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**Online Retail:
Service Quality Derivation, Market Segmentation and
Organisational Analysis**

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Niall Piercy
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Abstract

The recent rise of the internet as a commercial trading channel has left retail marketers facing several challenges. As in any marketplace, customer intelligence is the lifeblood of organisational success online, yet no thoroughly tested and validated model exists to reliably capture customer service requirements. Traditional service quality models are an insufficient and inflexible means to capture the unique nature of the internet medium while those emergent models of online behaviour developed thus far have typically been of limited scope, sample size, sample breadth and not validated in continued practice.

Beyond the problem of identifying customer demands, there remains a problem of how to group together customers for segmentation purposes. In the contemporary marketplace as a whole there is growing fragmentation and individuality with demographics no longer precise enough to be useful beyond describing broad definitions of product class users.

E-businesses also face a pressing challenge in addressing customer alignment in the 'value creating' marketing and operations departments. There is a need to move beyond the limiting scope of only considering marketing in relation to customer focus and to incorporate a wider consideration of organisational focus with true measures of customer requirements.

Within this thesis each of these issues is addressed. With the support and collaboration of four internet companies, one of the largest surveys of online customers undertaken to date has been completed (n=3403). This has allowed for the construction of a new model of online customer service demands, validated with confirmatory factor analysis, generating a nine factor solution that comprehensively describes customers service demands. Secondly, a wide range of situational factors have been analysed for their suitability as a means of segmenting the marketplace. Structural equation modelling has provided a strong finding that situational measures account for far greater variance in customer demands than demographics, confirming the limited usefulness of demographics online and providing a superior replacement. An analysis of marketing and operations personnel in the four supporting companies also provided evidence that marketers were better at understanding customer requirements than their operations colleagues and that in all companies a generally good understanding of customers had resulted in high levels of customer satisfaction.

Overall, this body of work stands apart in terms of holism of analysis (customer service quality, segmentation and organisational understanding), depth of analysis (extensive literature review and generation), depth of research (sample size of n=3403) and rigour of analysis (iterative statistical process) making contributions to the academic body of knowledge and nature of managerial practice in the areas of online retail customer service, market segmentation and organisational analysis.

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Chapter 1. Introduction

The modern retail environment is a sophisticated evolution from the earliest trading markets. With the rise of a consumer society across the Western world in the early twentieth century, and (the related) development of business as an academic discipline, rather than just managerial practice, research on retailing, customer behaviour, demands, desires, wants and needs has formed a large and established body of academic knowledge (Tedlow 1993). The transition from manufacturing to service economies has only served to accelerate research and discussion in this area (Hill 2005, Slack et al. 2004). Despite the breadth of endeavours in retail research (and more generally in marketing research), a key message from academicians and practitioners has been that knowledge and insight have failed to keep pace with the changing customer marketplace (Sheth et al. 2000, Kotler 2001). The 'new' marketplace contains customers who do not conform to traditional models of service or conventional behavioural analysis (Baker 2003, Iacobucci 2001). Several research studies have examined this new 'postmodern' market (Baker 2003, McDonald and Wilson 2002, Brown 1993a, 1994, 2003, 2005). While diverting, most such studies have yet to provide any useful guidance on customer analysis and organisational alignment. From an industrial perspective, the impact of this lack of useful research is stark – it underlines an organisational inability to validly assess customer demands, leaving companies unable to effectively design fulfilment and service mechanisms to serve new customer demands. Customer dissatisfaction, as well as high levels of complaints and defection, are becoming increasingly apparent across the contemporary marketplace as a whole (Quinn and Gagnon 1986, Zeithaml et al. 1990, Fournier et al. 1998, Acland 2005, Dickson et al. 2005).

Considering the internet marketplace, the youth of this medium means that research concerning this area is emergent rather than established. After the initial (unfounded) hype of the late 1990s, the resurgence of common sense and need for clear, established strategic business sense in this market has been noted (Porter 2001). Nonetheless, researchers and companies have struggled to adapt traditional marketing tools (many of which are failing offline) for the new online marketplace.

When considering service quality, it is impossible not to consider the most widely used tool for analysing service quality over the last quarter century - the ServQual tool of Parasuraman, Zeithaml and Berry (PZB) (1988). Applied in a wide variety of service environments around the world, ServQual has come to be a *de facto* standard for service analysis (Buttle 1996). However, several problems manifest themselves, when considering the use of the ServQual tool to improve current (online retail) service quality - the lack of market segmentation within the model, the unique nature of the online marketplace, and the need to consider organisational issues in service delivery beyond mere customer reports.

ServQual is probably the most widely used services marketing tool in practice (Buttle 1996, Asubonteng et al. 1996). However, despite decades of research, investigation into how ServQual relates to market segmentation, as one of the most fundamental principles of marketing theory, is almost non-existent (Webster 1989, Gagliano and Hathcote 1994). Indeed, at the same time, the basis of market segmentation is itself suffering serious conceptual and methodological challenges, since many customers no longer fit or conform to traditional demographic, geo-demographic or psychographic models of segmentation. A dual challenge is therefore both finding a valid basis for segmenting the contemporary marketplace, and then relating this to models of service quality online.

In considering the issue of service quality online, the transfer of offline service models to an online context has been addressed by various research teams. However, work to date that seeks to adapt the generic ServQual tool, or build on the expectation-performance model on which it is founded, have suffered several problems. Existing studies suffer from: problems of limited scope (for instance, focusing on specific aspects of service such as website design, not holistic service quality); problems of limited sample sizes; and, problems of limited validity and generalisability (with much of the research conducted by commercial researchers, some work has lacked academic rigour in statistical validation) (Chen and Wells 1999, Zeithaml et al. 2000, Tierney 2002, Zeithaml et al. 2002b, Wolfenbarger and Gilly 2003, Parasuraman et al. 2005). There is a need to consider the technological-mediated exchange involved in e-commerce, in ways which to address customer trust and security concerns, as well as analysing the wider issues in online service. This need presents a significant research task, that has not yet been undertaken within the academic or practitioner communities.

In addition to the problem of analysing the marketplace in which they operate, e-businesses have struggled with how to structure themselves organisationally to best serve this market.

Despite several validated works that have demonstrated the benefits of post-functional or post-classical, lean business models (Womack et al. 1990, Womack and Jones 1996), such business models utilise an understanding of customer value as the basis of organisational design (to serve that value). Lacking detailed tools for the analysis and structuring of their marketplace, online companies have struggled to implement new organisational structures. Within the existing organisational designs that dominate internet company structures, one of the most pressing concerns is the relationship between the marketing and operations departments - as it is this relationship that influences and can determine customer satisfaction. Traditionally, such internal relationships have been characterised by power struggles and hostility between functions, that has reduced organisational effectiveness (Crittenden et al. 1993, Berry et al. 1995, Celikbas et al. 1999, Hausman et al. 2002, Hill 2005). Wide-scale research has stopped short of non-manufacturing operations, where organisational dynamics, dependencies, and realities are clearly different. Further, research has tended to focus narrowly on specific relational issues, rather than addressing an holistic picture of working relationships as a whole.

The online retailer therefore faces three key challenges: understanding what their customers are actually demanding; understanding how to group similar customers for segmentation and targeting purposes; and, building organisational alignment between their processes and functions, to actually deliver to their identified customer groups the service demanded. This thesis sets out to address these issues in turn. Firstly, an extensive literature review is conducted on service analysis, online consumption, market segmentation and inter-organisational relationships. Secondly, a major research activity is undertaken, collecting data from the customers of four online companies to gain a usable sample of some 3403 responses, as well as gaining additional intelligence the managers of the organisations serving those customers. Finally, the analysis of these data is conducted: using confirmatory factor analysis to construct and validate a new model of online customer service demands; using structural equation modelling to test the usefulness of new post-demographic, situation-based models of segmentation. -In addition, the study also presents results concerning how marketing and operations managers collaborate to serve their market segments and customer service demands.

The breadth of these issues and holistic nature of this consideration provides the principal contribution of this work but has also provided the greatest challenge in its construction. The wide-ranging issues considered - from consumer behaviour, to marketing segmentation, to organisational behaviour - all within the context of a technology-mediated environment,

provide an extensive and far-reaching literature review, and a thesis which crosses several traditional functional demarcations.

Chapter Two provides the foundation for this study. The aim to understand customer service demands leads to a review of work on service analysis. This review clearly identifies the ServQual framework of Parasuraman et al. (1988) as the most widely-used framework for analysing service quality at a conceptual, theoretical and methodological level. The ServQual tool and approach are analysed for their suitability for this new study of online service quality. From this extensive literature review several points of note are developed: firstly, the use of the disconfirmation or comparison of customer demand versus performance as a basis of analysing customer demands and service performance is verified. Secondly, an investigation into confused notions concerning the 'expectations' components in prior research suggests the need to replace this with a more practical standard. After review of works on service quality, 'importance' is used to replace expectations. Thirdly, the need to generate an extensive range of additional items to conduct an online analysis of service quality is apparent. The unique context of this environment leaves the generic 22-item ServQual scale lacking coverage of key issues such as technology and consumer confidence.

In *Chapter Three*, an extensive review of existing works concerning online customer behaviour is conducted. This provides the source items, to supplement the traditional ServQual framework, to generate a new tool for measuring online service quality. This chapter also highlights the severe limitations of existing research on online service - small samples, limited scope of enquiry focusing on narrow issues rather than whole service, and industry-constructed measures that lack academic rigour or confirmation. Despite these limitations, key works on online service quality are identified and reviewed in terms of their ability to measure online service, and to generate the new service measurement items required. Chapters two and three are synthesised to provide the first research question, which seeks to address the issue of constructing and verifying a tool or model to analyse online service quality, specifically "*What are customers' service quality demands online?*"

In *Chapter Four*, the issue of clustering online consumers into groups, for segmentation purposes is considered. This builds on the work in the previous chapters, which serve to form the basis of analysing customer demands, and develops the problem of identifying groups of customers with similar characteristics for segmentation purposes. The initial literature review conducted reveals a lack of existing work looking at how service-quality demands can be used

for segmentation. A more fundamental problem is that traditional techniques for market segmentation more generally (that is, demographics), may be out-of-date and provide little useful information in the contemporary marketplace. Building on this finding, the usage of purchase situations for segmentation purposes is considered, based on conceptual recommendations in existing literature (for instance, Day 1969, Belk 1975, Silpakit and Fisk 1985). A wide range of potential purchase situational factors is developed, and analysed, for potential usefulness in online service quality market segmentation. This review builds the second research question: "*What is the impact of purchase situations on customer service quality demands online ?*" This second research question generates a series of propositions, which seek to test the impact of different purchase situations identified from the literature review.

In *Chapter Five*, the thesis shifts beyond traditional considerations of service quality and market segmentation, to investigate how service quality is actually delivered by organisations. Much existing research separates customer and organisational considerations in service quality. However, the need for an holistic consideration of service quality necessitates an investigation of not just of what service quality is (online), but how (online) companies are delivering it. This chapter identifies that the two most critical areas in this delivery concern the marketing and operations functions within the corporation. Together they interface with the customer and deliver goods and services. Literature review reveals a tradition of hostile and un-cooperative relationships between these two functions in practice, suggesting greater research is needed to address these issues. From this chapter, the final research question is developed: "*What differences exist in the marketing versus operations views and orientation towards customer priorities?*"

In *Chapter Six*, the research methodology used within this thesis is discussed and justified. The goal and need for a very large sample to develop a new service model, and to evaluate potential segmentation sources within it, necessitate a quantitative investigation. Within this thesis, the principal research activity is therefore a questionnaire survey. Initial exploratory research has been conducted with traditional paper surveys, while the final research survey uses an electronically-administered questionnaire to study the customers of four electronic commerce companies. A paper-based survey of managers within those companies is also conducted, to investigate the issues of managerial understanding of customer service demands.

In *Chapter Seven*, the first stage of the research is reported. Addressing the first research question, through exploratory and confirmatory factor analysis, a new nine-factor model of online service quality is developed and tested. This model describes the key issues in analysing

online customer demands as related to the following themes or dimensions: **The Website** – issues relating to the functional design of the website and ability of customers to navigate the website; **Trust** – issues relating to customers’ trust in the company to protect their personal and financial details; **Customer Service** – issues relating to pre-sale purchase facilitation, product delivery and after sales service; **Information** – issues relating to the provision of key information to the customer, such as product research, availability information and the ability to track products through shipping to delivery; **Ease of Contact** – the ability of customers to contact human staff in an online retailer; **No Advertisements** – freedom from pop-up adverts while shopping and unsolicited emails following purchase; **Personalisation** – concerning both the reactive ability of a website to be customised by a customer, and the proactive features of the website that can suggest products for purchase based on past behaviour; **Company Image** – both the possession of a ‘well-known name’, and a website that is of a quality consistent with the created image; and, **Product Range** – The provision of a depth of product range that customers cannot easily find in other purchase channels or companies. This model covers a greater range of issues, is built from a large range of source items, is developed from a bigger customer sample, and uses rigorous statistical validation, which go beyond the pre-existing models of online service quality that have previously been developed.

In *Chapter Eight*, the organisational side of service quality is considered. Firstly, the customer results from each company are compared, and the finding of significant differences in the customer reports is found. Secondly, the managerial surveys are reviewed in terms of organisational market orientation, cross-functional working, relationship quality and customer understanding. This exploratory research suggests that, while some co-operation between functions is present in all the companies, traditional demarcations leave marketing as better at analysing customer requirements. Despite this finding, departures from traditional organisational roles are detected, with the operations functions found to be more powerful in the organisation than the marketing function of each retail company, reversing the traditional power-structure suggested in the academic literature.

In *Chapter Nine*, the issue of situational segmentation is examined to address the second research question. The previous chapter establishes that differences occur in the customer reports from each company, necessitating the results from each company being treated as a separate sample, so that variance by company is controlled for in analysis. An escalating process of univariate correlation, multivariate regression and structural equation modelling is utilised, to test the situational and demographic effect on the customers demand levels, for

each of the nine service factors developed in Chapter seven. This process confirms that purchase situations account for significantly more variance in customer demands than traditional demographic features. This provides, therefore, the first, quantitative confirmation that a viable, post-demographic method of market segmentation is possible.

In *Chapter Ten*, the findings of the research as a whole are synthesised. Conclusions are drawn, together with the implications of the research for practice, and an identification of the limitations of the research and future directions. An outline of the work is shown in Figure 1.1 below.

A challenge of this research, as with any study of this type, has been gathering data and gaining the support of commercial organisations. Four electronic commerce companies co-operated with this study. They provided access for the researcher to sample their customers and managers, which has provided a customer sample size of some three and a half thousand individual customer responses, and over thirty detailed managerial surveys within the companies. This provides one of the largest single academic research samples of online customers ever undertaken, with unprecedented depth of behavioural analysis for service quality and segmentation construction. On the managerial side, for one of the first times outside of the manufacturing sector, detailed analysis of relational alignment can be considered, encompassing both functional departments. This research provides for a far greater understanding of the online customer marketplace, the influences upon customers and their service quality demands, and how relationships with the organisation impact on satisfying the organisations customers.

Naturally, all research studies contain important limitations, and lead to the identification of further research directions. The present study is no exception to this *caveat*. Nonetheless, it should be noted that the body of work reported within this thesis stands apart from much prior research in terms of the holism of analysis (customer service quality, segmentation and organisational understanding), depth of analysis (extensive literature review and proposition-generation), depth of research (sample size of n=3403), and rigour of analysis (iterative statistical process), making contributions to the academic body of knowledge and nature of managerial practice.

Figure 1.1 Thesis Outline

1 Introduction

2. Marketing and Customer Service: Service Quality

Analysing customer service requirements through ServQual metrics, limitations of the approaches and adaptations employed within this research.

3. New Markets, New Marketing and Customer Service: Online Service Quality

Online service quality and the adaptations required to the traditional ServQual model for internet application.

4. Situational Impacts on Service Quality

The fragmentation of modern markets, failure of demographics and development of situational based segmentation.

5. The Organisational Side of Service Quality

Cross-functional organisational alignment and market orientation.

6. Methods

Philosophical and practical approaches to research.

7 Model of Online Service Quality

Results of the final research survey application on 3400 customers of four companies. Development through to confirmatory factor analysis of a nine-factor model of online service quality.

8. Inter- and Intra-Organisational Issues

Findings on managerial reports of service understanding; variations in service demands and situations by company.

9. Situational Impacts on Online Service Quality

Univariate, multivariate and structural equation modelling of situational impacts on purchase.

10. Conclusions, Implications and Limitations

Chapter 2. The Marketing Concept and Service Quality

2.1 Introduction

The importance of delivering high quality services is of paramount importance to the firm in a modern era of value-demanding customers and intense competition. High quality service represents a competitive necessity in the modern marketplace - at a basic level the very nature of the free market economy allows choice and empowers dissatisfied customers to shop elsewhere, making high quality service a prerequisite for the company (Fornell 1995, Berry Zeithaml and Parasuraman 1990). At a strategic level, at a time of intense domestic and global competition, the firm can prosper from seeking to differentiate itself on the basis of the quality of the service it provides (Babakus and Boller 1992), with quality of services often far harder for competitors to duplicate than product quality or price (Parasuraman and Grewal 2000, Zeithaml 2000).

Organisational success in the fiercely competitive internet marketplace requires companies to embrace the philosophy encapsulated by marketing orientation. This philosophy proposes that achieving organisational goals depends on determining the needs and wants of target markets and delivering on these more effectively and efficiently than the competition. Production is based on what customers actually want and staff at every level in the organisation are dedicated to serving the customer at a profit for the organisation (Kotler et al. 1999).

In this thesis, the focus is online service quality - what it is, what impacts on it and how organisational factors are arranged to deliver it - essentially this involves the application of the principles of the marketing orientation to the analysis of internet service companies. In this chapter, a review of the development of one of the principal tools for achieving the analysis of customer wants and needs, is provided. Under a marketing orientation, the ultimate aim of customer satisfaction (loyalty, profitability) is highlighted as information-based - the derivation of information generation about the customer so that their needs or desires may be delivered at profit to the organisation. Deconstructing this proposition suggests the gathering of data about customer needs and demands and achieving

organisational alignment to meet these demands. Both these tasks involve complicated activities that remain poorly understood in the context of the online retailer. This poor understanding is demonstrated by the low customer satisfaction and poor organisational performance common in the online context.

In the following chapters, what this means for the contemporary internet based company will be explored and the deficiencies in knowledge and practice highlighted as the basis for this study. In this chapter, a thorough review of what has emerged as one of the principal tools for customer information generation will be provided (the SERVQUAL framework of Parasuraman, Zeithaml and Berry, 1988), to guide the construction of a modified service quality analysis instrument for application in the online environment. In the next chapter specific adaptations for this environment will be considered – two key emergent issues will be presented as the basis for further detailed study: the general fragmentation of the modern marketplace as a whole (which requires a consideration of new methods of customer segmentation) and the online marketplace (which requires adaptation and modification of the traditional SERVQUAL instrument).

From this review, a new online service quality tool has been developed for application in the customer marketplace. The development and application of this tool in four companies provides for the principal contribution for this thesis. In chapter five, the organisational side of service quality will be examined, in terms of the relationship between the value-creating department (operations) and the customer interface department (marketing) in the company. From this chapter an in-depth quantitative instrument is developed for application in the companies who collaborated in customer research, so that the impact of different relational attributes on customer service can be considered in addition to the customer results in isolation. This aspect of holism provides the secondary contribution of this thesis.

2.2 The Value of Customer Information

It is a fundamental of marketing that the first step in the delivery of quality services (and resultant benefits for the organization) is the determination of customer requirements to guide the firm in determining the services offering and their quality. The task of gathering meaningful information about customers and their needs, wants and desires is the basic grounding for the marketing concept and marketing research (Greyser 1998, Kotler et al. 1999). The value of information for the business has been extensively noted: Keener (1960) comments “Companies with the best marketing intelligence will be able to exercise better judgements ... and ... will have great competitive advantage” (p5), while Kotler (1972)

highlights that marketers and companies cannot create value for the customer if they do not understand the market. Slater and Narver (2000) comment: "It has become conventional wisdom that an organization's ability to continuously generate intelligence about customers' expressed and latent needs and about how to satisfy those needs, is essential for it to continuously create superior customer value." (p120). The continuing search for information on the customer in the service sector has proven one of the most important topics for management and the organisation (Genestre and Herbig 1996, Cronin and Taylor 1992, Oliver et al. 1997). Today, the generation of valid and valuable customer data on the customer in the service sector is relatively effortless, assisted by an extensive range of pre-validated surveys, questionnaires, measurement tools and assisting technology. This stands in stark contrast to the state of services research and practice when services first emerged as the dominant area of economic activity.

2.3 Outcomes of Quality: Loyalty

Extensive research has demonstrated the benefits of loyal customers. The importance of loyalty was clearly highlighted by Gupta et al. (2004), who analysed five years of financial data for five companies, determining that a 1% improvement in customer retention equated to a 5% increase in firm value, whereas a 1% improvement in margin or 1% improvement in acquisition costs equated to only a 1% and 0.1% increase in firm value respectively. Similar research has also highlighted the benefits of loyal customers, with fewer resources needed to retain customers than to attract new ones (Fornell and Wernerfelt 1987, 1988; Zeithaml et al. 1996, Flint et al. 1997, Anderson and Sullivan 1990, Wirtz and Lilhotzky 2003).

2.4 Outcomes of Quality: Profitability

The relationship between services quality, loyalty and profitability is complex, with complicating issues such as advertising, pricing, competition and distribution (Zeithaml 2000, Zeithaml et al. 1996). Boulding et al. (1993) note "no empirical research outside a laboratory setting has been reported that supports this relationships between service quality perceptions and behavioural outcomes of importance to the firm." (p11/12). However, "There is a growing body of evidence indicating that providing high quality goods and services enhances profitability, improves productivity, increases market share and return on investment." (Finn and Lamb 1991, p483). Boulding et al. (1993) were among the first to conduct extensive empirical work, finding: "the greater customers' perceptions of a firm's overall service quality, the more likely the customers are to engage in behaviours beneficial to the strategic health of the firm." (p24).

Table 2.1: Findings on Quality-Profitability Linkages

Buzzell and Gaze (1987)	use of the PIMS database to show the impact of service quality on financial outcome while controlling other variables
Nelson et al. (1992)	found a significant relationship between patient satisfaction and hospital profitability
Aaker and Jacobson (1994)	find significant positive relationship between stock return and changes in quality perceptions (while controlling for other variables such as advertising)
Ford Motor Company (1990)	find dealers with high service quality scores generate higher profits and ROI
Anderson et al. (1994)	using the Swedish Customer Satisfaction Barometer find a significant association between customer satisfaction and accounting ROA
Gale (1992)	finds businesses in the top quintile of relative service quality on average realised 8% higher price than competitors
Ittner and Larcker (1996)	using the American Customer Satisfaction Index find a positive correlation between customer variables (satisfaction, repurchase intention, perceived quality, value and loyalty) to financial measures (ROA, market to book ratio, and price-earning ratio)
Rust et al. (1995)	develop a return on quality (ROQ) framework, finding that the behavioural impact stemming from service quality leads to improved profitability and financial outcome.
Reicheld and Sasser (1990)	propose customer loyalty can produce profitability increases of 25 to 85 percent.
Rose (1990)	found profits on service purchased by a ten year customer were on average three times the profits than those of a five year customer.

2.5 Outcomes of Quality: Behaviour

Zeithaml et al. (1996) undertook research demonstrating “strong empirical support for the intuitive notion that improving service quality can increase favourable behavioural intentions” (p44). The behavioural outcomes of quality service have been highlighted by many researchers, in terms of: the link between satisfaction and retention (Zemke 1997, Anderson and Sullivan 1990, Woodside et al. 1989); the linkage between satisfaction, service quality and repurchase intentions (Cronin and Taylor 1992, Boulding et al. 1993, McLaughlin 1993); and, likelihood of recommending the company to others (Boulding et al. 1993, Parasuraman et al. 1988, Parasuraman et al. 1991, Zeithaml et al. 1990). Zeithaml (2000) conducted an extensive literature review highlighting links between service quality and organisational success, in settings as diverse as hospitals and car dealerships, finding repeated linkages between higher customer reported service quality perceptions and organisational profitability. Indeed, Woodruff et al. (1993) declared that “In the decade ahead, organizations will rise or fall based on their ability to deliver value that satisfies targeted customers” (p33).

2.6 The Rise of the Services Economy

With the service sector constituting the principal employer and source of Gross Domestic Product in the economy (Henkoff 1994, Hill 2005), standardised measures of service and services quality at the organisational and aggregate national levels are common (Fornell 1995). In the early 1980s however, managers and marketers alike were struggling to determine services quality at a firm, or even individual, level. The rapid decline of industrial manufacturing and the speed of transition to a services economy had simply outpaced developments both in research and practice on customer services marketing and research (Mills and Moberg 1982).

The rise of Japanese imports, first in automotive then in electronics, had from the early 1970s led to pressures on manufacturers to improve domestic quality (Crosby 1979). As a result much work was done on devising new quality techniques. However, this work focused on manufacturing process rather than customer services quality (Slack et al. 2004). Multiple issues combined to define services as different to manufacturing: the intangibility of the product, the involvement of the customer in production, production centred on people rather than machinery and the resultant heterogeneity of service encounters (Parasuraman et al 1985, Johnston and Clark 2000, Iacobucci 2001, Zeithaml and Bitner 2003, Fitzsimmons and Fitzsimmons 2004, Slack et al. 2005). The fundamentally different nature of the service experience compared to manufacturing meant that established tools and techniques were frequently unsuitable (Sullivan 1982, Mabert 1982).

As a result of the lack of understanding to how to analyse the service encounter, there was a corresponding lack of data to manage the encounter in a way to best please the customer (Zeithaml et al 1990). Andreasen and Best (1977) report growing customer dissatisfaction across a wide range of goods and services, while Peters and Waterman (1982) simply state: "In general, service in America stinks". Gronroos (1984) adds: "What we need is a model of service quality, i.e., a model which describes how the quality of services is perceived by customers... Today we have no service quality concept." (p36).

Thus, several factors combine to highlight interest in developing tools for the service sector: the size and importance of this new service sector and resultant academic attention (Oliver et al. 1997); the unique nature of the service economy and new tools required (Sullivan 1982), and the poor levels of service quality being provided by the majority of businesses in the economy (Quinn and Gagnon 1986). Unquestionably the most significant of these new tools

was the SERVQUAL (SQ) tool, first proposed by Parasuraman et al. (1985). This was a means of determining customer requirements for services and empirically consolidated three years later into a generic services questionnaire survey item (Parasuraman et al. 1988)¹.

2.7 Pre-ServQual Quality Measures in Services

ServQual has come to be the de facto standard for measuring customers' sentiments towards the company but the theoretical foundation came from early work on 'Customer Satisfaction/Disconfirmation' (CS/D) that continues to be utilised today. In common with SQ, CS/D describes the customer outcome as dependent on the discrepancy between company actual performance and an earlier reference standard of expectation held by the customer: when performance exceeds expectations, positive disconfirmation and satisfaction occur whereas when performance falls short, disconfirmation and dissatisfaction occur (Oliver 1980, Cadotte et al. 1987, Flint et al. 1997). Such a disconfirmation process is the basis for SQ (Boulding et al. 1993), however, the nature of the expectations component is proposed as different by PZB (1988). They identify CS/D expectations as predictions of what is likely to happen whereas in SQ "expectations are viewed as desires or wants of consumers" (PZB 1988 p17). The other main difference of note between SQ and CS/D is that SQ provided a generic set of validated survey items. This provides an 'off the shelf' tool for measuring the customer experiences without the need to gather data, usually qualitatively from focus group or other customer sources to form the basis of an empirical measurement. More extensive processes of information generation are often problematic, costly and time consuming (Cravens et al. 1985), providing SQ with a fundamental appeal in the marketplace for marketing tools. The conceptually more appealing title of 'service-quality' versus 'customer satisfaction/disconfirmation' may also have served to facilitate SQ popularity in the commercial sector.

2.8 The Rise of ServQual

Described as 'the most popular measure of service quality' (Asubonteng et al. 1996) and 'perhaps the most standardized questionnaire to measure service quality' Caruana et al. (2000), widespread usage of SQ is reported not only the academic setting but also in industry (Brown et al. 1993, Asubonteng 1996), both in the domestic USA and internationally (Caruana et al. 2000). Reviews of SQ have shown its application in a huge range of areas: real estate, physicians in private practice, public recreation programs, dental school clinics, a business

¹ In common with standard practice in articles by the authors Parasuraman, Zeithaml and Berry, when referring to their work in text the authors initials will be used (PZB); when referring to SERVQUAL the abbreviation SQ will be used.

placement centre, a tyre store, motor carrier companies, accounting firms, discount and department stores, gas and electric utility companies, banking, pest control, dry cleaning, higher education (PZB 1994a); tyre retailing, hotels, travel and tourism, car servicing, business schools, hospitality, business to business channel partners, accounting firms, architectural services, recreational services, airline catering, banking, local government, computer services, construction, and retail (Buttle 1996); and in both private and public sectors, such as health care and higher education (Babakus and Mangold 1992, Asubonteng et al. 1996, Caruana et al. 2000).

2.9 From Service-Quality to Electronic Service-Quality

Due to the pre-eminence of the SQ framework, both in terms of content, construct, methodology and application, as the means of understanding customer behaviour, needs, wants or desires, as well as perceptions of company performance, it is this tool that forms the basis of customer analysis within this thesis. The concern of this thesis is with electronic service quality rather than non-technology mediated SQ. In the late 1990s, PZB began a new research programme examining service quality in the internet context (electronic service-quality or e-SQ), beginning with fresh focus group research to generate new service quality items, rather than the adapting the original SQ generic framework (Zeithaml, Parasuraman and Malhotra (2000). The underlying theoretical justification, premise and methodology of this work, remains the same as for SQ. A review of SQ is necessary to reflect the usage of the basic SQ methodology, tools and items within this thesis, but further, as the most widely used measure of services quality it is also one of the most widely analysed. The twenty years since the production of the first SQ publications (PZB 1985) have seen many different researchers testing and critiquing the SQ framework whereas new measures of electronic service quality remain relatively untested beyond the original research as the first publications are only now beginning to emerge (limited circulation report - ZPM 2000, journal publication - PZM 2005).

As a result of the identical underpinning theory in SQ and eSQ, the application of SQ validations and criticisms to eSQ is possible, negating the need to wait for two decades of research to test and validate new scales or methods used in their generation. This chapter reviews and analyses the foundation of service quality and formation of the SQ instrument, which is of paramount importance. It remains the most widely cited and used service quality analysis tool worldwide, provides the theoretical underpinning for the majority of online service quality studies and is itself (in part) included in the final electronic questionnaire used in this research. The next chapter reviews the changing marketplace and competing works on service quality, both in retail and online shopping, that have emerged.

2.10 SERVQUAL Foundation

The origins of the SERVQUAL framework date back to the early 1980s, when seeking to rectify the shortcomings in knowledge and application of services quality, the first service quality research began in 1983 by an application by PZB to the Marketing Science Institute (ZPB 1990). PZB undertook from the early 1980s to develop a model of service quality, initially through exploratory research (reported PZB 1985) and later quantitative empirical investigation of exploratory findings (reported PZB 1988, ZPB 1990). ZPB (1990) highlight “scholars throughout the world are using our research as a basis for their own studies” (p xi). Fisk et al. (1993) in reviewing the development of services marketing describe PZB (1985) as a landmark article that together with the subsequent publications by the authors and others on service-quality, “led to service quality being a core topic for service marketing” (p72). By the late 1980s and in the early 1990s, researchers increasingly started to question the rationale, theory and practical application of the SQ framework. However, SQ remains the principal tool for analysing customer behaviour outside the manufacturing world.

With the aim of determining what managers and customers “perceive to be the key attributes of quality in services” (PZB 1985 p43), twelve nationally representative (USA) focus groups were conducted with consumers, and interviews with executives held in four nationally recognised service firms in the retail banking, credit card, securities brokerage and product maintenance/repair sectors - selected as representative of a “cross section of industries which vary along the key dimensions used to categorise services” (PZB p43). The focus group research provided an extensive list for the first time of what attributes customers consider in using services. PZB (1985) find that “regardless of the type of service, consumers used basically the same criteria in evaluating service quality” (p46), with results that were “remarkably consistent across groups and across service businesses” (p46). These results were grouped by similarity and ten key themes emerged, presented in Table 2.2 below. PZB (1985) also find that three issues can impact on customer expectations: personal beliefs, past experience and word-of-mouth recommendation. Reflecting on the original focus group work, ZPB (1990): “It was clear to us that judgements of high and low service quality depend on how customers perceive the actual service performance in the context of what they expected. Therefore service quality, as perceived by customers, can be defined as *the extent of discrepancy between customers’ expectations or desires and their perceptions*” (p19).

Table 2.2. Service Quality Items from Exploratory Study.
Source: PZB 1985, p47.

RELIABILITY involves consistency of performance and dependability.

It means that the firm performs the service right the first time.

It also means that the firm honors its promises. Specifically, it involves:

- accuracy in billing;
- keeping records correctly;
- performing the service at the designated time.

RESPONSIVENESS concerns the willingness or readiness of employees to provide service. It involves timeliness of service:

- mailing a transaction slip immediately;
- calling the customer back quickly;
- giving prompt service (e.g., setting up appointments quickly).

COMPETENCE means possession of the required skills and knowledge to perform the service. It involves:

- knowledge and skill of the contact personnel;
- knowledge and skill of operational support personnel;
- research capability of the organization, e.g., securities brokerage firm.

ACCESS involves approachability and ease of contact. It means:

- the service is easily accessible by telephone (lines are not busy and they don't put you on hold);
- waiting time to receive service (e.g., at a bank) is not extensive;
- convenient hours of operation;
- convenient location of service facility.

COURTESY involves politeness, respect, consideration, and friendliness of contact personnel (including receptionists, telephone operators, etc.). It includes:

- consideration for the consumer's property (e.g., no muddy shoes on the carpet);
- clean and neat appearance of public contact personnel.

COMMUNICATION means keeping customers informed in language they can understand and listening to them. It may mean that the company has to adjust its language for different consumers—increasing the level of sophistication with a well-educated customer and speaking simply and plainly with a novice. It involves:

- explaining the service itself;
- explaining how much the service will cost;
- explaining the trade-offs between service and cost;
- assuring the consumer that a problem will be handled.

CREDIBILITY involves trustworthiness, believability, honesty. It involves having the customer's best interests at heart.

Contributing to credibility are:

- company name;
- company reputation;
- personal characteristics of the contact personnel;
- the degree of hard sell involved in interactions with the customer.

SECURITY is the freedom from danger, risk, or doubt. It involves:

- physical safety (Will I get mugged at the automatic teller machine?);
- financial security (Does the company know where my stock certificate is?);
- confidentiality (Are my dealings with the company private?).

UNDERSTANDING/KNOWING THE CUSTOMER involves making the effort to understand the customer's needs. It involves:

- learning the customer's specific requirements;
- providing individualized attention;
- recognizing the regular customer.

TANGIBLES include the physical evidence of the service:

- physical facilities;
 - appearance of personnel;
 - tools or equipment used to provide the service;
 - physical representations of the service, such as a plastic credit card or a bank statement;
 - other customers in the service facility.
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2.11 SERVQUAL Empirical Research

PZB (1988) took the 97 items generated from focus group research (described in PZB 1985), and conducted a refinement exercise using 200 surveyed customers across five categories (appliance repair, retail bank, long distance telephone, securities brokerage, credit cards). They asked what a company in that category should do and secondly how a company they had used in that category had performed. Gap scores were calculated and coefficient alphas computed for the ten dimensions. Items with low alpha score items removed until the range of coefficient alphas improved from 0.55 to 0.78 to a new range of 0.72 to 0.83 with a total of 54 items. These 54 item gap scores were factor analysed and items removed due to cross-loading until 34 items and seven dimensions remained.

The resulting 34 items were tested on 200 customers of four nationally known firms (bank, credit card company, appliance repair, long distance telephone). Respondents were given self administration questionnaires in a shopping mall, with a qualification they had used the company in the last three months. To cross-validate results, data from each firm were analysed separately to obtain alpha values and a factor matrix. Research found “the results of the four sets of analysis were quite consistent” (p22), but, as “differences occurred consistently across four independent samples and data sets, further purification of the 34-item scale was deemed necessary” (p23). Items with poor correlations and weak fit in factor analysis were removed, resulting in a reduction in clear dimensions from seven to five (as the factor loading matrix showed greater cross loading than the initial refinement), and reduction in individual items to 22 which formed the final ServQual construct shown in Table 2.3 below.

Table 2.3: ServQual Dimensions and Definitions
Source: PZB 1988 (p23)

Label	Concise Definition
Tangibles	Physical facilities, equipment, and appearance of personnel
Reliability	Ability to perform the promised service dependably and accurately
Responsiveness	Willingness to help customers and provide prompt service
Assurance	Knowledge and courtesy of employees and their ability to inspire trust and confidence
Empathy	Caring, individualised attention the firm provides to its customers

The validity and reliability of the scale was verified by low pair-wise inter-correlations between factors, calculation of total-scale reliability (reliability of linear combinations) and reliability coefficient (alphas). Also, a check of convergent validity by one-way ANOVA calculation with

an overall quality measure was performed (as well as likelihood of recommending and ever having experienced a problem). Reanalysis of original data that generated the 34 item instrument replicated the dimensions of the final scale. Greater detail on the reliability/validation process is provided in Chapter Six where the methodology used is replicated to validate the instrument developed within this thesis.

PZB (1988) conclude that the developed framework: "is a concise multi-item scale with good reliability and validity that retailers can use to better understand the service expectations and perceptions of consumers and, as a result, improve service. The instrument has been designed to be applicable across a broad spectrum of services" (PZB 1988 p31)

2.11.1 Redefining SQ: Item Alterations and Factor Structure

PBZ (1991) report two item changes from the original PBZ (1988) instrument (the new items are also used in ZPB 1990). This took place due to management suggestions - for purposes of clarity - 'appearance of physical facilities of --- should be in keeping with the type of service provided', under the tangible dimension, was replaced with 'materials associated (such as pamphlets or statements)'. Secondly, 'company employees should get adequate support from their companies to do their jobs well' was replaced with 'employees in excellent companies will have the knowledge to answer customer questions'. Minor wording modifications were also implemented - such as 'up-to-date' being changed to 'modern looking equipment'. Following the wording and statement changes, the new sample provided high reliability coefficients and superior alpha values compared to those in the original study. The authors concluded "the refinements made to SERVQUAL seem to have improved the cohesiveness of the items under each dimension" (p 424) (where an a priori judgement was made and alpha reliability coefficients were calculated for the five pre-defined SQ dimensions). However, in conducting new factor analysis of the results, while consistent factor loadings are obtained company by company, the factor structure produced differs from that in the original study, questioning the validity of the previously defined five SQ dimensions.

In assessing the slightly modified SQ instrument results, PBZ (1991) report a factor structure that alters from the earlier clear five dimension structure described by PZB (1988). Specifically, 'tangibles' breaks into two dimensions (one on equipment and facilities, the other on employees and materials). The responsive and assurance dimensions show considerable overlap, loading onto the same factor. This overlap is also supported by greater pairwise intercorrelations between factors (after oblique rotation: .35 to .39 versus .21 to .26 in the 1988 study). To explore changes in structure, PBZ (1991) analysed expectations and

perceptions scores separately (with five factors extracted and then subjected to oblique rotation). Findings indicated for expectations, the tangibles dimension does not split into two, whereas for perceptions the tangible dimension does (as was seen with gap score results). Further, expectations scores support responsiveness and assurance loading onto the same factor, as do perceptions scores (although to a lesser extent). PBZ (1991) speculate that the overlap of responsiveness and assurance may be a result of an imposed five factor solution, when tangibles splits into two, it forces the two responsiveness/assurance dimensions onto the same factor. In moving to a six factor imposed structure, 'partial support' is found for this speculation, with less overlap between responsiveness and assurance.

Overall, despite increased inter-dimensional overlap versus the original scale, and issues regarding the unification of assurance/responsiveness, PBZ (1991) find "the refinement still reflects the basic five dimensional structure of the original scale with one key exception – namely the dichotomization of tangibles into two sub-dimensions". (p481). This conclusion of 'sub-dimensions', as opposed individual dimensions and lack of solid conclusion about responsiveness/assurance overlap may be a product of the need to maintain a five factor structure for the analysis of the importance weightings gathered within the research. A paired t-test of the importance scores led PBZ (1991) to conclude differences exist between responsiveness and assurance weightings, supporting the notion of a five dimension (two sub-dimension) refined SQ instrument.

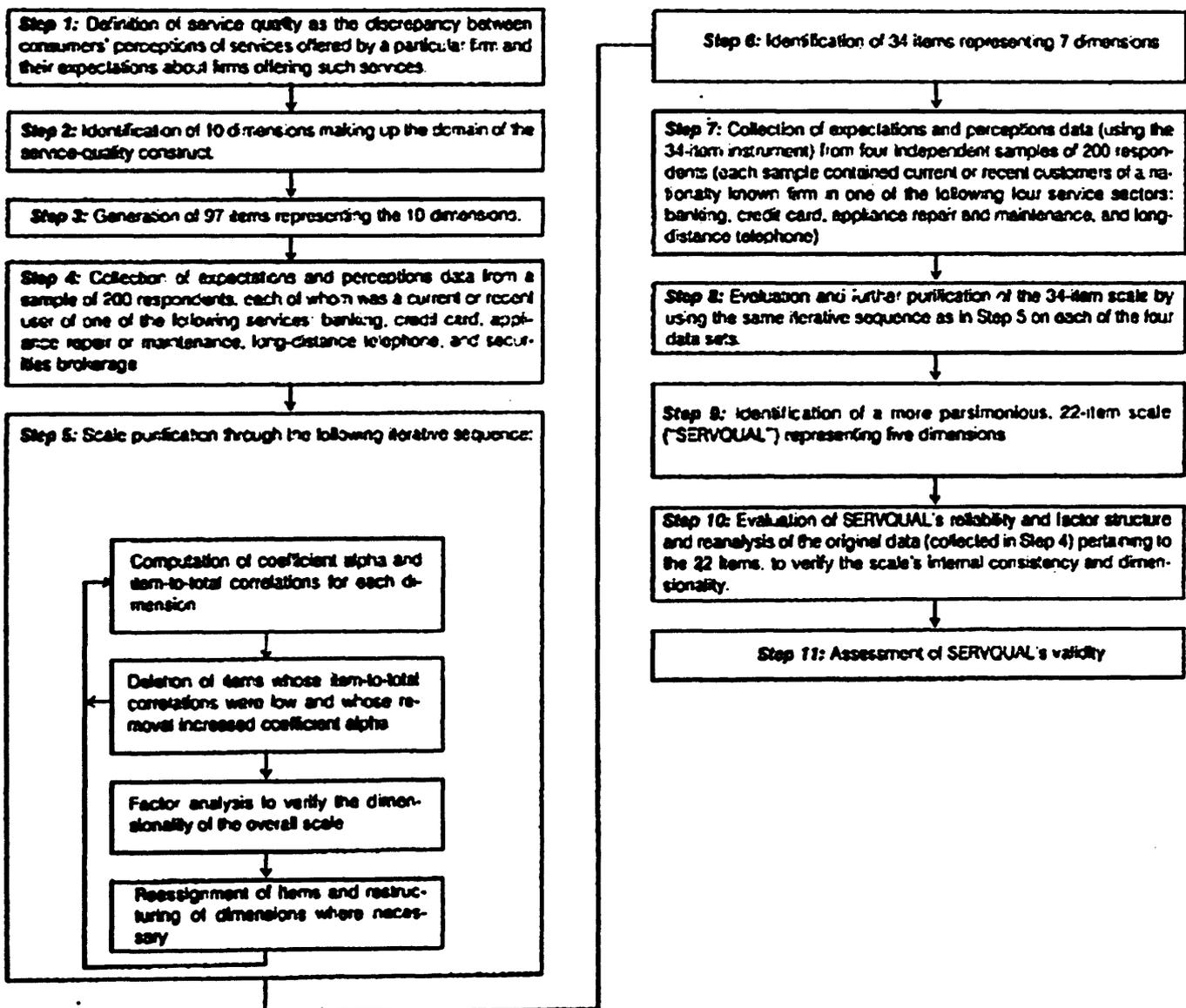
2.11.2 Service Quality: Validity and Reliability

The development of the SQ scale instrument followed a detailed and iterative methodology (shown in Figure 2.1 below). The aim of this was to generate a valid and reliable instrument. Various methodological checks and measures were developed to analyse this. Various measures of face validity, convergent validity, discriminant validity and predictive/concurrent validity were utilised, as were standard statistical measures including coefficient alpha scores and measures of factor loading and proportion of variance explained. The work of PZB (1988, 1991) has shown reasonable validity (see Appendix 1), although replication studies by Babakus and Boller (1991), Bresinger and Lambert (1990), Carman (1990) and Finn and Lamb (1991) have all produced less compelling results on the reliability and validity of the scale. Reasons for such poor validity have been explored in terms of the construction and application of the measure reviewed in the following sections.

2.12 Service-Quality versus Customer Satisfaction

The relationship between SQ and customer satisfaction (CSat) has proved difficult to establish. There is agreement they are distinct concepts (PZB 1988, Oliver et al. 1997), however, the nature of this distinctiveness remains elusive. Problems of definition are hampered by the inter-changeability of the terms 'service quality' and 'customer satisfaction' in the popular press and practitioner vocabulary (PZB 1994c). In the academic literature, different definitions of these constructs further hampers problems -some propose CSat as transaction specific and SQ as global (PZB 1988, Oliver 1981) while others contend SQ may exist at a transaction level and CSat at a global level (Bolton and Drew 1991a, Drew and Bolton 1991). It has also been suggested that quality/service-quality may be antecedent to CSat (Oliver 1993, Teas 1993b, Monroe and Krishan 1985, Churchill and Supernaut 1982).

Figure 2.1 Steps Involved in ServQual Development
Source: PZB 1988. (p14)

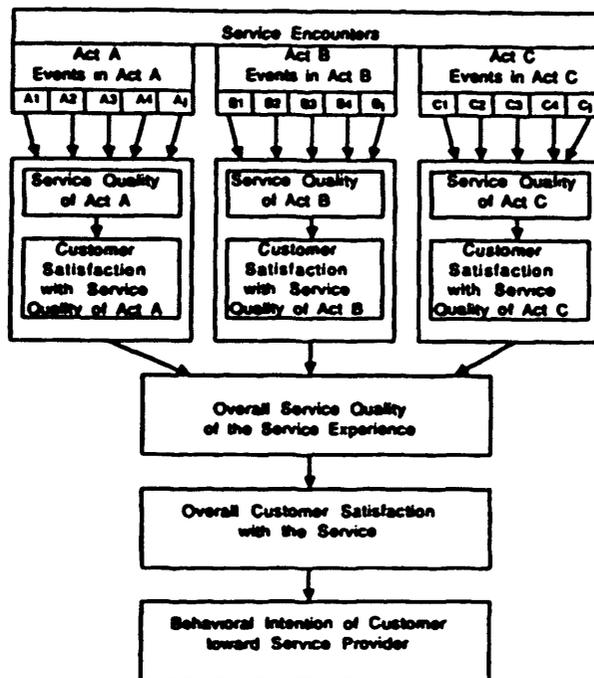


Both Woodruff et al. (1983) and Oliver (1980) emphasise how previous experience feeds into current and future expectations, intentions and interpretation of experience, which would support a notion of circular causation. Recently, researchers have indeed described a more complex relationship between SQ and CSat, where they are interrelated and causal of and to each other. Chenet et al. (1999) suggest global satisfaction with a firm might be the result of satisfaction with numerous transactions, while satisfaction with each individual transaction is based on assessment of that transaction's service quality, product quality and price. Bolton and Drew (1991a) propose perceived SQ as a function of consumers residual perception of SQ from a prior period and (dis)satisfaction with the current performance, leading Cronin and Taylor (1992) to suggest "satisfaction is a distinct construct that mediates prior perceptions of service quality to form the current perception of service quality" (p56). PZB (1994c) propose that evaluations of service quality, product quality and price lead to transaction satisfaction, and that multiple transaction satisfactions lead to global impressions about the firm regarding overall satisfaction with the firm, overall perception of service quality, product quality and price. Woodside et al. (1989) provide a similar model that separates the overall service encounter into a series of specific acts, each of which consists of a series of events (shown in Figure 2.2 below). In this model, the SQ of an individual service act leads to CSat with that service act which, in turn, leads to overall SQ which then leads to overall CSat. Woodruff et al. (1989) conclude from empirical investigation that "Overall customer satisfaction with the service encounter does appear to be a moderating variable between service quality and behavioural intention" (p15) and "The study of customer satisfaction as both a dependent and independent variable is advocated" (p16).

Despite causation being principally an academic argument, Dabholkar (1995) emphasises a clear managerial relevance. PZB (1988), for instance, highlight that "respondents gave several illustrations of instances when they were satisfied with a specific service but did not feel the service firm was of high quality" (p16), which suggests the importance of differentiation for the firm. Dabholkar (1995) goes further, proposing causation as related to customer cognition and the embedding of attitude - that SQ evaluations are cognitive whereas CSat is emotional. Dabholkar (1995) proposes the causal sequence will determine whether outcomes are embedded in the customer mindset (leading to behavioural outcomes such as repurchase).

Figure 2.2. General Framework of Customer Evaluation, Satisfaction, and Behavioural Intention of Service Events, Encounters, and Providers.

Source: Woodside et al. 1989, p7.



Dabholkar (1995) proposes a contingency model of causality at the service encounter level, as it is at this level behaviours are affected. Dabholkar (1995) differentiates between SQ as a cognitive assessment and CSat as more affective and emotional, proposing that causality will be determined by whether customers have cognitive or affective reactions to the service encounter - where cognitions are formed first, SQ leads to CSat (and if there is no effect at the CSat stage then both CSat and will overlap); where there is a strong emotional reaction to service, CSat will lead to SQ as emotion colours evaluations (where emotion is based on the cognition of SQ discrepancies, cognition will take a second place to the strong emotional response). Several potentially overlapping and interrelated variables are proposed as determining whether reactions at the service encounter are affective or cognitive, including: service levels (very bad or very good leading to emotional effects), the type of service, the presence or absence of service elements, the type of customer and their mood. Dabholkar (1995) highlights the impact of causal direction and level of service provided: for the company the best outcome is very good service delivery (resulting in CSat to SQ), as emotions turn into cognitions that bring customers back to the company; the worst outcome is very poor service delivery (resulting in CSat to SQ) as emotions turn into cognitions and the customer never returns. Where SQ leads to CSat, there is no emotion of evaluation so no 'delight' factor that guarantees the customers return, but also nothing so bad that will not ever return, and where SQ and CSat overlap, there will be an indifferent or neutral outcome.

While it may be useful to describe SQ a cognitive evaluation of different items (which can be measured) and satisfaction as a general attitude, this may not fully capture the complex processes which people use to make decisions and evaluate action. The work of Dabholkar (1995) emphasises the value to management of such differentiations between SQ/CSat and further research is clearly needed in this area (PZB 1994c, Cronin and Taylor 1992). However, the actual nature of SQ and CSat and interrelationships in the customer's mind, may well be beyond the scope of management, entering into the field of cognitive psychology.

2.13 Criticisms of ServQual

The success of SQ has come with a certain degree of notoriety. Since its inception many researchers have questioned and critiqued multiple aspects of the SQ framework. Principal attacks have focused on conceptual and empirical issues relating to: the initial construction of SQ (Buttle 1996, Anderson 1992); the usage of performance minus expectations gap scores to calculate service quality, and the proposal of performance only measurements as superior (Babakus and Boller 1992, Cronin and Taylor 1992, Brown et al. 1993, Peter et al. 1993, Teas 1993b, Van dyke et al. 1997, Caruana et al. 2000), and, for many of the same reasons, the usage of gap calculations in CS/D (Prakash 1984); scale dimensionality and reliability across different contexts (Babakus and Mangold 1992, Cronin and Taylor 1992, Gagliano and Hathcote 1993, Van Dyke and Popeika 1993, Kettinger and Lee 1994, Asubonteng et al. 1996, Buttle 1996, Van Dyke et al. 1997, Caruana et al. 2000); and, confusion regarding the meaning of the expectations component in both SQ (Teas and Wilson 1988, Tse and Wilton 1988, Boulding et al. 1993, Buttle 1996, Caruana et al. 2000) and CS/D (Swan and Trawick 1980, Prakash 1984, Woodruff et al. 1983).

To assess the impact of these (proposed) short-comings on the topic of this thesis, a review of the literature is conducted to determine implications or modifications needed to redress methodological, conceptual or theoretical problems with the standard SQ tool, before adaptation and application in the online marketplace. It is also necessary to review pertinent issues in the theoretical underpinning of the SQ tool – the Customer Satisfaction /Disconfirmation (CS/D) paradigm. This consideration is necessary due to the significant overlap between criticisms of SQ and the same criticisms applied independently but in parallel directly to CS/D (and therefore as CS/D provides the underpinning to SQ, such criticisms also indirectly relate to SQ).

2.14 Criticisms of SQ Development

Several problems are apparent in the development of SQ. While the focus group work is described: customers who “talked about many things – their expectations, their priorities, their experiences” (ZPB 1990 p18) very little attention in any work on SQ development has focused on the transition from focus group to empirical theory. PZB (1985, 1988) and ZBP (1990) provide only two examples from focus group work (a delighted repair customer and banking customer with incorrect information), which does not provide overwhelming evidence to support their proposal “the focus groups unambiguously supported the notion that the key to ensuring good service is meeting or exceeding what consumers expect from the service” (PZB 1985 p46). Anderson (1992) states PZB “abandon the principle of scientific continuity and deduction”. Equally, their literature pool in the first development of the scale is extremely limited. They cite Sasser, Olsen and Wyckoff 1978, Grootenboer 1982 and Lehtinen and Lehtinen 1982 – comprising two textbooks and one unpublished paper. They overlook the literature on CS/D, which at the time of their research had reached a ‘significant size’ Woodruff et al. (1983). No single research team can be expected to cover all literature on a subject, however, the coverage by PZB (1985) is troublingly scant. Earlier works on customer attitudes in psychology and behaviour research are also over-looked (for instance, Fishbein 1967, Cohen et al. 1972, Mazis et al. 1975). Buttle (1996) echoes these objections, emphasising that SQ development failed to draw on economic theory, statistics and psychological theory - “Parasuraman et al.’s work is highly inductive in that it moves from historically situated observation to general theory” (Buttle 1996 p12).

Some authors have also questioned whether the initial empirical work developing SQ was in and of itself enough to generate a general scale item. PZB (1988) contended that the SQ framework: “is a concise multi-item scale with good reliability and validity that retailers can use to better understand the service expectations and perceptions of consumers and, as a result, improve service. The instrument has been designed to be applicable across a broad spectrum of services.” (PZB 1988, p31), however, other researchers are not convinced. Finn and Lamb (1991) comment “The SERVQUAL scales that have been offered to consumer researchers are the result of ONE data collection... . Before they are accepted as ‘off the shelf’ measures of the dimensions of perceived service quality, they must be subjected to further testing.” (p483). Carman (1990) shares the Finn and Lamb (1991) concerns about the generalisability and validity of the SQ scales: “it may be more appropriate as a next step to do more replication and testing of the SERVQUAL dimensions and measures before accepting it as a valid generic measure of perceived service quality that can be used in any retailing or service situation” (p34). The problems in replicated the SQ dimensions and structure in

replication studies would suggest that these statements have weight to them and care should be applied to check validity, reliability and dimensionality in each SQ application, rather than assuming them to be present, as is often the case in practitioner- or company-led rather than academic-led research.

2.15 SQ Evolution and the Confounding Expectations Issue

Criticisms on the expectations component of SQ and CS/D have been both indirect, with questions raised on the usefulness of gap scores as opposed to performance only measurement; and also direct, with regard to the meaning of expectations in theory and practice. Confusion regarding multiple definitions and interpretations of the expectation component is further confounded by the continuing redefinition of operation of the expectation component in SQ.

Tse and Wilton (1988) emphasise that “Researchers have not converged on the exact conceptualisation of the comparison standard and disconfirmation constructs” (p204), while Buttle (1996) concludes: “it seems unlikely that the debate about the meaning of expectations is over” (p21). Many have highlighted the confused nature of defining expectations with so many possible meanings and interpretations in practice (Boulding et al. 1993, ZBP 1993, Van Dyke et al. 1997). Reviewing only a few: Boulding et al. (1993) classify need, should, would and predictive standards; Miller (1976) propose four different kinds of expectations – expected, deserved, ideal and minimum tolerable performance level; Van Dyke et al. (1997) define a *will* expectation – what the customer believes will happen in their next service encounter; a *should* expectation – what the customer believes should happen in their next service encounter; and an *ideal* expectation – what a customer wants in an ideal sense; Prakash (1984) views normative expectations of how a brand should perform for customers to be completely satisfied and ‘comparative expectations’ of consumer expectations from other similar products or brands. Niedrich et al. (2005) raise questions over how expectations overlap or are distinct from norms while Woodruff et al. (1983) propose the usage of ‘experience based norms’ - where limiting expectations to the focal brand or company fails to truly capture the nature of the customer experience as they are informed by experiences not only with the brand/service but also other experiences with the wider brand and product-class. Woodruff et al (1983) note: “Measures... which prompt respondents to consider only expectations, will not properly represent the proposed constructs. More important, true comparison standards may go undiscovered” (p302).

Several authors have questioned the existence of expectations or their value. Carman (1990) questions the validity of expectations when consumers do not have well formed expectations and Buttle (1996) suggests that where experience-based norms are formed, these occur after the service experience has passed, not before it, which would mean SQ is measuring an artificial construct not the actual process of customer choice (even if it is measuring a post-experience rationalisation that links to customer satisfaction). Indeed, Iacobucci et al. (1994) propose that expectations may not exist, or be clearly formed enough, to serve as a standard for evaluation of a service experience, and that 'expectations' should be removed from the SQ vocabulary altogether in favour of another standard.

In addition to general confusion across marketing, consumer behaviour, psychology, service-quality and consumer satisfaction/disconfirmation about the general meaning of customer expectations, this problematic issue is further confounded by the PZB repeated redefinition of the expectation construct – from a 'should' standard (1988) to a 'would' standard (1990) later reverting to a 'should' standard (1991), before developing minimum and desired (ideal) standards sometimes moderated by a 'can be' (arguably predictive element) (1994a). Caruana et al. (2000) highlight that: "These developments in the conceptualisations of expectations have meant that over time SERVQUAL has mutated considerably" (p59). There are three issues of concern in this process of development: firstly, whether the 'should' and 'would' standards are distinct or not; secondly, whether the original 'should' or 'would' standard is operationalised in such a way that it measures predictions not desires; and finally, whether the inclusion of a 'can be possible' element in the desired expectations construct translates it into a predictive rather than true desired standard.

2.15.1 Should/Would Standards: Distinctiveness versus Overlap

In first defining an expectations component of SQ, PZB (1988) emphasise that this is fundamentally different to the pre-existing standard used in the CS/D model. Specifically they suggest that in CS/D expectations were taken as predictions of what is likely to happen, whereas in SQ, expectations were referred to as desires - initially measured with the operational standard asking customers what should happen, not what would happen as in CS/D: "In the service quality literature, expectations are viewed as desires or wants of consumers i.e., what they feel a service provider *should* rather than *would* offer." (PZB 1988 p17).

Despite this early protestation that the 'would' standard referred to an operational measure of prediction not desire (ZPB 1990), PBZ (1990) and PBZ (1991) redefine SQ with a would

operational standard seeking to measure “what customers would expect from companies delivering excellent service” (PBZ 1991 p422). This change is explained by PBZ (1990) who determine the ‘should’ standard led to unrealistically high expectation scores, thus requiring a new standard. The differentiation between what a customer expects a company should do and what an excellent company would do remains unclear in theory and practice. The evolution in the SQ expectations from ‘should’ to ‘would’ was analysed by Teas (1993b) who described “definitional ambiguity” and that “A review of the service quality literature and ... empirical tests indicate that it is conceptually unclear what the SERVQUAL expectations... concept represents” (p29).

Referencing several major dictionaries to determine the differences between should and would standards provides some limited insight into their theoretical meaning. Initial examination of the full Oxford English Dictionary (Simpson and Weiner 1989) and Webster's Dictionary of International English (Gove 1961), the principal definitional differentiation emerges that ‘should’ is linked to what ‘ought according to expectation to be’ (OED 1989 vXV p154) whereas ‘would’ is more closely linked to ‘desire or wish’ (OED 1989 vXX p340). The issue is confused however when examined in more detail. The Concise Oxford English Dictionary (Thompson 1995) explains “there is much confusion as to when to use *should* and *would*. ... *should* is used for the first person singular and plural (*I* and *we*), and *would* with the second and third persons (*you, he, she, it, they*)” (p1283). The American Heritage Dictionary (2004) emphasises that while different in theory, should and would are used similarly in practice.

Such confusion and overlap of meaning is visible in practice. Teas (1993b) suggests variance in responses in comparing different standards is not caused by variance in respondent attitude, but in interpretation of the meaning of the standard in use. Tse and Wilton (1988) also find empirical support for the notion that customers make significantly different interpretations between standards, concluding such interpretations actually limit the standards usefulness due to difficulty in these interpretations. Niedrich et al. (2005) empirically testing multiple comparison standards find “while consumers can generate multiple comparison standards, consumers appear to integrate or assimilate these standards in the process of constructing multiple disconfirmation judgements” (p54).

2.15.2 Should-Would Standards: Desire versus Prediction:

As highlighted above, in technical language, the ‘should’ standard is linked to ‘what ought to be’ and the ‘would’ standard to ‘wishes or desires’; in SQ and CS/D their differentiation has been with regards their description of prediction of likely events (as with the use of ‘would’ in

CS/D and the revised SQ standard) versus the measure of desire and not simply prediction (as with the usage of 'should' in the original SQ standard). Two issues of note arise in considering the predictive intent in meaning of the two standards: firstly, as noted above, technically the 'would' standard is linked to 'desire or wish'; secondly, that consultation of the Oxford English Dictionary (Simpson and Weiner 1989) and Webster's International English Dictionary (Gove 1961) finds that both standards are used to express probability. This second point therefore requires the sole difference as based around the first – that 'should' standards measure a 'what ought to be' (in the future) and 'would' standards measure 'wishes or desire' (for the future). As previously noted, the confused interpretation of the different standards is likely to render confusion in the customer's mind, and such subjective interpretation of the actual meaning (based on education, experience, dialect and colloquialism) that attempting to determine practical differentiation between the two standards. This may emerge statistically (in discriminant validity) but the origin of this discrimination may not be what was intended by the researchers.

Pre-dating the work of PZB (1988), Woodruff et al. (1983) examined the standards used in disconfirmation, suggesting that a 'should' may not actually be a true measure of desire but more predictive in practice: "Breadth of experience may cause consumers to form norms or standards that establish what a focal brand *should* be able to achieve. These norms are constrained by the consumer's experiences with real products and brands and, thus, are not likely to be unattainable ideals" (p298). Niedrich et al. (2005) echo this. Testing multiple comparison standards, they utilise the 'would' standard as a measure of prediction of future events based on personal experiences, communication and other beliefs, whereas the 'should' standard is a prediction driven by a larger set of information, including that from competitors.

Boulding et al. (1993) echo the technical definition of the 'should' standard (as 'what ought to happen'), differentiating this from the 'would/will' standards described as predictive. They find significant differences between empirical results on both standards. However, unlike SQ research, the standards were better defined in operational measures – the 'should' standard being clarified as 'what ought to happen' rather than more simply as in SQ 'what the company should have or do'. ZBP (1993) propose three different levels of customer expectations, (desired, adequate and predicted), and highlight: "A noteworthy challenge in undertaking such research is to ensure that the wording of the instructions and/or scale items is sufficiently distinct for the three types of expectations to establish high discriminant validity among them." (p10). The issues of what expectations are in technical language, in the researchers' intent, the researchers' operational standard, and the customer's interpretation of this, makes

the standard a confounding perplexity, with the danger that differences between what is intended to be measured and what is reported may describe fundamentally different situations.

2.15.3 Desired Expectations: Ideal versus Feasibility

In defining a 'zone of tolerance' bounded by minimum and desired expectations, the issue of determining the true meaning of expectations is further confused. PZB (1994a) abandon the 'would' standard and define the upper level of expectations as "the *desired service* construct" (PZB 1994a p204), representing "a blend of what customers believe 'can be' and 'should be' provided" (p202 PZB 1994a). These definitions have consistency with the original definition of expectations in SQ, where "expectations are viewed as desires or wants of consumers" (PZB 1988 p 17). However, the introduction, both in intent and operational measures of a 'can be' possible element questions whether true desire is being measured or whether a prediction of likely performance is actually delivered. Tse and Wilton (1988) argue that ideal product performance is limited by a 'can be' element based on product experience, adverts and word of mouth communication. In their empirical work, the ideal standard is measured as 'exactly the combination of attributes you would like to see' mentioning no 'can be element'.

Boulding et al. (1993) differentiated between *should* standards (which may change as customers are told what to expect by the service provider) and *ideal* standards (unrelated to what customers are told by the service provider), which suggests there is no 'can be' element of their ideal standard. Indeed, such realisation of ideal standards as unrelated to the feasibility of delivery is evident in other works and practice. Fournier and Mick (1999) reviewing comparison standards, differentiate between desired standards (as ideal or aspirational) and equitable standards (based on what the consumer believes reasonably should occur given the price paid).

Returning to the issue of technical language, The Oxford Concise Dictionary (Thompson 1995) defines ideal as "answering to one's highest conception... perfect or supremely excellent... . A perfect type or conception of this" (p673). The Oxford English Dictionary Second Edition (Simpson and Weiner 1989) adds to the definition of ideal as "Conceived or regarded as perfect or supremely excellent in its kind; answering to ones highest conception" (p615 volVII). No mention is made of any 'can be' possible element of in the ideal definition. Considering a practical example, if you were to ask someone to identify their ideal partner, they would likely chose a film star, singer or model, not limiting themselves to what 'can be' achieved in the (dating) marketplace.

The definitions of PZB (1994a) of a desired or ideal standard containing a 'can be' element is also at odds with their earlier work, where ZBP (1991) state : "a *should* expectation, is close in spirit to the 'what ought to happen' expectation ... We distinguish this *should* standard from the ideal, or desired, standard frequently used in the service quality literature." Most importantly they add: "the consumer's *ideal* expectation – what a consumer wants in an ideal sense – may be unrelated to what is reasonable/feasible and/or what the service provider tells the customer to expect. Moreover ... *ideal* expectations represent enduring wants and needs that remain unaffected by the full range of marketing and competitive factors postulated to affect the *should* expectation." (ZBP 1991 p9).

2.15.4 The Expectations Standard

In reviewing work on the expectations standard, one conclusion is clear – we simply do not know what expectations standards are at play in customers' minds, how they subjectively interpret the different operations of expectations in survey instruments, or if they even exist in a salient form for measurement independent of that measurement. Some have suggested the abandonment of expectations measurement in favour of performance, however, the managerial insight and research value from data containing information about what customers want, rather than how a company has performed, suggests that the measurement of expectations has value, but should be reconsidered in a more simple manner (discussed later in this paper).

For managers and practitioners, the danger in adopting expectations components of unsure meaning could result in their measuring not what was intended. For instance, if measurement of customer predictions of what they expect to happen is taken when the company is seeking to actually measure what customers really would like to happen, then the results will report that customers predict the company to perform as before. This would send a false signal that the company is doing well, when such predictions may be unrelated to what customers actually want. The result of this is likely to be incorrect managerial decision making and resource allocation.

2.16 Reconceptualising Expectations as Importance

Many have challenged the usefulness of expectations. Criticism has focused on the statistical superiority of perceptions scores on their own (Babakus and Boller 1991, Cronin and Taylor 1992, Brown et al. 1993, Van Dyke et al. 1997, Caruana et al. 2000), rather than finding an alternative to the expectations standard. Perhaps the most promising alternative to the

confused expectations standard might be to directly ask customers how important each SQ item is to them (as well as performance).

Carman (1990) sought to investigate the relationship between expectations and importance, suggesting "To most service providers, the importance of a particular service attribute seems more relevant than its expected level" (p49). Carman (1990) concludes that a full model of services quality would include expectations, performance and the importance of items, not the more limited methods in SQ of asking customers to indicate the importance of the SQ dimensions : "A complete attitude model of service quality must measure the effects of the importance of individual attributes on perceptions of quality. While PZB discuss importance, it is more in the context of a validity check on their instruments" (Carman 1990 p51).

PZB (1985) do acknowledge the issue of the importance of the different SQ dimensions and ZBP (1990) report on efforts to address this, where they propose the best way to determine importance of SQ dimensions is to ask customers to allocate one hundred points across five questions representing the each of the five SQ dimensions. The inclusion of such an approach in practice requires that the dimensions of SQ be known in advance of the survey application. The most criticised aspect of the SQ framework has proved to be the failure of the 22 SQ items to divide into the proposed five dimension structure in replication studies (for instance, Babakus and Mangold 1992, Bouman and van der Wiele 1992, Cronin and Taylor 1992, Brown et al. 1993, Van Dyke and Popeika 1993, Gagliano and Hathcote 1994, Kettinger and Lee 1994, Buttle 1996, Asubonteng et al. 1996, Van Dyke et al. 1997, Caruana et al. 2000), suggesting such an approach of points allocation is fundamentally flawed.

As noted previously, the confused notion of the expectations component questions the usage of expectations as a component measure. There is evidence that there is no discriminant validity between expectations and importance in practice. Teas (1993a), in examining what meaning customers actually placed on the expectation standard, found that the majority of customers interpreted the expectation measure as importance. Cronin and Taylor (1992) directly measure the importance of each SQ item using it to test weighted and unweighted models of SQ, finding unweighted models explaining a greater amount of variance. PZB (1994c) criticise the weighting procedure: "We would argue that using weighted item scores as independent variables in regression analysis is not meaningful because a primary purpose of regression analysis is to derive the importance weights indirectly (in the form of beta coefficients) by using unweighted or 'raw' scores as individual variables (PZB 1994c p115). These issues, coupled with the increased length from measuring expectations, performance

and importance, suggest a superior approach may be to measure importance and performance alone.

If the intention of the expectations component is to determine the customer's ideal level of performance for that attribute, then asking the importance they place on the attribute may be a simpler and superior method than asking their expectations. If expectations are interpreted by customers as predictive standards or where experience-based norms emerge (where past experience shapes future experience expectations), customers may state a prediction or expectation that an item will be performed at a certain level (based on past experience) regardless of how important that item actually is to them. Cravens et al. (1985) using direct item importance measurements found that many companies were performing highly on items that were unimportant to the customers. If these companies were to go on with expectations-based measurement, they might continue to offer what customers expect, but what is actually unimportant to them.

Teas (1993a) investigation of respondents' interpretation of the expectations component suggests that expectations may be a fundamentally flawed concept. Many conflicting customer interpretations of the expectations component of SQ are found (importance 37%, forecasts 21%, equitable level 9%, ideal level 7%). The emergence of importance as the most favoured interpretation of the standard suggests the usage of a clearer, direct importance statement would seem advisable.

The most useful application of direct importance measurement in a disconfirmation SQ based model can be found in Cravens et al. (1985), who seek to measure the ideal level of various items of services quality. They make a conceptual link between ideal standards and importance item measures (rather than expectation measures as in PZB 1988) but describe "The use of an ideal reference level for service quality may indicate an unrealistic expectation on the part of the buyer regarding cost-benefit considerations" (p297). Therefore the operational version of the ideal concept is derived as an importance measure (asking respondents how important items are to them on a one to ten scale). They comment that asking respondents 'how important' questions were used, as it was assumed that an 'ideal' company would score '10' on each factor, they add: "Pretesting indicated that the importance procedure was easier to understand by respondents and tended to be much less abstract. This may be an important consideration when gauging intangible services compared to products" (p299). Results indicated the usage of importance based measures of SQ were a valid measure of service quality.

Support for the usage of importance as a basis of service quality rather than expectation can be found in earlier works rooted in marketing psychology, where the importance concept was clearly an integral part of the measurement of customer behaviour. Mazis et al. (1975) testing different models of analysing customer behaviour and intent, find those measuring importance to be superior to those measuring expectations, when seeking to determine customer behaviour and attitudes. This suggests that importance based models of customer affect were the dominant model of behaviour in use at the time. By the time of the development of the SQ scale, the CS/D based model of expectation-performance disconfirmation had entered wider usage and thus was chosen as the basis of the SQ model. This may have been the wrong choice given the problems with the expectations standard and evidence supporting the importance-based alternative.

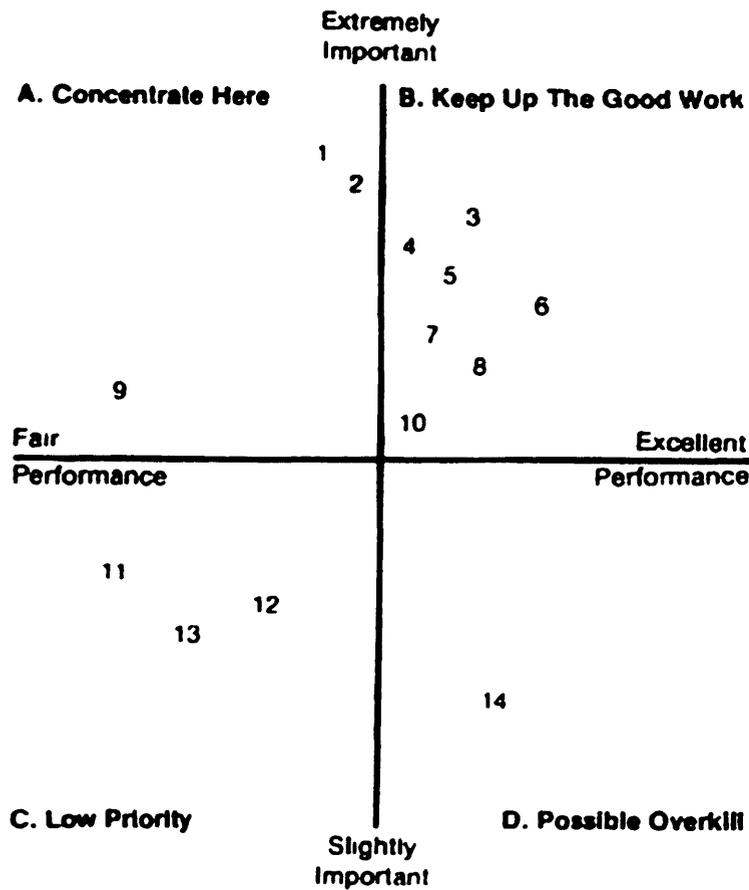
2.17 Importance-Performance Analysis

The usage of importance scores and performance scores together in customer research has significant precedent outside of SQ. Working before the first SQ work, Martilla and James (1977) proposed 'Importance-Performance Analysis' (IPA) using this technique. Acknowledging the value of expectations and performance in a single analysis, Martilla and James (1977) proposed a tool for evaluating elements of marketing through asking customers the importance they place on an attribute and the performance of the company on that attribute. Customers were directly asked "how important is this feature?" and "how did the dealer perform?", in a study of 284 new car purchasers. Mean scores were calculated and results presented on a grid overlaying item importance and the performance of the company, based on whether the company should concentrate on improvement (high importance/low satisfaction); maintain current performance (high importance/high performance); give the items a low priority (low importance/fair performance) or re-evaluate whether delivery should be reduced (low importance items (low importance/high performance), represented in Figure 2.3 below (numbers in grid represent attribute numbers, e.g., 1 - "Job done right the first time").

The approach developed by Martilla and James (1977) was subsequently adopted by a number of researchers both before the development and adoption of the SQ framework and more recently. In common with CS/D, IPA does not contain any generic items, meaning that it does not provide a generic instrument like that delivered within SQ. In addition, IPA publications have principally been evidenced in lesser journals than those regarding SQ, resulting in a lower profile for IPA versus SQ. However, this is not to say that the value of the

framework has not been identified – IPA has become “a widely used analytical technique that yields prescriptions for the management of customer satisfaction” (Matzler et al. 2004 p271).

Figure 2.3. Importance-Performance Grid
 Source: Martilla and James, 1977. (p78)



Martilla and James (1977) originally described IPA as “an easily understood technique that can yield important insights into which aspect of the marketing mix a firm should devote more attention as well as identify areas that may be consuming too many resources” (p79). This view is shared by many subsequent researchers. O’Neill et al. (2001) suggest “The information derived should prove invaluable in terms of the development of marketing strategies for the organisations that use it” (p407), while Lovelock et al. (1998) emphasise importance-performance analysis as a useful management aid to “direct scarce resources to areas where performance improvement is likely to have the most effect on overall customer satisfaction” (p15). Ford et al. (1999) propose the information derived from importance-performance analysis “will prove invaluable in terms of the development of marketing strategies for the ... institutions that use it” (p173). Hawes and Rao (1985) note the primary

benefit of IPA in combining information on resource allocation priorities, satisfaction, performance and areas needing improvement: “The key advantage offered by importance-performance analysis... is the synergistic effect of their simultaneous examination of these measures.” (p20). Similarly, Hudson et al. (2004) note “The two main research instruments that have been developed over the years to analyze the concepts of quality and consumer satisfaction in the service industry are the Importance-Performance Analysis (IPA) and SERVQUAL.” (p305)

Comparing IPA and SQ, Hudson et al. (2004) note that the “major criticism of SERVQUAL is that information about importance is not gathered and integrated in the calculation of the quality score. Importance is recognised by many authors as relevant for the measuring of perceived service quality... However, the relative importance of each of the dimensions in contributing to the overall quality of service is rarely addressed in SERVQUAL studies” (p306). Hemmasi and Strong (1994) further criticise SQ, identifying specifically the role of importance: “The evidence suggests that the SERVQUAL methodology does not appear to be an appropriate conceptualisation of operationalisation of the service quality construct. The primary reason is the inadequacy of the expectations/performance gap model which underlies the conceptual development of the SERVQUAL scale... service quality... appears more appropriately identified through... importance-performance analysis.”

Hudson et al. (2004) sought to test the differences between Importance-Performance-Analysis (Performance-Importance), ServQual (Performance-Expectation), ServQual-Importance ((Performance-Expectation) x Importance) and ServPerf (Performance), conducting empirical investigation on 220 holiday makers service quality and satisfaction. They directly measure item importance (measured on a five point Likert scale), expectations (measured as a feature being ‘definitely expected’ to ‘definitely not expected’) and performance (from ‘strongly agree’ to ‘strongly disagree’). They conclude that although the different methodologies provide very different rankings of thirteen service elements (how important they were to customers) “there was no statistical difference in the four methodologies” (p305). This suggests that further evaluation and comparison of the methodologies, on a larger sample, is required to determine if differences do truly exist. They also conclude the value of importance attribute scoring cannot be ignored: “Disregarding importance may mean losing useful insights. Without considering attribute importance, one has no indication of the relative importance that respondents attach to particular aspects of service performance.”

Ford et al. (1999) utilise the importance-performance framework in higher education, emphasising both the general shortcomings of SQ (that the specific items may be inappropriate in the education context), and the problems of expectations in general – that the lack of prior knowledge and experience with the context may lead to unrealistically high expectations of new students, and that expectations are liable to change over time. Using focus group data to generate attributes, then empirically applying an importance/performance survey, with students in the USA and New Zealand, Ford et al. (1999) find a validated seven factor solution using importance/performance measures (variance extracted, coefficient alphas and checks of discriminant validity), and utilise an importance-performance grid to represent results for managerial interpretation.

Joseph and Joseph (1997) also apply the importance-performance analysis framework in the education sector, highlighting the problems of expectations in that context – potential students with little or no knowledge and experience of tertiary education do not have well formed expectations, meaning that any reported expectations would lack validity. A different approach to measuring service quality may therefore be required and they note that “the traditional importance/performance paradigm is the most appropriate way of measuring service quality in education” (p17). The inability of customers to meaningfully articulate expectations in the online environment has been noted (ZPM 2000), suggesting that importance-performance analysis may be just as appropriate online as in education. Gaining 616 results and finding a seven factor solution (using context specific SQ items), Joseph and Joseph (1997) confirm the validity of importance-performance measurement in SQ analysis, utilising the importance-performance grid to illustrate findings for managerial interpretation.

The majority of publications on the usage of importance-performance analysis have been within the travel and hospitality sector, where numerous replications have been reported. Go and Zhang (1997) use IPA to evaluate Beijing as an international meeting or conference destination, Pike and Ryan (2004) use IPA to categorise the cognitive perceptions of customers of different holiday destinations, O'Neill and Palmer (2004) determine customer expectations and the issues of most importance to customers through using IPA combined with SERVQUAL analysis of visits to wineries, O'Leary and Deegan (2005) seek to analyse the slow down in Irish tourism from France by measuring what French tourists see as important destination attributes and how the country performed. Some authors also identify the success of IPA in comparing different customer segments, (one of the principal aims of this thesis). Williams and Dossa (2003) use IPA to evaluate different tourist segments responses to British Columbia's wine tourism industry and devise strategic initiatives for

improvement. Yavas and Babakus (2003) use IPA to compare the needs of vacationing versus business travel guests at a hotel when evaluating the service provided, Evans and Chon (1990) use IPA to analyse tourism policy while Hudson and Shepard (1998) analyse tourist destinations. IPA has also been popular in assessing healthcare, including general healthcare (Hemmasi and Strong 1994, Dolinsky 1991, Cunningham and Gaeth 1989); dental practice (Nitse and Bush 1993) and retirement communities (Hawes et al. 1982). Other applications have included: banking services (Ennew et al. 1993), food (Sethna 1982, Keyt et al. 1994), housing (Hawes et al. 1982), educational services (Hawes et al. 1983), adult education (Alberty and Mihalik 1989), for turning faculty course evaluations into improvement activities (Orthinau et al. 1989), in governmental services (Van Ryzin and Immerwahr 2004), and in banking (Swinyard 1980). Bacon (2003) reviews fifteen datasets of IPA usages, including: the service of a market research firm, restaurant, university campus, career placement centres, computer software training, rail service, sports association performance, MBA degree programme, communication skills of MBAs, fitness club. Alvin (1986) proposed 'simultaneous importance-performance analysis' as an application of IPA to analyse consumer perceptions of competing brands to drive marketing strategy, while Dawes and Patterson (1987) used IPA to analyse the importance of different tasks undertaken by product managers.

O'Neill et al. (2001) utilise Martilla and James Importance-Performance Analysis in investigating online service quality. Highlighting the shortcomings of SQ (problems of gap score usage, questions over expectations meaning and validity) and the shortcomings of performance-only measurement (such as SERVPERF), determine importance-performance analysis is a suitable tool "to identify the underlying importance ascribed by consumers to the various service quality criteria being assessed. In other words, importance is viewed as a reflection of the relative value of the various quality attributes." (p407). They propose this allows for the identification of which attributes are most influential in repeat purchase and which have a lesser impact. O'Neill et al. (2001) use eighteen modified SQ items in a study of students in Australia evaluating on-line education library services. They use a similar analysis to PZB (1988) with OBLIMIN factor rotation scores, but do not find the five factor structure of SQ. However, checks of construct validity and reliability (alpha .88 and .90 for importance and performance; .89 for difference) provide for the validity of the importance-performance rather than expectations-importance model. Rather than directly examining gap scores, to examine the validity of differences in importance and performance, paired t-tests were performed to determine if gaps were significant (and thus worthy of company attention to rectify). Plotting these on the importance-performance matrix as in Martilla and James (1977), O'Neill et al. (2001) conclude: "Heightened competition in the e-commerce domain

continues to force the need for a reliable and user-friendly service quality measurement methodology, and the importance-performance technique utilised in this study has proved to be quite successful in this regard” further, “The importance-performance grid also has a number of advantages over other service quality measurement techniques... The clear representation helps all parties to channel strategies into the right area.” (p413). Indeed, the importance-performance grid provides a far clearer picture of areas needing attention to the SQ gap graphs and weightings proposed by ZBP (1990) or zone of tolerance depictions of PZB (1994a,b) shown in Figures 2.4, 2.5 and 2.6.

Figure 2.4. Relative Importance Weightings and Associated Gap Scores
Source: ZBP 1990 p28/9

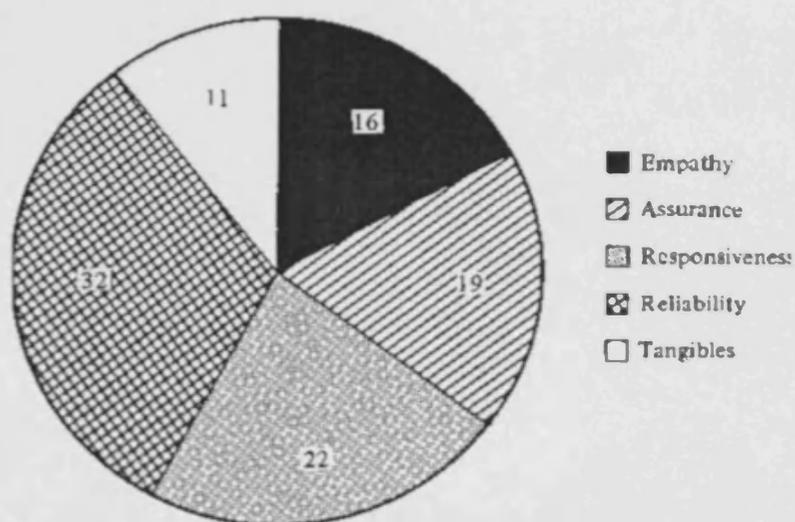


Figure 2.5. Relative Importance Weightings and Associated Gap Scores
Source: ZBP 1990 p28/9

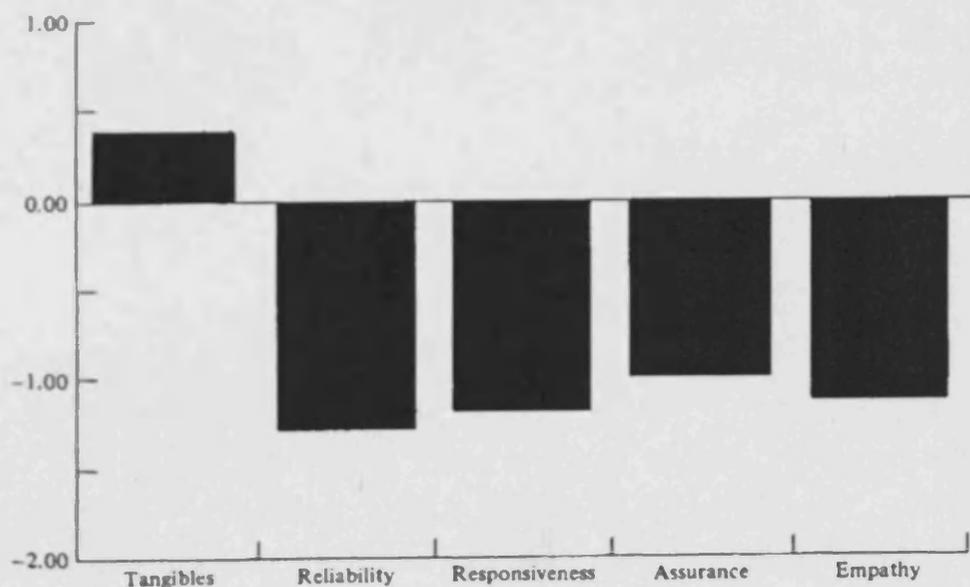


Figure 2.6. Service Quality Perceptions Relative to Zone of Tolerance for by Dimension.

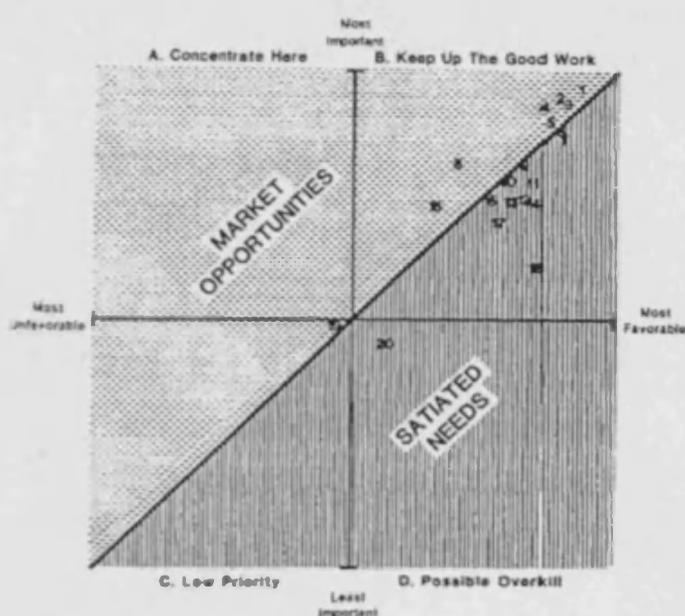
Source: PZB 1994a p216



2.17.1 Grid Positioning

Martilla and James (1977) originally suggested the establishment of quadrants based on research and managerial judgement. This sentiment is echoed by Hudson et al. (2004), who suggest determining positioning based on management interest in the level of importance customers placed on items. In some applications the point where the grid lines cross is placed in the middle of the scale, in some scales, the mean performance and importance is used while in other the median score is used (Bacon 2003). Hawes and Rao (1985) propose the introduction of an “iso rating diagonal” – that the importance performance grid should be constructed so that axes intersect at the other’s midpoint and that a 45-degree diagonal line should be placed representing whether importance and performance scores would be equal. Placement above the line represents importance exceeding performance and vice versa, with the greater the placement of an item from the line, the greater the issue for attention (shown in Figure 2.7 below).

Figure 2.7. Modified IPA Grid with Iso-Rating Diagonal
Source: Hawes and Rao (1985)



2.17.2 Rationalising Importance Score Levels

Hawes and Rao (1985) note when observing high levels of importance in health care IPA application, that such high scores are not expected – attributes selected for empirical investigation (through interview and focus group) are those of most importance to the customer or user, therefore, high scores on each final item is anticipated. Indeed, the very process of constructing a list of items and reducing these to the most crucial issues, provides that only the most important issues are retained. In comparing expectations and direct importance scores, Hudson et al. (2004) find that importance scores for nine out of thirteen dimensions exceed expectation scores, suggesting differing standards at work in customer evaluation of the meaning of expectation – be it predicted or desired/ideal. If interpretation was of desire/ideal level, expectations should have been roughly equal in score to importance, suggesting customers are using predictive evaluations in interpreting expectations, and thus that importance is a more accurate direct measure of desire/ideal standards.

2.17.3 Item Generation

IPA may provide an alternative measurement methodology to SQ, but as with CS/D, unlike SQ, no generic pool of items is provided. Hawes and Rao (1985) note “each application of importance-performance analysis must begin with an identification of salient attributes that are relevant to the situation being examined” (p20). Various approaches have been utilised in the literature - Hudson et al. (2004) asked managers to brainstorm all aspects of customer service to generate 146 potential items; Crompton and Duray (1985) use literature review and

qualified researchers to generate a list of items; Hawes and Rao (1985) use literature and focus groups to determine items. Hemmasi and Strong (1994) note that SQ items can be directly transferred to IPA usage, and undertake this in the service sector, while Matzler et al. (2003) adapt the standard 22-item SQ battery for IPA analysis in the banking sector. Ultimately, standard market research methods can be used to generate pool items, or indeed standard SQ items can be used in isolation or combination with other measures. Within this thesis a wide literature review has been utilised to generate items for testing, the process of which is described in subsequent chapters.

2.17.4 Statistical versus Non-Statistical IPA

One area of debate within the IPA literature has concerned the usage of statistical analysis. Crompton and Duray (1985) sought to assess the validity of different approaches for sorting items into the four quadrant importance-performance grid, highlighting two approaches in practice to determine where gaps should be classified as worthy of examination (i.e., a true gap in a certain direction). These approaches are descriptive sorting (based on mean or median scores) and statistical sorting (based on analysis of variance using Pearson correlation coefficients and ranking correlation with Spearman's rank-order correlation coefficient). Crompton and Duray (1985) report little difference firstly between mean and median scores and secondly between the two statistical methods, however, they find that statistical analysis generates significantly different results to descriptive methods, concluding that a statistical approach provides superior reliability and increases the likelihood of correctly plotting items. An IPA grid is not used within this study, instead, the t-tests are used to analyse the variance of SQ to validate observed differences.

Another area of concern has been the usage of direct measures of importance and the calculation of indirect assessments of importance (based on item satisfaction correlation to total satisfaction). Bacon (2003) conducts extensive analysis using fifteen datasets with 2139 responses to investigate different approaches to IPA, comparing the traditional mean-derived grid approach and indirect (multiple regression derived) measures of importance, highlighting that many different approaches to IPA had been suggested but: "To date, none of these various approaches has been empirically validated or compared" (Bacon 2003 p57). Bacon (2003) goes on to identify different statistically approaches to indirectly determine importance: standardised regression coefficients, unstandardised regression coefficients or simple correlation coefficients (usually determined by regression with overall performance as the dependent variable and individual performance scores as independent). While direct measures have been criticised as containing a social desirability bias (Lowenstien 1995, Matzler 2004),

Bacon (2003) notes: “Indirect methods are probably not distorted by the same biases as direct measures, but may be distorted when the assumptions underlying their statistical models are violated”, highlighting possible halo effects, problems of linearity assumptions in calculations, and spurious calculations that may lead indirect approaches to produce incorrect measures of item importance. Bacon (2003) utilises fifteen datasets to compare indirect importance measures (using simple correlation and regression coefficients) and direct measurements, using regression analysis to calculate which models best predicted customer reported priorities. He reports, “that direct measures of importance performed better than correlation-based measures and regression based measures... Direct measures are generally more valid than correlation or regression coefficients” (p65). Ultimately, however, Bacon (2003) concludes that the traditional IPA grid may differ from true priorities for improvement – that asking customers directly which areas should be improved provides different and superior results.

Ennew et al. (1992) make the somewhat surprising statement “techniques such as factor analysis and regression may be too complex to be fully operational” (p59), but do call for a more rigorous sorting technique than the usage of simple means – the usage of demand and supply calculations (using expectations and perceptions data) to moderate descriptive means with a stop-gap solution short of statistical analysis. This is an unverified and slightly unusual process which can be discarded as a research approach, but provides an interesting insight into the compromise between full statistical analysis and simple mean examination.

2.17.5 The Role of Competition

Dolinsky (1991) identifies a limitation of IPA “Though the technique is helpful, it is arguably limited to the extent that it ignores competition” (p31). Dolinsky (1991), empirically investigating the healthcare market, finds that not considering how competitors perform on critical issues could lead to management focusing on the wrong issues for importance – traditional IPA would suggest a high importance, good performance item would fall in the ‘keep-up-the-good-work’ quadrant, however, if competitors were offering superior performance, attention would need to be focused on addressing that issue.

Matzler et al. (2003) also highlight the need to consider competitor performance in analysing IPA, while Keyt et al. (1994) propose a modification to the standard IPA based on two (similar) identified weaknesses – the failure to consider competitor performance and the failure to identify which attributes are ‘determinant attributes’ (those which discriminate among competing products and influence choice): “An attribute, say price, may be very important (i.e., salient) to consumers, but if the consumer feels that alternative products are

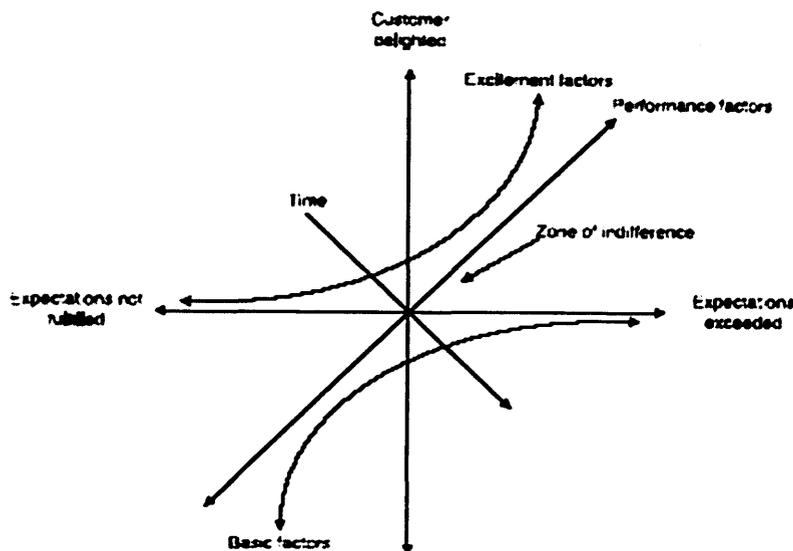
about the same price, then price is not a determinant attribute” (p36). Keyt et al. (1994) propose the measurement of these issues by including a third measure in addition to importance and performance of how well the customer’s favourite (other) company performs. Using this technique in the fast food industry, Keyt et al. (1994) determine this addition provides valuable information on which attributes to focus, however, their study only used ten items, meaning there was no real instrument length issue in including a third variable measurement. Also, in their study they found the majority of respondents answered the competitor performance question in relation to a single other restaurant whereas online, the volume and variance of competitors would likely mean that many different companies were identified further complicating comparisons.

2.17.6 Asymmetric Item Attributes

The validity of IPA due to the varying nature of different service items has been questioned. Matzler et al. (2004) propose as underlying assumptions of IPA (although no such relationship is provided in the original work or Martilla and James 1977) – that the relationship between attribute performance and overall performance is linear and symmetric. Matzler et al. (2004) utilise the Kano (1984) framework (illustrated in Figure 2.8 below), to undermine this assumption – proposing three categories of attribute: basic factors (critical when performance is low but with a decreasing impact on satisfaction as performance increases); and, excitement factors (which become important determinants of satisfaction when performance is high but play an unimportant role when performance is low). Matzler et al. (2004) conclude: “Thus, Kano’s model of customer satisfaction disconfirms the basic assumption of IPA and calls into question its managerial implications.” (p272), with item performance impacting on the importance of an item in a situation based on the nature of the factor (basic, excitement, performance). Matzler et al. (2004) go on to investigate their premise, concluding that management should identify the item type to moderate IPA. However, several problems are apparent in analysing their findings: firstly, they only measure performance and overall satisfaction are calculated – no direct measurement of importance is undertaken (meaning technically they are not actually conducting IPA), and further that no operational measure of item type conducted. Regression analysis is used to calculate item importance with the usage of dummy variables to determine whether items are basic, performance or excitement – meaning in effect that the classification of items is an artefact of the statistical analysis designed to produce an artificial classification based on supposition, not any real measurement of customer classification of item type. Even if conducted this would assume that the three factor Kano model is applicable which may not be the case – customers may have multiple different levels of factor types, which are expressed by the importance the customer places on

the item. Bacon (2003) also suggests that multiple regression measures to determine importance assume a linearity, which would suggest Matzler et al. (2004) usage of regression when seeking to prove non-linear relationships is at fault.

Figure 2.8. Kano / Three Factor Theory
Source: Matzler et al. 2004



Matzler et al. (2003) also examine this issue, taking direct importance measurements. However, they measure attribute satisfaction not performance – a different construct. Gaining 153 responses, Matzler et al. (2003) compare three different measurements of importance: direct attribute rating (5 point scale ‘not at all’ to ‘very important’), asking customers to rank the five (from thirteen) most important attributes, and use of partial correlation coefficients (of attribute satisfaction and overall satisfaction). They find little difference between alternative forms of direct measurement of importance, however, there is a significant difference between these and the derived or calculated measures. The similarity between the two direct measures would suggest this is more accurate than the calculated regression based identification of importance. However, Matzler et al. (2003) propose the superiority of indirect measures, as these take account of the three-factor theory where performance impacts on importance: “when some form of implicit measurement of importance (based on the attribute’s correlation with an external criterion like overall satisfaction) is used, relative importance is derived given the current level of attribute satisfaction” (p124). As previously stated, the existence of these three distinct segments is never empirically demonstrated and the usage of satisfaction rather than performance complicates conclusions due to the different nature of these constructs.

2.18 Criticisms of Gap Scores Usage in ServQual

The conceptualisation of service quality as a service quality score based on the performance minus expectations scores has proven to be one of the most contentious issues in SQ. Conceptual and empirical criticisms in the SQ and CS/D literatures have led to calls for performance-only measurement of services quality would be superior to the gap score conceptualisation.

2.18.1 Subtraction versus Psychology

Van Dyke et al. (1997) take objection to the principle of subtraction to form gap scores and the issue of “subtraction as a ‘simulation’ of a psychological process” (p196). Babakus and Boller (1992) highlight an operational psychological problem, proposing that ‘desired level’ scores will always exceed ‘existing level’ scores. Van Dyke et al. (1997) add “the use of difference was, and remains, an operational decision. Regrettably, it does not appear to have been a particularly good one” (p197). Caruana et al. (2000) comment “The complications resulting from a poor interpretation of expectations by respondents are perhaps compounded by operationalisation of service quality that seeks to represent an entire psychological process as simply subtraction of expectations from perceptions” (p58). Cronin and Taylor (1992) conclude there is “little if any theoretical or empirical evidence supports the relevance of the expectations-performance gap as the basis for measuring service quality” (p56).

2.18.2 Measurement Timing the Gap - Timing and Expectations in Gap Scores

Some researchers have criticised the measurement of both expectation and performance in a single post-purchase administration. Carman (1990) criticises the methodology of PZB in creating gap scores in asking respondents expectations and perceptions of performance in a single data collection: “There was not a before and after administration. Based on what they had experienced in the past, respondents were asked what they expected and then asked what they perceived. As respondent beliefs were entirely ex post these expectation responses can be of little value” (p47). Prakash (1984) sharing similar concerns about CS/D measurements, suggested bias will be present as customers rationalise post-purchase experiences and include this rationalisation in their statements of expectation and performance. Carman (1990) suggests the use of performance-only measurement while Prakash (1984) suggests a more complicated procedure where pre-usage measurement of expectation should be taken then customers asked to review this post-purchase.

2.18.3 Measuring the Gap – Survey Length

The survey of the SQ instrument at forty four questions (two sets of twenty-two questions to generate gaps) in original format, coupled with the likelihood of supplementation with context-specific questions and classification data has led to concerns that the survey may be too long. This would reduce response rates versus smaller instruments or a service quality tool only measuring performance, rather than two sets of issues to generate gap scores. PZB (1991) proposed: “the managerial appeal and usefulness of reporting service quality standard shortfalls as gap scores more than compensate for the increased survey length” (p444). However, in conducting format testing, Caruana (2000) actually found no difference in response rate for one, two and three column formatted questionnaires, suggesting that the limited difference in length had no impact on response rates. PZB (1994a) also conducting empirical testing did find a lower response rate for a two part, one-column questionnaire than measuring the same items/variables as a one-part, two column questionnaire, leading them to recommend this approach to assuage response worries. Notwithstanding decisions of integrating expectations and perceptions statements into a single statement with two answer columns (one for expectations and one for perceptions), the general rule of greater length, lower response rate, will likely hold true, dependent on the length of supplemental and classification data in use.

2.18.4 Gap Score Discriminant Validity

Several authors have focused on the empirical problems of using gap scores in both CS/D and SQ literatures (Prakash 1984, Peter et al. 1993, Brown et al. 1993, Van Dyke et al. 1997, Carman 1990, Babakus and Boller 1991). Iacobucci et al. (1994) proposed that the conceptual appeal of difference scores is invalidated by the fact that “they are notoriously unreliable, even when the measures from which the difference scores are derived themselves are highly reliable”. Van Dyke et al. (1997) clarify: “the reliability of a difference score is dependent on the reliability of the component scores and the correlation between them... the correlation between components reduces the reliability of the difference score to a level that most researchers would consider unacceptable” (p200). Indeed, multiple authors have highlighted that the difference scores correlation with its components means it fails to meet discriminant validity (from its components) such that construct validity is questionable which invalidates its usage (Van Dyke et al. 1997, Brown et al. 1993, Peter et al. 1993, Asubonteng et al. 1996). PBZ (1991) proposed that the usage of Cronbach alpha checks supported the gap score validity (although this is problematic as outlined below). PBZ (1993) further argued that gap score validity was measured, checked versus discriminant validity with unrelated constructs, not components, and that there was no conceptual reason for expectations to be related to

performance. However, the predictive element, either through subjective (mis)interpretations of the expectations standard as a prediction of what is likely to happen, or through the integration of experiences with the company influencing expectations of what 'can be' possible, suggests that there may be a correlation between expectations and perceptions for customers with experience with the company or product class. Further, a self-correcting element may be present, where the more the customer uses the company, expectations and performance may tend towards each other (or the customer would shop elsewhere with a company that better matched expectations).

2.18.4 Difference Score Reliability

Van Dyke et al. (1997) criticise the usage of Cronbach alpha to check validity for difference scores as was used in SQ development. They proposing an alternate formal (John's Alpha), which they utilise to demonstrate reliability may be up to 0.10 lower than as calculated with Cronbach alpha. Peter et al. (1993) also criticise the usage of coefficient alphas to assess the reliability of difference scores, as they do not adequately consider the correlation between the components (which as noted above may be a problem with difference scores). Buttle (1996) however concludes from a review of SQ literature, that even though SQ research with Cronbach alpha usage has been criticised, the difference between the commonly used alpha coefficient and 'reliabilities correctly calculated' (p19) is not actually that large.

2.18.5 Gap Scores and Question Item Attribute Nature

Teas (1993b) suggested that the attribute nature of the SQ items may lead to problems in measuring service quality as a gap score, specifically that the definition of expectations as ideal standards could "be incompatible with the assumption that increasing P-E scores reflect continually increasing levels of perceived quality" (Teas 1993b p19). Teas (1993b) defines item attribute natures as: 'vector attribute' (an item on which the customer's desire is at a finite level, such that more of the feature is always better and thus increases SQ), and 'classic ideal point attributes' (where the customer's ideal level of service is at a finite level, such that performance beyond that level would displease the customer). Thus if items are classic ideal points, SQ measurement as a gap score (where increasing performance scores continually represent higher service quality) is misleading, as once performance has increased past a certain level the customer experiences relatively lower service quality. PZB (1994c) inconclusively identify that "customers are likely to consider most of the 22 items in the SERVQUAL instrument to be vector attributes" (p116), they do add that if items were classic ideal points, the P-E specification should be modified. They conclude that further research is needed in this area, but that one option may be to determine the attribute nature of each item,

which they acknowledge would lengthen the questionnaire. Due to the generic nature of the SQ instrument, with constant adaptation for specific contexts and with the addition of items by managers and academics, this issue is an important one – if new questions added to the SQ scale are of a classic ideal point nature, then the SQ gap score is an inappropriate measurement tool.

2.18.6 The Existence of Expectations

Caruana et al. (2000) question the usefulness of expectation scores, as expectations may not in fact exist in the customer's mind: "it is quite possible that in many cases customers do not have any real specific expectations about a service and making use of expectation batteries of questions results in specific expectation scores for the various items that might not in fact exist" (p59). Expectations may only be formed in the customer's mind when asked what expectations are by the SQ battery: "It may be that customers' expectations about services are often passive and ill defined. Therefore, direct measures may elicit expectations that otherwise might not operate in customers' cognitive evaluations" (p64).

2.18.7 Performance-Only Measurement

The problems outlined above have led many researchers to propose the superiority of performance-only measurement of customer service quality. Babakus and Boller (1992) conclude that differences scores do not provide any additional information beyond that already contained in the perceptions component of the SQ scale. This is a sentiment echoed Caruana et al. (2000), whose research describes the perceptions side of SQ as "the salient component" (p57). Several other researchers have proposed that performance measures are a better indicator of customer intention than gap scores – noting stronger correlations between perceptions of performance and behavioural intent than between SQ (gap score) and behavioural intent (Carman 1990, Babakus and Boller 1991, Brown et al. 1993, Peter et al. 1993, Van Dyke et al. 1997) while PZB (1991) in re-analysing their own SQ data find performance more closely related to intent than the gap score. Cronin and Taylor (1992) even developed a measure they call 'SERVPERF' as a performance-only measurement of services quality, claiming superiority based on better correlations to behavioural intent than gap score derived measures, and emphasising that performance-only measurement is a common way of conducting service analysis in real world practice

2.18.8 In Defence of the Expectations Component

Despite the superior statistical validity of performance-only measures versus gap scores, PBZ (1993) emphasise "the richer diagnostics of SERVQUAL more than justify the separate

measurement of perceptions and expectations”, while PZB (1994c) add “the superior predictive power of the P-only measure must be balanced against its inferior diagnostic value” (p120). Prakash (1984) in a similar situation in CS/D reaches the same conclusion – the greater diagnostic value in measuring expectations more than offsets the weaker statistical correlation with behavioural outcomes of gap scores versus performance only measures.

Cronin and Taylor (1992) propose the superiority of performance-only measurement as “current performance adequately captures consumers’ perceptions of the service quality offered by a specific service provider”, however, the failure to consider the importance of the service quality items, or how much customers desire them, is a fundamental flaw in performance-only measurement, which is simply asking how the company performs on certain items, regardless of whether those items are actually of any value to the customer. Such performance-only measurements may therefore lead to a suboptimal allocation of service improvement resources, as management mis-identifies areas needing attention (PZB 1994a). This issue is clearly explained by PBZ (1993) with reference to Table 2.4 below: “The perceptions ratings suggest placing equal emphasis on improving responsiveness and empathy when, in fact, the company has a bigger problem with responsiveness as the SERVQUAL scores reveal. This company would also focus more attention on improving its tangibles than on enhancing assurance if it had relied solely on the perception scores. Clearly, this would be a major mistake as indicated by the SERVQUAL scores for tangibles and assurance. Measuring expectations and perceptions separately also allows managers to better understand the dynamics of customers’ assessment of service quality over time” (p146).

Table 2.4: Perception vs ServQual Scores
Source: PBZ 1993, p.146.

Dimension	Perceptions Scores	SERVQUAL Scores
Tangibles	5.3	0.0
Reliability	4.8	-1.6
Responsiveness	5.1	-1.3
Assurance	5.4	-1.0
Empathy	5.1	-1.1

2.18.9 Direct versus Indirect Gap Generation

PZB (1994a) also explore the issue of whether rather than calculating gap scores, customers could be asked directly how a company performed versus their expectation. Empirical testing of different instrument formats compared: three column format (measuring individually desired expectations, adequate expectations and performance lined up in columns against a single item statement); two column format (directly measuring performance versus adequate

service and performance versus desired service); and, finally in one column format (initially with the same content as the two column format but with repeated items rather than aligned columns). The one column format received low response rates. Both two and three column formats received generally equal responses, suggesting that length is an important issue only beyond a certain limit. In addition, the three column format suffered far less response errors in asking expectations and performance separately, compared to asking customers to directly make this calculation themselves (as was measured by people stating desired performance less than adequate performance). The superior diagnostic ability of separate expectations and performance measurements rather than direct customer responses was also noted – when asking for performance versus expectation, no information on that expectation is gained independent of performance, providing no general guidance beyond that specific service encounter.

2.19 Dimensionality and Factor Construction

The Cronbach alpha reliability scores are fairly high across replications in the SQ literature (Buttle 1996), however, Asubonteng et al. (1996) prescribe a more stringent test of convergent reliability is the replication of the anticipated (five) dimensions and factor structure. Such a structure has not been observed in the vast majority of SQ replications, with many berating the ‘unstable dimensionality of the SERVQUAL instrument’ (Van Dyke et al. 1997 p201) and highlighting different factor structures. To name but a few of the studies undertaken: Cronin and Taylor (1992) find SQ unidimensional in banking, pest control, dry cleaning and fast food; Babakus and Mangold (1992) find SQ unidimensional in healthcare; Caruana et al. (2000) do not support the original or revised SQ factor structure in higher education; Brown et al. (1993) do not find the five SQ dimensions when analysing financial institutions; Gagliano and Hathcote (1994) find four factors in retail; Bouman and Van der Wiele 1992 find three factors in car service; Kettinger and Lee (1994) find a four factor SQ model; Van Dyke and Popeika (1993) find SQ unidimensional; Carman (1990) finds five to nine factors in different industries; Pitt et al. (1995) find three, five and seven factor models across different industries.

In fact, there is little conceptual reason for the SQ factor structure to replicate in different circumstances – the two components of the SQ scale, customer expectations for service and company performance, are likely to be inherently different in every situation, resulting in a different factor structure. Several authors have suggested that the factor structure may be dependent on the service being offered (Babakus and Boller 1992, Buttle 1996), while Babakus et al. (1993b) comment “the domain of service quality may be factorally complex in some industries and very simple and unidimensional in others” (p16). Carman (1990) also finds

context influences customers' evaluations and therefore factor structure, suggesting "The lesson ... is that when one of the dimensions of quality is particularly important to customers, they are likely to break that dimension into sub-dimensions" (p37). Indeed, PZB (1994a) highlight that further research into the dimensionality of the SQ scale may be required (p221). The failure of the SQ structure to replicate in many situations, may not necessarily limit its use or applicability (except in making cross industry comparisons). As long as the standard requirements of rigorous research such as reliability and validity checks are carried out in each application and analysis, the replication of the original factor structure may be less important than the information contained within the new structure found in each situation.

2.20 Supplementation and Adaptation

Cravens et al. (1985) describe two approaches for analysing service performance: the use of generic criteria (such as those developed by PZB in SQ), and the use of service-specific criteria: "While a generic term such as 'competence' can be used to evaluate an architect's services, factors such as design creativity and quality of design documents probably convey more specific attributes of the service. "(p297). Much of the popularity of the SQ framework (as opposed for instance, CS/D) derives from its delivery of an 'off the shelf' set of items to apply to customers, without the complex and time consuming task of generating new items from qualitative research. However, it should be noted that PZB (1988) readily acknowledge that the instrument is 'a basic skeleton' (p31) that when necessary can be supplemented or adapted to fit the particular context of enquiry. Many authors have found it useful to couple some or all of the generic SQ items with their own context-specific research needs (PZB 1991). Some researchers have, however, questioned the extent of adaptation required and whether the extensiveness of this modification might negate the usefulness of the SQ score scale (Carman 1990, Galgiano and Hathcote 1994). Brown et al. (1993) and Bowers et al. (1994) finding significant item addition needed in healthcare, while Finn and Lamb (1991) conclude SQ is not appropriate in the (physical goods) retail sector where different core criteria are at work.

In applying the SQ framework, in addition to modifying the actual content of scale items, multiple data collection methods have been employed: mail surveys are common and used by PBZ (1991), Babakus and Boller (1991), Bresinger and Lambert (1990) while Finn and Lamb (1991) used telephone surveys, and Carman (1990) used on-site self administration. Despite these many different methods used in data collection on SQ, the nature of these methods is not considered an important factor in altering results or SQ structure - in considering differences between factor loadings and discriminant validity PBZ (1991) dismiss differences

in data collection and analysis procedures in SQ replication. Such cross-methodological robustness has also proved helpful in the spread of SQ, allowing researchers to adapt their methods for the peculiarities of specific situations they are considering.

2.21 Data Bounding by Organisational Context

In building a general model of SQ, where factor analysis is based on the incorporation of perception data (from four companies in PZB 1988), the performance of the individual company plays a large role on determining the factor structure of service-quality (as what the company did at any given point feeds into the gap score). This leads to a model that is directly bounded by the organisations in which the study takes place, as organisational performance determines the gaps and therefore the model. A framework derived from data about four specific companies may not therefore be applicable in circumstances beyond those four specific companies. This would partly explain the wide variation of factor structure observed in the multiple replication studies - different companies were sampled, therefore different performance levels were achieved, and as the SQ score is calculated based on performance perception minus expectation, a different performance by a different company alters the SQ score for each item and therefore how the items factor together. Finn and Lamb (1991) criticise the SQ model for being based solely as the result of one data collection, and echo the Carman (1990) call for wider testing of the construct before the dimensions are accepted as generic across any service situation. Multiple authors have highlighted that service situation will determine SQ structure (Babakus and Boller 1992, Buttle 1996, Babakus et al. 1993b, Carman 1990). PBZ (1991) acknowledge the contingent role of the companies studies - highlighting that the failure of the SQ dimensions to emerge in replication studied may be due to "across-dimension similarities and/or within-dimension differences in customers' evaluations of a *specific* company involved in each setting" (p440).

It may be more appropriate to examine a model based on the factor structure resultant from the expectations component rather than the gap or performance score. Where expectations are used as the basis for factor analysis, the model is only indirectly bound to the organisation, as customer expectations of what will happen in a situation are bound to the situation, they are not limited solely to a specific instance of performance. This then gives a clear picture of the general factors customers consider in making general decisions. If necessary, a gap score can easily be calculated based on the factor structure determined by expectation based reduction. Depending on the customer's experience and nature of expectations, the level of indirect bounding will vary - predictive standards of experienced users have much closer bounding to

a specific organisation than ideal wants/desires which are closer to the customer's non-normative own standards of a product class/purchase situation rather than specific company.

2.23 Differential Generalisability

As noted previously, in the many replications of SQ, many different factor structures and dimensions have emerged, suggesting that customers consider different elements in different purchase situations. The role of context in determining SQ structure may suggest limited or no generalisability from a single measurement or derivation of a model based on that measurement. However, we might apply a concept of 'differential generalisability', where some elements may represent generic action across industries and sectors, whereas some or most may be context specific. This is not an entirely new or unprecedented deduction.

PZB (1988) and ZBP (1990) both report when measuring the importance weighting of customers of the SQ dimensions that across the four companies examined "reliability is the most critical dimension, *regardless of the service being studied.*" (ZBP 1990 p27), further: "We have used the SERVQUAL instrument in many different studies since we initially developed and tested it. Results from those studies have consistently shown reliability to be the most important dimension... we are confident that the number one concern of customers today, regardless of type of service is reliability; and the facet that matters the least to current customers in assessing quality of service is tangibles" (p28). PBZ (1991) examining five further companies find the same pattern replicated, with reliability most important and tangible features least important: "the relative importance of the SERVQUAL dimensions are stable across settings." (PBZ 1991 p431). Similarly, Cravens et al. (1985) find when measuring customers importance evaluations for different companies within the same field that the most important items were consistent across firms, however lower importance items did not follow a set pattern. Mersha and Adlakha (1990), in seeking to determine what aspects of service quality are important for high quality service, find across five different service sectors find: "attributes that are ranked high as determinants of good quality for services in general are also consistently ranked high as attributes of good quality for individual services" (p44). In common with Cravens et al. (1985) they do not find consistency in low importance items.

The limited works which have looked at the importance customers place on SQ items across contexts allow the argument that the most important issues in customers' minds are broadly applicable across contexts, with others are determined at each encounter. This is not illogical - the same customers use different services they may carry their most important concerns universally. Such issues may be driven by core values which do not change in the situation.

Boulding et al. (1993) consider the different standards customers use, and emphasise that ideal standards represent enduring needs and wants and are likely to be relatively static and stable over time. This may be extended to suggest that ideal standards (which have been measured previously as the importance customers place on items (Cravens et al. 1985)) may be generally applicable across different encounters, while relative standards of expectation of what should happen or what is desired in a given situation change. Mersha and Adlakha (1990) concur, concluding: "managers should pay attention to the 'generic' attributes of quality as well as to the unique features of a particular service in order to improve the perceived quality of the service" (p44). This issue is one clearly in need of greater research in the future.

2.24 Conclusions

The goal of this thesis is to investigate the provision of service by online retailers to their customers. The foundation of this investigation is an analysis of online customers' service quality demands, which will be used in the first instance to produce a model of online service quality. Once constructed, the model will be used as a tool to consider how customers with different characteristics, or representing different situations, report different service issues within the model. The first step in the construction of the new model of online service quality has been the review of literature relating to existing theories and approaches used to analyse service in practice.

As a pre-requisite for developing the model to be evaluated in the thesis, the first part of this chapter sought to outline *why* the issue of service quality is important. Several key principles were found to support this proposition - the fundamental marketing belief that customer requirements must be known before they can be delivered (Keener 1960, Greyser 1998); empirical evidence of linkages between increased quality delivery and greater customer loyalty (Gupta et al. 2004), Zeithaml et al. 1996, Flint et al. 1997), greater profitability associated with higher service quality (Zeithaml 2000, Boulding et al. 1993); and, the greater likelihood of repeat business and promotion by customers related to service quality (Zemke 1997, Woodside et al. 1989, Anderson and Sullivan 1990).

Having determined *why* service quality is important, a review was conducted of *how* to measure service quality in practice. Over twenty years of research on this issue has provided one tool that has been adopted and applied far more than any other - the ServQual tool, established in the work of Parasuraman, Zeithaml and Berry (Buttle 1996). The ServQual approach bases service analysis on a quantitative comparison of customer expectations and their perceptions of performance (with performance out-stripping expectations resulting in a

positive service experience, whereas performance falling short of expectations representing poor service) (Parasuraman et al. 1985, 1988). In fact, this approach is pre-dated by the Customer Satisfaction/Disconfirmation approach (Oliver 1980, Cadotte et al. 1987). However, the ServQual tool has gained greater popularity, probably in large part due to its provision of a generic set of twenty-two service questions (or items), that can be applied in any contingency, whereas CS/D models provide only a theoretical approach of expectations-performance comparison.

As the most widely used and applied tool to analyse service quality, the ServQual approach has been adopted as the basis of service analysis within this thesis. The different nature of internet service provision (which did not exist when the ServQual work was first conducted), coupled with many different critiques of the ServQual tool, required a thorough analysis of both the appropriateness of the ServQual tool itself, and the theoretical underpinning it utilises - this analysis forms the basis of the majority of the past chapter.

The stages of ServQual development through exploratory, quantitative and confirmatory studies by the original research team was presented, as a precursor to examining some of the issues raised as criticisms of the process of development, and the outcomes of that process. Through review of a very wide range of literature sources, a series of specific criticisms were identified and determinations of corrective action developed, and conceptually justified for the current piece of research. The ease with which ServQual analysis can be applied, and its resultant popularity, have allowed the ServQual tool to grow to become one of the most widely applied and analysed in the academic literature (Asubonteng et al. 1996, Caruana et al. 2000). Specific criticisms were identified and investigated to ensure that the research presented within this thesis was based on a valid understanding and application of service analysis.

Criticism of ServQual Development: Suggestions have been made that the researchers went from focus group to empirical testing too soon, with inadequate support for the existence of the expectations-performance model they utilise (Anderson 1992); in addition. Some consider that one data collection exercise is insufficient to generate the generic instrument the researchers proposed (Finn and Lamb 1991, Carman 1990).

ServQual Evolution and the Consistent Meaning of the Expectations Standard: Extensive research has sought to challenge multiple facets of the 'expectations' standard used within ServQual. The usage of expectations has been complicated by the repeated re-definition of the notion of

expectations by the original research team - changing the original CS/D expectation standard, that looked at customer prediction of future performance, to a broader measure of customer desires of what companies 'should' perform (PZB 1988). This further altered in meaning in later research to what 'excellent' companies 'would do' (ZBP 1990), and yet later to a measure of 'ideal' standards bounded by 'feasible' limits (Parasuraman et al. 1994a). Critics have suggested a 'definitional ambiguity', with customers and academics alike uncertain as to what 'expectations' means (Teas 1993a, Tse and Wilton 1988, Boulding et al. 1993), and conclude that it may be worth removing or at least re-defining the expectations component (Iacobucci et al. 1994).

Criticisms of Gap Scores Usage in ServQual: Related, in part, to the above criticisms, the calculation of service quality as the gap between expectations and performance has also been challenged. The use of gap scores has been philosophically challenged with suggestions that it is not desirable to measure a psychological process using a simple mathematical computation (Van Dyke et al. 1997, Babakus and Boller 1992). The measurement of expectations and performance at one point in time, rather than before and after service delivery, has been questioned as providing meaningless results (Carman 1990). However, the measurement of both expectations and performance adds length to questionnaire surveys, potentially reducing completion rates (Caruana 2000). Statistical researchers have also highlighted that gap scores may lack discriminant validity from their components, and that the guards against this used by PZB are inadequate (Peter et al. 1993, Brown et al. 1993, Babakus and Boller 1991). It has also been suggested that where service items are not 'vector attributes' (where more is always better), but 'classic ideal points' (where there delivery over a certain level leads to dissatisfaction), then gap score measurement is unable to usefully capture service quality (Teas 1993b). These problems have led many researchers to suggest that performance only should be measured when analysing service quality - that the expectations component, and subsequent gap-score calculation, be removed from the analysis completely (Carman 1990, Babakus and Boller 1991, Broen et al. 1993, Peter et al. 1993, van Dyke et al. 1997).

ServQual Dimensionality and Factor Construction: Researchers have suggested that the five-dimension (or factor) structure of the ServQual tool is context-specific - that in different contingencies, different factor structures will emerge (for instance, Cronin and Taylor 1992, Babakus and Mangold 1992, Gagliano and Hathcote 1994).

Based on the literature review conducted, and criticisms examined (and summarised above), several modifications to the ServQual methodology were considered as necessary, to

maximise the theoretical validity of this thesis. Firstly, despite criticisms of the inclusion of the expectations construct, it was decided that the need to identify customer demands independent of firm performance, necessitated the inclusion of a separate measure of customer requirements. A performance only measurement would not provide the required information (that is, what customers demand from online retailers). While the decision was taken to retain this initial disconfirmation standard, it was decided to modify this from the ServQual 'expectationa' standard to an 'importance' measurement. Review of ServQual research indicated precedent for this decision (for instance, Cravens et al. 1985), and research that suggested many customers interpreted 'what they expected' as 'how important' the item was to them (Teas 1993a). The Importance-Performance-Analysis framework of Martilla and James (1977), that has been supported and used by many service researchers (for instance, O'Neill et al. 2001, Lovelock et al. 1998, Ford et al. 1999, Hawes and Rao 1985), also adopts this approach, and actually predates the CS/D or SQ model usage of expectations, further validating the decision to use importance measurements.

The unique nature of internet retail, when compared offline service, means that while the ServQual tool was intended as a generic instrument (PZB 1988), significant supplementation of the 22-item scale is required (for instance, to include the difference for technology-mediated rather than human based exchange). A thorough review of literature on internet service quality is conducted in the following chapter, which builds towards a complete list of additional items, which can be used with the original SQ items, in the modified, importance-based, SQ model derived and validated through the literature review in this past chapter.

Chapter 3. Online Customer Behaviour and Service Quality

3.1 Introduction

In the previous chapter a review of the literature into the measurement of service-quality was conducted as a foundation to the development and measurement of online service quality. Attention now turns towards the specific measurement of online services quality in terms of how this compares to offline service quality and progress made to date in analysing the online consumer.

A major limiting factor of the original ServQual framework in the online environment is the emphasis on employees, who which are absent in the web-based technology-mediated exchange. Some ten of the twenty two items directly mention employees. In an electronic environment, where no human contact is present (unless through subsequent contact), many of the roles of the employee (for instance, “employees give customers personal attention”) are replaced by the website (for instance, the ability of the website to be personalised). ServQual and related retail quality studies were developed to consider service or retail encounters (and pre-date the internet) such that it is not immediately clear if they are applicable or adaptable for this new environment. Bitner et al. (2000) highlight: “it is important to determine if the same conceptual factors established in interpersonal service encounter research are relevant in a technology-based environment” (p147).

Parasuraman and Grewal (2000) identified several issues to consider in technology-mediated service encounters: definitions and relative importance of the five service quality items; whether perceptions of in-use value depend on access to employees; the way in which characteristics such as demographics, lifestyles or ‘technology readiness’ affect perceptions of quality and value; what moderating effects are relevant for customer loyalty/retention in technology, rather than employee encounters. ZPM (2002b), comparing their new electronic services quality model (reviewed later in this chapter), find both differences and similarities: half of the traditional SQ dimensions are present online (issues such as honouring promises, having a reputable name, knowing customers), but many additional issues are also emergent

(such as website reliability): “Most, but not all, new dimensions relate specifically to technology” (p367).

Collier and Bienstock (2003) highlight “Online services have unique characteristics that off-line service do not possess which can affect the perception of service quality” (p159), and that technological issues “and other unique characteristics” require the generation of additional criteria beyond the traditional SQ or ServPerf scales.

ZPM (2002b), when comparing SQ and eSQ, highlight that for most traditional SQ items “more of an attribute was typically better than less”(p367), suggesting that SQ items are vector attributes. However, they write: “In contrast, several of the expressed attributes of e-SQ involved ideal points that varied among customers. In other words, inverted U-shaped relationships, rather than linear relationships, appeared to exist between performance and perceived e-SQ on those attributes” (p367/8). They give the example that while customers wanted to be kept informed, too many email contacts led to negative evaluations. This would suggest that some eSQ items may be ‘classic ideal points’ rather than ‘vector attributes’ (Teas 1993b). ZPM (2002b) describe these ‘curvilinear relationships’ but do not examine the important implications for scale item generation or expectations measurement of this in the measurement of eSQ.

Wolfenbarger and Gilly (2003) emphasise the unique nature of the internet exchange, highlighting the lack of employee interaction in a physical space, the role of technology, customer privacy/security concerns and the opportunities for personalisation, community experiences, content design and increased product selection. They note “existing concepts of service and retailing quality may be inadequate in an online context” and further, “It is important that a complete conceptual framework be developed for both defining and measuring tail quality (eTailQ)” (p183).

3.2 Current Research Shortcomings

PZM (2005) in the development of their own electronic service quality measure have at various stages reviewed the state of the literature and research on online services quality. In addition to PZM (2005), Wolfenbarger and Gilly (2003) have also proposed what has become regarded as one of the most significant measures of online services quality (PZM 2005). In the construction of this measure, Wolfenbarger and Gilly have also at different points critiqued the online services quality literature.

ZPM (2000) note that despite increased attention to electronic service quality, the majority of works can be categorised into three areas: anecdotes, simple activity monitoring (such as site purchasers versus visitors), or commercial surveys: “the scholarly literature is, to our knowledge, devoid of articles dealing directly with how customers assess electronic service quality (e-SQ)” (p5).

Revising the issue two years later, ZPM (2002b) do not find significant progress: “While both business and academic researchers have begun to conceptualise and measure electronic service quality, most do not provide definitions of domains” (p363). They deride most pre-existing works as of limited scope, where often “measures of e-SQ are ad hoc and include only a few factors” (p364), focusing on limited issues such as technical quality, interaction, fulfilment or returns, not the holistic process of online service quality delivery. They further identify that “published scholarly literature is minimal in terms of articles dealing directly with measuring how customers assess electronic service quality” (p364). They add that the majority of scales developed have been constructed by industry or consulting firms, resulting in a lack of transparency on the validity of their composition or development. They also criticise both industry and academic scales for the often ‘arbitrary’ way measures have been taken from physical retail or human-customer interface literature: “by doing so, these research studies may not elicit the comprehensive dimensionality of e-SQ” (p365). Wolfenbarger and Gilly (2003) share a concern for the reliability and validity of industrially-derived measurements, also noting that these have focused on measuring performance on individual items rather than conceptualising constructs of electronic service quality.

Chen and Wells (1999) highlight a major problem of internet research in the late 1990s as the dominance of simplistic website usage, volume or visitor measurements. Tierney (2002) echoes the shortcomings of online customer research, stating “there is a great need for evaluations to go beyond hits and page viewings” (p212). Current analysis of online behaviour has been dominated by technological measures of usage, click-through, visitor origins (domain type, country), all of which are easy and cheap to apply, but which “cannot give critical information about the user, such as income, reason for visiting the site, satisfaction with the site or actions taken because of visiting the site” (p213). Busch (1999) emphasises the importance of not just using tracking technology-based information, but actually talking to customers to gain a better understanding of their wants and needs, commenting: “There will never be a substitute for traditional customer profiling, segmentation and research.”

PZM (2005) emphasise the continued focus of many studies on technical website design rather than holistic services quality, highlighting the need to include “not only experiences during their interactions with the site but also post interaction service aspects (i.e., fulfilment, returns)” (p217). Wolfenbarger and Gilly (2002) echo the concerns of PZM (2005) that much of the work on technology or computer interaction has focused solely on the front-end or design oriented issues, with no real consideration of end-to-end service quality. Wolfenbarger and Gilly (2003) state: “The focus of the majority of researchers studying e-tailing has been only on the customer’s interface with the website” (p185). Further they conclude that many have focused on all internet sites, not just retail delivery, which may invalidate findings as customers have different motivations for shopping versus non-shopping online activities. This issue of better integrating all areas of the organisation towards customer delivery is highlighted in a lean sense by Womack and Jones (2005), although there has only been limited adoption of such (lean) practices within a small set of retailers.

Wolfenbarger and Gilly (2002) note that despite many researchers being interested in the online shopping experience, “to date none has developed a conceptual framework for defining and measuring online quality from the beginning to the end of the transaction” (p3), and that such a tool is needed to: determine satisfaction and quality; the importance of different service factors; the identification of customer segments with different needs/desires; comparing online and offline environments; and, classifying the importance of different dimensions of service. ZPM (2002b) do note that “some academic researchers have started to establish more comprehensive e-SQ scales based on more rigorous empirical testing” (p365), but, the two principal studies they identify (the WEBQUAL scale of Loiacono et al. (2000) and .comQ scale of Wolfenbarger and Gilly (2002)) are criticised as geared towards technical website or interface quality design rather than service quality, and in need of further testing. They also note their own eSQ scale also needs further testing.

Yang and Jun (2002) also conduct a review of pre-existing works on online service quality, noting a very narrowly defined domain in previous research and the need for systematic research into the key dimensions of internet services quality. Yang et al. (2002) further comment that while research has uncovered dimensions of services quality none has focused on the issue of which attributes of service quality were most important to customers in evaluating service quality. Loiacono et al. (2002) also note: “There does not exist a comprehensive instrument specifically designed to focus on the consumer’s perspective of Web site quality in the context of predicting the behaviour to reuse the site” (p432).

More recently, PZM (2005) note that despite twenty years of SQ research, only a few 'scholarly articles' deal directly with customer assessments of electronic services quality. In common with this thesis, they use a review of SQ as a starting point for developing a new electronic model of services quality. PZM (2005) conclude their study of electronic services quality literature: "Although past studies provide insights about criteria that are relevant for evaluating e-SQ, the scales developed in those studies also raise some important questions that call for additional research on the topic" (p217). Wolfenbarger and Gilly (2003) highlight an increasingly wide range of research on electronic service quality, but note that it is of varied structure, focus and content - with some focusing on interface design, satisfaction, intention or purchase, but that "Little commonality exists among the many scales developed for measuring website characteristics important to consumers" (p185). They conclude that: "In summary, the results of researchers have differed quite widely; these differences arise in part from the fact that investigators have had somewhat different foci. Moreover, the methodological approaches have varied greatly, often with limited attention given to generating items carefully and balancing coverage of different concepts likely to be important to consumers" (p186).

3.3 Research into Online Services Quality

The principal focus of this thesis is addressing shortcomings in the understanding of online customers service quality demands, and the impact that various situational influences have upon this. The construction of a new measure of online services requires a structured and rigorous approach towards the identification of the widest possible range of issues that are important to customers when shopping online.

The importance of a rigorous approach to item generation was noted by work highlighted in the previous chapter (for, instance, Cravens et al. 1985). Martilla and James (1977) summarise the importance of a comprehensive approach in collating items for analysis if: "factors important to the customer are overlooked, the usefulness of ... analysis will be severely limited" (p79). The complex nature of the online exchange, and the need to supplement traditional SQ with more than just technological items, necessitates a review of contemporary research into online services quality to generate a pool of research and scale items. These can be consolidated to provide a comprehensive analysis of online services quality. ZPM (2002b) note some consensus in work to date: "We know that electronic service quality is not unidimensional but multifaceted... Different dimensions have been proposed, some of them ad hoc and anecdotal, yet some of them are beginning to be researched more systematically. As yet, there is no consensus on the component dimensions, but frequently occurring

dimensions include fulfilment, privacy/security, site design, efficiency and ease of use” (p371). ZPM (2002b) comment “We know from nearly 20 years of research that reliability is the most important dimension of traditional service quality, and we need to understand which dimensions are most responsible for driving electronic service quality” (p372). Yang and Jun (2002) also note in constructing a model of online service quality for current and non-internet users that reliability is the most important factor for users, but that security is the most critical concern of non-users. Evanschitzky et al. (2004) find across samples that similar issues (convenience and site design) influence satisfaction, concluding “Despite sample sizes and context differences... at least some of the drivers of e-satisfaction may be context in-variant” (p245). Other specific evaluative features of lesser importance, vary in order of impact across samples. Despite some emergent work emphasising key themes, ZPM (2002b) provide a useful conclusion of progress to date: “Rigorous attention to the concept of service quality delivery through Web sites is needed. This would involve a comprehensive examination of the antecedents, composition, and consequences of service quality” (p371). Such research is the principal focus of this thesis.

To this end, a review of existing work into online service quality has been conducted to provide a basis for the identification of key themes and issues important to customers when purchasing online. Based on the limitations of online services quality research identified above, a broad literature review was conducted into customer behaviour in the internet environment. The remainder of this chapter is structured on the themes emergent from this review, which in part mirror those limitations outlined above. This consists of: firstly, a review of general findings into online customer behaviour; secondly, a review of the work focusing on the ‘front end’ of e-commerce, website design analysis; thirdly, a review of work into online trust and security issues; fourthly, work which focuses on the ‘back end’ issue of delivery and fulfilment; fifthly, a review of general work contributing towards holistic consideration of services quality. This leads to a final consideration of major research studies into online service quality, which were identified, and which form the basis for the development of a new survey instrument into online services quality within this thesis.

3.4 The Online Customer

Although online demographics are now equivalent to the demographics of the marketplace as a whole (Wolfenbarger and Gilly 2002), understanding of the online consumer is still some distance away from understanding of the offline customer. This lack of knowledge or information, as highlighted in Chapter two, provides a severe problem for customer service.

Nicholson and Sethi (2002) note that the speed of the development of the internet has outpaced empirical research, while Butler and Peppard (1998) highlight “before marketers can effectively respond to consumer demand, they must understand the consumer” (p603). PZM (2005) state: “Even though low price and Web presence were initially thought to be the drivers of success, service quality issues soon became pivotal... Mounting business and academic evidence demonstrated a widespread lack of adequate service quality delivered through the internet” (p213). Collier and Bienstock (2003) add “Measuring e-service quality is becoming an important topic to understanding what customers’ value in an online service transaction” (p158).

There is general consensus on the reasons for customer adoption of e-commerce. For instance, the Centre for International Economics (2001) national survey found common reasons for going online – time based savings (in product search and purchase), direct money savings, expanded product range, improved convenience, obtaining services not readily available offline. However, there is little commonality or consensus within the broad range of literature on online customer behaviour. Parasuraman and Colby (2001) report on a national (USA) survey of customers; propensity to shop online, finding: 63% like idea of doing business over internet as not restricted to normal opening hours; a sizeable minority say the internet frees them from sales pressure; 90% still think the human touch is important in dealing with a company; and, 67% are not confident in doing business with a company only reachable via the internet.

Aaker and Joachimsthaler (2000) propose the web is all about experiences that create an active rather than passive consumer, while Bizrate.com finds the key driver of customer intent to return to a website as customer support, and the least important factor as price (ZPM 2002b). Warrington and Eastlick (2003) find online merchandise assortment, price and time and effort all influence satisfaction, loyalty and perceived value, however, this work has limited topic coverage and does not produce scale items.

Discombe (2002) focused on the ‘added value’ of brands operating online – interviewing a panel of fifteen internet experts and finding several common themes: the need to pull customers towards the website rather than push messages as in traditional advertising and the need for brands to communicate unique values online rather than just traditional offline communications messages. Emphasis is placed on the role of customisation and entertainment, as well as the general ‘added value’ of e-commerce, including issues such as:

accessibility, cost comparison, convenience, high involvement, brand reinforcement, creating partnerships, customisation, quick delivery and cost savings.

Mirsky (2002) considers the role of online customer service, highlighting the continued role of human interaction when problems occur online. Mirsky (2002) emphasises the importance of resolving any problems immediately, also finding poor training coupled with limiting software and computer systems are a major problem in preventing employees from resolving customer issues over the telephone, calling for better investment in people and solutions. In addition, Bromage (2001) finds between 70-80% of online shoppers make more than one enquiry about the status of their order, while Dodson (2001) emphasises the importance of customer support for successful e-commerce, noting telephone and online support for customers with problems. ZPM (2002) emphasise: "Additional research is needed to empirically study the question of where to invest in electronic service quality improvement" (p372).

3.5 Online Quality, Satisfaction and Loyalty

ZPM (2000) note: "The most experienced and effective e-tailers are realizing that the key determinants of success or failure are not merely Web presence or low price but rather the delivery of quality service over the Web... sustainable advance... will come from understanding the elements of superior quality on the Web and then leveraging information technology to delivery "knock-your-socks-off" e-service" (p3).

In the previous chapter, the complex relationship between service quality, satisfaction and loyalty was discussed. In the online marketplace, research to date has not been as concise in delineating quality, satisfaction and loyalty as been the case in the offline market. Within a general pool of work that blurs the boundaries between these concepts there is a clear message – that improving services quality is vital for organisational success online, and that just as offline, analysing customer demands and expectations is a vital first step towards this.

ZPM (2002b) propose, based on focus group research, that compared to SQ, eSQ assessments will be more cognitive than emotional: "Purchasing online appears to be a very goal-directed behaviour. While emotions such as anger and frustration were expressed when reporting on problems arising from online transactions, these appeared to be less intense than those associated with traditional service encounters... positive feelings of warmth or attachment that were engendered in SQ situations did not surface... as being characteristics of e-SQ experiences" (p367). This is somewhat at odds with later empirical research conducted by Warrington and Eastlick (2003). Their work on the relationship between satisfaction, quality

and loyalty, concludes that: "Overall the findings suggest that online shopping loyalty is less directly influenced by value-driven cognitions than by satisfactory shopping experiences. More specifically, online shopping loyalty was directly and positively impacted by e-shopping satisfaction and, to a lesser extent, perceived e-service quality" (p75).

Wallace et al. (2004) investigating customer loyalty across multiple retailing channels, finding strong empirical support for the positive benefits of loyalty across online and offline retail, also finding that "Price is a generally important competitive issue in satisfying customers" (p259). This somewhat conflicts with Srinivasan et al. (2002), who found that one consequence of online loyalty was customer willingness to pay more.

Warrington and Eastlick (2003) go on to highlight that the online context requires a re-examination of the relationships between satisfaction, quality and loyalty, while Sousa and Oliveira (2005) highlight there has been 'little rigorous empirical research' into the linkages between service quality and customer loyalty in electronic commerce. Conducting empirical research on Portuguese retail banking, they conclude a strong and significant linkage exists between website quality and customer loyalty.

Much of the research into the impact of online quality on customer satisfaction has been based with industry and not academia. General research manager at BizRate, Julianne Hurst, commenting on analysis of 1700 retailers finds: "There's a direct correlation between order growth and customer satisfaction overall" (Andruss 2001). Chris Bogan (Best Practices CEO) comments: "In today's hyper competitive market, the ability to identify and satisfy customer needs isn't the key to success - it's the key to survival. Customers have high expectations. If you fail to fully understand and meet them, they'll become someone else's customers with the click of a mouse" (Mirsky 2002). A Boston Consulting Group study on 'Winning the Online Consumer: Converting Traffic into Profitable Relationships' analysed 3000 internet purchases in 2000, and found an almost perfect correlation between consumer satisfaction and the likelihood of repeat business. It concluded that web businesses need to focus on satisfaction to maximise earnings, with 41% shoppers experiencing flaws in purchase process and consequently no longer shopping at the offending site (Read 2001). Accenture Consulting highlight moving customer satisfaction from 'average' to 'high' (based on 30% performance improvement), increased the return by \$25million from companies with \$1bn sales (Bertagnoli 2001).

Evanschitzky et al. (2004) investigate online satisfaction, and finding “as in traditional retail, consumer satisfaction is not only a critical performance outcome, but also a primary predictor of customer loyalty and thus, the Internet retailer’s endurance and success” (p239). Oliveira and Sousa (2005) highlight that due to high levels of competition and low switching costs online, the linkages between service quality and loyalty should be strong, as poor service is more likely to lead to customer defection than in offline markets. Kuttner (1998) comments: “The Internet is a nearly perfect market because information is instantaneous and buyers can compare the offerings of sellers worldwide. The result is fierce price competition and vanishing brand loyalty” (p20). Srinivasan et al. (2002) also highlight the importance of gaining customer loyalty online, due to the high number of competitors that customer can easily access with ‘a few mouse clicks’, proposing “In order to reap the benefits of a loyal customer base, e-tailers need to develop a thorough understanding of the antecedents of customer loyalty” (p41).

Despite the clear priority of providing high customer service, reports of poor online service are common - Mainspring and Bain & Company (2000) found that the average customer must shop four times at an online store before the store profits from that customer. The Boston Consulting Group find 28% of online transactions resulting in failure or frustration, and 6% of those leaving a site feeling frustrated (Lang 2001). The International Customer Service Association (ICSA) and e-Satisfy.com in 2000 found only 36% of e-customers were satisfied with their internet purchasing experiences, while The Boston Consulting Group (2000) report four out of five online purchasers having experienced a failed purchase, with 28% of all online purchases failing, and 23% of those frustrated with the website, not using it again (ZPM 2000). One explanation for this poor level of service is a lack of understanding of the online customer.

Harris and Goode (2004) highlight that despite low online customer loyalty “recent research indicates that such rare, loyal online customers are highly profitable... it may be claimed that generating loyal customers online is *both* more difficult and more important than in offline retailing” further, “too little is known of the nature and drivers of online loyalty”. (p139). ZPM (2002b) highlight the need to deliver superior service quality, companies must first understand how customers perceive and evaluate online customer service: “This involves defining what e-service quality (e-SQ) is, identifying its underlying dimensions, and determining how it can be conceptualised and measured” (p362). Yang and Jun (2002) similarly emphasise: “What brings online customers back, primarily, is a sense of loyalty that comes from an Internet company offering better service than anyone else... To offer better

services, it is necessary for Internet companies to investigate what existing and potential customers expect for service quality” (p20).

Regarding the organisational side of electronic services quality, ZPM (2000, 2002b) describe four organisational gaps preventing the delivery of quality service online: marketing information gaps (a discrepancy between management perception of customer requirements and actual requirements); design gaps (a failure to incorporate fully customer information into the structure and design of the website); and communication gaps (a lack of accurate company understanding the websites capabilities). These all combine to form a ‘fulfilment gap’ on the customer side . Fulfilment gaps may be caused by either the company over-promising on what they are capable of delivering or a failure to deliver what the customer expects or demands. The issue of fulfilment and organisational structure online are discussed here, but specific consideration of the design of online organisations in terms of marketing-operations relationships is considered in the next chapter.

3.6 Website Design

One of the principal areas of academic research has been the development of measures of website design and effectiveness. While this research is criticised as failing to focus on true services quality (PZM 2005), the website represents the interface between the company and its customers, requiring consideration of the evaluative mechanisms thus far developed for its study.

One of the earliest large scale quantitative surveys of online customer behaviour was conducted by Chen and Wells (1999) who investigated consumer attitudes towards websites, based on an adaptation of the traditional media ‘attitude towards the advert’ measurement. Their research sought to describe the appearance and design of websites from consumer perspectives, with three key features emergent: entertainment (fun, exciting, cool, imaginative, entertaining, flashy); informativeness (informative, intelligent, knowledgeable, resourceful, useful, helpful); and, organisation (messy, cumbersome, confusing, irritating). Attitude to the site is only one part of the overall purchase experience, but it is an important consideration.

Lang (2001) identifies five key difficulties in website experience: difficult navigation, slow download times, difficulty finding information, multiple clicks to complete an objective, confusing home page, with other problems including long download times, link placement, graphics, navigational structure and language problems. Lang (2001) proposes all companies should have a ‘Customer Experience Plan’ that maps out the interaction with the website. This

plan should identify goals for the site and be backed up with ongoing website usability measurement, comprising: accessibility (website loading, navigational structure, load times); and, 'scan time' (how long it takes a user to read the contents of a web page, page load time and the time and effort required for the user to complete a specific task online. Lang (2001) also suggests multiple tools for site analysis, including both automated tools (web activity monitoring), and more traditional market research analysis, including focus groups or test panels.

Barnes and Vidgen (2002) proposed the WebQual survey "for assessing the quality of web sites" (p114). It should be noted that the Barnes and Vidgen (2002) WebQual measurement is entirely different to the Loiacono et al. (2002) WebQual construct. Barnes and Vidgen (2002), using four developmental iterations, initially starting with focus group work produce a final survey which considered three aspects of web site quality – usability, information quality and service interaction quality, measured across 22 items. The results of application in three internet bookshops highlighted that trust was the most important issue for customers, and that trust will be important for successful companies. The instrument provides an overview of the present state of customer importance and experience over a range of issues. It does not probe in detail the important issues of customer service (for instance, ease of contacting the company), issues of customer profiling or behaviour, or validate the final instrument outside of the book sales industry. Further, the production of only three dimensions suggests several important aspects of the complex consumer experience may have been overlooked. The failure of trust to emerge as a distinct factor is somewhat suspect given the importance of this issue highlighted by the individual item rankings.

The Centre for International Economics (2001) also reports 60% of consumers surveyed nationally were using the internet for information search only, and not purchasing. Wyner (2001) reports that while two-thirds of customers felt there was a better selection of products available online (versus offline), most continued to use the internet for information search and not actually make purchases. Wyner (2001) proposes that websites should be more 'compelling', and with a better customer value proposition. Problems include functionality, shopping cart abandonment and a need to better focus advertising techniques to convert visitors into purchasers (Wyner 2001). The Interactive Bureau (2003a, 2003b) described the websites of many of the top one hundred FTSE-UK companies as "woefully inadequate" and "wallowing in mediocrity", with more than half having serious problems needing attention, and sixteen being so poorly designed they should be taken down. They also found a third of

all websites had been re-designed in the period 2002-2003, with a third of those being worse than those they replaced.

De Chernatony and McDonald (1998) note the impact of a poorly designed website on brand perception: “marketers need to beware of dull or poorly-developed sites, as visitors are more likely to ignore the brand or form negative impressions” (p355). Bertagnoli (2001) highlights that the site serves the same purpose as the retail store – that if customers see a poorly designed, disorganised website, they will not be satisfied. Donovan et al. (1994) highlight the importance on purchasing behaviour of retail store environment (finding pleasantness a predictor of willingness to spend), so it is necessary to consider this as part of the online service quality experience.

Maklan et al. (2002) highlight the role of the internet as a source of information and that the role of the website in providing information is critical, even highlighting intuitive navigation as a source of customer loyalty. Graphics Arts Monthly (2000) cites Kelly Mooney (Managing Director of Intelligence for Resource Marketing, Ohio) on the problems of website design: “E-retailers are trying to be all things to all people. Consequently their sites are too complex, resulting in a frustrating, inconsistent experience.” Resource Marketing (2000) identifies the biggest e-commerce blunders as: navigation that goes nowhere, pay-to-return policies: have to set up an account to purchase: post-purchase spam: inaccessible and unhelpful call centres: strong brands but weak promises (big brand sites only offering a few items); and, poor execution of order.

Dodson (2001) makes a link between website design and wider customer support – reporting a fall of customer satisfaction to 35% over Christmas 2000/2001. Problems included: a long order process; slow processing speed; and, shopping cart malfunctions with nearly three quarters of shopping carts abandoned before completion. Dodson (2001) comments “Research consistently proves that online customers feel the Web lacks adequate customer support” (p17).

Davis et al. (1989), investigating acceptance of computer technology in the 1980s, found that perceived usefulness was a highly important variable, that affected user acceptance, and that perceived ease of use also had a small significant effect on intent. They note: “Many designers believe that the key barrier to user acceptance is the lack of user friendliness of current systems... Yet, our data indicates that, although ease of use is clearly important, the usefulness of the system is even more important and should not be overlooked” (p1000). For e-

commerce, while ease of use or design are clearly important, usefulness, (usefully fulfilling the need or wants for product/service delivery), is of greater importance.

3.7 Security and Trust in E-Commerce

Verdict Retail reported less than one-third of British people with internet access purchased online in the year to July 1999. They found 46% of people worried about giving financial details, and 54% believed e-commerce will never replace real shops (Daily Mail 1999). Two years later, credit card company Visa's survey of Canadian non-online shoppers found 25% were not planning to shop online because of fears about online security and fraud (eMarketer 2003). Security issues still remain - in 2004 the American Bankers Association reported "a decade into the 'e-volution' security challenges continue to confound cyberspace" (ABA 2004 p73).

A 2000 survey conducted by MORI for the National Consumer Council (NCC) based on interviews and discussion groups, proposed that lack of confidence in internet security is impeding e-commerce growth. Chief customer concerns included: unease about transmitting payment and personal details - 40% viewed releasing credit card details as a serious worry; the danger of being unable to inspect goods before paying; the risk of dealing with fraudulent, anonymous suppliers; and, 44% believing they have less protection when shopping online than on the high street (Computer Buyer 2000b). Horrigan (2000) found both new and longer term internet users remain concerned about giving credit or personal details online and questioned e-commerce sites' ability to guarantee financial and personal detail security.

High profile cases of security problems, include: attacks on internet bank Egg (Harrison, 2000b); multiple incidents involving Barclays allowed customers to view the details of different peoples' accounts (Computer Buyer 2000); power company Powergen placing customer credit card details on its publicly viewable website (Computer Buyer 2000): and, retailer Woolworths publishing customer credit card and personal details on its website (Harrison 2000a). The British Home Secretary's formation of a new high technology crime unit to focus on internet hacking (Pickering 2000) did little to reassure customers as all the errors listed above were caused by internal failures not external attacks.

Horrigan (2000) highlights that security is not only a concern for new customers - a US Study shows longer term users (2 years or more) are still concerned about giving financial and personal details online, albeit not as much as new users. Dunnhumby (2001) found nearly 90% of all people online have visited websites to research a purchase while many other authors

have noted that the majority of consumers continue to use the internet as a search medium, rather than a purchase medium (Wyner 2001, Ratchford et al. 2001, Maklan et al., 2002). The Centre for International Economics (2001) national survey of Australian consumers found 60% of internet users searching for information rather than purchasing, with privacy and security concerns the main reasons for not purchasing online. Maklan et al. (2002) note the continuance of multiple media usage in the travel and automotive sector – that customers are continuing to view the internet as an information source with most purchases made offline for reasons of convenience and security. Harris and Goode (2004), investigating online book and flight purchases, find that in addition to service quality, satisfaction and perceived value, trust is the principal driver of online customer loyalty (reflecting the nature of the medium where customers may not trust online companies, payment systems or the nature of online shopping).

Initially trust in the internet as a medium for secure exchange of payment and personnel details was a major inhibitor to consumer adoption, but, increasingly fear of product delivery failure is a larger barrier. In 1996 an OECD report identified security and the perception of security as a key issue in expanding e-commerce (OECD 1996), with other studies echoing these findings. Reports by Verdict in 1999 (Daily Mail 1999) and MORI in 2000 (Computer Buyer 2000) both highlight continued consumer concern about the security of internet transactions. However, McKinnon and Tallam (2002) highlight that credit card security had dropped to the number two concern of online purchasers, with delivery reliability the top issue discouraging consumers from shopping online. They note that the growth in home shopping is creating challenges for retailers and distributors with McKinnon (2002a) commenting: “The success of e-commerce revolution depends critically on the issue of fulfilment – the ability of the retailer to deliver successfully to consumers the goods and the services they have purchased” (p2).

Andruss (2001) notes the role of consumer review sites, finding good reviews can boost consumer trust – organisational success on such sites, compiled by customers who have completed transactions with the company is significantly influenced by the role of fulfilment.

3.8 The Importance of Fulfilment

Porter (2001) comments on how the internet amplifies the importance of the physical activities of the company – specifically the fulfilment and delivery processes. The Australian National Office for the Information Economy (NOIE 2001), adds: “E-Commerce underpins productive growth in the economy and is much more than simply putting up a website” (p5)

Jones and Simons (2000) in evaluating the home shopping marketplace, described the customer fulfilment process as “the weak link” and commented there was a long way to go towards achieving the high levels of fulfilment required by web shoppers. They further comment that web retailers such as Amazon who do achieve good levels of customer fulfilment were doing so at the expense of “a staggering amount of inventory”(p44). Cooke (2000) comments that online companies: “have to satisfy some of the most demanding customers on the planet – customers with very high expectations regarding speed and order accuracy. To no-one is this more apparent than to the distribution... who are charged with filling online orders.”(p59)

In a similar vein, Saenz (2001) highlights the critical role of the physical movement of products to customers: “The final, lasting impression made on these consumers is determined by the speed and quality of delivery” (p37).

Saenz (2001) goes on to highlight the issue of returns in addition to normal fulfilment and delivery – citing approximately 10% of retail purchases are returned, compared to 30% of goods sold online, with the result that companies need to have the capacity to handle this higher level of returns, and the capacity quickly to credit customer accounts.

Hogan (2001) proposes an important part of fulfilment for sellers of goods online as the packaging provided – reporting on a study of sixty retailers he finds packaging speaks to overall quality, before the packages are even opened by the customer: “It is clear that the consumer sees packaging as part of the total brand image the Internet retailers or catalogue marketers project”.

Browne and Jackson (2001) highlight the importance of logistics and delivery in home shopping and its increased importance as internet shopping widens home shopping product categories into areas such as groceries. Parker and Gulliford (1996) also call for better delivery structures and arrangements in delivery adding: “the logistical challenge will be in supplying goods to the customer at home” (p20).

Chen and Leteney (2000), from an examination of US online companies, identify distribution and supply as two of six critical areas for successful internet retailing (as well as information, communication, transaction processing and integration of old and new systems). Saenz (2001) further identifies three key areas: picking, packaging and returns (especially important due to

higher observed returns online at 30% rather than 10% offline). Hogan (2001) highlights the importance of correct packaging – attributing a third of all returns due to poor packaging, dissatisfying customers and increasing company costs.

McKinnon and Tallam (2002) emphasise that e-commerce does more than simply add volume to the home delivery marketplace, highlighting delivery on a greater scale, requiring fulfilment capacity investment, and greater scope with new products not previously offered for home delivery. Further, delivery reliability and poor customer service were among the top reasons discouraging people from online shopping in the UK. Lewis (2001) also comments on the need to better focus on the logistics of supply commenting: “Fulfilment problems had a lot to do with the recent dot-com crash. People assumed perfection of execution which simply wasn't there” (p26).

Despite the widespread awareness of the problems, few have suggested better structures for fulfilment, other than applications of lean or Efficient Consumer Response (ECR) principals in the grocery sector (for instance Jones and Simons 2000). However, some authors have questioned these approaches as actually harming customer fulfilment and value (Piercy and Morgan 1997). Collinge (2000) highlights this: “Much has been said and written about success or failure, of order fulfilment and its relationship to the success or failure of business to consumer e-commerce ventures and investments. Little has been written about how to go about solving the order fulfilment problem” (p18).

Despite an estimated rise of 44.5% in online shopping in the UK Christmas 2004/5 run-up, compared to the previous year (Blackley 2004), fulfilment remains a critical problem with continued demonstrations of delivery failure. Watson (2005) reported approximately half a millions goods failing to be delivered for Christmas and the Daily Mail (28 December 2004) reported the chairman of the Commons Trade and Industry committee even considering an inquiry into the number of failed orders. Bromage (2001) takes an holistic perspective, emphasising the importance of getting the chain of events from the customer entering site to final delivery right, and noting the failure of companies, highlighting: “An online presence alone is not an effective internet strategy”. Companies need to ensure internal hardware and software systems working together and that these work with trading and supply chain partners so that customer fulfilment is realised (Bromage 2001).

3.9 More than Fulfilment

Some commentators have highlighted the need for electronic companies to focus on creating viable business structures (Grieger 2001, Hagel 2001). It is suggested that online business structures are one of the least understood aspects of the internet (Rappa 2004) and that the massive variations in service quality observed when comparing companies is based on the different business structures each company has adopted (Cooke 2000). Porter (2001) talks about “an absence of strategy” in many e-businesses who have abandoned all principles of (generic) strategy. Porter (2001) suggests that the principles for gaining competitive advantage for online companies are exactly the same as for offline competition.

Commentators have also noted a confusion as to where e-commerce as a division sits in the corporate structure (Melymuka 2000). Issues of cross-functional working required for effective fulfilment further confuses matters (Daniel and Wilson 2001, Rohm and Sultan 2004). Others have noted the issue of experience – some proposing that established retail companies have a significant advantage over new companies, with the expertise and ability to leverage past knowledge onto online trading (Ethiraj, Chen and Letenet 2000, Porter 2001, Min and Wolfenbarger 2005). However, others have highlighted new companies as having a “clean sheet” to design fulfilment and operations without historical legacies of inefficiency (Collinge 2000, Cooke 2001, Reda 1999).

3.10 Towards Online Service Quality

ZPM (2002b) note “In e-tailing’s nascent days, Web presence and low price were believed to be the drivers of success. However, no amount of presence or low price could make up for the service quality issues that became all too apparent” (p362). Parasuraman and Colby (2001) also highlight: “enduring marketing success comes from serving customers well, not just selling to them”(p88). The limitations of research into distinct areas such as website design rather than services quality, or technical measures of hits rather than fulfilment, have gradually resulted in an increasing number of studies into wider services quality online. Despite interest in this area, as noted by PZM (2005) and Wolfenbarger (2003), many of these studies are still limited in terms of validity and reliability. A comprehensive literature review produced two distinct outputs into online services quality to supplement traditional SQ in seeking to build a new measure of online services quality – a general review of works from multiple authors and five major studies. In this section more general works on online service quality are considered, and in the next section five focal studies are analysed in detail.

Szymanski and Hise (2000), measuring satisfaction, focus on online convenience, merchandising (product offering and information), site design and financial security. PZM (2005) criticise this for failing to study fulfilment issues, a common problem in many online studies which focus on small parts of the online experience, rather than on holistic online experience and product fulfilment. Liu and Arnett (2000) surveyed webmasters to find out what they believed to be important, finding issues such as: information, system use, privacy, playfulness, design quality. This study has however been criticised for not being from customers point of view and due to the fact that not all of the webmasters sampled were from companies who had a website (Wolfenbarger and Gilly 2003).

Yoo and Donthu (2001) developed a nine-item SITEQUAL scale with four dimensions (ease of use, aesthetic design, processing speed and security), which PZM (2005) and Wolfenbarger and Gilly (2003) criticise as based on a convenience sample of staff and students, as well as for failing to capture the entire purchasing process, meaning it is not a complete measure.

Nicholson and Sethi (2002) note: "While firms are now spending a great deal of resources for the creation and maintenance of ... brand web sites, very little is known about how consumers actually experience these kinds of web sites... . Understanding of consumer responses to and interactions with online marketing materials is still in its infancy." They take a more psychological approach to analysing website interaction than most electronic services quality studies. Collecting data from 722 respondents who were asked about elements of different websites they identified with, Nicholson and Sethi (2002) find four basic aspects of experience: arousal (the cognitive and psychologically stimulating aspects of the website, including issues of exhilaration, originality and engagement); functionality (the degree to which the site generates the information the customer wants and needs, along the dimensions of usefulness, credibility, clarity); psychological comfort (reflecting a sincere organisation); and, identification (the ability of the website to connect with its target audience and create a sense of belonging). Nicholson and Sethi (2002) find consumers care about a host of such non-rational experiences, concluding "The fact that consumers experience at a website can be quite rich and involve emotions suggests that web sites have the potential of playing an important role in the development and enhancement of consumer brands." While interesting, this work places more emphasis on interface management than services quality.

Some authors have taken a more holistic approach that does embrace wider service issues. Beatty (2001) highlights three areas of concern: website design (navigation, information structure and graphic presentation); customer evaluation (alternate channel value perceptions);

and, security/non-fulfilment risks. Stevens and Gebhart (2001) propose four important factors for online companies: responsiveness, expectation management, online-messaging and effective selling. They also propose that the online customer is in search of “instant gratification”, suggesting it is critical that online response mechanisms are in place to distribute information quickly (such as by emails to customers).

Srinivasan et al. (2002) investigated antecedents and consequences of online customer loyalty, using interviews to determine eight potential antecedent factors of importance. These were dubbed the ‘8Cs’ of: customization (ability to tailor services); contact interactivity (effectiveness of two way contact); care (pre and post purchase customer care), community (sense of being part of a virtual community); convenience (simple, intuitive and friendly web site); cultivation (provision of incentives of facilities to increase retention); choice (range); and, character (website image). The focus of this work was, however, loyalty and not service quality. The need to differentiate these two constructs was highlighted in the previous chapter, such that there are problems in generalising from this loyalty research into specific service quality issues. Similarly, while Evanschitzky et al. (2004) find that convenience and site design are the most important determinants of satisfaction, the differentiation of satisfaction and service quality also makes generalisation of this study to service quality issues problematic. The Francis and White (2002) PIRQUAL scale (Perceived Internet Retailing Quality) contained six dimensions: web store functionality; product attribute description; ownership conditions; delivery; customer service; and, security. This study also failed to focus specifically on service quality, instead looking at behavioural intention. Odekerken-Schroder and Wetzels (2003) investigated what customers valued online (475 German consumers), finding that product related information and fulfilment were the most important variables. They highlight how information becomes of increased importance online, where consumers are disconnected from the product, cannot touch or feel it before purchase, worry that quality is unverifiable and that if problems exist they must bear the return costs. This work also failed to identify specific service quality issues.

Barnes and Vidgen (2002) describe five factors of importance: usability; design; information; trust; and, empathy. PZM (2005) criticise this scale as: firstly, developed from an unrepresentative convenience sample of staff and students; and also, that as it can be answered without a respondent needing to complete a transaction, it does not provide a comprehensive service quality measurement. White and Nteli (2003) report on a small sample (56 customers) analysing online banking service quality and present five dimensions from an initial list of twelve dimensions as important: security; responsiveness; ease of use; credibility;

and, product variety all. The findings of the study, while interesting (and reassuring for banks as they scored fairly well on service delivery), are restrictive in terms of sample size and given the complex nature of service quality, acknowledged by the authors as “elusive and abstract” (p31), only twelve dimensions are unlikely to capture the full customer experience.

Many of these works provide interesting insights and several common themes (for instance, the role of trust and fulfilment). However for reasons of small sample sizes, convenience samples of students, consideration of specific industries only, focus not on service quality but satisfaction, loyalty or behavioural intent, these works cannot be considered as a base for the delivery of a new service quality instrument. For such a construction, rigorous and validated research is needed and six principal research groups have been identified (shown in Table 3.1 below).

Table 3.1. Principal Service Quality Studies Reviewed

Study	Principal Source Reference(s)
SERVQUAL (SQ)	Zeithaml, V., Parasuraman, A. and Berry, L. 1990. <u>Delivering Service Quality</u> . Free Press New York.
E-Service Quality (eSQ)	¹ Zeithaml, V., Parasuraman, A. and Malhotra, A. 2000. <u>A Conceptual Framework for Understanding e-Service Quality</u> . Marketing Science Institute Working Paper Report 00-115. ² Parasuraman, A., Zeithaml, V. and Malhotra, A. 2005. E-S-QUAL: A Multi Item Scale for Assessing Electronic Service Quality. <u>Decision Sciences</u> .
.comQ (eTailQ)	Wolfenbarger, M. and Gilly, M. 2002. <u>.comQ: Dimensionalizing, Measuring and Predicting Quality of the E-tail Experience</u> . Marketing Science Institute Working Paper Report 02-100.
Internet Service Quality	Yang, Z. & Jun, M. 2002. Consumer Perception of E-Service Quality: From Internet Purchaser and Non-Purchaser Perspectives. <u>Journal of Business Strategies</u> , 19, 1, pp 19-41.
WebQual	Loiacono, E., Watson, R., Goodhue, D. 2002. WebQual: A Measure of Website Quality. <u>Proceedings of American Marketing Association Winter Educators Conference Winter 2002</u> .
Retail Service Quality	Dabholkar, P.A., Thorpe, D, & Rentz, J. 1996. A Measure of Service Quality for Retail Stores: Scale Development and Validation. <u>Journal of the Academy of Marketing Science</u> , 24(1), 3-16

These works have been chosen for reasons of: author research stature, major journal publication, comprehensive and rigorous approach to research, and validity checking. These major studies also reflect major works identified elsewhere in the literature. Wolfenbarger and Gilly (2003) and PZM (2005) both identify the works of the other as major publications in online services quality. The WebQual scale of Loiacono et al. (2002) is similarly identified bby

both researchers as a major study into site design (Wolfenbarger and Gilly 2003, PZM 2005). The Retail Service Quality scale of Dabholkar et al. (1996) serves to supplement offline service quality with retail issues, a recurrent theme in the literature. Wolfenbarger and Gilly (2003), for instance, consider the retail literature as one of three focal sources in their work. These works serve as adaptations for the online retail environment of the original SERVQUAL measurement tool reviewed in the previous chapter.

3.10.1 WebQual

Loiacono et al. (2002) reported on their development of a new model for analysing website quality – the WebQual measure. They build on a literature review and exploratory research (interviews of website users and designers and studying standards for site design at a large organization), to generate five proposed dimensions of website quality: site ease of use; usefulness (information, trust); entertainment (including design); complementary relationship (image, online and offline); and, customer service. From these dimensions, 142 items were developed which were reduced through initial screening (by 20 students). This initial stage removed the customer service element, focusing the resultant measure solely on website design, with cluster analysis to producing a list of 88 items. These items were converted to scale questions (7-point Likert scale) with some reverse coding, and 510 students presented with a hypothetical situation and asked to evaluate a website. Items with low correlations, poor alpha scores or weak discriminant validity were removed. This was rather arbitrary, seeking to maintain at least five items per dimensions. Some 27 new items were added, resulting in an 83 item measure that was tested on a further 336 students. Confirmatory factor analysis was conducted on 307 students, and checks of validity conducted (reliability alpha scores .72 to .93; discriminant validity checks through measuring correlations between constructs; convergent validity with a separate measure of overall website quality, and nomological/predictive validity with a measure of intention to purchase from or revisit a website). This provided a final measure of four ‘high level concepts’ and twelve dimensions (provided in Table 3.2 below).

Various problems exist within the framework (beyond its sole consideration of website design rather than wider customer service): the reverse coding of certain items has been shown to be problematic in service quality research (see Chapter two); the arbitrary nature in which items were added back in to maintain three items per construct is somewhat at odds with rigorous scale development; the use of students provides a non-representative sample in general, but in addition students were not real purchasers, but presented with a false situation (“imagine it is your friend’s birthday and you are searching for a good gift” (Loiacono et al. 2002 p434)),

meaning that website design is being examined in a purely hypothetical situation. Loiacono et al. (2002) acknowledge that the student sample is not representative of wider website users, and that they are not current purchasers. They justify (somewhat weakly) that “These important limitations are typical of those facing most instrument developers because such work often needs to start in an environment where many subjects are readily and repeatedly available” (p436). They do note further research and confirmation of scale is required.

Table 3.2. WebQual Concepts, Dimensions and Items
Source: Loiacono et al. (2002)

Higher Level Concept	Dimension	Description
USEFULNESS	Informational Fit to Task	The information on the Web site is pretty much what I need to carry out my tasks The website adequately meets my information needs The information on the Web site is effective
	Interactivity	The web site allows me to interact with it to receive tailored information The website has interactive features which help me accomplish my task I can interact with the Web site in order to get information tailored to my specific needs
	Trust	I feel safe in my transactions on the Web site I trust the Web site to keep my personal information safe I trust the Web site administrators will not misuse my personal information
	Response Time	When I use the Web site there is very little waiting times between my actions and the Web sites response The website loads quickly The web sites takes long to load
EASE OF USE	Ease of Understanding	The display pages within the Web site are easy to read The text on the website is easy to read The web site labels are easy to understand
	Intuitive Operations	Learning to operate the Web site is easy for me If would be easy for me to become skilful at using the Website I find the Web site easy to use
ENTERTAINMENT	Visual Appeal	The website is visually pleasing The website displays visually pleasing design The website is visually appealing
	Innovativeness	The website is innovative The website design is innovative The website is creative
	Flow - Emotional Appeal	I feel happy when I use the Website I feel cheerful when I use the website I feel sociable when I use the website
COMPLEMENTARY RELATIONSHIP	Consistent Image	The website projects an image consistent with the company's image The website fits with my image of the company The websites image matches that of the company
	On-Line Completeness	The website allows transactions online All my business with the company can be completed via the website Most all business processes can be completed via the website
	Better than Alternative Channels	It is easier to use the website to complete my business with the company than it is to telephone, fax, or mail a representative The website is easier to use than calling an organisational representative agent on the phone The website is an alternative to calling customer sales or sales

PZM (2005) conclude the WebQual scale is limited to generating information for website designers, rather than measuring service quality while, however, as noted before, one of the principal differences between SQ and electronic services quality concerns the technology replacing human interaction. Since the website takes the place of humans, it is important to assess customer feelings towards this site, requiring any comprehensive measure, such as that being constructed here, should consider this issue. Loiacono et al. (undated) even note that a future research issue is to consider how WebQual fits within broader measures of “total quality” for online customers. Wolfinbarger and Gilly (2003) describe WebQual as “the most empirically grounded of the scales that focus specifically on the website interface” (p185). As one of the earliest and widely cited models of this, WebQual has been included in this thesis.

3.10.2 Internet Service Quality

Yang and Jun (2002) constructed a model of online services quality (based on performance-only measurement), specifically to compare current and non-current internet user opinions, but also more generally to develop a model of electronic services quality (for purposes of clarity, referred to here as ‘Internet Service Quality’). They describe: “personal interviews with online customers in this study revealed that most of the participants did not have a clear conception of what expectations they held for online service... . The main underlying reason is that the Internet as a new information technology device is still a relatively new service channel. Even highly experienced customer groups encounter difficult in shaping definitive pre-consumption expectations.”

Their literature review generated a semi-structured interview questionnaire applied to four customers face to face to probe aspects of online purchasing. This identified positive/negative experience, specific criteria used to evaluate quality, what they expected online, and what they liked/disliked most. In addition to the items generated from this study, the standard SQ instrument was also adapted. Three academic experts also reviewed the suggested items. An ultimate list of 41 items for online customers was pretested on a small group of students to further check wording and clarity. This instrument was tested on 271 customers of a ISP in the South-Western USA. The results were factor analysed (low correlation and cross loading items removed), with 21 items retained to form a six factor solution, accounting for 67.4% of variance across six factors, Cronbach alpha of .59 to .89. The six dimensions were titled: reliability; access; ease of use; personalisation; security; and, credibility (factor items described in Table 3.3 below). Regression analysis was performed, finding age, gender and education levels not statistically significant in influencing online service quality, or overall satisfaction, and that reliability carries the heaviest weighting in customers’ online service quality.

Comparing online internet service quality and SQ, Yang and Jun (2002) highlight “The newly identified factors, such as ease of use and security, are Internet-based related. While some dimensions contain many traditional service quality aspects, they do have some unique characteristics related to the Internet commerce setting” (p33), suggesting increased attention to speed of information access online, and access to customer representatives (via traditional means).

Table 3.3 Perceived Service Quality for Internet Purchasers.
Source: Yang and Jun, 2002.

Dimension	Items
1. Reliability	<p>The quantity and quality of the product/service I received was exactly the same as I ordered.</p> <p>The product/service I ordered was delivered to me within the time promised by the Internet retailer</p> <p>The billing process was accurately handled and its records were kept accurately</p> <p>When the Internet retailers promised to email or call me by a certain time, it did so.</p>
2. Access	<p>If I want to, I could easily contact a customer service representative over the phone.</p> <p>The Web site showed its street and email addresses, and phone and fax numbers</p> <p>The internet retailer offered multiple ordering options such as phone and mail options</p> <p>For more information, I could turn to the Internet retailer’s chat rooms, bulletin boards or others</p>
3. Ease of Use	<p>The organisation and structure of online catalogues was logical and easy to follow</p> <p>The cyberspace address was easy to remember</p> <p>All the terms and conditions (e.g. payment, warranty and return policies) were easy to read / understand</p> <p>The contents in the Web site were concise and easy to understand</p>
4. Personalisation	<p>The internet retailer gave me a personalised or individualised attention</p> <p>The web site had a message area for customer questions and comments</p> <p>I received a personal ‘thank you’ note via email or other media after I placed an order</p>
5. Security	<p>I felt secure in providing sensitive information (e.g. credit card number) for online purchase</p> <p>I felt the risk associated with online purchase was low</p>
6. Credibility.	<p>The web site showed how long the internet retailer has been in this online business</p> <p>I received special rewards and discounts from doing businesses with the Internet retailer</p>

Ease of use emphasises online technology and customers’ ability to understand and utilise this.
 Personalisation is driven by electronic means rather than employees (for instance, auto-email

upon product despatch). Online credibility has an element of age of company as an indicator of credibility (and trustworthiness) and security paid increased attention to personal and financial details. Yang and Jun (2002) note the principal limitation of their study – data collection from a single ISP in one geographic area, and highlight greater research is needed to validate their findings across different industries. In addition, as with the majority of online research, specific product categories are not compared, only results as a whole are analysed. Despite these limitations this study provides a useful structure for consideration in constructing a new model of online services quality.

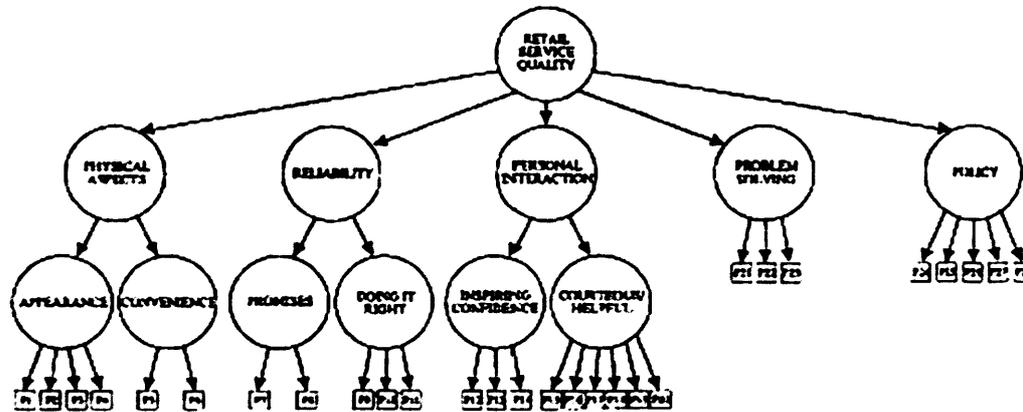
3.10.3 Retail Service Quality

Dabholkar et al. (1996) propose a major shortcoming of the SQ scale is the lack of ability to adequately describe the retail environment where physical products are involved: “A retail store experience involves more... . In terms of customers negotiating their way through the store, finding the merchandise they want, interacting with several store personnel along the way, and returning merchandise, all of which influence customers’ evaluations of service quality.” They propose that despite similarities with pure service encounters, the goods retail encounter involves extra dimensions, and to service this, they develop a new ‘Retail Service Quality’ scale to better capture retail experiences than is possible with the standard SQ instrument. To construct this, they reviewed literature and conducted qualitative research, using three phenomenological interviews, followed by six in-depth interviews, in addition to tracking and recording customers’ experiences through a store, to monitor their evaluations of the shopping experience. This new research was combined with the traditional SQ scale to propose a “hierarchical structure for retail service quality” (shown in Figure 3.1 below). They describe five dimensions of: physical aspects; reliability; personal interaction; problem solving; and, policy.

Comparing the new retail service quality construct with traditional SQ, Dabholkar et al. (1996) note several differences: physical aspects has a broader meaning than ‘tangibles’ in SQ, including store layout convenience, store appearance. Reliability is similar to SQ, but with two sub-dimensions referring to “keeping promises”, “doing things right” and also includes merchandise availability (found to reflect customers perception of store dependability). Personal interaction includes two sub-dimensions of employees inspiring confidence and helpfulness/courteousness, including the ease of contacting staff and access to people to help the customer. Empathy and assurance (personnel issues), while separate dimensions in SQ, are found to be interrelated with courteousness/helpfulness aspects of personal interaction in retailing. Problem solving is viewed as a separate dimension, not part of reliability, including

ease of returns and problem rectification. Policy includes issues of responsiveness to customer needs, such as convenient opening hours, parking availability, merchandise quality and credit policies.

Figure 3.1. Proposed Hierarchical Structure of Retail Service Quality
Source: Dabholkar et al. 1996.



NOTE: It may be noted that the evaluator numbers above do not represent the order in which these items were presented in the questionnaire, that is, the items were not grouped according to dimensions but instead were scrambled. They are numbered here to match the order in the appendix.

From the exploratory research which generated these dimensions, they propose a 28 item scale, using 17 SQ items and 11 new items based on exploratory research (specific additions and removals are outlined in Table 3.4 below). Questionnaires were self administered at seven store locations, gaining 227 survey responses. Statistical analysis was found to support the five dimension structure: “leading us to conclude that our five basic dimensions appear to be well suited for measuring retail service quality” (p10). They further find support for a higher level construct of retail service quality across dimensions and for the six sub-dimensions proposed. For cross-validation purposes, a second study was conducted at two stores, gaining 149 responses, which when analysed provided strong support for all three levels of the hierarchical structure. Checks for construct validity yielded high Cronbach alpha scores (.83 to .89).

Dabholkar et al. (1996) conclude “We see the scale as a generalized retail service quality scale that can be adapted to specific circumstances” (p14). Further, they wrote: “We recognise that there may be aspects of retail service quality that may have been omitted or that may become relevant as new trends in retailing evolve” (p14). One clear trend is the emergence of the internet. As with traditional SQ, retail-service-quality will require adaptation for the specific features of the technology-mediated exchange. Many of the retail issues presented exist in the online environment – the physical aspects of store or merchandise layout and store appearance emerge in the e-commerce literature as website design and ease of use issues.

Aspects of the personal interaction dimensions concerning the ease of contacting staff for information, help and support emerge with regard to the ease of contacting the company for online support. The issue of returns ease within 'problem solving' is also likely to be important in the online marketplace, which experiences higher levels of returns than traditional shopping. Due to the focus on physical goods retailers within this thesis, the need to consider retail service quality as a rectification of physical goods quality omission in SQ is of vital importance, so as not to omit any important issues regarding the fulfilment of goods online.

**Table 3.4. Retail Service Quality is an extension of SQ.
Constructed from Dabholkar et al. 1996.**

Dimension	Sub-Dimension	Items
Physical Aspects	Appearance	This store has modern looking equipment and features The physical facilities at this store are visually appealing Materials associated with this store's service (such as shopping bags, catalogues or statements) are visually appealing This store has clean, attractive, and convenient public areas (restrooms, fitting rooms)*
	Convenience	The store layout at this store makes it easy for customers to find what they want* The store layout at this store makes it easy for customers to move around in the store *
Reliability	Promises	When this store promises to do something by a certain time, it will do so This store provides its services at the time it promises to do so
	Doing it right	This store performs the services right the first time This store has merchandise available when the customer wants it* This store insists on error-free sales transactions and records
Personal Interaction	Inspiring confidence	Employees in this store have the knowledge to answer customers' questions The behaviour of employees in this store instil confidence in customers Customers feel safe in their transactions with this store
	Courteousness Helpfulness	Employees in this store give prompt service to its customers Employees in this store tell customers exactly when services will be performed Employees in this store are never too busy to respond to customers' requests This store gives customers individual attention Employees in this store are consistently courteous with customers Employees in this store treat customers courteously on the telephone *
Problem Solving		This store willingly handles returns and exchanges * When a customer has a problem, this store shows a sincere interest in solving it Employees in this store are able to handle customer complaints directly and immediately*
Policy		This store offers high quality merchandise * This store provides plenty of convenient parking for customers * This store has operating hours convenient to all their customers * This store accepts most major credit cards* This store offers its own credit card*
SQ Items Excluded		XYZ company's employees are neat-appearing. Employees in XYZ company are always be willing to help you. XYZ company has employees who give you personal attention. XYZ company has your best interests at heart. Employees of XYZ company understand your specific needs.

* Indicates, the eleven new retail context items.

3.10.4 E-Service Quality (ESQ)

The electronic service quality scale of Zeithaml, Parasuraman and Malhotra (2000) has been noted as “one of the first definitions of e-service quality” (Collier and Bienstock 2003 p159). Adopting a similar process as has been used within this thesis, ZPM (2000) in first considering *electronic* service quality, use the basic framework and theory of traditional SQ as their starting point. To build a picture of the context-specific issues customers consider when purchasing over the internet, ZPM (2000) conducted focus groups (six groups of six to seven participants, split into three age groups, and by high and low internet buying experience). Participants were probed for (un)desirable site characteristics, positive/negative experiences and criteria used in forming evaluations. This research produced were “...consistent across the groups, experience levels and e-businesses discussed. The focus groups revealed that consumers use basically similar dimensions in evaluating e-SQ regardless of the type of product or service being evaluated on the Internet” (p15). The specific attributes described by participants were grouped into eleven dimensions (shown in Table 3.5 and 3.6 below) which are proposed as describing electronic-service-quality. This is defined as “the extent to which a website facilitates efficiency and effective shopping, purchasing and delivery” (p11). ZPM (2000) categorise items across a ‘means-end’ chain from concrete cues (specific key items of concern, often based on technological design which may be transitory), perceptual attributes (items or attributes of a more generic and longer lasting nature), dimensions (factor groupings of these attributes) to higher level abstractions (such as value).

Comparing SQ and eSQ, ZPM (2000) note that half of the original SQ dimensions are represented in eSQ (reliability, responsiveness, access, assurance, customisation/personalisation), but also several new dimensions emerge (including but not limited to those related to the technology). Issues such as site navigation and ease of use are of importance, but also price knowledge emerges in eSQ. In conducting the focus group research, ZPM (2000) find focus group participants have problems articulating e-SQ expectations, except about direct fulfilment (items in stock, delivery of what is ordered, when promised and accurate billing). With regards to expectations ZPM (2000) note: “Unlike focus group participants who articulate with ease the nature and sources of their expectations for traditional SQ, participants in our study often seemed at a loss to articulate their e-SQ expectations except when it came to order fulfilment” (p23). While respondents could describe the need for items to be in stock, delivering what/when promised and billing accuracy, in other areas problems arose. This trend is also noted by Mick and Fournier (1995, 1998b) who state “In buying and owning technological products, an individual’s pre-

consumption standards are often nonexistent, weak, inaccurate, or subject to change as life circumstances shift” (Mick and Fournier 1995, p1).

Table 3.5. Dimensions of perceived e-SQ.
Source ZPM 2000 (p16)

	Theme	Description
1	Reliability	Involves the correct technical functioning of the site and the accuracy of the service promises (items in stock, delivering when promised), billing and product information.
2	Responsiveness	Means quick response and the ability to get help if there is a problem or question
3	Access	Is the ability to get on the site quickly and reach the company when needed
4	Flexibility	Involves the choice of ways to pay, ship, buy, search for and return items.
5	Ease of Navigation	Means that a site contains functions that help customers find what they need without difficulty, possesses a good search engine, and allows the customer to manoeuvre easily and quickly back and forth through the pages
6	Efficiency	Means that a site is simple to use, structured properly, and requires a minimum of information to be input by the customer.
7	Assurance/Trust	Involves the confidence the customer feels in dealing with the site and is due to the reputation of the site and the products or services it sells as well as clear and truthful information presented.
8	Security/Privacy	Involves the degree to which the customer can determine shipping price, total price, and comparative prices during the shopping process.
9	Price Knowledge	Is the extent to which the customer can determine shipping price, total price and comparative prices during the shopping process.
10	Site Aesthetics	Relates to the appearance of the site.
11	Customisation/Personalisation	Is how much and how easily the site can be tailored to individual customers’ preferences, histories and ways of shopping.

ZPM (2000) note further differences between SQ and ESQ: “Compared to SQ, E-SQ seems to be more of a cognitive evaluation than an emotional one” (p25), suggesting that while positive feelings did not surface as clearly in eSQ nor did anger and frustrations. ZPM (2000) also establish that customers have both generic, web-wide reasons for shopping online (such as convenience, lower prices and buying unusual items), and also website-specific criteria for assessing quality. ZPM (2000) identify customers as most comfortable buying branded or standardised products (such as books, or CDs) online, with poor customer service and security concerns significant reasons for customer reluctance to go online.

Table 3.6 Specific Attributes of E-SQ
Source ZPM 2000 (p17-21)

Dimension of eSQ	Facets of eSQ	Sub-facets
Reliability	Site is up and running	<ol style="list-style-type: none"> 1. Available for business 2. Site does not crash 3. Pages don't freeze after you have put in all your information 4. Site is working correctly
	Accuracy	<ol style="list-style-type: none"> 1. Received the item ordered 2. Pages confirm exactly what was ordered. 3. Billing is accurate (product and shipping costs) 4. Information is accurate <ul style="list-style-type: none"> - make accurate promises - accurate description of products
	Items are In Stock	<ol style="list-style-type: none"> 1. Items are available 2. items are available in my size 3. Know that items are in stock 4. Items are available in suitable time frame.
Responsiveness	Confirmation of Order	<ol style="list-style-type: none"> 1. received a confirmation of item ordered 2. quick confirmation 3. received and email when order was sent 4. received information about when the order was coming 5. response time should be fast 'time is money'
	Help available if there was a problem	<ol style="list-style-type: none"> 1. message about what to do if your order doesn't go through (e.g. Please submit again) 2. Compensation for problems they create 3. taking care of me after the purchase 4. emailing or otherwise following up the purchase and asking how satisfied I am 5. taking care or problems quickly 6. refund shipping charges when product doesn't arrive in time 7. fast response to email queries
	Speed of placing an order	<ol style="list-style-type: none"> 1. speed of execution
	Ability to get answers quickly Quick delivery Updates on status of order	
Access	To the site	<ol style="list-style-type: none"> 1. being able to get on the site quickly 2. loads fast (not too many extraneous pictures) 3. site should be easy to find
	To the company	<ol style="list-style-type: none"> 1. contains a telephone number to reach the company 2. ability to talk to a 'live' person using a telephone number 3. ability to talk to the person who processes the order 4. hast online customer service reps

Table 3.6 (cont) Specific Attributes of E-SQ
Source ZPM 2000 (p17-21)

Dimension of eSQ	Facets of eSQ	Sub-facets
Flexibility	Choice of ways to pay Choice of way to ship	1. would like to pay my way using cheques 1. ability to use different billing and shipping addresses 2. ability to get the package without having to sign for it.
	Choice of way to return the item Choice of way to buy the item Options for the ways you can search Full information about choices	1. having a brick and mortar option to return items 2. being able to return the items to a store 1. options to be on an email list buy not receive junk mail
Ease of Navigation	Easy to find what I need	1. easy to get anywhere on the website (not go round in circles) 2. shouldn't get you lost 3. contains a site map with links to everything on the site
	Has a search engine Ability to manoeuvre through the site	1. good user interface 2. ability to find a page previously viewed 3. being able to go back when you make a mistake
	Speed of manoeuvring through the site Speed of checkout	1. not too many web pages 2. not too many graphics that take up time to download
Efficiency	Simple to use Doesn't require me to input a lot of information Structured properly	1. site that contains just the basics 1. gives information in reasonable chunks 2. gives information on command rather than all at once 3. no scrolling from side to side 4. no fine print that is difficult to read and hard to find
	Well known site Sells known brand names Offers a guarantee Ratings provided by other customers	1. reputation of site 2. advertises on other media so that name is well known 3. well known name 1. provides clear information about the products
Security/ Privacy	Secure Site	1. symbols and messages that signal the site is secure 2. verification from third parties
	Shows care in how it collects my credit card information	1. not having to give my credit card information until right at the end 2. doesn't keep my credit information on file
	Does not share private information	1. personal information should not be compromised 2. doesn't give other sites or companies access to my information 3. doesn't use banner ads with cookies to collect information on me 4. doesn't give my information away to other companies.

Table 3.6 (cont) Specific Attributes of E-SQ
Source ZPM 2000 (p17-21)

Dimension of eSQ	Facets of eSQ	Sub-facets
Price Knowledge	Speed of manoeuvring through the site	<ol style="list-style-type: none"> 1. not too many web pages 2. not too many graphics that take time to download
	Ability to compare prices (with other sites)	<ol style="list-style-type: none"> 1. a site that brings you all the bids/prices from other sites
	Knowledge of shipping prices	<ol style="list-style-type: none"> 1. want to know up-front what shipping charges are (can determine if purchase or go elsewhere)
	Knowledge of what I am spending as I go	<ol style="list-style-type: none"> 1. running total of purchases as order progresses 2. running total of purchases and shipping costs 3. prices shown with the items on the screen 4. up-front pricing
	Knowledge that the site has low prices	<ol style="list-style-type: none"> 1. incentives to shop 2. knowing that shipping is free 3. knowing that a discount coupon is available
Site aesthetics	Good pictures of items on sale	<ol style="list-style-type: none"> 1. colour of items same as it was on the screen
	Eye catching	<ol style="list-style-type: none"> 1. colour is intriguing 2. brighter rather than darker background
	Simple	<ol style="list-style-type: none"> 1. free of distraction 2. uncluttered 3. clean, not too busy 4. no flashing things going across the screen 5. not too much movement 6. no or few advertisements.
Customisation/ Personalisation	Site that helps me find exactly what I want	<ol style="list-style-type: none"> 1. site that makes recommendations about what I might like 2. site is targeted at me 3. has a wish list capability that allows me to save items I might want to buy
	Gives many options for merchandise Easy to customise Stores customer information to facilitate future transactions	<ol style="list-style-type: none"> 1. wide selection

Others have sought to take the original eSQ focus group items as the basis of empirical work. For instance, Filho et al. (2005) seek to validate the structure of e-SQ, taking the findings of the original focus group participants, and using them to form the basis of a questionnaire survey in a convenience sample of online shoppers in Brazil. Gaining 350 responses, taking 101 items across eleven dimensions down to 51 in pre-testing, they determine a nine dimension structure (ease of navigation, responsibility and efficiency, security and privacy, reliability, price knowledge, guarantees confidence, information about orders, site aesthetics/image and flexibility) with fifty items. This work did not include any items other

than those in the original ZPM (2000) work, suffered from a small sample size and was conducted in an atypical online marketplace.

From the initial eleven dimensions described (ZPM 2000), PZM (2005) took the 121 individual items from the original focus groups, reviewing these with further focus groups to produce some rewording and reduction, leading to 113 items being put to formal questionnaire test. A marketing research firm was used to identify respondents who had used the internet twelve times during the past three months (purchasing on at least three occasions), with three equal groups asked to evaluate the most, second and third most favourite sites 'to get adequate variance in the data' (p219). A total of 549 responses are provided across a wide range of product categories (apparel, books, CDs, computer software/hardware, electronics, drugs, flowers, groceries, toys.).

The results were grouped by the eleven focus group dimensions, with those items with low correlations and whose elimination improved coefficient alpha scores removed. Items with high amounts of missing data were also removed. At this part of the procedure, PZM (2005) determine "It was evident that all of these items related to service recovery (product returns, problems, compensation for problems, ways to reach the company for information or to deal with problems" (p220). They propose that respondents were not answering items as they had not experienced them and due to this, these items were set aside for a separate 'e-recovery service scale'. Factor analysis and refinement resulted in a 22-item scale across four dimensions to describe e-SQ, and a recovery scale with eleven items across three dimensions (shown in Table 3.7 below). The validity of the scales developed were confirmed with a secondary study of two major online retailers, Amazon.com and Walmart. They gained 653 and 205 responses respectively for the e-SQ scale, but only 51 and 34 for the recovery scale. Good convergent, discriminant and nomological checks of validity confirm the four dimension structure of eSQ with regression analysis (with measures of overall quality, value and loyalty used to further check validity). PZM (2005) define eSQ as "the extent to which a Web site facilitates efficient and effective shopping, purchasing, and delivery" (p217) and conclude "E-S-QUAL and E-RecS-QUAL are generic and parsimonious scales, intended for obtaining a global (as opposed to transaction specific) assessment of a Web site's service quality" (p230).

Acknowledging the eSQ scale of ZPM (2000) as "one of the first definitions of e-service quality" (p159), Collier and Bienstock (2003) state that "the e-SERVQUAL model may have

some merit” (p160) but they note a fuller conceptualisation is required. Several unresolved issues remain within the eSQ work. The empirical analysis of PZM (2005) is less rigorous than that leading to the original SQ scale (PZM 1988) and the sample is based on respondents across the whole marketplace, rather than in specific companies or product groups. This resulted in an inability to compare distinct product groupings to check validity or dimensional stability as most groupings were too small to form meaningful samples on their own.. In addition, only products are considered rather than pure services, a major part of the online marketplace. Also, despite previous emphasis on the value of expectations data, PZM (2005) measure website performance with a five point Likert scale (strongly agree/disagree), and do not use a separate measurement of expectations (possibly, although not explicitly, excluded due to respondent difficulty in stating online expectations in ZPM (2000)). The failure to measure directly item importance or customer expectations is a serious shortcoming that results in data of little value for generalisation about what customers demand or want in the online marketplace.

Table 3.7. Electronic Service Quality
Source: Constructed from PZM (2005)

Construct	Factors	Description
E-S-QUAL	Efficiency	The ease and speed of accessing and using the site
	Fulfilment	The extent to which the site’s promises about order delivery and item availability are fulfilled
	System Availability	The correct technical functioning of the site
	Privacy	The degree to which the site is save and protects customer information
E-RecS-QUAL	Responsiveness	Effective handling of problems and returns through the site
	Compensation	The degree to which the site compensates customers for problems
	Contact	The availability of assistance through telephone of online representatives

Collier and Bienstock (2003) question the “service recovery” aspect of eSQ. Indeed, the small sample sizes used to derive the scale, and the fact that some issues are not actually related to recovery but to general customer service (meaning some recovery items would be better placed in the main eSQ scale) are serious problems. Examining the e-recovery items stated (only those retained are provided), not all require a problem to be experienced, specifically: ‘the site offering a meaningful guarantee’, ‘the site having a telephone number to reach the company’, ‘the site having service representatives online’, are three of the eleven items which

do not directly require a problem to be experienced, and may be of importance to the customer. Of the three dimensions of e-recovery (responsiveness, compensation and contact) only 'compensation' exclusively relates to service recovery. The result is a separate scale with issues that may well be better placed in the main e-SQ scale. Also, with very small responses for confirmatory study, the validity of the eleven item scale itself is subject to further examination. Wolfinbarger and Gilly (2003) note: "Rather than view customer service as a core element of a typical online purchase experience as other researchers do, they suggest that customer service comes into play only when a customer problem occurs and only after the online transaction is made, ignoring that online consumers sometimes need pre-purchase customer service" (p186).

3.10.5 eTailQ

Wolfinbarger and Gilly (2002), based on an earlier undated working paper from the Centre for Research on Information Technology and Organizations, report on their work to 'dimensionalize, measure and predict quality of the e-tail experience', with the '.comQ' scale. In developing their .comQ instrument, Wolfinbarger and Gilly (2002) draw on three pre-existing literatures: retail image, computer-mediated environments and services marketing. This echoes the three literatures selected for review here: retail services quality, online service quality and service-quality (SQ). Wolfinbarger and Gilly (2002) identify key themes from this literature:

- usability – including navigation and ease of use as a key feature, analogous to retail store layout and design;
- website download time and checkout processing important issues;
- in depth information content about products and information content being key factors in online shopper choice;
- reliability / fulfilment – just as this is the most important SQ concept, so too it should be online as companies must convince the customer they can reliably deliver products;
- customer service – in retailing often part of store image, in SQ part of personnel measures;
- selection – found to be very important in retail literature it should also be important online, especially as extended selection often a key reason for shopping online;
- security/privacy – not covered as well in retail as SQ but relevant online;
- experiential/atmospheric issues – including website layout, analogous to store layout, and the unclear issues of creating a compelling online experience.

Wolfinbarger and Gilly (2003) rename their '.comQ' measurement 'eTailQ', and provide detail on the development of the instrument. Wolfinbarger and Gilly (2003) describe a three stage "multi-method, iterative process" (p186) in the development of the eTailQ measure. Their approach involved: firstly, the use of nine focus groups to generate items (totalling 64 consumers, three student/staff groups, two offline groups and four online across the USA).

Respondents were questioned about online shopping habits, purchase behaviour, and reactions to different websites. A total of 375 items generated were added to the original 22 SQ items (reworded for the online context) and other items from online surveys. These were all reviewed and reduced by the researchers into 100 items for a second stage of “structured conceptualisation”, where 100 students sorted items into like groups and expressed the importance of each item. A group similarity matrix (showing how often items were paired together) was generated and submitted to hierarchical cluster analysis with Ward’s minimum variance and the Centroid method, producing two different solutions. The Centroid solution comprised five clusters (website design, customer service, personalisation, fulfilment/reliability and privacy/security). Wards minimum variance broke down website design into four smaller clusters of selection, information, experiential/atmospheric issues and usability. This method removed 18 items, producing an 82 statement solution. For final examination, items were selected to represent these eight clusters using four criteria (providing sufficient coverage of the eight dimensions, choosing the most important items, avoiding redundancy and excluding those close to two different clusters). This resulted in forty items for further investigation. Final empirical investigation used an online panel to generate 1013 completed survey responses from those who had purchased products online. Items were arranged in two column format with seven point Likert scales (strongly disagree to agree) for the desirability and performance of a company on each item, with a high number of validity checking statements (six satisfaction, five loyalty, five attitude to the site and two global service measures). Exploratory factor analysis largely supported the structure suggested by Centroid clustering (personalisation loaded with website design, the other four factors matched exactly). Confirmatory factor analysis provided a final set of 14 items with good construct reliability, variance extracted and Cronbach alpha checks (shown in Table 3.8).

Table 3.8. eTailQ Dimensions
 Source: Constructed from Wolfinbarger and Gilly (2003) p193

Construct	Description
Fulfilment/Reliability	the accurate display and description of a product so that what customers receive is what they thought they had ordered and delivery of the right product within the time frame promised
Website Design	all elements of the customer’s experience at the website (except for customer service), including navigation, information search, order processing, appropriate personalisation and product selection
Customer Service	responsive, helpful, willing service that responds to customer inquiries quickly
Security/Privacy	security of credit card payments and privacy of shared information



Wolfenbarger and Gilly (2003) note an important difference in SQ versus eTailQ (or electronic services quality). Whereas in SQ consumer perceptions of the employee play a key role, the company is the focus online. Online, website design and privacy/security emerge as new constructs. They also find: fulfilment/reliability and website design are the largest and most consistent predictors of quality and that these factors are of greater importance in predicting quality for those purchasing more than two weeks ago. Further, they note website design is especially important in judging quality for experiential users and book/music/CD purchasers. Also while customer service is of varying importance across the sample “this factor may not always predict overall quality because interaction with customer service is not always needed for etail purchases” (p195). Privacy/security is “eclipsed by the other three factors” –to suggesting that initially security is inferred from website design for new shoppers, and for more frequent usage derived from experience – parallel to retail environment where store credibility derived from physical conditions. Wolfenbarger and Gilly (2003) in focus group research found that ‘community’ was rarely mentioned as important to customers.

Table 3.9. Full Listing of Items in eTailQ
Source: Wolfenbarger and Gilly 2002.

Dimension	Items
RELIABILITY / FULFILMENT	You get what you ordered from this site This website gets the order correct The on-line receipt informs me of the total charges that will be debited against my credit card Transactions at this website are error free The product that came was accurately represented by the website The product is delivered by the time promised by the company My order is delivered by date promised Returning items is relatively straightforward The returns policy at this site is reasonable You get you merchandise quickly when you order it The website has reasonable shipping and handling costs It's easy to track the shipping and delivery items of items purchased on this website Products on the site are almost always in stock The website provides shipping options The items sent by the site are well packaged
CUSTOMER SERVICE	The company is ready and willing to respond to customer needs Customer service personnel are always willing to help you Inquiries are answered promptly When you have a problem, this website shows a sincere interest in solving it After sale support at this site is excellent This website has customers best interests at heard I feel like the company wants to provide me with a good buying experience The website appreciates my business
PERSONALIZATION	This website gives you personal attention The level of personalisation at this site is about right, not too much, not too little. The website understands my specific needs This site has features that are personalised for me This website stores all my preferences and offers me extra services or information based on my preferences This site does a pretty good job guessing what kinds of things I might want and making suggestions
PRICE	The site has competitive prices You get food value for the money spent at this website I like the special promotions and deals on this website This site has great specials The promotions for this site seem to beckon me

Table 3.9 (cont) . Full Listing of Items in eTailQ
Source: Wolfinbarger and Gilly 2002.

<p>USABILITY FACTORS (One cluster with centroid method, and separate with Ward's method)</p>	<p>EXPERIENTIAL / ATMOSPHERIC The site almost says 'come in and shop' The website has good surprises It's really fun to shop at this website There are features at this site that are entertaining to use Buying at this website is exciting The site's appearance is professional The website is visually appealing The website has useful interactive features (for instance, being able to look a the product from all angles, building the product I want, or tying on the items virtually) The website appears to use the best technology The website has innovative features The home page provides a link to order status</p> <p>USABILITY / EASE OF USE The organisation and layout of the website facilitate searching for products It's easy to get around and find what you want at this site (easy trans to cat) This site doesn't waste my time The site has well arranged categories The website is laid out in a logical fashion I can go to exactly what I want quickly It is quick and easy to complete a transaction at this website Download at this website is quick The website has good pictures of the product You can find what you want with a minimum number of clicks The site always works correctly The search function at this website is helpful The website functions as it should I know what all my options are when I shop at this website The layout of the site is clean and simple The site is organised in a way that is intuitive, like your thinking Every process at this site moves like a well oiled machine</p> <p>INFORMATIVENESS At this site, I have the full information at hand The website provides in-depth information The site gives me enough information so that I can identify the item to the same degree as if I am in the store The website has comprehensive information The website is a very good source of information The site helps me research products</p> <p>SELECTION You know exactly what you're buying at this website The website lets me know about product availability during search The website has good selection This site has a variety of products that interest me The website has products I can't find in stores The website is updated often with new products There are hard to find products on this site I can find items that are unique or different on this site</p> <p>SECURITY This website has adequate security features I feel secure giving out credit card information to this site I feel safe in my transactions in this site I feel like my privacy is protected at this site I trust this site will not mis-use my personal information I feel I can trust this website The company behind the site is reputable I trust that this site will not give my information to other sites without my permission The website instils confidence in customers The company is well established I am worried about this site knowing everything about me</p>
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Despite the comprehensive approach with which the eTailQ measure has been constructed, shortcomings exist. The Wolfenbarger and Gilly (2003) eTailQ scale is acknowledged by PZM (2005) as comprehensive in methodological design, however, PZM (2005) suggest problems. They criticise two of the four items (website design and customer service) for poor internal consistency and distinctiveness, with several items (related to information, personalisation, selection, speed) combined within them, thus requiring further testing of scale validity. Wolfenbarger and Gilly (2003) acknowledge limitations of their work: the sample is not random, in using an online panel to gain responses; the sample is likely more technologically sophisticated than the general internet population; and, only one product sub-sample was large enough to be analysed separately. Further, although the measurement taken in exploratory research concerns the importance customer place on items, this is replaced with measures of desire and performance in the final study. Using agree/disagree points in the final research leads to methodological concerns regarding the final instrument. The focus of the study is solely on products rather than services, limiting generalisability, and while 1013 responses are gained in the final study, these are across lots of different product categories. Product or other contextual differences are also not fully investigated.

3.11 Conclusions

In Chapter two, the basis for evaluating the service quality delivered to customers *in general* was analysed. A broad literature reviewed proved the ServQual approach (PZB 1988) to be the most widely used and validated method of analysing service delivery to customers. The many criticisms levelled at the ServQual tool were also reviewed, and while the broad validation of the ServQual method was established, the need for certain modifications was identified. At a foundation level, the 'expectations' component was found to be inferior to an 'importance' component, that has been adopted in some research and will be used in this thesis. At a practical level, the need to modify the generic ServQual questions for the internet environment is also required. Personal employee service is a major part of the ServQual instrument, but is not present in the internet environment, where issues such as website design and a greater emphasis on trust and security emerge. The purpose of this past chapter has been to assess the many different works examining service quality delivery to customers *online*, to determine how to adapt the ServQual model with practical items for the internet context.

Before considering how previous research can be used as a basis for generating a new online service quality instrument, this work was considered in terms of how well it provides for assessing customer service quality online, to identify resulting gaps in theory and practice, to validate the contribution of the work conducted in thesis.

Research has noted that the existing literature on online service quality is extremely limited (Parasuraman et al. 2005, Wolfinbarger and Gilly 2003, Yang and Jun 2002, Yang et al. 2002). Existing works have a very narrow focus (Zeithaml et al. 2002). Often they focus on one specific area of online service (for instance, website aesthetics), rather than taking an holistic approach. Much of the work done on online service quality has also been conducted in the commercial sector and has suffered a lack of rigorous, academic development or peer review (Parasuraman et al. 2005). In the decade or more since the first e-commerce stores were established, the problems of correctly assessing online service quality requirements have left retailers unable to assess their customers and design suitable fulfilment systems or marketing strategies. The result of these failures has frequently been very high levels of customer dissatisfaction with the online retail and service experience (ICSA 2000, Harris and Goode 2004). The fundamental operating principle that good service quality is required for customer satisfaction and competitive advantage remains true in the internet environment (Porter 2001). In the highly competitive internet marketplace, any company that cannot repeatedly deliver high-quality service to their customers will see low customer loyalty and face serious competitive problems. There is, therefore, a compelling need to develop a comprehensive, rigorously developed and verified measure of online services quality, to allow companies to address their service problems and to resolve the gaps in academic knowledge in this same area. This thesis seeks to address these problems.

Despite the lack of a comprehensive service quality tool, much has been written about online consumption and customer behaviour. A review of this literature has been conducted to assess the current state of knowledge, to analyse methods of research utilised by major studies, and to attempt to synthesis the key findings of past research into a new and comprehensive model of online services quality. This review has been in two stages – firstly, a review of the general literature, followed by a detailed analysis of five major works on services quality (four on online service and one on retail service).

The first stage of the literature review revealed three clear and distinct themes across the broad range of works reviewed on internet commerce: website design issues; security and trust issues; and, finally, the role of fulfilment. The issue of website design is examined as a separate concern to other aspects of service by several researchers (for instance, Loicono 2002, Lang 2001, Chen and Wells 1999, Wyner 2002), Their work has focused on the physical design attributes of the website interface (such as look or atmosphere, excitement, navigation or load-time). These studies provide insight into how customers interact with the sales channel, but do

not investigate broader issues of how customers experience service, or how service is delivered to customers.

The issue of security and trust has been one of the most widely discussed when considering internet commerce. Customers are wary of the unfamiliar internet purchase channel, where they are dislocated from the supplying company, often only able to contact them virtually through the internet. Repeated stories in the popular press about online security failures have fostered attitudes of mistrust and concern for personal and financial details when purchasing online (for instance, Harrison 2000a,b, Pickering 2000, Computer Buyer 2000). Research into this issue has shown that both new and experienced users are worried about the security of their transactions (Horrigan 2000), suggesting the issue of trust is a major part of the wider service proposition in internet retailing.

A third body of work has focused on the issues of actually fulfilling customers' orders - making sure the right product is delivered to the right place at the right time. In part related to customer trust-building, fulfilment plays a major role in customer evaluations of service quality, satisfaction and loyalty to the company. Research has highlighted that internet companies are consistently failing to master the fulfilment challenges of internet retailing, with subsequent customer dissatisfaction (Porter 2001, Andreuss 2002, McKinnon 2002a, Jones and Simons 2000, Saenz 2001).

These three general themes, revealed through a broad literature review, highlight areas where greater research is needed, to relate the separate topics together within a single framework. Table 3.10 brings together the works reviewed, as part of the above analysis, highlighting specific commonalities, and more importantly omissions. As can be seen, website design issues (including ease of use, information and access), trust/security, and fulfilment (including responsiveness), emerge as recurrent themes. It is also evident from this overview that no single work has considered all issues raised as important across all the studies concerned.

In addition to these broad themes, a second stage of literature review was conducted to analyse in more detail, specific internet service frameworks compiled by major researchers in this area. In total four major internet studies were analysed - three on holistic service quality (which includes fulfilment and trust issues); one on website design (due to the key role of the interface in internet purchasing, it was deemed necessary to consider the most comprehensive study on this area as part of a focal review of major works); and, a final study on offline retail

service quality (to assess offline retail issues to ensure no retail specific issues were overlooked).

Each of these studies provides insight into the nature of service provision to customers, and together they provide a good pool of source items, for compilation into a new research instrument. However, the limitations of each study mean that none on its own provides a complete or generic tool for use in determining customers' online service requirements. The work of Dabholkar (1996) was never intended to do this, instead seeking to look at how the pure-service ServQual scale would need to be adapted for the physical-goods retail environment. His work highlights the need for significant adaptation on issues such as physical layout, but does validate the use of ServQual in physical goods environments. The work of Loicono (2002) focuses purely on issues of website design - providing a comprehensive list of the different experience and use-based issues encountered, but not considering how these relate to broader service delivery. The three remaining studies each seeks to compile such a broad survey tool. However, each suffers limitations of scope and methodology, that necessitate further research into service quality online, before any solution is accepted.

Two of the three original creators of the ServQual measure (PZB 1988) have themselves sought to modify this framework for the internet, conducting new focus group research (ZPM 2000) and providing some empirical confirmation (PZM 2005). These works provide a comprehensive list of issues, when considering online service. However, several peculiarities in the confirmatory study, that separated key service issues into a separate scale entitled 'recovery' (when they were in fact core service issues), limits the generic usefulness of the study (Collier and Bienstock 2003). Wolfenbarger and Gilly's (2002, 2004) parallel research has generated themes and items on holistic service quality. However, the decision to use cluster, rather than factor, analysis led them to two different sets of conclusions with weak validation (PZM 2005). The work of Yang and Jun (2002) on internet service quality also generates a wide range of issues, but suffers from a small sample size. In Table 3.11 the themes and topics presented across these works have been categorised. In common with Table 3.10, it is possible to identify that no single work has yet embraced all the disparate aspects of online service delivery to customers.

The stages of the literature review process in this chapter have sought to: firstly, highlight the need for greater research on online service quality; secondly, conduct a broad review of the general trends across literature on online commerce as a whole, to identify key emergent

themes or topics that are of concern to customers; and, thirdly, to review specific major works on separate parts of the service process and the service process as a whole. Thus, the first research question drawn from this literature is stated:

What are customers' service quality demands online?

This chapter has sought to justify the need for greater research on online service quality by noting limitations in previous work. It builds towards the research study by utilising existing studies to guide the general themes for consideration, and also to generate from previous research a pool of pre-validated survey items that can be used in a new survey tool construction (as described in Chapter six).

When this survey is constructed and tested, a comparison of how different customers demand different service features will be conducted. Considering how such a comparison can be conducted is the purpose of the next chapter, which examines traditional, demographic market segmentation tools, the identified limitations of demographic analysis, and new, post-demographic or situational issues that can be used to segment customer markets.

Table 3.10. Themes in General Literature Reviewed^{1,2}

	Customisation / Personalization	Contact	Cultivation	Customer Care	Community	Choice / Range	Site Ease of Use / Navigation	Website Design / Image	Price	Trust Security	Information	General Convenience	Reliability / Fulfilment	Responsiveness (Service speed or efficiency)	Website Access	Product Representation / Accuracy	Returns / Service Recovery
Srinivasan et al. 2002.	x	x	x	x	x	x	x	x									
Warrington and Eastlick. 2003						x			x			x					
Sousa and Oliveira 2005							x	x		x	x		x	x			
ZPM 2002b.	x						x	x		x	x		x	x	x		
Liu and Arnett 2000.	x			x	x		x	x		x	x			x	x		
BizRate Scale (cited ZPM 2002b)				x		x	x		x	x	x		x		x	x	
Gomez scale (cited ZPM 2002b)	x	x	x	x		x	x	x	x	x	x				x		
Yang, Peterson and Huang 2001.							x	x		x	x				x	x	
Szymanski and Hise 2000.						x		x		x	x	x					
Collier and Bienstock 2003				x			x	x		x	x		x	x	x	x	x
Evanschitzky et al. (2004)						x		x		x	x	x					
Rice et al. (1997)							x	x			x						
Sohn 2000.	x						x	x		x			x		x		
Kaynama 2000	x						x	x						x	x		
Filho et al. (2005)							x	x	x	x	x		x	x			
Barnes and Vidgen (2002)				x			x	x		x	x						
Yoo and Donthu (2001)							x	x		x					x		
Chen and Wells (1999)					x			x									
Francis and White (2002)							x	x		x			x		x		
White and Nteli (2003)						x	x	x		x				x			
Odekerken-Schroder and Wetzels (2003)											x		x				

Table 3.11. Themes in Focal literature Reviewed^{1,2}

Focal Studies	Customisation / Personalization	Contact	Cultivation	Customer Care	Community	Choice / Range	Site Ease of Use / Navigation	Website Design / Image	Price	Trust Security	Information	General Convenience	Reliability / Fulfilment	Responsiveness (Service speed or efficiency)	Website Access	Product Representation / Accuracy	Returns / Service Recovery
Loiacono et al. (2002, undated) ² WEBQUAL	x						x	x		x	x				x		
Yang (2002) INTERNET SERVICE QUALITY	x	x			x		x	x		x			x				
Dabholkar et al. (1996) RETAIL SERVICE QUALITY		x		x				xxx					x				
Wolfenbarger and Gilly. .COMQ (undated, 2002); etailQ (2003)	xx			x	xx	xx	x	x	xx		xx		x				
ZPM (2000), PZM (2005) e-SQ	xx	x		x			x	x	xx	x			x	x	x		
PZM (1988). SQ.				x	xxx			xxx					x	x			

1 Headings listed do not necessarily represent the existence of that distinct heading in each body of work, but rather the inclusion of the key theme as either a factor or sub-factor.

2 Multiple other sub-factors present related to website design: ease of usage, innovativeness, emotional appeal, online completeness, complementary support to offline channels.

xx – themes represented in original exploratory work but later removed in final analysis.

xxx – themes represented in the offline context by equivalent measures, e.g. website design / retail store design.

Chapter 4. Situational Segmentation

4.1 Introduction

Thus far, the determination of customer service requirements in the internet marketplace *in general* has been considered. The focus of this chapter is the consideration of how customer service requirements may vary in certain different circumstances. The identification of customers that behave in the same way (i.e., they vary from the norm in the same way) has traditionally been the basis for segmenting the marketplace into groups with similar needs and desires that the company can target with a specific message or offering. This process of segmenting the marketplace has predominantly been based on standard demographics (age, gender, education, income), geographic variables (location), or lifestyle and psychographic variables (young family, older single) (Kotler 1997, Kotler et al. 1999). This process of segmentation has however been increasingly questioned as failing to provide a useful means of differentiation either in general or in the online marketplace. Authors examining this theme have done so under headings such as post-modern marketing (Brown 1993a, 1993b, 1994, 2001, 2003, 2005), new marketing (McDonald and Wilson (2002), new consumer marketing (Baker 2003). Others contribute specific studies of the marketplace, considering the applicability of measures of various aspects of purchase situations or context differentiation rather than personal differentiation, as a basis of customer grouping (for example, Palmer 2000, Beal et al. 2002, Buttle 1996).

In this chapter, the development of marketing and segmentation will be considered. The traditional basis of market segmentation (demographics) will be reviewed, and the shortcomings of this approach noted, before new literature themes highlighting alternative methods of analysis are outlined. Following this, a list of situational variables is compiled from the literature, which are evaluated for their impact on online customer behaviour. The general research question developed from this review concerns the impact of situational issues on customer demands. To address this question, each theme in the literature regarding distinct purchase situations has been developed into a specific research proposition. Empirical analysis of customer survey results allows investigation into the existence and nature of impact of these variables on customer service quality requirements, and thus their validity as basis of

segmentation. Traditional demographic measures of segmentation are included, so their relative and absolute impact on customer service requirements may also be evaluated.

4.2 Marketing Evolution

The modern marketplace has been characterised by some of the world's leading marketing academics as radically different to that of twenty years ago. This change is not solely based on the development of internet commerce, but also a more general change in customer behaviour. Kotler (2001) comments "Markets are changing faster than marketing. Today most company marketing strategies are obsolete" (p.xiv). He identifies many issues for marketing to address: hyper-competition; power shifting from manufacturer to retail giants; power shifting to consumers; more price-sensitive, better informed consumers; declining brand loyalty, increasing similarity between brands; and, mass advertising losing effectiveness. These issues are summarised in Table 4.1 below. Kotler adds: "Conventional marketing thinking has served business practice well. Yet the passage from an Industrial economy into an Information Economy is introducing new considerations that question the suitability of conventional marketing thinking in developing today's and tomorrow's marketing strategies" (p.xiii).

Table 4.1. Conventional vs New Marketing
Source: Compiled from Kotler (2001)

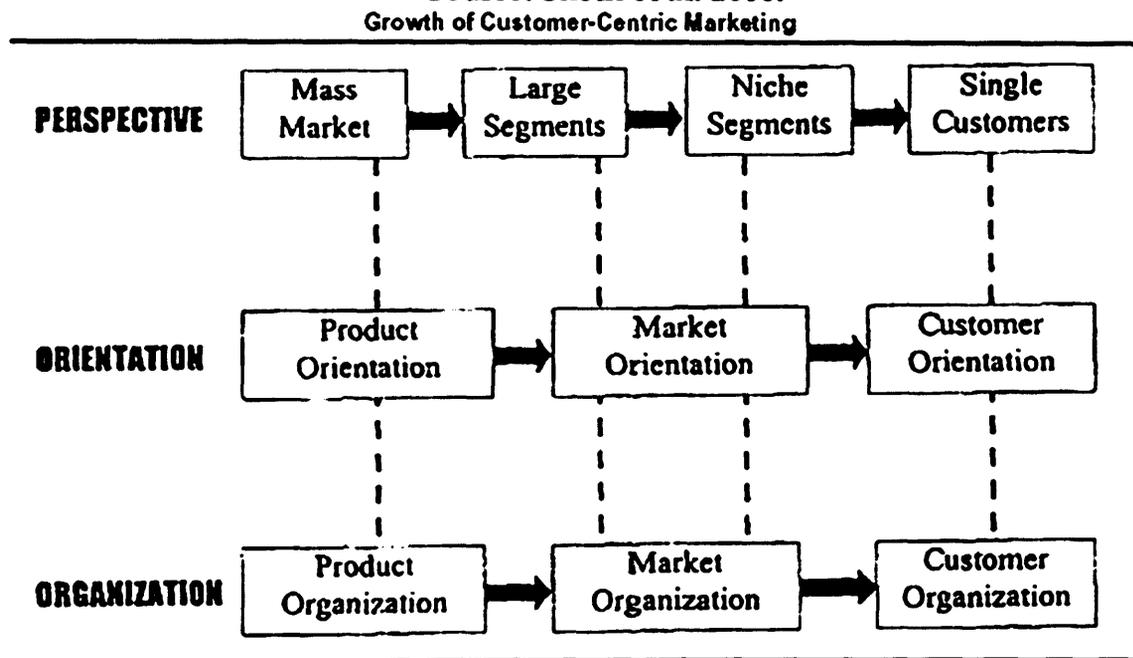
Issue	Conventional Marketing Thinking	New Marketing Paradigm
<i>Organise by:</i>	Product units	Customer Segments
<i>Focus on:</i>	Profitable transactions	Customer life time value
<i>Judge performance by:</i>	Financial results	Marketing metrics and financial results
<i>Focus on satisfying:</i>	Shareholders	Several stakeholder groups
<i>Marketing is done by:</i>	The marketing department	Everyone in the company
<i>Brands are built through:</i>	Primarily advertising	Company behaviour
<i>Customer emphasis:</i>	Acquisition	Retention
<i>Expectations:</i>	Over promise to get the order	Under promise, over deliver Value Chain
<i>Unit of analysis:</i>	The Firm	

Sheth et al. (2000) echo these themes. They highlight the changing focus and development of marketing, arguing that as the focus moves from mass to segmented marketing, so too it will now shift to being customer centric or individual customer focus. Highlighting the key market trends forging this change, Sheth et al. (2000) state "The marketing function has undergone dramatic shifts in the past 50 years" (p55). After World War II, firms adopted mass production, distribution and communication techniques to serve customers who were satisfied with standardised products at reasonable prices, which focused marketing attention on the mass production approaches and a product orientation. Sheth et al. (2000) identify the

entrance of many competitors to the marketplace (as post-war shortages declined), leading to a decline in mass market approaches and the rise of the market concept and orientation in the 1950s, and focus on the market and areas within it: “With an increasing emphasis on markets, segmentation was a logical destination... a rational and more precise adjustment of products and marketing efforts to consumer or user requirements through segmentation” (p55).

Sheth et al. (2000) propose that the end of the twentieth century sees a “confluence of demographic and technological factors as well as dissatisfaction with existing marketing productivity” (p56), that will lead to a customer orientation which “emphasises understanding and satisfying the needs, wants, and resources of individual consumers and customers rather than those of the mass market or market segments” (p56). Key factors in the change of focus are identified as: marketing failures (to keep pace with productivity improvements in areas such as manufacturing or operations market diversity); changing demographics (lifestyle, ethnic, income and age diversity); and, new technology (in production, distribution and the internet). Sheth et al. (2000) identify implications as: moving marketing towards a supply management approach, that involves consumers in production (as in services); and, the need to integrate firm activities around the customer, change corporate culture and move from scale to scope economies. Within this thesis the findings suggest an alternative to individual or customer centric marketing (the real world organisational cost implications of which are not considered), to a new base of market segmentation (based on purchase situation rather than changing demographics), all of which are shown in Figure 4.1 below.

Figure 4.1: The Growth of Customer-Centric Marketing.
 Source: Sheth et al. 2000.



Homburg et al. (2000) echo in part this model, proposing changes in organisational structure from product-based (using groups of related products as the primary basis for structuring the organisation) to geographic focused (using territories to structure product groups which in Sheth et al. (2000) definition would be segments) to a customer-focused organisational structure (which they propose is an antecedent to market orientation). Schipper (2002) identifies customisation and relationship marketing, prevalent in the late 1990s, as moving towards a new kind of individualised marketing. A key part of these developments is a radical shift in the basis of market division and segmentation - the process of breaking the whole market groups of customers with like needs and desires (Kotler et al. 1999).

4.3 Market Segmentation

McDonald and Wilson (2002) describe segmentation as “one of the oldest and most longstanding of all marketing processes” and further highlight the importance of the technique: “True customer segmentation has such a profound impact on a business that getting it right cannot be left to chance” (p51). They also note: “To be successful, businesses have to view their markets as consisting of distinct customer groups, each with their own distinct set of requirements, and then deliver targeted offers to the customer groups they elect to serve. It may not be the latest idea to sweep the world of commerce, but customer segmentation is essential to commercial success” (p50). Grove and Fisk (1997) add: “Satisfying all customers with the same service delivery is virtually impossible. This is particularly true because people seemingly have different ideas regarding what is appropriate and reasonable in any situation” (p78). Sternthal and Tybout (2001) highlight “Segmentation and targeting are two key elements of marketing planning. Segmentation involves dividing the market or potential customers into homogenous subgroups” (p3), further “The list of potential bases for segmenting a market is seemingly endless and there is little guidance as to how to choose among them” (p4).

Sternthal and Tybout (2001) propose the principal segmentation tool is to split the market into current brand, competitor and category non-users. They highlight that to make such a strategy operational, factors that vary or correlate with usage must be identified. The main tools are demographics (age, social class, gender), geographic (focusing on location), or psychographics (focusing on lifestyle) or by the customers role in the buying centre (influencer, decider, purchaser and user roles). Kotler et al. (1999) review market segmentation, highlighting that many different methods of market segmentation exist and that there is no consensus on the best method. They provide an extensive list of the different methods available (shown in

Table 4.2). These methods categorise geographic, demographic, psychographic (explored in more detail in the demographics section), and behavioural methods, which have the closest relation to the situational measures used here, and are explored in more detail in the relevant individual sections. Kotler et al. (1999) note that marketers increasingly believe behavioural variables are best starting point for building market segments.

Table 4.2 Market Segmentation Variables for Consumer Markets
Source: Kotler et al. 1999. (p 387)

Variable	Typical Breakdowns
<i>Geographic</i>	
Region	E.g., USA: Pacific, Mountain, West etc
County Size	A, B, C, D.
City Size	Under 5000, 5000-20,000 etc
Density	Urban, suburban, rural
Climate	Northern, Southern
<i>Demographic</i>	
Age (life-cycle analysis)	Under 6, 6-11 etc
Gender	Male, Female
Family Size	1-2, 3-4, 5+
Family Life Cycle	Young single; young married no children; young married youngest child under 6; young, married, youngest child 6 or over; older married with children; older married, no children under 18; older single; other
Income	Under \$10,000; \$10,000-15,000; \$15,000-20,000 etc
Occupation	Professional and technical; managers, officials and proprietors; clerical, sales; craftsmen, foreman; operatives; farmers; retired; students; homemakers; unemployed
Education	Grade school or less; some high school; high school graduate; some college; college graduate
Religion	Catholic, protestant, Jewish, other
Race	White, Black, Asian, Hispanic, other
Nationality	American, British, French etc
<i>Psychographic</i>	
Social Class	Lower lowers, upper lowers, working class, middle class, upper middles, lower uppers, upper uppers
Lifestyle	Achievers, believers, strivers
Personality	Compulsive, gregarious, authoritarian, ambitious
<i>Behavioural</i>	
Purchase Occasion	Regular occasion, special occasion
Benefits Sought	Quality, service, economy
User Status	Non-user, ex-user, potential user, first-time user, regular user
Usage Rate	None, medium, strong, absolute
Loyalty Status	None, medium, strong, absolute
Readiness State	Unaware, aware, informed, interested, desirous, intending to buy
Attitude Towards Product	Enthusiastic, positive, indifferent, negative, hostile

4.4 Service Quality and Segmentation

The need to consider segmentation and service quality is noted by Zeithaml (2000): “Most published research on the connection between service quality and profitability has reported relationships in the aggregate rather than by segments or individual customers... most service quality efforts in the past treated all customers alike, usually attempting to deliver high quality to all customers. Lately, however, both managers and scholars have come to believe that all customers are not alike” (p79). Similarly, Bacon (2003) describes a ‘majority fallacy’ that may exist from aggregating data: “The results describe the group average well, but do not describe and individual or segment well” (p69). Bacon (2003) goes on to suggest the usage of importance scores as a means of clustering/segmenting the market before conducting Importance-Performance Analysis (IPA), or the use of issues such as industry or purchase situation such as B2B or B2C purchases. Ennew et al. (1992) also implicitly suggest the importance of situational factors or varying customer assessments of service quality (for whatever reason) within service quality assessments. Specifically, they criticise the aggregation of means across all customer responses as leading to a possible illusion of quality – that customers who think an important attribute as poorly performed and those who think the same attribute is unimportant and well performed will cancel each other out.

In the original SQ publication, PZB (1985) highlight: “the usefulness of segmenting customers on the basis of their service quality expectations is worth exploring” (p49). They add that perceived quality could be used as a basis for segmentation, and that different ServQual scores could be analysed based on the composition of customers making the same SQ judgement: “on the basis of (1) demographic, psychographic and/or other profiles; (2) the relative importance of the five dimensions in influencing service quality perceptions; and (3) the reasons behind the perceptions reported” (PZB 1988 p35).

Buttle (1996) in reviewing SQ development highlights several areas for future research. These suggest situational variance such as: the commonality of expectations across different classes of service providers; and, the role of context in determining expectations and performance evaluations. He concludes: “The role of context appears to have been repressed or subjugated in the present body of SERVQUAL research. Context needs to be recovered” (p26).

Webster (1989) did consider the role of context in terms of demographics, using a 34-item (early) SQ tool to determine if consumers could be segmented on the basis of their service quality expectations. She used ANOVA and MANOVA to test differences among the 300 responses, however, it is unclear from the publication whether Webster (1989) uses a

measurement of “how important is” for expectations, rather than the phrasing suggested by PZB (1985,1988). It is also unclear whether ANOVA/MANOVA tests were conducted on expectations/importance or on gap scores. Webster (1989) finds support for both the impact of demographics, but also situational factors in combination with demographics – finding differential demographic impacts for professional versus non-professional services. Findings highlight: age, gender, marital status, ethnicity, income and occupation all impacting expectations of professional services but having no impact on expectations for non-professional services. Further, education is found to have no significant impact on anything.

Gagliano and Hathcote (1994) mirror the methods of Webster (1989), to determine the impact of different demographic characteristics (using ANOVA). Gagliano and Hathcote (1994) find different dimensions of their revised SQ factor structure were impacted by different demographic characteristics. Specifically, those with significant impacts on SQ were: race (Caucasian respondents had a higher gap for convenience); marital status (married respondents had the greatest discrepancy for reliability); and, income (higher income households over \$35,000 had greater discrepancies between expectations and perceptions than lower income groups). However, sex and age did not have any significant impact on expectations. These largely unaccountable variations by demographic groups suggest that while demographics may have an impact on SQ, the picture is not clear, and as noted by Gagliano and Hathcote (1994) further study is needed.

Joseph and Joseph (1997) conducting importance-performance analysis in education, comment “for segmentation purposes, it was deemed important to compare the mean responses by gender” (p18), finding, some gender-related differences in the importance placed on different factors of services quality.

Extending the need for segmentation research on service quality to the internet, ZPM (2002b) note: “To our knowledge, there have been no published studies on whether and how customer-specific characteristics such as demographics and psychographics influence e-SQ” (p370), adding, “We know almost nothing about the demographic, behavioural, and experience correlates of e-SQ. Does age, gender or income of customers affect their perceptions of service quality delivery through Web sites? How is experience with Web sites related? Are there other behavioural correlates that influence perceptions? All of these questions remain to be investigated” (p373).

ZBP (1993) acknowledge a wide range of influences on expectations: personal needs, service problems, perceived alternatives, factors beyond the control of the organisation (such as bad weather), advertising, selling and communications, word of mouth recommendations and past experience. The acknowledgment of such a wide range of influences on expectations validates the need to examine in detail what is termed here situational factors, or the multitude of factors that define the purchase situation. In ZBP 1993 the term 'situational factors' is defined in a different sense to classify "service performance contingencies that customers perceive are beyond the control of the service provider".

4.5 Traditional Segmentation: Demographics (Geo-Demographics and Psychographics).

Many studies have sought to explain product selection criteria in terms of multiple categorising or segmenting criteria. Traditionally demographics and psychographics (Kotler 1999), cultural values or personality values (Prakash and Munson 1985), and situational classifications (Belk 1975) are used. The use of demographics remains the most popular basis of market division.

Demographics remains one of the quickest and easiest ways of measuring customer characteristics online and offline, whether they are used in isolation (basic demographics) or in addition with geographical data (geodemographics), or with lifestyle variables or psychographics. Kotler et al. (1999) highlight the traditional demographic measurements as important in market analysis. Age-based segmentation is relevant as customers needs and wants change with age - many companies use different approaches for different age groups, for instance Lego have age bandings from baby (Duplo) to young teen (Technic) and beyond (Lego robots). Gender-based segmentation remains important, with different sexes targeted for different products based on their requirements, usual in clothing, hairdressing, cosmetics and magazines. Income-based segmentation targets different groups based not solely on whether they can afford the products, but also on whether their income bracket are consumers of the product or service - common in cars, clothing, cosmetics and travel.

4.5.1 Online Demographics

The extension of traditional demographic measures to the online environment has been employed by several researchers, seeking to analyse different behaviours. Samji and Gray (2002) highlight how in the early stages, young, rich, males dominated the internet (in 1997 - 70% of users male, 60% were under 35 years old and half in social classes AB). However, internet use has now moved towards a more general reflection of the population (in 2002 -

men were half of all surfers, only 44% were under 35 and only a third were in the A/B social class). ZPM (2000) and Dunnhumby (2001) echo findings that the online population now reflects society as a whole. However, Swinyard and Smith (2003) investigated why people do, or do not, shop online, surveying internet users and finding that online shoppers are: younger, wealthier and better educated.

Considering the nature of the online customer, Dunnhumby (2001) investigating 3000 online customers' habits, found nearly half of internet users were female and that the online population broadly reflected society as a whole. This study found that demographic trends did impact some behaviours: women surf less and are more focused and solution-orientated in behaviour; men are more likely to spend longer online, and browse more sites while women have a major influence on purchase decisions in all markets examined. Kau et al. (2003) report on a sample of 3000 respondents, examining differences in buying behaviour of male/female internet shoppers, noting: "It was found that female online shoppers behaved differently from their male counterparts in many ways" (p195). They find female shoppers prefer well-known brands, whereas male shoppers placed emphasis on choice of brand and product features and were prepared to conduct more comparisons to reach a decision. Females were also more receptive than men to image-based messages, were more inclined to click banner ads, were more willing to shop from an online store that had a retail presence, were more cautious about online security than men, expressed greater reservations about warranties, and were more concerned about not being able to touch or feel products. Men were also greater believers that shopping online saved time and money.

4.5.2 Beyond Demographics

While demographics do still have an impact on behaviour, many researchers are now proposing that this impact is limited to very broad variables (such as using the internet or a product class) and that demographics do not provide any useful information beyond this (such as preference for a certain product or brand). Fennell et al. (2002) note: "Since the early seventies, it has been known that the relationship between demographic and general psychographic variables and product use is present but not strong" (p15). Day (1969) notes the limitations of socioeconomic and demographic variables: "these descriptive variables at best are remote proxies for important individual differences in buying styles, decision processes, or sensitivity to promotional influences" (p30). Similarly, Rossi et al. (1996) show that demographics only provided very weak evidence in explaining brand preference, while Bucklin et al. (1995) find almost no evidence of a predictive relationship between demographics and brand preference. Dickerson and Gentry (1983), conducting a large scale

empirical investigation of the profiles of early home computer adopters, conclude: "We suggest that the nature of the adopter of an innovation is partially a function of the characteristics of the innovation itself-viz., the complexity of the [product], the familiarity required to be cognizant of its relative advantage, and the need for some other type of [product] oriented experiences before it can be perceived as compatible" (p233). Homburg and Giering (2001) note that psychological variables explain individual-level phenomena in more detail than demographics (although these still play a role). Fennell et al. (2002) find that while demographics may explain the usage of a product class, and in some instances frequency of class usage, they cannot determine usage of a specific product or brand. Palmer (2000) notes while easily measured, demographics miss the unique factors that distinguish individuals' increasingly diverse needs and aspirations in the contemporary marketplace.

Bellman et al. (1999) note: "Demographics alone do not seem to influence whether or not people buy online... . Demographics have some influence on whether or not a person is online in the first place compared with the rest of the overall national population... However, once people are online, whether they buy there and how much they spend has more to do with whether they like being online and whether the time they have for buying elsewhere is limited" (p37). Considering those more likely to be online, they note that higher income, education and age increase the likelihood of being online.

Karjalutot et al. (2002), surveying 1167 Finnish bank customers, found that while demographic variables did have some impact on broad internet usage, there was little impact of demographics on propensity to use banking online. Females were more likely to use internet for communication, and males more likely to purchase, seek information, make investments and purchase. The younger were more likely to use internet for information seeking, communication, commerce and booking, and the more educated were more likely to seek information, invest, communicate and book. There was almost no impact of demographics on online banking usage.

Modahl (2000) also notes research highlighting that demographic factors such as age, race and gender do not matter as much as consumers' attitudes towards technology. Bellman et al. (1999) propose demographic factors have only minimal impact on propensity to buy online, and that the most important determinant was previous behaviour such as online purchases. Bhatnager and Ghose (2004a) note: "Demographics do not discriminate between web buyers even though that has been the traditional focus with the internet" (p758). They find from 1330 consumers, split into usage groups and sentiments about the internet, that little

difference exists in the demographic profiles of those with different propensities to use the internet. The many different surveys of internet customers' demographics have tended to produce varying results, highlighting both the complex nature of the online customer and the failing applicability of demographics to analyse modern consumption.

Studies as far back as the late 1960s noted that demographics were at best a rough guide to general behaviour (Day 1969). The use of demographics online has tended to focus on descriptions of 'the typical online customer' or general behaviours, usually finding minimal demographic influences (Karjalutot et al. 2002). Within this thesis a principal concern is testing alternative, situational-based sources of variance in customers service quality requirements, as outlined below. For comparative purposes it is necessary to investigate the impact of demographic characteristics (gender, age, income, education, job/class) on behaviour.

Propositions:

Demographics will have an impact on customers online service quality requirements.

Demographics will have less of an impact on customers online service quality requirements than situational / contextual variables.

4.6 Situational Segmentation

Due to the limitations of demographic variables in explaining variance in consumer behaviour, several researchers have suggested for some time that the use of the purchase situation as a basis of differentiating behaviour may provide a superior approach. Analysing why, when and how a purchase is made, and grouping like responses together may explain a greater amount of behaviour than simple demographics. Ward and Robertson (1973) for example, suggest that "situational variables may account for considerably more variance than actor-related variables" (p26). Engel et al. (1969) also suggest individual and situational variables be considered to explain consumer choice. Belk (1975) comments: "Growing recognition of limitations in the ability of individual consumer characteristics to explain variation in buyer behaviour has prompted a number of appeals to examine situational influences on behaviour... Nevertheless, these and other suggestions to include situational variables in research on consumer behaviour have gone largely unheeded. The primary obstacle has been the absence of an adequate conception of the variables which comprise a situation" (p157).

Belk (1975) provides a review of various works on situational influences and seeks to define what actually construes a situational factor. This is defined as a point in time and space,

separating behavioural settings (bounded not just by time and space but by a sequence of behaviour across a continuation of space and time) and environmental issues (of which behavioural and situational factors are subunits). From this Belk (1975) further separates the product or object as a unique source of behavioural influence apart from situational factors. Individual consumer characteristics such as age, sex, personality, race are classified as stable over time and therefore particular to the individual. However, where product, object or person features are transitory (for instance, a sale price or a headache) they are classified as part of a situation. Belk (1975) also separates: psychological issues (those that rely on a persons subjective perceptions and interpretations of the situation “an extension of sociological inquiry into the ‘situation as defined” (p161); and, objective issues (defined as features of the situation that exist before the subject interprets the situation). Belk (1975) highlights the greatest problem in drawing these issues together to define a situation concerns the definition of so many particular factors and items, noting: “The ultimate problem for all future situational research is the lack of a comprehensive taxonomy of situational characteristics” (p162). With attempts to codify situational items within the psychological and behavioural literatures generating many hundreds of items (includes issues such as gravity, temperature, group structure, role requirements or situation novelty), Belk (1975) seeks to combine all previous taxonomies of situational factors under five broad headings, as shown in Table 4.4.

Table 4.3: Five Factors of Situational Influence
Source: Constructed from Belk 1975.

Classification	Description / Examples
Physical Surroundings	The most readily apparent features of situation such as décor, lighting, weather, merchandise configurations
Social Surroundings	Persons present and their characteristics, their roles, interpersonal interactions
Temporal Perspective	From time of day to season of the year; past or future events or commitments
Task Definition	Intent or requirement to select, shop or obtain; may reflect buyer roles (such as buying for a gift versus for oneself)
Antecedent States	Momentary moods (such as anxiety, hostility) or momentary conditions (such as cash on hand or fatigue)

Silpakit and Fisk (1985) highlight situational influences in addition to service characteristics and consumer characteristics as feeding into the service encounter. They utilise Belk’s (1975) definition of five situational states (see Table 4.5), Lovelocks (1983) classification of service characteristics (the nature of the services act, the type of relationship with customers, the

degree of customisation, the extent to which judgement is made by service personnel, the nature of demand and supply and the method of service delivery), and consumer characteristics, in both general demographic and psychological terms (personality traits, self concept, needs, social roles).

Woodruff et al. (1993), reporting on interviews with customer across a range of products and services, note the “complexity of consumer value”. They highlight the different attributes mentioned when discussing purchases: “Consumers rarely talked about attributes without also discussing use situations, benefits sought from those situations, and purposes for using the product” (p35). Woodruff et al. (1993) propose conceptualisation of these attributes through usage of the means-end-chain (Gutman 1982). This is the purpose of purchase to key benefits sought which then split into specific product attributes. These attributes are however product specific (for example, for a car ‘layout of instruments’) rather than more generalisable issues such as broad categorisations of product situations. Such a means-end-chain is valuable in product specification or design research or even in the service context for delineating specific aspects of service quality (for example, ‘layout of website’), but it does not provide for analysis of what impacts on those issues of service quality in different purchase encounters.

Cardozo (1980) highlights limited work in the 1960s and 1970s on organisational buying situations, proposing four dimensions as useful in segmenting such markets (familiarity with the buying task, product type, importance of purchase to the organisation and by the principal type of uncertainty present in the buying situation). Branthwaite (1984) says that managers can influence the situations in which consumer behaviour takes place in two principal ways: by controlling the environment (layout and design to increase time in-store; advertising to suggest consumption situations, such as associating luxury products with prestigious situations); or, by generating rules that influence behaviour in purchase and consumption settings (for example, advertising to establish gift patterns, which dictate what presents are suitable for particular people; but also the creation of social rules that make purchase part of a certain situation, such as strawberries and cream at Wimbledon).

Godsell and Harrison (2002) note “the requirements or ‘benefits’ sought by a particular customer may also change depending on the context, hence the same customer may seek different benefits in different situations” (p8). Beal et al. (2002) highlight how situations influence consumer behaviour, proposing consumer behaviour is ‘product-person-situation specific’. Beal et al. (2002) go on to categorise situational influences according to five main dimensions: physical surroundings (store location, interior décor, music, smell, temperature,

amount of choice provided by product category and across product categories); social surroundings (types of customer in-store, queues and crowding, whether the consumer is likely to be known/recognised by others, whether there are high profile people/celebrities shopping at that store, whether the product will be consumer privately or in the presence of others); temporal perspectives (whether the product is seasonal, whether the product is urgently required, such as calculator before an exam, whether there is time for shopping or not – the product may be just an excuse for shopping - how long the previous product lasted or was expected to last); task definition (is the product utilitarian or used as a status symbol, is it a gift or for oneself, must the product be long lasting/tough or decorative is the product intended for several uses?); and, antecedent states (moods such as feeling sad triggers eating sweets, momentary conditions such as if a customer cannot buy ice cream because it hurts their teeth).

Gehrt and Pinto (1990, 1993) highlight how they have successfully used situational segmentation in healthcare markets, undertaking a two stage process of using focus group interviews to gather information about users for usage in questionnaire studies. CRM Health Lines (2000) also report on how situational segmentation, using lifecycle and life stage analysis in the healthcare market in the USA has led to large increases in revenue for hospitals, using trigger events and life stages to focus mailings.

Smith and Sivakumar (2004) seek to conceptually model internet shopping behaviour in terms of 'flow' (described as a customer passing into an experiential state so desirable they wish to replicate it). They identify several factors which may moderate this state, including several situational issues. These include: whether shoppers are browsers, one-time purchasers or repeat purchasers; whether customers are buying goods or services; whether the purchase was planned or impulse; and, customer self confidence, willingness to buy and perceived risk in the transaction. These factors are only examined conceptually in their relation to the notion of 'flow', and are presented as a fairly simplistic and unusual mix of propositions, that may or may not impact customer behaviour.

Kay (1993) highlights the need to consider the context of adoption processes in looking at computer adoption: "It may be necessary to tailor cognitive attitude scales to unique environments" (p383). Godsell and Harrison (2002) highlight: "identifying... end customer needs is becoming increasingly difficult as the same customer may alter their buying behaviour depending on the context" (p1), while Bolton and Drew (1991a) highlight the need to extend customer analysis beyond a single instance of measurement, because customers' service quality

ratings change over time. Classifying levels of situational variables at any given point in time, and then comparing these measurements to a second point in time may allow for classification of how the context of the customer has changed, thus changing their service quality requirements.

Despite these many works looking at different aspects of situational influence, they have tended to be based on a fairly limited classification of the situation, not bringing together a wide range of issues for consideration. In addition to these works, several broader trends within the marketing literature suggest a move towards situation-based analysis of customer behaviour.

4.6.1 Market Fragmentation and Postmodern Marketing

The postmodern condition has been applied to a many different areas, such as: architecture, literary theory, politics, sociology, philosophy, theology, history and economics. Despite a confused understanding of the nature of postmodernism, it has received increased attention within the marketing community (Brown 1994). The issue of postmodern marketing has predominantly and repeatedly explored by Stephen Brown (Brown 1993a, 1993b, 1994, 2001, 2003, 2005). Brown (1994) notes postmodernism as “a complex and amorphous phenomenon” (p38), but Brown (1993a) presents a simplified summary of the postmodern condition: “The postmodern condition is characterised by the celebration of scepticism, subversiveness, irony, anarchy, playfulness, paradox, ephemerality, fragmentation, style, spectacle, self-referentially, and – above all – by hostility towards generalisations” (p91). The underlying notions of individualisation and differentiation coupled, with the disintegration and fragmentation of the collective whole into separate individual states, has profound implications for marketing and segmentation. In considering traditional traits such as demographics or psychographics, which the postmodern condition suggests are no longer bases of collectivisation. Brown (1993b) notes “postmodernism rejoices in and provides a rationale for the latter-day fragmentation of marketing thought” (p26). Brown (1994) highlights: “Fragmentation... is evident in the inexorable disintegration of mass markets into smaller and smaller segments” (p38), and emphasises “the splintering of the family unit, the sheer unpredictability of buyer behaviour and the fragmentation of the media, distribution channels, retail outlets and even the marketing discipline itself” (p39).

Brown (1993b) describes the need to move beyond traditional marketing (analysis) tools such as the ‘4Ps’, SWOT analysis, marketing planning, NPD and segmentation, highlighting that despite the marketplace being postmodern, “Marketing conceptualisations are implacably

modernist in orientation. They represent attempts – admittedly imperfect attempts – to make universal statements about marketing related phenomena” (p23), further, “Despite decades of research, the validity, reliability, universality and predictive power of the product life cycle, Fishbein’s behavioural intentions mode, Maslow’s hierarchy of needs, the Howard-Sheth model and so on, are far from established” (p23), concluding “Postmodernism, in sum, highlights the inherent limitations of many extant marketing models and theories” (p25).

Brown (1993b) highlights how postmodernism underpins many current marketing trends that reflect individual level marketing (such as micro-marketing, maxi-marketing, database marketing, new marketing, wraparound marketing, valued added marketing or relationship-marketing). He notes: “Although the premises of these panaceas are many and varied, they all possess one or two basic components: (a) an emphasis on dealing with the customer *as an individual*; or (b) a desire to *retain existing* customers, products or services rather than creating them anew. With regard to the former, however, the primacy of the individual... is precisely what postmodernism presupposes. Whereas modern marketing is predicated on the development of meaningful generalisations about consumers in the mass (or sizeable segments thereof), postmodernism emphasises the uniqueness, diversity, plurality and idiosyncrasy of each and every individual” (p24).

Brown calls for qualitative rather than quantitative research to understand customers (Brown 2001). However but despite talk of “hyper-reality” and “consumption of experiences” (Brown 1993a), he fails to provide useful guidelines for implementing market analysis or to identify what new tools of segmentation should be employed in the postmodern market. Indeed Bauman (1992) notes “the postmodern mind seems to condemn everything, propose nothing. Demolition is the only job the postmodern mind seems to be good at”.

4.6.2 The New Marketing

McDonald and Wilson (2002) highlight the changes in the consumer marketplace, and the implications of such changes for marketing: “Today’s first world consumer is more highly educated, under higher stress, more specialised, living longer, and more influenced by global culture than those of the 1960s and 1970s when our view of marketing was formed. This is resulting in various changes to consumer behaviour” (p210). They go on to note that one of these key changes regards the fragmentation of consumer markets.

McDonald and Wilson (2002) describe ‘the new marketing’ as a concept to address changes brought about by the information revolution, and the need for total integration of these

processes within the marketing organisation. They describe the new marketing process as a map of activities including: defining markets and understanding value, determining the value proposition, delivering and monitor this value, all linked to the underlying asset base. The principal focus of this map is defining markets and understanding their value, with identifying how to divide the market into segments of customers with similar needs a key step. McDonald and Wilson (2002) note: "Few businesses in the world... can truly regard each customer as an individual market for which they design a specific product, service, distribution channel and so on. The economics of true one-to-one marketing just don't stack up for the majority of businesses. At the same time, the days of being able to treat all customers as if they were a single entity looking for the same offer have long since disappeared into the history books" (p50)

McDonald and Wilson (2002) propose a structured approach to segmentation: market mapping (expressing the market and how it operates in terms of customer needs and mapping out the structure and decision makers in this market); secondly, identify who is buying; and, thirdly, identify what is bought, where, when and how. They highlight this third step should identify 'Key Distinguishing Features' as 'the few aspects of the product/service offer which customers use when deciding between competitors' (p58). Although this shares commonality with the situational descriptives used in this thesis, McDonald and Wilson (2002) note that their identification process should be in terms of customer needs, whereas here the concern is measuring the general situation to determine the buying process as an expression of need. The fourth step McDonald and Wilson (2002) describe involving determining 'who buys what', in terms of grouping buyers by benefits sought; fifthly, identifying why something is bought, including the benefits offered by the company. They go on to describe a final stage of monitoring the segmentation process over time. While many of the sentiments of this process share common ground with this thesis, the overriding notion of segmentation described by McDonald and Wilson (2002) is segmentation based on benefits sought by the user, whereas in this thesis the concern is the buying situation (as an expression of benefits sought realised in the marketplace). The identification of benefits sought by customers would be a complex process requiring in-depth qualitative research that would be problematic in generalisation as it would be product- or service-specific. Using standard descriptions of purchase situations that occur regardless of the specific product provides a better opportunity for large scale quantification of purchase situations, and how they may group together different buyer requirements.

4.6.3 New Consumer Marketing

Baker (2003) describes “The present consumer-driven marketplace is characterised by a new kind of consumer, one who has been variously described as ‘active’ knowledgeable’ and ‘post modern’. In essence, this is a ‘New Consumer’, a creature distinctively different and identifiable from its predecessors” (p27). Baker (2003) identifies key features of this consumer as: time conscious, experience seeking, IT-enabled, leading a complex life, marketing literate and highly demanding. She continues the implications of this for marketing: “Marketers need to accept that the marketplace is no longer stable and predictable but it is instead dynamic and complex... This is driven, for the most part, by the heterogeneity of the New Consumer. Consumers today no longer resemble the conventional perceptions formed in the era of mass marketing, and traditional approaches to consumer research and segmentation do not adequately capture their essence” (p34). Baker (2001) notes “The conventional tools and techniques of marketing that have worked successfully for years are seen as increasingly ineffective as managers grapple with the enigma that is the new consumer” (p21).

Baker (2003) highlights that half a century after Levitt’s work on ‘marketing myopia’, “Too many businesses still define and segment their markets in terms of the products they sell... They fail to understand the kinds of value their customers are seeking” (p93). Baker (2003) studies how a company may seek to identify ‘super-segments’ that describe the general orientation of the customer (for example, at a supermarket, family-orientated, value-orientated), divide this into sub-segments (such as time-rich/cash-poor or health-conscious shoppers), each division being based on the value sought by the customer. Despite highlighting “meaningful segmentation takes into consideration different types of data” (p94), little description or guidance on how to conduct value-based segmentation is provided.

Baker (2003) does highlight the move away from traditional research tools. She highlights work on ‘need-states’ to “explain the fact that there are more differences between the same consumer making a brand choice on two different occasions, than between two different consumers choosing the same brand on the same occasion. People choose brands to fit a particular context” (p86). Baker (2003) gives the example of a consumer buying a bottle of cheap supermarket own label wine for their own home consumption, but expensive wine for a gift when dining out, noting: “Their choice of product is influenced by a variety of factors, including the meaning of each occasion, the environment in which the wine will be consumed, and the other people involved. This leads to the idea that a brand can be positioned against a need-state, and through effective brand communications activity can become the brand most associated with that need-state” (p87). Such is the foundation of the explicit measurement of

purchase situation in this thesis, undertaking it not through the complex and time consuming construction of mental-models grounded in psychology as previously, used in need-state work, but through validated pre-existing measures of purchase situations in quantitative research.

4.6.4 Cognitive Maps and Networks

Iacobucci (2001) notes “while marketers often speak of segmenting on demographic variables, these are usually simplistic and ineffective in explaining much variance” (p202). Iacobucci (2001) proposes an alternative approach of studying consumer networks (such as word-of-mouth recommendations to other consumers, or the nature of inter-organisational networks to target users), or segmenting the market based on cognitive associations, using ‘cognitive maps’. This involves identifying the aims, behaviours and psychological drivers of different customers through qualitative research, conducting in-depth interviewing, and using ‘laddering’ (repeated questioning of why a customer does something, why what is important, and why the response to that is important). This is used to construct a ‘means-end hierarchical chains’ of what drives the customer. This is an interesting approach, however, the time involved in such in-depth research provides for only a small and potentially limited representation of the marketplace, giving non-validated, non-generalisable data. While Iacobucci (2001) suggests this technique could be applied to identify differences between loyal users, competitor users and non-category users, only one brief example is provided, and further research is required before serious consideration be given to such an approach.

Such psychological methods for examining how different situations impact on behaviour have tended to be complex, costly and unsuited to large scale survey. These have tended to be experimental or projective procedures – showing subjects choice alternatives and rating them, providing pictorial, video or text based descriptions and asking for responses in the described situation. While providing insights they usually consider hypothetical situations and divide customer groups based on situation and monitoring, although this tends to be best suited to only observing one or two variables (Belk 1975).

4.6.5 Situational Segmentation

As has been noted above, there is increasing evidence that demographics do not provide a useful means of segmenting the market in a meaningful way, beyond broad issues such as product class usage. In the following sections, literature review has been used to generate a broad list of potential contextual or situational sources of variation in customer behaviour and service quality requirements. This review has provided a list of potential influences which require further investigation. Work on the contexts of behaviour as a means of segmentation

still remains largely fragmented considering one to two specific situational influences or to conceptual works that have no empirical validation. The majority of the works reviewed, have only highlighted how change in the situational variable may change customer behaviour and have not explicitly linked this to any specific service quality issues, either online or offline. The analysis of the influence of these variables on specific issues of customer service requirements is both timely and highly relevant, and is described in the following section which addresses each of these purchase cues in turn.

4.7 Information Overload and Brand Dependence

Early writings on the internet proposed it as a form of 'frictionless capitalism' (Gates 1999). Consumers were expected to use the internet as a way of making (economically) better choices, additional information to make logical, rational decisions. However, in reality, the amount of information provided by the internet has overwhelmed many customers. Simplifying behaviours guide purchase decisions rather than logic - brand dependence (buying familiar brands) or price dependence (using price as a quality cue - covered later in this chapter)

Winzar and Savik (2002) conducted extensive research on this issue. However, their work is limited by considering a simulated purchase rather than actual purchase (meaning no risk was actually involved) and in only considering one product category. Winzar and Savik (2002) proposed as volume of information, (measured by number of brands and range of brand features in an on-line store) increases then confusion and uncertainty increase, and less information is accessed. They build on the theory of information overload, which proposes there is a limit to how much information a person can process in a limited amount of time. Attempting to process too much information causes a breakdown in the decision making process, resulting in a poorer quality purchase decision, for instance, making a random choice, focusing on wrong product attributes or failure to purchase at all as the customer gives up (Kelly and Fiske, 1951; Miller, 1956).

Winzar and Savik (2002), specifically investigating information overload online, propose the volume of information overload can be operationalised as the number of choice options available (brands) and the amount of information available on each option (attributes). They seek to measure this by manipulating information from online retailers with regards the number of brands and brand features displayed (producing four different information combinations or levels of information). They measure 115 customers' time spent on the information gathering task (JavaScript routing), amount of available information accessed

(JavaScript on number pages seen), self reported information overload, satisfaction, certainty, confusion and desire for more information. While they find no relationship between age, gender, education or income and overload, the results indicate they do find the number of brands has a significant effect on time spent on information gathering, the amount of available information accessed, self reported information overload and confusion. They also find that self-reported overload is more affected by the number of attributes, whereas the number of pages viewed is more affected by the number of brands. Looking at the impact of information overload, they report at the highest volume of information, there was a dramatic decline in completion rate. This is consistent with models on information search where consumers abandon search, where costs such as cognitive strain exceed benefits. However, while the number of attributes increases information overload, it also increases satisfaction, certainty and the desire for more information suggesting in some cases a website providing too much information may have positive repercussions for the company. The research provides some insight into the issue of information overload. Complex measurements and tools were used in the Winzar and Savik (2002) study and the acknowledgement of self-reports of information overload as a valid measure within the study, provides a useful simplifying measurement tool to investigate the presence and impact of information overload within this study across different brands and price groups.

Other researchers have also considered the issue of information overload and branding in both online and offline marketplaces. Shapiro (1973) highlights some customers as brand reliant, with store or brand being the principal information cue to customers. A range of factors were found to influence the levels of dependence, including trust, snobbery and risk. Beatty and Smith (1987). Investigating customer attitudes across five product groups, also found a significant relationship between increased search effort and lower product class knowledge. Lichtenstein et al. (1993) found a relationship between brand and price as indicators of quality - that customers who view price as an indicator of quality, have lower price recall accuracy. They conclude "Consumers operating on a price-quality schema are likely to rely on a well-known (and hence, more expensive) brand name as an indicator of quality without actually relying directly on price *per se*" (p242). Oliver's (1999) suggestion that highly loyal customers 'tune out' competitor information also supports this. Capraro et al. (2003) suggest that repurchase decisions and customer defection to other brands is more closely related to the level of customer knowledge about other brands, over and above satisfaction.

Parasuraman and Colby (2001) propose that with marketers obsessing over equity and positioning, many have forgotten that the original historical purpose of brand was that “A solid brand name is a form of guarantee, a signal that the consumer is engaging in a risk-free purchase”. Where technology is involved, and a high degree of uncertainty exists, marketers need to send a signal that consumers are engaging in a safe transaction. They identify the heavy investment in brand-building of start-up e-commerce companies as a major commitment to this end, with customers more willing to enter into internet commerce with recognised trading makes. They find even those normally non-brand loyal, when using a technology medium would rather use a recognised name.

De Chernatony and McDonald (1998) note that brands still play an important role online – “In any kind of remote purchasing they can offer customers a guarantee of quality and service and will act as a powerful way of facilitating choice in a world of ever increasing data” (p354). Dunnhumby (2001) proposed that online “the brand is everything”, highlighting that online where customers cannot touch or see the product, brand names are a significant indicator of quality. Dunnhumby (2001) found across 3000 online and 1000 offline grocery customers, using Tesco Clubcard data to gain insight into the shopping behaviour of 1 million retail and 250,000 online customers, that with branded products (such as mineral water or colas), sales as a proportion of total spent were far greater online than offline, while own-brand labels were purchased significantly less online. Degartu et al. (2000) also compared brand reliance and price sensitivity in online and offline stores. They found brand names more important in some online categories than others, depending on the level of information available. When information on fewer attributes was provided, brand reliance increased.

The internet as a source of information and indeed too much information, generating ‘information overload’ has been noted by commentators (Conhaim 2003). While research has thus far examined preference for branded versus non-branded goods (Dunnhumby 2001), or discussed the importance of branding as a prompt to purchase online and offline (Degarty et al. 2000, Lichtenstein et al. 1993, De Chernatony and McDonald 1998), the issue of how differing levels of information overload and related brand dependence may impact service requirements has not been considered. For instance, if customers are exhibiting brand dependence due to too much information being provided, they may have differing demands and perceptions of fulfilment for website information provision and display.

Proposition:

Information overload or brand dependence will impact customer service quality requirements online.

4.8 Product Category

That different products lead to different customer expectations and behaviours in purchasing is well established within the marketing literature (Kotler et al. 1999, Kotler 1997, Jobber 2004). This often forms one of the main criteria for comparative analysis of differences (for instance, the original SQ work divided the sample by product type provided, PZM 1984, ZBP 1990). As highlighted in the Chapter two, many researchers have proposed SQ as context- or product-dependent (for instance, Carman 1990, Babakus and Boller 1992, Buttle 1996). Researchers have noted that differences in product type also affect the suitability of different product types for sale online (Yoon and Kim 2000, Zeng and Reinartz 2003). While these two themes have been explored separately, how different product types impacts online service quality (rather than their mere sale online) has not yet been considered despite the clear differences in service requirements proposed in the established marketing and service quality literatures.

Sujan and Dekleva (1987) differentiate product class (such as car), product type categories (such as sports cars) and specific brand level categories. They propose the product type level as a more useful categorization, as more customer inferences can be made about the product by this level, rather than a broader product class.

General differences in search behaviour across product characteristics have been noted by Johnson et al. (2004) and Bhatnagar and Ghose (2004b). Cardozo (1980) identifies product type as an important organisational buying variable: "Most purchasers and analysts agree that organisational buying activities vary among specific products purchased" (p268), noting two important issues: product use (limited to the organisational setting and classified in terms of four usages: maintenance and repair products; components of finished products; materials to be used in production and equipment); and, purchase or product standardisation (versus customisation). The more important or unique the purchase, the greater seniority of staff involved and consideration given.

4.8.1 Service Quality and Product Types

As highlighted in the Chapter two, the dimensionality of SQ has proven inconsistent from study to study. A principal explanation for this has been that different studies have examined different products, resulting in different customer priorities in each context. Buttle (1996), for instance, highlights the problems of scale "stability from context to context" (p15), and that different studies have found different numbers of dimensions within the SQ scale. Babakus et al. (1993b) finding a single factor model, suggest that "the domain of service quality may be

factorally complex in some industries and very simple and unidimensional in others". Buttle (1996) adds "the number of SQ dimensions is dependent on the particular service being offered" (p16). Carman (1990) also finds context influences customers' evaluations, and therefore factor structure. Babakus and Boller (1992) after empirical investigation (n=689 mailed surveys), conclude that "the dimensionality of service quality may depend on the type of services under study" (p253). Carman (1990) highlights "From a practical standpoint, expectations should differ between settings. One does not expect the ambiance of an expensive restaurant at a pizza parlour" (p47).

Considering the nature of expectations, also covered in Chapter two, Niedrich et al. (2005) in comparing *want*, *need*, *will* and *should* comparison and disconfirmation standards found different standards having differential impacts to previous research and within their own sample. They concluded that comparison standards may vary across situations and product category, suggesting the complex issue of standard interpretation may be coloured, in addition to the individuals subjective knowledge, by the product being purchased.

4.8.2 Online Product Types

To date research has focused not on addressing how service quality issues differ by product type online, but a more limited assessment of which products are suited to being sold online. Yoon and Kim (2001) investigated how different products were better suited to different media channels for advertising, finding the internet better suited for highly involved and rationally orientated situations. Parasuraman and Colby (2001) report on a national (USA) survey of customers propensity to shop online finding: consumers show high willingness to purchase small items (46% desirable), and high reluctance to purchase large items (14% consider desirable). Siddiqui et al. (2003) note problems in online fashion retailing, with customers concerned about overall Web page design, the level of interactivity, the absence of information about fashion trends and inconsistency across websites.

Sorce et al. (2002) note the role of operant conditioning theory and buyer behaviour online. They find that customers are significantly more likely to shop online for positive reinforcement products (those which are viewed as pleasure purchases, such as a new book) versus negative reinforcement products (those that are viewed as necessary but non-desired such as a computer repair). They attribute this to customers putting-off negative reinforcement purchases until the last minute such that they cannot wait for delivery from an online order, and purchase offline. Widrick and Hibbs (1985) find that customers undertake longer search processes for positive reinforcement products. This suggests that the internet as

a rich information source is a useful medium for selling positive reinforcement products. The time and cost savings available from internet shopping would also suggest that customers seeking to minimise the duration of purchase for negative products would also use this medium.

Keen et al. (2004) note that differences in propensity to shop online rather than offline occur for different product categories. This comprises results from compact disc versus personal computer shoppers, and find that for items such as a CD (low cost, low risk) then customers may prefer a retail store due to the desire for instant gratification (not waiting for delivery), which outweighs the potentially lower price online. For a high cost purchase such as a PC, consumers spent more time in search and were also more concerned about low price than a desire for a retail shop, meaning they were prepared to wait for delivery from a cheaper online store.

Grewal et al. (2004) seek to investigate why internet shopping adoption has not been as high as anticipated, investigating various weaknesses in the internet retail paradigm from a customer orientation (described in Table 4.4). They note: "e-stores cannot always fulfil all of their customers' needs and have more difficulty in providing personalised human-contact, pre-purchase trial or experience, and low cost after-sales service (including returns) than do their bricks-and-mortar competitors" (p706).

Table 4.4. Customer Inhibitors to Online Shopping
Source: Developed from Grewal et al. (2004)

Factor	Description
Trial	lack of trial (products where tactile contact is important such as clothing, toys or furniture remain retail products while the most commonly purchase online product remain standardised items like books or CDs)
Personal Service	lack of interpersonal trust (for products like jewellery where salesman reinforcement pre-purchase is important, the final push given to purchase by the salesman is absent online);
Instant Gratification	lack of instant gratification (customers must wait for product delivery);
Delivery Costs	shipping and handling costs (which can offset lower initial purchase price);
Post-purchase Service	lower customer service post purchase (customers problems and time involved in handing returns or refunds such as packaging and posting);
Trust	security concerns about internet safety;
Shopping Experience	a lack of in-store shopping experience (the internet lacks the 'theatre' of retailing that some people enjoy).

Zeng and Reinartz (2003) highlight that different types of product will have different characteristics, which may make them suited or unsuited to internet purchase, and that each will carry different customer requirements. They note that products such as books, travel, computing, stock trading all take full advantage of the benefits of the internet but other product categories such as furniture or beauty products are having difficulty in bolstering online sales. Zeng and Reinartz (2003) propose several categories for describing the suitability of a product for internet sales, described in Table 4.5 below.

Table 4.5. Product Characteristics and Online Shopping
Source: Developed from Zeng and Reinartz (2003)

Factor	Description
Perceived risk and the value of the purchase	low value or convenience driven products such as staples may not work online as the customer does not want to search for them online while high value products may require personal inspection pre-purchase
Frequency of purchase	for products continually purchased, customers are unlikely to re-evaluate and consider moving online if they are happy with offline purchase
Type of Goods	functional goods (evaluated on logical search criteria, for instance a computer that can be evaluated online) versus experience goods (such as a dress) where retail contact is required
Contact with the product	some products require experience before hand, making them unsuitable for internet selling
Information content	some products where a lot of information is required before purchase may be well suited to provision online, where information delivery is easy
Expertise	noting there is a difference between simple information (about a product) and expertise (such as an estate agents support in guiding through a house purchase), therefore, products requiring expertise support may not work well online

4.8.3 Online Service Quality and Product Type

A few studies have considered that product type will impact online service quality issues: O'Cass and Fenech (2003) caution against making generalisations across product categories in the online environment due to differences in behaviours across product groups. Zeng and Reinartz (2003) note that the benefits of the internet (classified as search efficiency, product evaluation and transaction convenience) vary significantly across product categories with problems of online evaluation an important barrier to some product categories. Lynch et al.

(2001) highlight the need to tailor the website to the specific products being offered - examining responses across multiple countries and product categories, they find that site quality, trust and affective attitude towards a website all alter by product being sold.

Conducting confirmatory analysis of the e-SQ scale, PZM (2005) note differences in the profiles of customers of Amazon.com and Walmart.com, including length of website use. However, this is not considered in terms of impact upon eSQ. Wolfenbarger and Gilly (2002) in common with PZM (2005), survey a wide range of web users across multiple product categories. They draw out book and music buyers as a separate group (as the only group with a large enough number of respondents to be analysed separately), with results indicating different loadings of items within factor analysis, although these are never fully investigated. Similarly, Wolfenbarger and Gilly (2002) acknowledge the existence of demographic and 'webographic' customer artefacts, but, the impact of these is not fully explored.

Despite the clear acknowledgment of product type as a driving force of different customer behaviour, the nature of this in terms of differing service quality requirements in internet shopping has not been considered and is worthy of further investigation.

Proposition

Product type will impact customer service quality requirements online.

4.9 Benefits Sought and Use Occasion

Several researchers have noted the general influence of purchase occasion on behaviour and potential for segmentation (Lancaster et al. 2004, Palmer 2000, Kotler et al. 1999). This issue covers a huge range of actions and behaviours that would require extensive research to elaborate. However, a principal difference in purchase occasion that is easily examined is business versus personal shopping behaviour, noted in the literature as leading to fundamentally different behaviours in customers (Baker 2003).

Business purchasing consists of a distinct and often complex process with different people in the organisation setting requirements and making decisions, not the actual purchaser. The end user of the product may or may not be the actual purchaser. In addition, organisational purchasing is likely to be subject to set rules, practices and procedures, possibly limiting purchasing choice while the nature of the business and product may lead to specific service requirements (such as delivery by a set date) (Jobber 2004, Kotler et al. 1999). In the online marketplace, Loiacono et al. (undated) note a series of important research issues when

considering website quality – highlighting comparisons of business and consumer customer requirements.

In addition to purchase for business versus personal usage, the purchase of goods as gifts may lead to different behaviour. Swinyard and Smith (2003) note that “Online shoppers are much bigger gift spenders overall – not just on-line spending – than non-shoppers” (p577). Established research has noted different behaviour for gift purchase - Gronhaug (1972), for instance, found buyers of tableware utilised different types and sources of information for personal versus gift purchases.

Proposition

People buying for business, personal or gift purposes will have different service quality requirements.

4.10 Company and Internet Past Usage

Differences in behaviour between repeat versus first time buyers have been noted in the marketing literature. In addition to the traditional issue of company/brand usage, the issue of internet usage must also be considered an important factor that may differentiate service requirements.

4.10.1 Company Usage

Kotler et al. (1999) note that usage rate can be an important behavioural issue in segmenting markets (both in terms of non-users, first time users, potential users and by frequency of use). They note heavy users, who are often only a small percent of the customer base, account for a very high percentage of total spending. For instance, while 41% of households buy beer, heavy users account for 87% of the beer bought (meaning a beer company would prefer to attract a new heavy user than several light users). Other examples include airline frequent flyer programmes which provide an incentive to heavy users to repeat business with the company, providing increasing benefits with increased usage to keep customers loyal. Lancaster et al. (2004) and Palmer (2000) have also noted the impact of whether people are light, medium or heavy users on behaviour and the resultant segmentation. McDonald (1993) highlights that repeat prone segments of the market (high purchase frequency) may be identified and targeted with specific strategies appealing to their needs to increase loyalty. Bellman et al. (1999) also highlight the importance of prior usage in predicting behaviour: “The most important information for predicting shopping habits – online and offline – are measure of past behaviour, not demographics” (p37). Zeithaml (2000) highlights how company or product

usage has been successfully used to segment customers in several sectors, including airlines, hotels and car rental (for instance, frequent flyer or frequent buyer programmes).

Sternthal and Tybout (2001) propose usage as a key segmentation tool – splitting the market simply into current brand users (and seeking to increase consumption); identifying customers of competitors (and seeking to attract them to the company); and, identifying category non-users and seeking to build up usage. They highlight: “One segment of nonusers that warrants consideration is composed of those who are entering the category for the first time. The goal is to attract this point-of-entry target to your brand” (p8), or alternatively total non-users “The goal of category build is to convince people to consider achieving some goal by using one category rather than another” (p9/10).

4.10.2 Company Usage and Customer Requirements

Park and Stoel (2005) found brand familiarity and previous experience were significant factors reducing perceived risk and increasing purchase. They also note that the level of information provided did not impact these issues, which suggests prior experience and brand familiarity will be significant issues impacting customer behaviour online.

Woodruff et al. (1993) highlight that value is dynamic and the customers consistently re-evaluate perceptions about products and services over time (as situations change) and Parasuraman and Grewal (2000) describe “perceived value is a dynamic construct in that the relative emphasis on each component may change over time... determinants of value assessment may change during various stages of a customer’s association with a company” (p169/170). Flint et al. (1997) also highlight that changes in customer value definitions are important and not adequately covered by CS/D measurement or customer research surveys.

Woodruff et al. (1983) propose that amount of experience with a brand or brand class will influence the customer’s beliefs: “Breadth of experience may cause consumers to form norms or standards that establish what a focal brand *should* be able to achieve” (p298). Further “as experiences within a product class accumulate, performance norms will shift and/or expand to reflect the new experiences” (p299). Woodruff et al. (1983) investigating the role of experience based norms in CS/D highlight the complex nature of the issue: “an individual’s brand experiences can vary so much, different norms are likely to be used by different people, even in the same, or similar use situations” (p299). Further, “Multiple norms are most likely to emerge during important events” (p299), suggesting that for important events multiple experience breadth for each attribute of CS/D or SQ may be in play. This suggests a complex

situation where consumers in an identical purchase situations will have different experience based norms, not only for the purchase as a whole but, if an SQ type framework is applied, may have different experience based norms for each single item attribute.

Carman (1990) notes that in first time use of a service “expectations will not be well informed” (p48), which may impact expectations and their usefulness, concluding “we recommend that users of the instruments collect information on familiarity with the service at the time expectations information is collected. Our current research suggests that expectations change with familiarity” (p49). Cadotte et al. (1987) find that different performance standards are used by customers with different experience levels, highlighting previous usage of either the focal brand or product class as shaping expectations, such that they differ from those users who have no experience. What the customer believes to be feasible in any given situation will be based on prior experience of fulfilment. Wilcox (2000) highlights consumer learning – finding the likelihood of optimal behaviour in online bidding (making a last minute bid) increases with experience, supporting the idea that experience influences behaviour.

Kotler et al. (1999) propose “buyer readiness stage” (product awareness, interest, intent to buy) as driving different behaviours and Cardozo (1980) highlights buyers’ familiarity with the buying task as one of four organisational situational variables. He finds differences in number of alternatives considered, decision making, time and effort between new tasks (not previously purchased), straight rebuys (previously purchased), and modified rebuys (some purchaser re-evaluation). Cardozo (1980) also identifies perceived risk (total cost of exposure, transaction and technical uncertainty) in the purchase situation as altering the decision making and purchasing process. Felcher et al. (2001) examined how consumer familiarity of consumption situations influenced choice criteria, finding that as familiarity increases, consumers construct more narrowly defined, within-category choice sets, whereas for non-familiar situations consumers use broader across-category choice sets.

4.10.3 Internet Usage and Experience

The issue of internet experience may be specifically considered in terms of customer behaviour online while the research on the issue of experience with a purchase method or situation and customer behaviour resultant from this has been considered in the marketing literature separate to the internet.

Past experience online (be it purchasing or more general usage) is likely to have a major impact on behaviour. Page and Lepkowska-White (2002) discuss ‘web equity’ as consumer

familiarity and perceptions of a website. Wolfinbarger and Gilly (2002) use the term 'webographic' to describe internet experience, length and frequency of purchasing online and connection speed). Karjaluoto et al. (2002) note that the most important reason for customers' adoption of e-banking services was attitude towards the technology – that people familiar with computers and the internet were far more likely to adopt e-banking, and that difficulty with computer or internet usage was an important barrier to adoption: "The strength of consumer's product beliefs is affected by past experiences with the target object... past experience has a relatively high effect on beliefs that different customer groups hold about Internet banking" (p356). Kwak et al. (2001) using a sample of 307 users across nine product categories find online experience important: "Consumers who frequently seek product information online are more likely to engage in web purchasing" (p106).

Bellman et al. (1999), reporting on a large-scale survey of online buying behaviour (n=10180,) find: "Looking for product information on the Internet is the most important predictor of online buying behaviour" (p34). They go on to describe those conducting many activities online as having a 'wired lifestyle', and that: "Just as they use the Internet for most of their other activities (such as reading the news at home), these people naturally turn to the Internet to search for product information and in many cases to buy products and services" (p35). Bellman et al. (1999) also note that customers who had not been using the internet for long periods of time (over two years) were less likely to purchase online or would purchase at lower levels than more experienced users. Conducting empirical research into the impact of experience on behaviour, George (2002) finds that internet experience is positively associated with trustworthiness of the internet, noting with more frequent internet purchasing, that as experience increases, positive feelings increased and therefore also purchase likelihood increases.

Koyuncu and Lien (2003) highlight that people with more online experiences in the home environment are more likely to order over the internet. Jaworski and Jocs (2002) note that as customers gain greater experience online, their interactions with the company alter. Investigating characteristics of adopters of home computers versus non adopters, Dickerson and Gentry (1983) found that as well as demographics and psychographics, experiences with technical consumer products and computer related products and services played a major role in the decision to purchase a home computer. They note: "Experience with a broadly defined product class should lead to greater likelihood of adoption an innovation in that product class" (p227).

Yoh et al. (2003) sought to analyse consumer adoption of apparel purchasing online, using psychological (belief and attitude) variables, social factors (support and acceptance) and prior experience. They find prior experience with the internet has the strongest impact on the decision to actually purchase (apparel) online, with positive online experiences resulting in a greater inclination to actually purchase online. Such a finding is supported by theoretical and empirical literature highlighting the importance of prior experience in determining future usage intentions, with higher adoption groups driving forward adoption (O’Cass and Fenech 2003)

Bhatnager and Ghose (2004a) find, when surveying 1330 respondents, that those with the least experience of shopping online were those who disliked buying online. Conversely, those with the most experience had the highest interest in computers and the internet. They found that high experience and high usage internet customers were highlighted as knowing exactly what they wanted and therefore not needing sales person pre-purchase advice.

Swinyard and Smith (2003) find trust a major issue. They find 70% of non-shoppers were fearful of financial loss from online transactions versus a third of all shoppers, while three-quarters of non-shoppers were concerned about credit card numbers being stolen versus only half of actual shoppers.

Gefen (2000) highlights that familiarity is a precondition for trust and Ha (2004) notes that building trust online may require the build of a systematic relationship between the customer and a web brand – over time.

Literature shows that online shoppers have more favourable attitudes to technology - Reardon and McCorkle (2002) note more technology-orientated (i.e., experienced) customers may derive greater pleasure from internet usage than retail purchase. Swinyard and Smith (2003), investigating online shopping, find users have higher computer literacy, spend a greater amount of time online than non-shoppers and find online shopping to be easier. However, they note: “The existing literature provides little insight into any truly configurable differences between on-line shoppers and non-shoppers, much less identifying lifestyle segments within those groups” (p573).

4.10.4 Service Quality and Experience

ZPB (1990) highlight several influences on service quality: word-of-mouth communication, personal needs, past experience and external communications. Both usage rate and past

experience of the company are included as situational variables within this study. Word-of-mouth communication is supplemented by an electronic variable, usage of consumer reports prior to purchase. ZPM (2000) highlight that different customers (such as experienced or inexperienced, browsers versus buyers or those with different purchase frequencies) may have different levels of desire for different items, although this is not investigated. Wolfenbarger and Gilly (2003) find various issues in their online service quality model impacted by experience: fulfilment/reliability is of greater importance in predicting quality for those purchasing more than two weeks ago; website design is especially important in judging quality for experiential users and book/music/CD purchasers; website design is the most important factor in predicting quality for frequent purchasers of a particular website; customer service is of varying importance across the sample “this factor may not always predict overall quality because interaction with customer service is not always needed for etail purchases” (p195); privacy/security is “eclipsed by the other three factors” – suggesting that initially security is inferred from website design for new shoppers, and for more frequent users derived from experience – parallel to retail environment where store credibility is derived from physical conditions.

PZB (1994c) note that the SERVQUAL tool “is designed merely to measure perceived SQ – an *attitude level* - at a given point in time, regardless of the process by which it was formed. SERVQUAL is a tool to obtain a reading of an attitude level, not a statement about how the level was developed” (p112). The inclusion of measures of past experience and usage within this thesis seek to qualify how these attitudes change based on experience over time at a specific point in time.

The literature has examined how brand experience influences behaviour and how internet experience influences likelihood of shopping online. However, there have been few studies that have investigated and compared how experience with a company and the internet (in this thesis measured as length of purchasing, amount spent in a year, and purchase frequency and for internet experience, the number of online activities conducted and product categories purchased) alter specific aspects of service quality.

Propositions

Familiarity (online experience) influences online service quality demands.

Familiarity (company experience) influences online service quality demands.

Familiarity (of product type purchase) will influence online service quality demands.

Online ability (connection speed) influences online service quality demands

4.11 Techno-Readiness

Noting the increasing proliferation of technology and customers using this technology to serve themselves, Parasuraman and Colby (2001) reported on their efforts in investigating human interactions with technology in general. Parasuraman and Colby (2001) defined the term 'techno-readiness' to describe users' propensity to embrace and use new technology, not just in terms of internet shopping, but more broadly any human interaction with technology. They highlight that this measure is not simply a measure of technological skill but also a function of belief and feelings about technology. Their work defined four drivers of techno-readiness (TR): optimism (positive view of technology); innovativeness; discomfort (feeling of being overwhelmed); and, insecurity (distrust). From survey research they define a typology of five types of TR (from most to least TR): explorers; pioneers; sceptics; paranoids; and, laggards. Parasuraman and Colby (2001) propose the challenge for companies is to make market offerings appealing to high-TR customers while also making the offering accessible to low-TR customers. Parasuraman and Colby (2001) highlight three issues for companies to consider based on TR of customers: customer focused design; responsive customer care; and, reassuring communications (outlined in Table 4.6). Parasuraman and Grewal (2000) identified several issues to consider in technology-mediated service encounters: definitions and relative importance of five service quality items; whether perceptions of in-use value depends on access to employees; the way in which characteristics such as demographics, lifestyles or 'technology readiness' affect perceptions of quality and value; and, what moderating effects are relevant on customer loyalty/retention in technology rather than employee encounters.

ZPM (2002b) speculate on the impact of TR on electronic shopping behaviour, calling for further research into the linkages between TR, online service quality and online shopping behaviour. They suggest for instance: "Is it possible that customers high on TR are less likely to be intimidated by technical snafus and more prone to continue to use technologies despite problems than are low-TR customers?" They also speculate high TR customer may be more demanding and have higher e-SQ expectations. Thus, these issues are explored within this thesis as a situational influence on purchase.

Proposition

Familiarity ('techno-readiness') influences online service quality demands.

Table 4.6. Technoreadiness Issues
Source: Developed from Parasuraman and Colby (2001)

Factor	Issues
Customer Focused Design	<ul style="list-style-type: none"> • “customer focused design results from a concerted effort to properly define and understand the target market, design interfaces to ensure maximum comfort and rigorously test the interfaces with potential users” (p156) • least techno ready feel uncomfortable due to lack of control over tech therefore companies should attempt product and website design so as to make such customers feel in control – that a balance needs to exist between simple and sacrificing functionality • technology should be: intuitive (average user able to make work without seeking assistance – online, to clearly view and find content); efficient – (logical and efficiency controls), minimal repetition, timely; responsive (minimal time for technology to complete a task); assuring (gives cues that working properly and informs if is not); compatible (technology fits with other technology the user will possess); and reliable (dependable and free of problems)
Responsive Customer Care	<ul style="list-style-type: none"> • “Even with the most customer-focused design, almost every user will on occasion encounter a problem with technology” and that “Customers are often frustrated by the perception of being patronised, deluged with meaningless technobabble or given the run around by poorly trained representatives’ (p159). • different TR level customers will have different support requirements - high TR customer will prefer detailed manuals or built in support (which low TR do not like) whereas low TR customers prefer face-to-face or knowledgeable acquaintances, with lower preferences for technical support line. third is phone support
Reassuring Communications	<ul style="list-style-type: none"> • a major inhibitor to adopting new technology being insecurity with customers unsure that technology is working properly • low TR customers preference for researching online but ordering over the telephone to ensure goods are actually ordered where high TR customers reported that a person could just as easily make a mistake as a computer or low TR customers being more secure giving credit card details to a person whereas high TR customers were more secure cutting the person out.

4.12 Retail Dependence

Related to the concepts of internet experience and internet history mentioned above is the issue of retail dependence. This can be defined as the amount to which customers prefer retail shopping channels compared to the internet. Companies are increasingly seeking to combine online and offline retail channels in approaches to the marketplace (McCarthy 2005). The concept of ‘multiple channel retail’ is increasingly established. The existing literature on general internet purchasing has considered how different products are more or less suited to the internet as a purchase channel (highlighted in the product section above), or investigated classifying shoppers based on internet usage. Research on multiple channel retailing has focused on price modelling - aligning or separating online and offline retail price structures (Yao and Liu 2005). Studies also consider how price perceptions alter on the internet

compared to retail (Jensen et al. 2003) and the need to manage supply chains differently for online and offline channels (Chiang and Monahan 2005). Other works examine the need to leverage brands from the retail sector to the internet (Park and Stoel 2005), and the problems in managing multiple channel organisations or transferring online (Doherty et al. 1999). To date, much of the literature implicitly considers the issue of retail dependence – customer dependence on retail channels. However, no studies have considered how customers may prefer shopping from an established retail brand online and how this impacts on the propensity to shop online and specific service quality requirements.

There is significant and established literature indicating that shoppers' orientation and desire for certain characteristics shapes their behaviour. It is reasonable to assume that such orientations and classifications exist online, and that various issues related to this will impact on customer take-up of internet purchasing. Different typologies of shoppers have been proposed (offline) that may influence whether someone shops online. Stone (1954) provides a taxonomy of customers as economic (pays attention to price, quality and product assortment); personalizing (seeks personal relationships with store personnel); ethical (who support smaller non-chain stores); and, apathetic (does shopping out of necessity not choice). The Williams et al. (1978) classification is very similar, describing low-price, convenience, involved and apathetic shoppers. While economic customers would seem to be natural online shoppers, as do apathetic shoppers (seeking out price, quality and assortment and not really caring how), ethical and personalizing shoppers may prefer retail stores. Bellenger and Korgaonkar's (1980) definition of recreational shoppers as using leisure time for shopping was further examined by Korgaonkar (1981). This study found economic (price seeking) customers more likely to use catalogue showrooms than recreational shoppers, who preferred the full shopping experience. How recreational shopping translates online is unclear – some customers may prefer the use of retail stores for recreational shopping while others may prefer internet usage as a source of pleasure. Girard et al. (2003) note "Literature suggests that a person's shopping orientation plays an important role in his or her preference for shopping from different shopping venues... published research on what type of shopping orientations or motivations that make people buy on the internet is not abundant and offers only limited results" (p106).

Describing five shopping orientations and four product types, Girard et al. (2003) investigate how these factors influence preference for online shopping. They describe price conscious shoppers, convenience shoppers, recreational shoppers, variety seeking shoppers and impulse purchasers. Describing different sets of products, they describe search goods (full information about the product is known prior to purchase, such as books or personal computers);

experience goods (where qualities cannot be known prior to purchase, for instance clothing; or televisions); and, credence goods (where the average customer cannot verify quality on their own even after use, such as vitamin tablets). There are several factors which may form part of a shopper's orientation that could impact the dependence on traditional retail purchasing. Keen et al. (2004) describe different clusters of customers: generalists – product experience determines channel choice; formatters – where the most important attribute determines channel choice (such as instant gratification); price sensitives (who select the lowest price source regardless of channel); and, experiencers (whose behaviour is driven by positive past experiences of a channel). While these four clusters are identified, the categorisations are based on a very limited set of characteristics described by single item measures which are not fully explored or explained.

Gaining 558 survey results, Girard et al. (2003) find only a few statistically significant relationships between shopping orientation and online behaviour. They found convenience orientation positively related to preference for online shopping for experience and credence products, and recreational shoppers did show a positive orientation for shopping online for experience and credence products, despite the suggestion they would always prefer a retail store experience. The lack of conclusive evidence is likely due to seeking to examine nine impacts across four categories with a relatively small sample size. However, the results clearly indicate, as Girard et al. (2003) note: “consumers’ shopping orientations significantly influence their preference for shopping from different types of retailers including the internet” (p115).

Wallace et al. (2004) seek to investigate factors that impact on retailer loyalty. They find different impacts of satisfaction on loyalty for shoppers who use multiple channels to purchase when compared to those only using a single channel. Their results indicate that satisfaction is a better predictor of loyalty for multiple channel customers than it is for single channel customers. This highlights that traditional retail usage has an impact on online customer behaviour, and that the impact of retail presence is worthy of investigation.

4.12.1 Trust and Experience

The issue of trust as a barrier to shopping online was considered extensively in Chapter three, looking at online service quality. Here our concern is how lack of trust in the internet may lead customers to be more dependent on retail brands when shopping online. Concerns about trust have been shown to be a barrier to e-commerce usage. Reardon and McCorkle (2002) highlight the established issue of trust and security online – that for some the perceived risks may simply be too great and that they will remain retail shoppers. Bhatnager and Ghose

(2004a) note “there is a large segment of web surfers who dislike buying on the web; the predominant reason for this appears to be their perceptions about the security of sensitive information” (p758).

Stewart (2003) notes the role of the retail channel as a ‘trust inducer’, finding that institutional-based trust does transfer from traditional shopping channels to the web-presences of offline retailers. Park and Stoel (2005) also found when comparing the impact of brand familiarity, previous experience, and information, on perceived risk and purchase intention online, information had no impact whereas previous experience and brand familiarity both had significant positive effects on intent. They go on to highlight the need for retailers to transfer brand power into the online environment to maximise familiarity with customers.

Karjaluoto et al. (2002) note that not being able to use a computer or the internet were significant barriers to online purchasing, noting that non-users (compared to users) of online banking, disliked e-mail and the internet. Those customers still struggling to use computers and the internet are likely to have less experience of purchasing and therefore to be less trusting or familiar of internet-only companies, suggesting such retail dependent customers will place greater emphasis on trust and security than less dependent customers.

4.12.2 Personal Relationships and the Social Experience

Some behaviours may prevent customers shopping online at all or they may to have serious negative feelings towards shopping online that will alter their service requirements. Mols (2000) investigating the Danish business banking sector, found managers could be reduced to four clusters: the nervous (viewing the internet as a threat to their important close relationship with a bank, seeing the internet as a self-service and media channel); the positive (who do not see the internet as a threat to personal relationships); the sceptics (uncertain as to how the internet will impact relationships); and, the reluctant (who see the internet as a slowly developing medium for their companies). Karjaluoto et al. (2002) also considering the banking sector, highlight that despite speed, time and cost savings online, some customers placed emphasis on the personal service and knowledge of banking personnel over and above this, preferring to remain retail loyal.

Reardon and McCorkle (2002) noting the same issues comment “some consumers will continue to desire a shopping experience that extends beyond the utility of it”, that for consumers who enjoy the social experience of shopping “traditional retailers may hold the advantage” (p183). Those customers still desiring traditional retail channel services, such as the

social experience of shopping, or the personal service of sales staff are likely to hold different requirements for online service than those customer more orientated towards internet shopping.

4.12.3 Retail Brand Dependence

The issue of shopper channel preference is clearly multi-faceted. It is dependent upon and impacting upon many other of the situational influences considered here (product class, internet experience, company experience). Different customers are posited as having significantly different expectations and requirements based on their orientation towards shopping activity. Here a measure of 'retail dependence' has been constructed (preference for purchasing from names recognisable from the high-street) as a separate measure of multiple channel shopping behaviour, and dependence on trusted retail names. Issues of skill, product type and experience are considered as separate measures, while the requirement for trust and personal service are considered as service-quality factors, proposed as being different for those customers who prefer established retail names when purchasing online.

Proposition

Customers who prefer shopping online from high street retail names will exhibit different service quality requirements to those who do not.

4.13 Planned versus Impulse Purchasing

The issue of impulse buying has been considered important in evaluating online customer behaviour. It has been suggested that while impulse buying makes significant contributions to retail profits, online, the lack of prompts or visual displays with merchandise and customer orientation may impact on this lucrative source of sales.

Girard et al. (2003) note "Impulse buying is defined as a person's irresistible, sudden urge to purchase a merchandise or service with no advance planning" (p107). Impulse purchases may occur as a person sees something in a store, while shopping for other goods, or while walking down a street and decides to go into a store. Girard et al. (2003) propose: "Since impulse purchases are more likely to be for inexpensive or less expensive items seen in a store environment while shopping for other goods, people are less likely to buy on impulse on the Internet" (p108). Strategic Direction (2000) also notes that, as shopping on the internet is a planned activity, impulse buying may be reduced when compared to retail channels.

Smith and Sivakumar (2004) evaluating the 'flow' of online shopping propose that behaviours may differ, depending on whether the purchase was planned or an impulse buy. Cotte et al. (2004) note how a person's approach to time management and personality will influence the level of spontaneity and impulse purchasing versus planned purchasing. Hoffman and Yung (2000) note that customers exhibiting task-orientated behaviour may have different approaches to impulse buying than the non-task orientated. Wolfinbarger and Gilly (2001) suggest that most online shoppers are indeed goal directed.

The issue of planned versus impulse behaviour has been considered sketchily in the literature in terms of its existence, however, the service quality requirements of an impulse buyer versus planned purchaser have not been considered at all.

Proposition

Impulse purchasers and planned purchasers will have different online service quality demands.

4.14 Loyalty

Research on loyalty can be traced back as far as the 1950s (Lim and Razzaque 1997) and has proven to be a very complex issue (Ha 1998). Stern and Hammond (2004) note "Measuring loyalty is important for all firms" (p5). Lancaster et al. (2004) and Kotler et al. (1999) note that customer loyalty can be an important behavioural issue in segmenting markets. They report many firms are trying to segment their markets by loyalty and using loyalty schemes to do so, with marketers splitting buyers into groups according to loyalty then focus on the most profitable customers (the most loyal).

Zeithaml (2000) also introduces the notion that customers have differential profitability - that some customers lead to greater profits than others. Bank One is cited as an example of a financial institution overcharging the best customers to subsidise others. Reicheld (1993) highlighted the importance of building a high loyalty customer base of the most profitable customers, while Storbacka and Luukinen (1996) find that customer satisfaction was highest among the most unprofitable customers in the customer base.

In conducting importance-performance analysis, Martilla and James (1977) emphasise the need to consider the differences between loyal and disloyal customers. They find that while some attributes are equally important to both groups, there was divergence in opinions on many items. They examine the importance placed on different service demands of car dealers of loyal versus disloyal customers, finding both groups placed low service price as highly

important (and poor performing), and both groups placed prompt warranty work as highly important, but loyal customers reported high performance whereas disloyal customers reported poor performance.

4.14.1 The Nature of Loyalty: Behaviour and Attitude

An important theme emergent from the literature is the classification of two types of loyalty – that measured as repeat purchasing behaviour from the company, and that measured as a positive attitude towards the company in conjunction with repeat purchase behaviour. Many studies on loyalty provide a false measure of loyalty, determining it based on repeat purchase behaviour, rather than a positive commitment or attitude towards the company (Ha 1998, Zeithaml 2000). Baldinger and Rubinson (1996) note “Reviewing the marketing literature reveals that loyalty is almost always defined behaviourally, either as a share of requirements measure, or as a pattern in choices (often using an experimental design)” (p22). They go on to propose “the importance of brand loyalty can be better understood by extending the typical definitions and measurement approaches” (p23). Displaying the over-simplification of loyalty, Jen et al. (2003) note “The frequency that a customer interacts with a firm is one of the most important indicators of the customer’s financial value to the firm” (p5), further, they seek to devise mathematical predictions of future usage based on past purchase frequency.

Loyalty measurement continues to be dominated by simple behavioural measures that fail to capture attitudinal information (Budman 2005, Ha 1998, Lim and Razzaque 1997, Dick and Basu 1994, Baldinger and Rubinson 1996).

Many authors have for some time called for separation of attitude and behaviour measures. Day (1969) provides one of the earliest suggestions of a difference between simple repeat purchase and actual loyalty (although simple behavioural measures remain dominant). Day (1969) describes the measurement of brand loyalty as commonly based on repeat purchase behaviour, and a tendency to regard this as a measure of brand performance rather than simple purchase level (a mistake still common today), noting “Loyalty measures, based on reports of purchase decisions, do not distinguish between true or ‘intentional’ loyalty and ‘spurious’ loyalty associated with consistent purchasing of one brand because there are no others readily available or because a brand offers a long series of deals, had a better shelf display location... The key point is that these spuriously loyal buyers lack any attachment to brand attributes, and they can be immediately captured by another brand that offers a better deal, a coupon, or enhanced point-of-purchase visibility through displays and other devices” (p30). He highlights that “loyalty should be evaluated with both attitudinal and behavioural

criteria” (p30). Conducting empirical testing to delineate these two constructs and highlight the importance of attitudes consideration, Day (1969) finds that across a sample of 955 households, almost 30% of the loyal group (traditionally/behaviourally defined) are in fact spurious loyals, not really loyal to the company in attitude. Jacoby and Chestnut (1978) note “If brand loyalty is ever to be managed, not just measured, it will have to be elaborated in a much more detailed description of cognitive activities rather than focusing only on behavioural aspect of brand loyalty (e.g., repeat purchase)”.

Noting a ‘chasm’ between behaviour (repeat buying) and attitude (feeling toward the brand), Baldinger and Rubinson (1996) highlight that some loyal buyers do not exhibit attitudes that tie them to the brand and may even have positive feelings about competing brands, despite continuing to purchase (due to constraining factors) the focal brand. In contrast, ‘real loyals’ are both behaviourally loyal and display positive attitudes about the brand and are proposed as far more likely to remain loyal to a brand over time. Combining five different studies that had used their proprietary measurement tool, re-contacting 2261 customers across 27 different brands, comparing attitudes and behaviours over time, Baldinger and Rubinson (1996) find the highest repeat purchasers are 70% attitude-favourable, compared to only 20% of moderate repeat purchasers being attitude-favourable to the brand and only 1% of low repeat users. They note “attitudinal loyals were almost three times as likely to remain loyal to the brand” (p29). Further, moderate repeat purchasers with positive attitudes were four times as likely to increase purchase rate than non-positives. They conclude: “The stronger the attitudinal commitment to the brand, the more likely consumers were to *remain* loyal to the brand, or to *become* loyal to the brand” (p30), determining that positive attitude to the brand impacted the ability to maintain and grow market share over time with behavioural loyalty an insufficient measure to assure this.

Neal (2000) notes “the behavioural definition of loyalty disregards motivation, it simply observes and measures the degree of a customer’s repeat purchase of the same brands in a category” (p7). Neal (2000) defines several combinations of attitude-behaviour: attitudinal loyalty (behavioural loyalty due to customer dedication to the brand), performance loyalty (because the brand has some valued performance attribute none can match), convenience loyalty (the convenience of buying the same brand as before), and lack-of-choice loyalty (where the customer does not have a choice. Neal (2000) notes that in most product categories convenience loyals, unwilling to expend time and effort in brand search (but who will defect to other brands if quality fails), make up the largest proportion of loyal customers.

Martin and Goodell (1991) note that product commitment or loyalty is multi-dimensional and consists of both behavioural and attitudinal causes, mediated by the consumer's level of involvement with the product. Lim and Razzaque (1997), comparing the impact across two products of behaviourally repeat purchase with attitudinal loyalty to the brand, find "There is significant difference in repeat purchase rates across groups with differing levels of relative brand attitude... repeat purchasing behaviour is driven by strong and positive relative brand attitudes". Budman (2005) highlights that behavioural loyalty or repeat purchase is "cash in the bank" for firms; but, "behavioural loyalty with attitudinal loyalty is pretty weak" (p51).

4.14.2 Forced Loyalty

Lim and Razzaque (1997) contrast two approaches to consumer behaviour: the personologist approach (where the person is the most important antecedent of consumer behaviour, with individual differences accounting for behaviour); and the situationist approach (where situations are the dominant determiner of human behaviour). Noting the situationist approach to consumer behaviour, Lim and Razzaque (1997) highlight "that repeat purchasing behaviour can be attributable to certain recurring situational factors which influence brand choice". (p96). Lim and Razzaque (1997) propose that the relationship between attitude to the brand and repeat patronage is mediated by social norms and situational factors (measured as task importance, difficulty, time pressure, uncertainty, interest, involvement and experience), however, they fail to find any statistical support for this proposition. Not included in their study, the availability of competing substitutes is perhaps the most important situational variable in determining behavioural loyalty non-concurring with attitudinal loyalty.

Smith and Swinyard (1983) highlight several situational impacts that affect loyalty, noting stock-outs of favoured brands, incentives for switching to non-favoured brands through reduced prices or in store promotions (that temporarily alter attitude to a non-favoured brand, but are temporary).

Budman (2005) provides the example of air travel – that despite negative ratings of the service quality of an airline, as they were the only company flying from a local airport they had behaviourally loyal customers, but as soon as a competing airline started flying from the location, many customers switched.

Ha (1998) highlights that even when a customer has an unfavourable attitude towards a brand they may still repeatedly purchase it (exhibiting behavioural loyalty), due to situations enforcing that purchase, or restricting choices. Examples of such enforcement most likely

include the unavailability of the desired brand (for instance not being on a store shelf or a store not being within a geographically reasonable distance). As enforcing conditions are lifted, customers will purchase a brand to which they hold a more favourable attitude. Ha (1999) also investigates how social influences may impact repeat purchase as enforcing conditions, noting, for instance, how a customer displeased with a brand such as Ford, may still purchase from them for ethnocentric or social or national influences that colour their behaviour, especially likely where a person's own personality is relatively weak.

The research on loyalty indicates two principal types of loyalty – that based around a measure of repeat purchase, a measure of (purchasing frequency) behaviour, and alternatively a measure of attitude toward the brand or company (proposing loyalty as based on positive sentiments toward the company) that leads to repeated purchases. These two issues have been repeatedly delineated in the marketing literature, however, how service requirements differ between customers exhibiting behavioural versus attitudinal loyalty remains unknown. Those displaying attitudinal loyalty are likely to have higher overall ratings of service quality (as they decide to shop with the company over alternatives) compared to those just displaying behavioural attitude (where the company is not delivering service at such a level they are attitudinal loyal to the company).

Proposition

The level and nature of loyalty (behavioural versus attitudinal) will influence online service quality demands.

4.15 Customer and Purchase Involvement

The concept of involvement has been discussed for three decades in consumer behaviour and even longer in psychology (Homburg and Giering 2001). Homburg and Giering (2001) note: "Although there is disagreement concerning the precise definition of involvement, most researchers agree that the level of involvement is associated with the level of perceived personal relevance or importance of a specific product category to the customer". Greater levels of involvement lead to more extensive product search.

Varki and Wong (2003) highlight how consumer involvement impacts on intent to engage in relationships with the company. They find more involved customers express greater interest in engaging in relationships with service providers. Greenwald and Leavitt (1984) also highlight consensus that high involvement means high personal relevance or importance to the customer (and low involvement, low relevance and importance). Karaatli (2002) finds that

customers highly involved with purchase exhibit different shopping behaviour (time take to shop, number of alternatives considered), than those less involved with purchase.

The impact of purchase involvement has been emphasised. Hsu and Lee (2003) note "Involvement is significant in understanding and explaining consumer behaviour" (p56), while Beatty and Smith (1987) and Beatty et al. (1988) highlight how purchase involvement impacts search and information requirements. Teichert and Rost (2003) study how consumer involvement influences trust and customer retention with the company, and Cronin and Taylor (1992) identify their service quality research is limited due to its sole focus on low-purchase involvement categories. They suggest different involvement levels will impact perceived quality. Several researchers have even noted that different levels of consumer involvement should be considered as basis of marketing segmentation (Chebat and Picard 1985, Williams et al. 1978). However, studies have tended to investigate purchase involvement as a single impact (or linked with demographics), and its impact on information search and provision rather than how different customer involvement segments may require different service strategies, beyond the issue of information.

4.15.1 Involvement and Advertising

Much of the research on purchase or consumer involvement has focused on customer information processing and responses to different advert types. Indeed, Hsu and Lee (2003) highlight the origins of interest in involvement developing from work on television advertising and low involvement learning in the mid-1960s by Krugman. Many works have since highlighted the interplay between involvement and action with regards advertising. Bolting (1988) highlights how products with different levels of consumer involvement require different advertising strategies (due to the different amounts of information used by customers in different involvement categories, with low involvement/information products better suited to repetition advertising than information provision). Bucholz and Smith (1991) consider how consumer involvement influences recognition, specifically the number of connections made with adverts and subsequent recognition of the brand. Muehling and Bozman (1990) examine the relationship of advertisement type (factual versus evaluative adverts, level of musical background) with consumer involvement. MacInnis and Park (1991) further highlight how consumer processing of advert content is influenced by consumer involvement. Johar (1995) evaluated how low involvement consumers were more easily deceived by claims in adverts that required detailed processing to detect. Reed and Ewing (2004) note how different levels of consumer involvement require different strategies for advertising, but how other issues are interrelated, including experience (repeat versus first time

users). Chebat and Picard (1985) find that confidence in product and messages increases with levels of consumer involvement, concluding that consumer involvement is a potential market segmentation tool, which they note as overlooked in the marketing world.

4.15.2 Involvement and Products

The impact of differing levels of purchase and consumer involvement across different product categories has been noted as impacting on behaviour. Bolting (1988) examines how consumer involvement impacts information search and usage, finding for low involvement products (like batteries) consumers use only limited information in decision making, but for high involvement products (such as a camera) customers used far greater information in decision making. Similarly, when comparing brands, more features and information are used in comparing high involvement products than low involvement products. Beatty and Smith (1987), investigating customer attitudes across five product groups, find “Consumers tend to engage in more search when purchasing higher priced, more visible, and more complex products - i.e., products that intrinsically create greater perceived risk” (p44). Brock and Bristor (1994) modelled uncertainty orientation and purchase involvement, and highlighted the role of product-type. They find for durable products, uncertainty-orientated customers experience greater purchase risk and engage in greater external search, than certainty-orientated customers. For non-durable products, uncertainty-oriented consumers experience lower purchase risk than certainty-oriented consumers.

Arora (1993) demonstrates that despite the dominance of consumer involvement studies in relation to product involvement, that the measurement and application of involvement is equally applicable to services - a finding later supported by an increasing number of studies highlighting the impact of involvement in the service sector (Gabbot and Hogg 1999, Varki and Wong 2003, Aldlaigan and Buttle 2001). Aldlaigan and Buttle (2001) were able to highlight how the low/high involvement product measures translate into services, finding complex issues such as mortgages and investment are high involvement activities whereas cash machines and cheque books are lower involvement areas.

4.15.3 Involvement Complexity

As noted above, several authors have highlighted differences in involvement by product type. Many have however highlighted that consumer and purchase involvement are far more complex issues with many areas of influence.

Williams et al. (1978), analysing grocery store shoppers, divides them based on consumer involvement with price or service policies. They find four distinct clusters: the involved, apathetic, convenience and price shopper. They suggest that these are distinct segments, requiring differentiated strategies. Slama and Tashcian (1985) highlight that “consumers differ significantly in their shopping efforts and the degree to which they seek information for purchase decision making”. They propose that purchase involvement and search behaviour are related, and that customer responses to marketing actions will be based on their level of purchase involvement. Using a 33-item scale, they find several characteristics positively related to the level of purchase involvement: family life cycle stage (when children are in the home); education level; moderate level of income; and, gender (female).

Beatty et al. (1988) investigated the relationship between brand commitment and purchase involvement. They find that purchase involvement precedes brand commitment and that both are preceded by ego-involvement. Ong (1994) notes that purchase involvement is ‘intertwined’ with price perceptions and quality perceptions, while Bunn and Clopton (1998) highlight customers using multiple different sources of information in decision making with purchase involvement and purchase complexity both impacting on information sources. Lamb et al. (2004) further note five factors influencing the level of purchase involvement: previous experience; interest; perceived risk; situation; and, social visibility.

Laurent and Kapferer (1985, 1986) highlight that risk, importance, product pleasure value, symbolic value and perceived risk, all influence involvement behaviours. Teichert and Rost (2003) studied consumer involvement as multi-faceted, with both cognitive and affective aspects, each of which differentially impacts trust in the company and retention. Varki and Wong (2003) provide one of the few studies linking consumer involvement to the specific issue of services quality and provision. They find that high and low-involvement customers do share the same expectations about some issues (providers communicate regularly and be price competitive), but that high involvement customers expressed a greater desire for fairness in treatment, and being involved in solutions to their problems. Houston and Rothschild (1977) differentiated enduring involvement (across time and situations), and situational involvement (to temporary, situational issues). Mital and Lee (1988) specify that customers may have low enduring involvement with a product overall, yet high situational involvement during a specific purchase.

Many definitions, techniques and measurement scales of involvement exist. The most common distinction is between high and low involvement purchases, with customers

postulated to act differently in low versus high involvement decisions. However, Hsu and Lee (2003) note that problems exist in this division, since it ignores the large 'gray' middle area. Hsu and Lee (2003) propose the mathematical derivation of an index of involvement (from 0 to 1), for each issue of enduring involvement (product importance and product interest) and situational involvement (financial, functional, physical, psychological and social risk).

Despite differences in definitions of purchase involvement, Mittal (1995) notes "One theme remains constant, namely, that involvement is the perceived importance of the stimulus – be that stimulus the product itself or the purchase decision task" (p664).

4.15.4 Purchase Involvement

Mittal (1995) notes several important developments in purchasing involvement: The Personal Involvement Inventory (Zaichkowsky 1985); The Consumer Involvement Profile (Laurent and Kapferer's 1985); The Foote, Cone and Belding scale (Ratchford 1987); and, The Purchase Decision Involvement scale (Mittal 1989). Comparing the validity and reliability of these scales, Mittal (1995) notes trade-offs in terms of unidimensionality, nomological validity and convergent validity, simplicity and response ease. As single issue measurement tools, the length of each of these scales is too long for usage within a set of many different purchase variables.

Despite much interest in the concepts of consumer or purchase involvement throughout the general marketing literature, the more recent internet literature has yet to provide a detailed consideration of how purchase involvement transfers from the offline marketplace into internet purchasing. Further, work on purchase involvement has tended to investigate broad issues such as advertising response or product type or demographics, rather than specific issues of services quality, either online or offline.

Proposition

High and low involvement customers will have different online service quality demands

4.16 Price Perception

Customers frequently expect to find lower prices online and the nature of the internet as a source of information search (and therefore reference price generation) creates great pressure on retailers (Jensen et al. 2003). Research on how customers view the price of a product is well established in the marketing literature. Lichtenstein et al. (1993) for instance note "Price is unquestionably one of the most important marketplace cues... present in all purchase

situations” (p234). Byoungho et al. (2003) highlight price as the most important cue used by consumers in product selection, and Willenborg and Pitts (1977) note both the complexity of price, and highlight that not all consumers are price sensitive, therefore requiring different marketing approaches when targeting. Jensen et al. (2003) note that price perceptions (relative to competitors); and information search intentions, differ for online and offline retail customers. Ong (1994) found quality perception ‘intertwined’ with price perceptions and purchase involvement.

There has been a great deal of work investigating the role of price in the marketplace. For instance, Folkes and Rita (1995) investigated how different discounting methods impacted price perception, finding that sales and coupons or time of purchase discounts, lowered price perception more than rebates or post-purchase savings. Biswas and Scot (1993) look at how discount level positioning altered perceptions. They find that for large discount ranges, discount claims starting with the maximum discount level were more effective than starting with the minimum level, while for smaller discount ranges there was no difference. Cheong (1993), however, challenges all discount coupons, finding that when tested they had no impact on price perception. Licata et al. (1998) found mixed results on the plausibility of discount levels on consumer behaviour, indicating no difference between implausible and highly plausible discount levels on price perception or behavioural intention.

Researchers have sought to link company versus product line price perceptions (Desai and Talukdar 2003), influences upon price perceptions, such as situational or contextual influences like purchase purpose (Monroe et al. 1977). Others have compared differences in price perception by country (Jin and Sternquist 2003, Moore et al. 2003). Several researchers have investigated the concept of ‘internal reference prices’ - prices remembered by the customer to which the selling price is compared, to make a judgement about selling price/quality and the influences upon these prices, such as advertising and quality perceptions (Greal et al. 1998, Janiszewski and Lichtenstein 1999, Chandrashekar and Harsharanjeet 1995)

However, many studies utilise an extremely limited and misleading view of price – concentrating on the negative role of price, and the assumption that customers seek the most reasonable or lowest price, without considering the possible issue of price as a signal of quality (with customers seeking to purchase a higher price product). Illustrative examples of such studies are shown in Table 4.7.

Table 4.7: The Negative Role of Price

Study	Description
Woodside (1971)	Used interviews to generate customer perceptions of restaurant prices above, equal or better than competitors to provide new management strategies for the organisation.
Israel et al. (1991)	Conceive price perception as product price relative to other competing different products in the same product class. They find that price perception on these terms is a significant determinant of company (restaurant) usage and highlight the need to consider this in strategy setting.
Boyd and Bhat (1998)	Pound various factors influenced price perceptions in B2B transactions, notable knowledge of the sellers costs, perceptions of product benefit and prices of competing products all of which influenced the customers view of a 'fair' price.
Ranaweera and Neely (2003)	Provide a severely limited definition of price perception as the customers perception of the price 'as reasonable'. Propose that where there is good service quality, those viewing price as unreasonable are less likely to repurchase from the company as those viewing price as reasonable and "Where negative price perceptions are associated with high service quality perceptions, service quality alone will be inadequate to retain customers" (p244).
Jensen et al. (2003)	Price perception online also define price perception as an issue of comparisons of prices to an external reference point or competitor

The assumption that the best price and the most likely to induce customer purchase is the lowest price has been challenged by several researchers, shown in Table 4.8.

Table 4.8: Positive Role of Price

Study	Description
Erickson and Johansson (1985)	Highlights the positive role of price, investigating price and brand relationships in the automotive industry. They note that the price and quality relationship is reciprocal and that customers view price as a good proxy for perceived quality.
de Chernatony et al. (1992)	Found when interviewing grocery customers that even though price awareness was very low, but that despite this a positive price-quality relationship existed, notably also including branding as a positive quality cue with price they call for continued brand-building to this end.
Biswas (1992)	Found a relationship between branding and perceptions of higher price related to the branded (higher quality) goods.
Zeithaml (1988)	Price is a signal of product quality

Lichtenstein et al. (1993) provide a comprehensive analysis of the role of price perceptions, over and above consideration of simple comparative reference to competitors and the concept of a 'reasonable price'. Lichtenstein et al. (1993) provide seven constructs of price perception,

five negative and two positive, outlined in Table 4.9 below. Conducting empirical research in the grocery marketplace, using questionnaires (n=582), till-receipts, coupon monitoring and ad-responses, Lichtenstein et al. (1993) found support for the existence and validity of the seven price constructs proposed. Lichtenstein et al. (1993) highlight that the price-quality judgement is also subject “to contextual cues that reinforce the perceived validity of using price to infer quality” (p242). Online, such cues are likely to involve website design.

Table 4.9. Constructs of Price Perception
Source: Constructed from Lichtenstein et al. (1993)

Price Construct	Literature Description	Price Perception Measurements Utilised Here
Negative Role of Price		
Value Consciousness	“a concern for price paid relative to quality received” (p235)	Use of consumer review sites to maximise price for quality ‘value’
Price Consciousness	“the degree to which the consumer focuses exclusively on paying low prices” (p235)	Importance of Low Price
Coupon Proneness	an increased propensity to respond to a purchase offer based on a coupon price reduction rather than reduction in sales price	Purchase Based on Promotion while Online
Sale Proneness	“an increased propensity to respond to a purchase offer because the sale form in which the price is presented positively affects purchase evaluations” (p235)	
Price Mavenism	desire to be informed and inform others about the lowest marketplace price	Negative Role of Price (worth time and effort looking)
Positive Role of Price		
Price-Quality Schema	“generalised belief across product categories that the level of the price cue is related positively to the quality level of the product” (p236)	Positive Role of Price (as indicator of quality)
Prestige Sensitivity	“feelings of prominence and status that higher prices signal to other people about the purchaser” (p236)	Online purchase non-social. Proxy, brand dependence measure (as branded more expensive)

4.16.1 Online Pricing

Price perception online is a potentially important issue. Brynjolfsson and Smith (2000), conducting over 8500 price observations of book and compact discs, conclude that the internet was between 9-16% cheaper than traditional retail channels. However, little research has considered how behaviours online differ with price. Jensen et al. (2003) found that price

perceptions and price search activities differed for internet and retail channels, and that price perceptions themselves differed for customers with and without internet access, suggesting variance is present.

Xia and Monroe (2004) note the complex pricing structure of many online retailers, that customers are ill adept at calculating total prices (including shipping and surcharges). They find that price partitioning in this way impacts price value judgements (with lower initial prices taken as basis of comparison), although they qualify this, noting surcharges over a certain level may have a significant negative impact on price value.

Jiang (2003) notes that the positive role of price is equally applicable online - highlighting that internet companies may manipulate their market image by charging high prices, attempting to signal quality to the marketplace. Jiang and Rosenblum (2005) highlight a continued lack of detailed research on price perceptions in the online marketplace.

Suri et al. (2003a) found that motivation to shop (search) and information load had a significant impact on online price perceptions. Rajneesh et al. (2003) find: for motivated subjects with excessive information loads, a high price level was evaluated as higher in value; when motivated subjects did not have an excessive information load, they evaluated the low price level as better value; for less motivated subjects, the high price level was perceived higher in value and quality than the low price level. Suri et al. (2003b) evaluated how customer computer familiarity influenced online price perceptions. They find in the high-motivation condition, subjects with a greater level of computer anxiety viewed high price as more indicative of higher value, than those with less computer anxiety (who evaluated low price as better value). In the low-motivation condition, both groups linked high price with higher perceived quality than the low price level.

The usage of consumer review sites and price listing sites to search for information on retailer performance and conduct price comparisons is increasing. The importance of consumer review sites and discussion boards in consumer decision making processes has been noted (Finch 1999), as has the use of the internet for specific issues such as price comparison and peer review. Marketing Week (2005) notes 30% of shoppers now using peer review sites to exchange information about good and bad experiences with companies. Peterson and Yang (2004) even note review sites as a potential source of consumer intelligence for the company, assisting in strategy formulation and marketing research. Dellarocas (2003) notes the increasingly important role of online feedback mechanisms and the "digitization of word-of-

mouth”, as a source of information for customers about company performance, based on actual experiences of company performance rather than company-based advertising. How customers interpret prices on these sites is unclear, as is how the ready availability of comparison information on pricing influences internal reference pricing.

The concern in this thesis is not with a detailed consideration of price perceptions, but how customers with different measured orientations on price issues (positive and negative) require different service quality items when shopping online. Pricing is a highly complex issue both online and offline. The potential for pricing as a classification tool of customer approach to the purchase requires a detailed consideration of how this impacts upon online customer service quality requirements, something not previously considered. Due to the complexity of price perceptions, several measures have been utilised related to price within this thesis, based on the offline work of Lichtenstein et al. (1993). Measures are taken for consumer review site usage, the overall importance of low price, whether purchase was based on promotion while online, the negative role of price (worth time and effort looking for) and the positive role of price (as an indicator of quality).

Propositions

Customers paying different prices will exhibit different online service quality demands.

Customers exhibiting different levels of each price orientation will exhibit different online service quality demands.

4.17 Time Capacity

As early as the 1970s, researchers were highlighting competing pressures on people's time (Lazer and Smallwood 1972). Lee and Ferber (1977) conducted work on how use of time affected behaviour, finding different uses of time had a significant impact on purchase behaviour (for instance, career hours of the wife influenced number of credit cards). Schaninger and Allen (1981) also note differences in time stresses of non-working, low-occupational and high occupational status female workers. During the mid-1980s researchers were noting the increasing 'poverty of time' of the modern consumer and predicting that this would alter values and priorities for customers (Michman 1984). Blackwell and Talarzyk (1983), investigating the contemporarily major lifestyle changes occurring, note 'time poverty' as a distinct and important life style segment. They highlight the importance of considering this lifestyle area in strategic planning. Gofton (1995) notes 'dollar rich and time poor' consumers, highlighting 'time famines', and how increasing importance and value of time is leading to more convenience-driven behaviour in consumers.

Cotte et al. (2004) note the complex and multidimensional way in which time is perceived and used. They describe four dimensions of time style: social orientation (time alone or with others); temporal orientation (past, present or future orientation); planning orientation (analytic and planned versus spontaneous approach to time); and, the polychronic orientation (one thing at a time as monochronic compared to multi-tasking or polychronic approaches). They go on to propose five symbolic metaphors of time, describing how time styles interact with self-identity and socio-cultural issues. They describe: time as a pressure cooker (constant time pressure); time as a river (refusal to plan or think for the future); time as feast (getting the most out of every moment); time as a map (intensive information seeking to map out progress towards goals); and, time as a mirror (always trying to get better at time use). Cotte et al. (2004) highlight that customers with different time styles whose lives fall into different metaphors, will have very different attitudes and behaviours toward shopping and conducting different search activities (based on time availability and planning preference) across different varieties and depths of product range, with different levels of spontaneity of purchase.

Dabholkar (1996) acknowledges that different situational factors will play a role in service quality and investigates these issues in the retail environment. Several factors are identified in retail terms, including: items such as crowding, whether the customer is alone or with friends/family, whether they are in a hurry and how this affects waiting time, with only waiting time considered. The study found that as waiting time increased, so too did customer inclination towards technology based self-service rather than waiting in retail queues. For customers who experienced high waiting times, ease of use was a key determinant of customer service. Beatty and Smith (1987), investigating customer attitudes across five product groups, also found a significant relationship between increased search effort and increased time available. Lehmann and Moore (1983), investigating time pressure, highlight that people with frantic lifestyles processed information differently with different consumer behaviours resulting.

Many studies have highlighted the internet as a faster way of consumption compared to traditional retail structures. Bellman et al. (1999) describe 'time starvation' as a major force leading people to purchase online. They note that time is an important predictor of likelihood of online shopping - highlighting that as lifestyles developed where people have less time to search for and buy products in traditional retail stores, they turn to the internet to purchase. Many have attributed the growth of the internet to the relative time savings and convenience offered, compared to traditional retail channels (Reardon and McCorkle 2002). Beyond the

time saved from not going to a retail store for purchase, Reardon and McCorkle (2002) note that the internet allows for considerable time savings in searching for information about products. The American Bankers Association Journal (1999) notes that the electronic banking is "a perfect fit for today's and tomorrow's time pressured lifestyles". Karjaluoto et al. (2002) highlight that, in the banking sector, both experienced and new online users, who were becoming busier, were seeking to conduct transactions at their leisure (online), and not within the confines of retail branch opening times, enjoying the release from time and place as well as speed of online transactions.

Bellman et al. (1999) noted that not having free time to use traditional retail stores was an important predictor of the likelihood of online shopping (that as lifestyles developed where people have less time to search for and buy products in traditional retail stores, they turn to the internet to purchase). Conversely, it is possible that those whose lifestyles still have ample free time for retail store usage will not be forced online and will remain retail-loyal. Online, the existence of 'cash rich, time poor' customers has been noted repeatedly in the popular press. Described as higher income but with little free time, they embrace the convenience, time savings and freedom from normal opening hours that internet purchasing provides, compared to traditional retail channels (Isaac 2003, Stark 2000). Samji and Gray (2002,) investigating the nature of heavy internet shoppers, find that such shoppers are usually from higher social classes, with greater incomes, describing them as 'cash-rich, time poor', suggesting that lack of time for high achievers is leading them into online purchase.

The amount of free time people have available to them has found to have a significant impact upon shopping behaviour offline (Cotte et al. 2004, Dabholkar 1996, Beatty and Smith 1987). The description of online shoppers as 'cash rich, time poor' suggests that the time and convenience for online shopping is a major driver of internet adoption. There has been limited study of how time alters general shopping requirements, with none specifically considering online service quality factors or dimensions that may be of differing impact to those with different time available to shop.

Proposition

Customers with different amounts of time available to shop will exhibit different online service quality demands.

4.18 Conclusion

Market segmentation is one of the oldest marketing tools - the clustering of customers into homogeneous groups, that can be targeted by the company, and overcome the problems of trying to serve the disparate demands of all customers in the market as a whole (McDonald and Wilson 2002). Despite the long-standing acceptance of market segmentation within the marketing community, the use of segmentation in alliance with ServQual measurement is very rare. It is an area where researchers have called for urgent new research, to examine how demographic and psychographic factors influence customer service demands, and therefore provide a base for segmentation (Zeithaml 2000, ZPM 2002b). Those few researchers who have investigated the differences in ServQual demands by different (demographic) customer groups have found confused results with few useful patterns (Webster 1989, Gagliano and Hathcote 1994). The application of segmentation tools, when considering the online market, is also very limited - studies to date have focused on demographic characteristics of users versus non-users (Swinyard and Smith 2003, Dunnhumby 2001), rather than specific identification of how different customer groups have different expectations about internet purchasing.

At a more fundamental level than calls for new application of segmentation tools (in ServQual), a great many researchers have questioned the continued applicability and use of existing segmentation tools. As early as the late 1960s, researchers were questioning the value of demographic tools, suggesting they did not usefully describe differences between customers on anything more than the broadest base (Day 1969, Engel et al. 1969, Belk 1975). More recently, several separate streams of research have highlighted increased fragmentation and individuality in the marketplace (Baker 2003, McDonald and Wilson 2002, Brown 1993a, 1994, 2003, 2005), that reduce the already limited usefulness of demographic measures.

Several works have noted the potential for situational rather than demographic bases of market segmentation (Silpakit and Fisk 1985, Woodruff et al. 1985, Engel et al. 1969, Belk 1975). It is suggested that people act according to the purchase situation more than out of any inherent demographic characteristic. For this reason, identification of the situation may be of greater use, than simple demographic identification - for instance, distinguishing between a business purchaser and customer purchaser of an airline ticket is more useful than separating male and female purchasers) (Baker 2003). To date, there has not been a large scale, quantitative investigation of how many different situations can impact on customers' behaviour. The problems of gaining a large enough sample, on a large enough range of items, has made such research problematic. The ease of conducting online research, in terms of gaining a very large sample population, makes conducting such research online preferable. The

failure of research to date to usefully segment online customers provides a very large research gap to be addressed. Within this thesis, this gap is addressed with the use of a new model of online service quality to measure customer demands, and comparison of demands across situations, to determine demographic versus situational influences on purchase behaviour.

The purpose of the past chapter has been, firstly, to review the research that has examined the changing nature of the marketplace, and to question the usefulness of demographic segmentation within this market. Secondly, a broad range of potential issues, that can be classed as purchase situations, were reviewed, and compiled into a list of propositions (that evaluate whether each situation will impact on customer service demands). Some of the issues are directly related to customer behaviour online (for instance, past use of the internet), while some are indirectly or only implicitly linked to online behaviour (for instance, retail preferences). Thus, the second research question can be stated:

What is the impact of purchase situations on customer service quality demands online ?

Within this broad question, from the literature review, a list of specific propositions has been generated to encapsulate each of the potential situational (and demographic) sources of segmentation. These are listed below:

- 1. Product type will impact customer service quality requirements online.*
- 2. Demographics will have an impact on customers' online service quality requirements.*
- 3. Information overload or brand dependence will impact customer service quality requirements online.*
- 4. People buying for business, personal or gift purposes will have different service quality requirements.*
- 5. Familiarity ('techno-readiness') influences online service quality demands.*
- 6. Familiarity (online experience) influences online service quality demands.*
- 7. Familiarity (company experience) influences online service quality demands.*
- 8. Familiarity (of product type purchase) will influence online service quality demands.*
- 9. Online ability (connection speed) influences online service quality demands*
- 10. Customers who prefer shopping online from high street retail names will exhibit different service quality requirements to those who do not.*
- 11. Impulse purchasers and planned purchasers will have different online service quality demands.*
- 12. The level and nature of loyalty (behavioural versus attitudinal) will influence online service quality demands.*
- 13. High and low involvement customers will have different online service quality demands*
- 14. Customers paying different prices will exhibit different online service quality demands.*

15. *Customers exhibiting different levels of each price orientation will exhibit different online service quality demands.*
16. *Customers with different amounts of time available to shop will exhibit different online service quality demands.*
17. *Demographics will have less of an impact on customers online service quality requirements than situational / contextual variables.*

The first three chapters are interlinked in their examination of direct analysis of online retail customer behaviour, the main purpose of this thesis. In Chapter two, the foundation model for analysing online customer behaviour, the original ServQual framework, was introduced, critiqued and modified, based on theoretical and literature recommendations. In Chapter three, the issue of online service quality was introduced, with the analysis of the specification of the adaptations to the original ServQual framework, needed for measuring online consumer behaviour. This chapter has considered the way in which peoples' (measured) online service demands and behaviours will vary, and how customers can be grouped into homogenous clusters for market segmentation and targeting . The failure of demographics to provide a useful segmentation base, in general light of the changing marketplace, necessitated consideration of new approaches to market segmentation. This has produced a set of purchase situations which it is postulated will influence customer behaviour more than the measured demographic characteristics.

The next chapter extends this work into the supplying organisation - considering how marketing and operational areas of the organisation understand customers, and work towards fulfilling their service demands.

Chapter 5. The Organisational Side of Service Quality

5.1 Introduction

Thus far in this thesis, the focus has been on the determination of customer requirements online, and the consideration of situational impacts that may alter this. The fulfilment of these customer requirements is determined by the organisational and operational processes of the supplying organisation. This issue was a significant area of research within the original service quality research (PZB 1984, ZBP 1990), however, it has been largely overlooked in the many replications of SQ conducted.

The functional organisation of business continues to result in two principal customer-facing and fulfilling areas – marketing and operations (Porter, 1985). Functional division based on specialisation of expertise to maximise efficiency is several hundred years old. The works of Smith (1776), Babbage (1832) and Taylor (1911) emphasised the need to reduce job design into specialised parts for workers. The work of Fayol (1916) on administrative theory, and Weber (1947) on bureaucracy, laid the foundations for modern business structure: formal, bureaucratic, with hierarchies of specialised departments. Bureaucracy provides standardisation and specialisation, where: “primary strength lies in its ability to perform standardised activities in a highly efficient manner” (Robbins, 1998, p489). However, the mechanistic nature of bureaucracy has led to criticisms that rules can hinder innovation and change. More importantly, within the functional business, optimisation of specialised unit goals may be at the expense of the optimisation of the whole organisation. Robbins (1998) elaborates: “Specialization creates conflicts. Functional unit goals can override the overall goals of the organisation” (p489).

Within the functionalised business structure, marketing actions have traditionally been left within the marketing function, while operational issues have been the purview of operations. Marketing, traditionally dominant in the corporate structure, has been increasingly challenged by the growing role of the operations function. The changing business environment since the 1970s has seen increasing management awareness and interest in the management of the operations that deliver goods and services. Academics, since the late 1960s, have highlighted

the importance of managing manufacturing, and later operations, as a vital strategic activity for the organisation (Skinner 1969, 1974; Hayes and Wheelwright 1984, Schonberger 1986). Issues such as an increasingly competitive global market, most notably the rise of Japanese competition in the 1970s, increasing political and economic disruptions around the world, shortening product life cycles, consumers demanding greater quality at lower cost, have all increased the corporate position of operations management (Slack 2004, Hill 2005). Despite the rise in interest in operations, and continued importance of marketing, the relationships between these two 'value creators' has remained difficult in practice and under-studied in academia.

There is increasing evidence in the literature that cross-functional activity, rather than those of a single department, are required to realise customer demands, or the enactment of the marketing concept. This chapter will identify what the marketing concept means in practice (market orientation), and the role of cross-functional relationships between marketing and operations in delivering customer value.

5.2 The Organisational Side of SERVQUAL

The consideration of organisational antecedents of service quality was conducted by ZPB (1990) and PZB (1985). Their unification of both organisational and customer-side research within the service quality research programme, provides additional justification for the inclusion of both streams of work within this thesis. The problems of including both issues within a single body of work is clear in reviewing the majority of service quality replications - most only include the 22-item (see Chapter 2).

An aim of PZB (1985) was to determine what differences exist between customer and marketer viewpoints, and the reasons for this disparity. This secondary theme of customer-marketer disconnect, was represented in PZB (1985) and explored in ZPB (1990), however, it is replicated in almost no other service quality research which instead relies on the usage of customer-only measurement. The ideal of identifying the gaps between customers and marketers is a fundamental tenet within the original service quality research that has been overlooked for nearly two decades. However, this ideal is replicated within this thesis (within the marketing-operations company-based research where company understanding of customer requirements/fulfilment is measured).

Through interviewing executives, PZB (1985) found "remarkably consistent patterns" from which they propose "commonalities are encouraging for they suggest that a general model of

service quality can be developed” (p44). From these interviews four ‘gaps’ are identified, where gaps describe “discrepancies... regarding executive perceptions of service quality and the tasks associated with service delivery to consumers” (p44). Specifically:

- Gap 1 – Consumer Expectation – Management Perception Gap / Not Knowing What Customers Expect: executives do not understand what customers expect or what features denote high quality to consumers “a discrepancy between what customers expect and what management perceives that they expect” (ZPB 1990 p68), resulting from insufficient marketing research, inadequate use of research, lack of upward communication, too many managerial layers and a lack of interaction between management and customers.
- Gap 2 – Management Perception – Service Quality Specification Gap / The Wrong Service Quality Standards: executives understand what customers expect but there are constraints preventing this delivery, such as resource and market constraints, lack of perception of feasibility, inadequate task standardisation or “absence of total management commitment to service quality” (PZB 1985 p45).
- Gap 3 – Service Quality Specifications – Service Delivery Gap / The Service Performance Gap: “when employees are unable and/or unwilling to perform the service at the level desired by management” (ZPB 1990 p112) due to issues such as role ambiguity, role conflict, poor employee job fit, poor technology-job fit, inappropriate supervisory system, lack of perceived control by employees and lack of teamwork.
- Gap 4 – Service Delivery – External Communications Gap - When Promises Do Not Match Delivery: promising more than can be delivered, raising initial expectations, which fail to be delivered in practice due to issues such as inadequate horizontal communication among marketing, operations, and other branches, and a general propensity to over-promise

It is proposed that the combination of these four organisational-side gaps lead to a fifth gap which constitutes the discrepancy between expected and perceived service quality by customers or the service quality gap (PZB 1985). Chenet et al. (1999) comment that the issues are “interesting because they present some totally unexpected answers, which find no support in other research” (p136). They go on to speculate that teamwork may be highly significant, employee and technology job-fits and perceived control may be significant, but that the other items are not significant, although ultimately they call for greater empirical research in this area to validate their speculations.

ZPB (1990) produced a managerial book of their ServQual findings “to offer a framework that managers can actually use to understand and improve service quality” (p x). Despite this, almost all studies have ignored this part of ServQual. Due to the clear importance of linking customer behaviour and organisational/operational antecedents of this service, a wider consideration of this issue is provided within this thesis. A review of work linking marketing and operations is required.

5.3 Linking Consumer Behaviour and Organisational Analysis

The importance of considering organisational issues in service quality (and therefore their importance for consideration within a single thesis) has been highlighted by many researchers. Chenet et al. (1999) comment: “A link between profitability in service industries and customer loyalty, employee satisfaction, loyalty and productivity has been established... in ... the service-profit chain” (p135). Within this concept (first described by Heskett et al. 1994), employee satisfaction leads to employee retention and productivity, both of which feed into external service value for the customer. The value of an holistic approach, including service quality analysis and organisational relationships within single body of work, is echoed by Schlesinger and Heskett (1991). They reflect on the short-sightedness of those analysing customer service quality in isolation from wider organisational processes: “Like the blind men attempting to identify an elephant by feeling the animal in different places” (p148). Bitner (1990) also notes: “The management of individual [service] encounters is nested within broader managerial issues of organizational structure, philosophy, and culture that also can influence service delivery and ultimately customer perceptions of service quality” (p69).

When seeking to truly analyse managerial understanding of customers, it is important to consider the viewpoints of the actual customer rather than manager perceptions of customer service, based on their own performance indicators. Almost all the research conducted has limited itself to consideration of manager perceptions of customer service. This is unsurprising given the difficulty of firstly gaining access to managers, and then to customers as well. Indeed, this was a significant barrier to the undertaking of the research described here. However, it is also one of its greatest strengths, and links actual customer views on customer service to manager perceptions and the relationships behind service.

Piercy and Morgan (1997) highlight the inadequate definition and understanding of customer value included within the operational lean approach, suggesting that manufacturing or operations specialists do not have the same depth of relationship or understanding of customers as marketing. This implies that manufacturing managers' perceptions of customer service may be an inadequate benchmark of actual performance.

Deshpande et al. (1993, 1997) conducted 'double dyads' of interviews and clearly highlighted the disparity between company managers' perception of service, and their customers actual experience of service (see Table 5.1 below). They stress the importance of considering both buyer and seller opinions, especially in dealing with new constructs or when dealing with customer orientation. They further highlight the absence of studies in this area. Their findings

describe the difference between customer and marketer perceptions even in the business-to-business context. Greater differences are anticipated in the consumer marketplace, which has not been investigated previously in this manner.

Table 5.1 Customer Orientation Measurements
Source: Deshpande et al. 1997 (p14)

	Measured at Customer	Measured at Marketer
England	29.7	33.1
France	29.9	32.1
Japan	32.1	32.5
U.S.	32.1	34.8
Germany	33.5	36.9

*aggregated score of nine items customer orientation items, measured on 5-point likert scales, with higher scores indicating higher customer orientation.

This value of including external customer data, rather than just asking managers to describe performance based on a limited set of measures, was highlighted by Slater and Narver (1994) in identifying limits in their market orientation research: "All our performance measures are subjective. Though accounting treatments vary from company to company and substantial industry effects on performance complicate the use of objective measures, it is important to understand the effect of market orientation on objective measures of performance. Care must be taken to understand how companies define performance measures and to control for industry effects".

Brown and Swartz (1989) conduct rare empirical research considering both customer and company expectations and perceptions about service delivery, focusing on patient-physician service encounters. They comment on service research "none has taken a dyadic view of the evaluation of service quality and satisfaction – that is, from the perspectives of both the client and the provider.... Such an approach makes possible the identification and analysis of perceptual gaps between the parties" (p92). They identify a series of potential customer-company perception gaps: between client expectations and experiences; between company perceptions of client expectations versus reality; and, company perceptions of client experiences versus reality. They go on to relate these gaps to evaluation/satisfaction – where service is designed on incorrect understanding of customer expectation/experience, dissatisfaction will result: "Inconsistencies in expectations and experiences can and do have an adverse effect on the evaluation of service performance" (p98). Using 65 expectation and performance items, 1096 patient responses and 12 physician responses gap scores for each item, item correlations to satisfaction highlighted that: the greater the client expectation-experience gap, the greater the negative correlation to satisfaction. Also, where patient experiences exceed physician perception of the experiences gap, then the greater the

correlation to satisfaction . Where patient experiences fall below what physicians perceive has happened, then there is a negative relationship to satisfaction. When considering patient expectations versus physician perception of customer expectations, only weak correlations were found and only two in correct direction. However, Brown and Swartz (1989) attribute the weakness of the expectations standard as responsible: “The reliability of the expectations standard is suspect. Therefore, the relationship hypothesised may not have been truly tested” (p96).

Peiro et al. (2005) conducted a service quality analysis in multiple hotels and restaurants finding that employees’ perceptions of the service quality being offered was significantly different on many items, with both overestimation and underestimation present.

Brown and Swartz (1989) conclude “Our research shows that gap analysis is a straightforward and appropriate way to identify inconsistencies between provider and client perceptions of service performance. Addressing these gaps seems to be a logical basis for formulating strategies and tactics to ensure consistent expectations and experiences” (p97), and suggest “marketers can gain information by looking beyond the traditional satisfaction/dissatisfaction paradigm when assessing their service offerings. Though client assessments are important, the professional’s view, when combined with the client’s perspective, can provide additional insight into areas where change is needed” (p96).

5.4 Considering Marketing and Operations

Noted as the two value-creating areas of the organisation (Porter 1985), marketing and operations constitute the principal functional activities that deliver products and services to the customer. While the need for the management of both front- and back-ends has been highlighted, in e-commerce there has been no empirical investigation into the interactions between these two areas and how this relates to customer fulfilment. To conceptualise fully the antecedents of this relationships, and how the relationship itself impacts on organisational performance, an extensive literature review has been conducted.

Despite the continuing dominance of functional specialisation, many early commentators noted the importance of linking cross-functional marketing activity. For instance, Coutant (1936) highlights “marketing research sometimes reaches across the boundary into production, to suggest changes in product process that will enhance salability” (p28), and further, “Everyone recognises that marketing is at least half of the business structure, the other half being production” (p28). Keith (1960) describing his company’s marketing orientation:

“Marketing permeates the entire organisation... New product ideas are conceived after careful study of [customer] wants and needs, her likes and dislikes. Then marketing takes the idea and marshals all the forces of the corporation to translate the idea into a product and the product into sales” (p37).

Ries and Trout (1998) note “In the aftermath of World War II, the leading companies became customer orientated. The marketing expert was in charge and the prime minister was marketing research” (p4). Many early authors highlight this view of marketing as dominant in the corporation. Keith (1960) added a fourth dimension to the accepted production to sales to marketing list of company market orientations. He proposed beyond marketing orientation lies ‘marketing control’, which is vital for competitive success, where “more than any other function, marketing must be tied to top management” (p38). He believed that marketing should control short and long term policy, inventory, technology and capital finance. Keith (1960) also notes “marketing will become the basic motivating force for the entire corporation. Soon it will be true that every activity of the corporation – from finance to sales to production – is aimed at satisfying the needs and desires of the customer” (p38). Felton (1959) describes marketing coordinated across functions as a ‘corporate state of mind’, leading to ‘total marketing’ and ‘integrated marketing’ (p55). Similarly, Keener (1960) defines “Total marketing” or “The Marketing Concept”, emphasising: “Everything that the business does should be pointed to the market. It means that every business function must be directed toward and be in tune with the market. Research and development, production, finance and control, personnel, all and more, must at all times watch what the market does” (p6).

These early authors, beyond proposing the importance of marketing, sought to emphasise the boundary spanning or company wide responsibilities of marketing. Felton (1959) proposes the marketing concept as a ‘state of mind’ (p55). It is cultural and cross functional, with ‘integration and coordination’ (p56), and marketing coordination of production, personnel and finance. Felton (1959) highlights many important early organisation-wide issues for marketing – the need for ‘complete integration of teamwork’, ‘clear cut channels of communication’, a ‘uniform control system’ that ‘should afford means of determining goals and limitations’, and the role of culture and leadership in setting culture – ‘since the proper corporate state of mind is a fundamental need in understanding and making integrated marketing work, it follows that the chief executive officer and board of directors come up for review first’ (p59). Felton (1959) even highlights the importance of operational expertise – defining ‘marketing myopia’ (p56) as overly focusing on customers at expense of things like distribution. Keener (1960) refers to ‘marketing logistics’ as part of using marketing intelligence to determine production

and distribution, where marketing intelligence should guide production facilities, size of production units, location, product development, distribution, logistics, and drive down costs

Kotler (1977) highlights the importance of cross functional collaboration: “marketing management must be effective in working with other departments earning their respect and cooperation” (p72). Kotler (1972) defines marketing effectiveness as including customer philosophy, integrated marketing organisation, having adequate marketing information, strategic orientation and operational efficiency.

Ruekert and Walker (1987) emphasise the critical role of marketing in bridging the gap between the organisation and the customer, and the cross functional activities this entails: “A day in the life of most marketing managers consists of interactions with customers, other marketing employees, and personnel in other areas of the organization. Marketing personnel often play a coordinating role, linking demands from outside the organisation with the functional departments inside the firm that are capable of satisfying those demands. Unfortunately our understanding of how marketing personnel interact with people in other functional areas in performing marketing tasks is limited” (p1).

Chopra et al. (2004) identify marketing as the information gatekeeper between operations and the end customer. They call for research to develop “more comprehensive models with greater fidelity than the current state of the art” (p13), as well as calling for greater links between operations research and other organisational areas, such as behavioural models of performance. Berry et al. (1991a) comment: “Operational linkages between marketing and operations are clearly a vital interface in companies... the operational linkages between marketing and operations needs to continue to be an important area for further research” (p296/7).

Hausman et al. (2002) highlight how the resource-based view of the firm supports the importance of marketing-manufacturing relations “where the task of every organisation is to create truly distinctive, inimitable competencies due to combinative firm resources” (p242). They further highlight specific reasons for the increased importance of marketing/manufacturing relationships: the inherent complexity and interdependencies in marketing/manufacturing resource planning, acquisition and deployment; the need to build complementary competitive capabilities based on matching manufacturing priorities to market requirements; the rise of cross-functional programmes within world class organisations, such as just-in-time, total quality management, quality function deployment and computer-mediated

design. They also highlight how as environmental turbulence and complexity increases there is greater need for cross-functional coordination due to increased interdependencies.

Fitzsimmons et al. (1991) highlight the benefits for marketing, manufacturing and design of collaboration in new product design, elaborating that “a company must compete on the basis of the product it sells” (p414). This requires marketing and manufacturing to co-operate in the design and production development process, noting the use of cross-functional teams at Taurus, which allowed marketing to exploit specification design features in early advertising (Fitzsimmons et al 1991). On a similar theme, considering the multiple areas that customer fulfilment requires, Davenport (1993) comments: “Processes that involve direct contact with customers traditionally have fallen into the functional areas of marketing, sales and service. Today, these processes cut across many functional areas... Processes that ... face the customer depend heavily on other back room processes, including manufacturing, logistical and financial processes, the customer perspective, either internal or external, should pervade all processes” (p243). Considering the multiple aspects of organisations that fulfilment requires, Deshpande (1999) comments: “business problems know no functional parent. Thus it behoves marketers to complement their functional perspective with those from other functions” (p166/7).

Min and Mentzer (2000) comment: “customer satisfaction, the ultimate goal of a market orientation and the evaluation of the customer value created by a firm is affected by many factors that lie either inside or outside the scope of the marketing department. For example, delivery reliability, invoice accuracy, invoice clarity and personnel are major factors that determine customer satisfaction... The marketing concept is concerned with company wide efforts” (p769/770).

Christopher (1992) adds: “The process of satisfying customer demand begins with inbound supply and continues through manufacturing or assembly operations and onwards by way of distribution to the customer. Logically the way to manage this process is as a complete system, not by fragmenting it into watertight sections” (p220).

Ellinger (2000) highlights the increased importance of cross-functional collaboration between marketing and logistics/supply chain areas, as customer demands continually increase and in fast-moving markets where firm differentiation is solely based on customer service (as is the case in many internet product companies). He comments: “Success in today’s competitive business environment is largely dependent on the degree to which firms are able to integrate

across traditional functional boundaries to provide better customer service” (p85). Ellinger (2000) further highlights how cross-functional integration affects cycle time reduction, perceptions of customer value and customer service, distribution performance, and response to customer requirements, concluding: “Currently little is known about the internal behaviours that may positively affect collaborative marketing/logistics integration” (p86).

5.5 The Hostile Relationship Between Functions

One of the first authors to explicitly examine the relationship of marketing and manufacturing was Shapiro (1977) who posed the question “Can marketing and manufacturing co-exist?”. He noted that in practice the relationship was typified by conflict and antagonism between the two areas. He describes, for instance, the sentiment of a manufacturing manager: “The marketing people have no understanding of costs, profits, plants or operations. They are just dumb peddlers” (p104).

Shapiro (1977) identifies eight problem areas of conflicting priorities that typically lead to conflict between marketing and manufacturing (also shown in Table 5.2 below). He identifies conflict based on: long term capacity shortfalls – based on the problem of marketing accurately predicting sales in advance, and thus much operations capacity is required, often with marketing under/overstating and manufacturing second guessing; short term production scheduling – operational attempts to maximise total output based on operational constraints, competing with marketing’s desire to serve customers; delivery and physical distribution – marketing’s desire to keep items in stock for despatch competing with manufacturing desire for inventory reduction; quality assurance – marketing’s desire for perfect quality versus manufacturing constraints of cost and increased complexity; depth of product line – marketing’s desire for wide product lines competing with manufacturing ability (such as competence and changeover time); cost control – marketing’s desire for competitive prices and perfect quality/instanct despatch within manufacturing; new product introduction – marketing’s desire for new products or modifications competing with manufacturing’s problem of retooling and reskilling; and, adjunct services such as installation/repair – disagreements over cost responsibility in the final stage of manufacture or customer service. Shapiro (1977) identifies three basic causes of conflict – incongruent evaluation and reward systems, inherent complexity (requiring information from beyond functional boundaries) and cultural differences, complicating the relationship. Solutions are focused on communication and evaluation alignment. In addition to these basic causes of conflict, Shapiro identifies further complicating factors: additional interfaces (when research and development, engineering and finance become involved in the relationship); wide product lines; companies

under pressure due to rapid growth; environmental complexity; high levels of technological change, which can lead to products or processes becoming obsolete and a burden of change; automation of processes which makes the marketing/manufacturing interface 'less fluid'; and, company size, with large companies involving more people finding it difficult to manage the marketing manufacturing interface.

Table 5.2. Marketing Operations Relationships: Conflicts and Synergy.
Source: Adapted from: Shapiro, B. (1977)

Problem Area	Typical Marketing Comment	Typical Manufacturing Comment
1. Capacity planning and long range sales forecasting	"Why don't we have enough capacity?"	"Why didn't we have accurate sales forecasts?"
2. Production scheduling and short range sales forecasting	"We need faster response. Our lead times are ridiculous"	"We need realistic customer commitments and sales forecast that don't change like wind direction"
3. Delivery and physical distribution	"Why don't we ever have the right merchandise in inventory?"	"We can't keep everything in inventory"
4. Quality Assurance	"Why can't we have reasonable quality at reasonable cost?"	"Why must we always offer options that are too hard to manufacture and that offer little customer utility?"
5. Breadth of Product Line	"Our customers demand variety"	"The product line is too broad - all we get are short, uneconomical product runs"
6. Cost Control	"Our costs are so high that we are not competitive in the marketplace"	"We can't provide fast delivery, broad variety, rapid response to change, and high quality at low cost"
7. New Product Introduction	"New products are our life blood"	"Unnecessary design changes are prohibitively expensive"
8. Adjunct service such as spare parts inventory support, installation and repair.	"Field service costs are too high"	"Products are being used in ways for which they weren't designed"

Berry et al. (1995), revisiting marketing and manufacturing relationships twenty years later, found little evidence for a development of co-existence: "The gap between manufacturing and marketing is legendary. Traditional differences separate these key functional areas. Some argue that the cause is their different cultures, value systems and traditions. Others see it as a more fundamental division based, at least in part, on status and level of corporate influence.

Whatever the origins, companies can no longer live with such preferences or functional whims” (p4).

Hausman et al. (2002) characterise the typical relationships between marketing and manufacturing as “uncomfortable and frequently adversarial” (p243-4). They identify reasons as the continuing perception that manufacturing is less important in the organisation, with less involvement in strategy formation, increased stress on manufacturing because product complexity increases as marketing purses differentiation. They highlight a key absence of research on: “empirical assessments of important behavioural dimensions found in the management literature such as perceived importance of functional strategy, the general ability of two or more groups to work together and functional morale” (p244).

5.6 Cross-Functional Marketing

The past decade has seen a swing towards cross-functional or process-based themes in the literature, with some even calling for the end of formal marketing departments (Webster 1998). More recently some have questioned these approaches, highlighting the continued importance of marketing activity (Dennison and McDonald 1995, McDonald 2003).

Webster (1992) traces several evolutions to the approach of marketing, describing how in the early twentieth century market was “a set of social and economic processes rather than as a set of managerial activities and responsibilities” (p2). In the 1950s and 1960s there was a shifting focus to marketing as a business activity with a managerial activity, at a time when “managerial authors defined marketing management as a decision making or problem solving process and relied on analytical frameworks from economics, psychology, sociology and statistics... . marketing research gained prominence in manage practice a vehicle for aligning the firm’s productive capabilities with the need of the marketplace” (Webster 1992, p2). This led to the marketing concept and the view “that marketing was *the* principal function of the firm” (Webster 1992, p2). The 1950s, 1960s saw “the standard micro-economic profit maximisation paradigm of marketing” well seated and well suited to the “large hierarchical, integrated corporate structures [that] were the dominant organization” (p3). During the 1970s, corporate centralisation saw marketing concentration and growth of specialised expertise. Webster (1992) identifies a shift in the late 1970s and 1980s, as decentralisation, de-layering and downsizing lead to increased flexibility in light of global competition, changing technology and customer demands, with increasing focus on long term relationships with network partners. Webster (1998) continues: “Tight hierarchical, functional, divisional forms of organisation are giving way to more flexible, dynamic, loose forms” (p39). Denison and McDonald (1995)

echo "leading companies appear to be moving away from a formal, top down, hierarchical structure... traditional job titles and responsibilities are being replaced" (p61)

Berating current marketing obsession with tactical implementation of the "4 P's", Deshpande (1999) identifies "4 C's" for the future of marketing that echo the need to cross boundaries and engage with other areas. The "4C's" are: cross disciplinary focus (working with and bringing in knowledge from other areas); cross-cultural focus (with a greater interest in generalising US/Western marketing concepts to the rest of the world); cross-functional focus (concerned with cross-functional processes); and, customer-centric focus (continuing the view of marketing as the centre of the business). Homburg et al. (2000) review the changes in marketing organisation. They find three key themes: declining functional boundaries and firms increasingly adopting cross-functional teams; an increasing importance of relationships and alliances with external partners; and, thirdly the importance of intangible organizational factors such as market organisation, learning and market sensing. Deshpande (2002) notes "Marketing or some aspect of it has to be everybody's responsibility" (p229), echoing Drucker's (1954) viewpoint that marketing is not a function or department, but the whole business seen from the outside in or Jack Welch's statement "Marketing is too important to be left to marketing people" (cited in Deshpande 2002). Day (2003), commenting on the role of marketing in the modern corporation, suggested that new technologies and innovative organisational designs were promoting cross-functional teams, with a resultant shift in power away from functions to teams: "A related consequence is that traditional marketing tasks are being dispersed throughout the enterprise".

Greyser (1998) suggests that in the customer focused organisation of the 1990s there was an "upgrading of orientation and downsizing of formal function", and that while "the marketing function ('doing marketing') belongs to the marketing department, becoming and being marketing minded is everybody's job" (p14), Webster (1992) observes that "the marketing function... in some cases, has disappeared altogether as a distinct management function at the corporate level" and that where organisational boundaries blur (between supplier and customer), so too "traditional functional boundaries within the firm become less distinct" (p10). Webster (1992) comments: "Marketing can no longer be the sole responsibility of a few specialists... everyone in the firm must be charged with responsibility for understanding customers and contributing to developing and delivering value for them" (p14). Lehmann (1998) however cautions "if responsibility becomes too divided it may not be exercised at all and the marketing credo will become like many mission statements, words often mouthed but rarely implemented" (p134). Greyser (1998) highlights how the growth of customer focus has

meant “non-marketing people have had to devote meaningful attention to the process of marketing strategy and planning. In essence, non-marketing executives had to become more marketing orientated” (p13). However, Webster (1998) notes that: “The marketing concept’s dictum that marketing is everyone’s responsibility... has tended to mean, in practice, that marketing is nobody’s responsibility” (p45).

McDonald (2003) takes issue with some who have extended the post-functional view of marketing, such as the Chartered Institute of Marketing, whose president represented “Marketing isn’t a function. It is an attitude of mind”. McDonald (2003) comments “Let us be unequivocal about marketing. Just like finance, HR or IT, it is a *function*: a specific business activity that fulfils a fundamental business purpose”. McDonald (2003) adds that this marketing function is involved with: defining markets, quantifying customer needs, putting together value propositions for customers and communicating this across the organisation, playing a part in delivering and then monitoring value delivery.

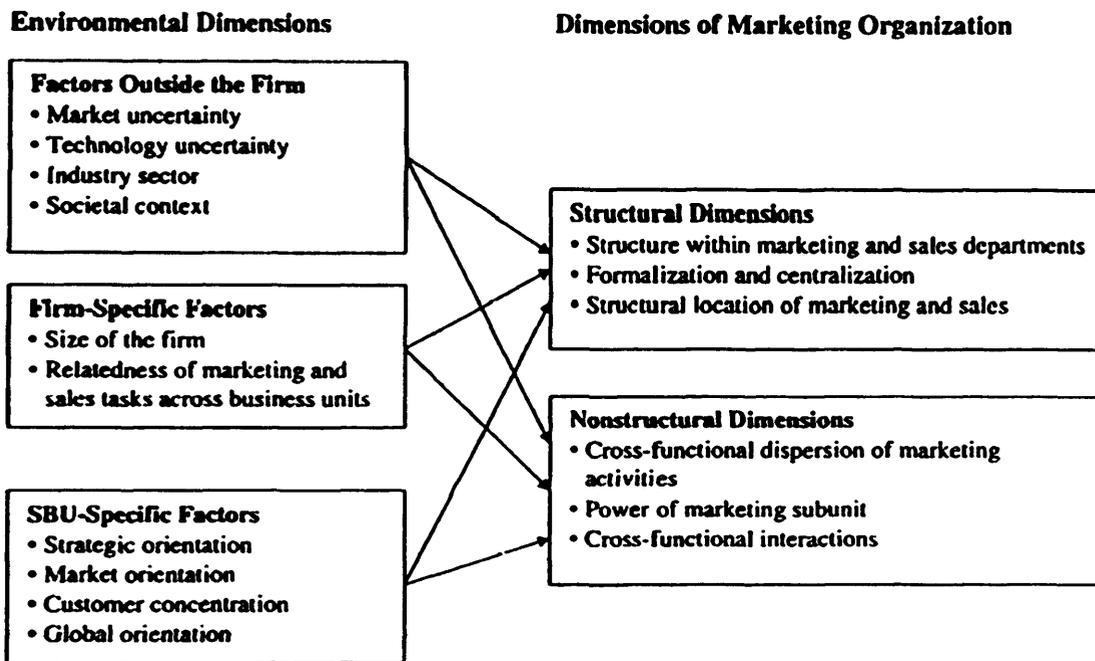
Regardless of the limited examples of cross-functional working, the problems in matrix structures, systems thinking or process orientations continue to result in traditional hierarchical structures. These retain both operations and marketing departments, often with hostile relationships. The shortcomings of the alternatives to bureaucracy, and its long-standing adoption in virtually all large organisations, has meant it continues to be the dominant form of business organisation. The continued presence of physical and psychological distance and difference between marketing departments and other departments as they exist as functionally independent entities raises several questions. These questions concern customer understanding, and specifically whether marketing understands customer needs better than operations while operations better understands company ability to fulfil these needs. Part of this thesis relates the customer study the first section of research, backwards into the organisations delivering that service. This is done to examine the level of cross-functional, co-operation between functions and analyse what influences this may have on customer understanding or service, investigating the moderating forces on the relationships between the marketing and operations functions.

5.7 Marketing’s Impact within the Firm

Workman et al. (1998) conducted an extensive literature review and interviews to develop conceptual propositions about dimensions and determinants of marketing organization. Specific issues under consideration included: the structural location of subunits; cross functional dispersion of marketing activities and relative power of the marketing subunit;

highlighting the importance of environmental contingencies; firm-specific issues; and, structural and non-structural issues that impact on marketing organisation (highlighted in Figure 5.1 below).

Figure 5.1: Conceptual Framework Linking the Environment with Dimensions of Marketing Organisation
 Source: Workman, Homburg and Gruner, 1998. p28)



This work was expanded by Homburg et al. (1999), who conducted extensive empirical research concerning contingencies that alter marketing influence within the organisation. Homburg et al. (1999) comment: “although there is increased interest in marketing’s changing role within the firm, there is little empirical research that measures the influence of marketing or links marketing’s role to situational factors” (p1).

Homburg et al. (1999) sought to identify circumstances that result in the marketing subunit having higher levels of influence, finding marketing’s influence related to: institutional factors and determinants other than individual manager characteristics. There were that : “institutional factors account for variance not explained by the determinants more commonly used in contingency theories in marketing. This implies that organisational dimensions are the result not only of adaptation to environmental conditions, but also of unique historical aspects that become institutionalized in the firm” (p1).

Homburg et al. (1999) examined impacts on the influence of marketing by interview then survey of managers in both marketing and manufacturing subunits. They construct an extensive framework of external and internal contingencies. External contingencies include:

marketing growth (positive non significant relationship between growth and influence); market-related uncertainty in terms of market complexity (not significant); frequency of market related changes (increases influences); unpredictability of major changes (decreases influence); and, technological turbulence (no impact). Internal contingencies included: generic strategy under consideration - low cost (no influence) versus differentiation (increased influences); percentage of direct sales (increased direct sales reduces influence); and, customer concentration (no influence). Institutional determinants were tested as: CEO background (finding marketing background increases marketing influence) and industry-type (with no difference between consumer goods versus industrial goods).

Homburg et al (1999) provide an extensive framework for the determinants of marketing influence, however, (acknowledged) limitations include: the outcomes of influence are not considered (business performance or customer satisfaction), and neither are moderating factors (such as skill of subunits), on influences on power such as political behaviour.

Homburg and Pflesser (2000) highlight contingent or situational determinants of marketing influence, however, this study also had limitations. In ignoring the mitigating effects of presence or absence of a marketing orientation, and cross-functional collaboration). However, it provides us with both issues for consideration in the relationship between marketing and operations (internal and external situational factors) and a gap of existing research to be resolved (the failure of linking these issues to the moderating effects of organisational marketing strategy and internal functional relationships).

The conceptual framework developed by Workman et al. (1988) also includes several factors excluded from the empirical research reported in Homburg et al. (1999). These included: marketing orientation/strategy (either in terms of Kotler's (1977) basic definition or the more detailed constructs of other authors considering marketing orientation (Deshpande et al. 1993, 1997, Kohli and Jaworski 1990, Jaworski and Kohli 1993, Narver and Slater 1990)), which is identified as having a major impact on behaviour, both conceptually and empirically (Roth and Van der Velde 1991). Other forces include the impact of firm size, the relatedness of marketing and non-marketing activities across business units (what Ruekert and Walker 1987 called 'domain similarity'), and organisational considerations such as formalisation, centralisation, cross-functional dispersion of activities and cross-functional interactions.

5.8 Operations Impact within the Firm

In parallel to discussions of marketing's declining influence and dispersal (noted above), there has been increasing recognition in the management literature that operational activities, such as internal operations management, logistics, supply or value chain of activities, that deliver products and services, are vital to corporate strategy and competitive advantage (Christopher and Peck 2003, Slack et al. 2004, Hill 2005).

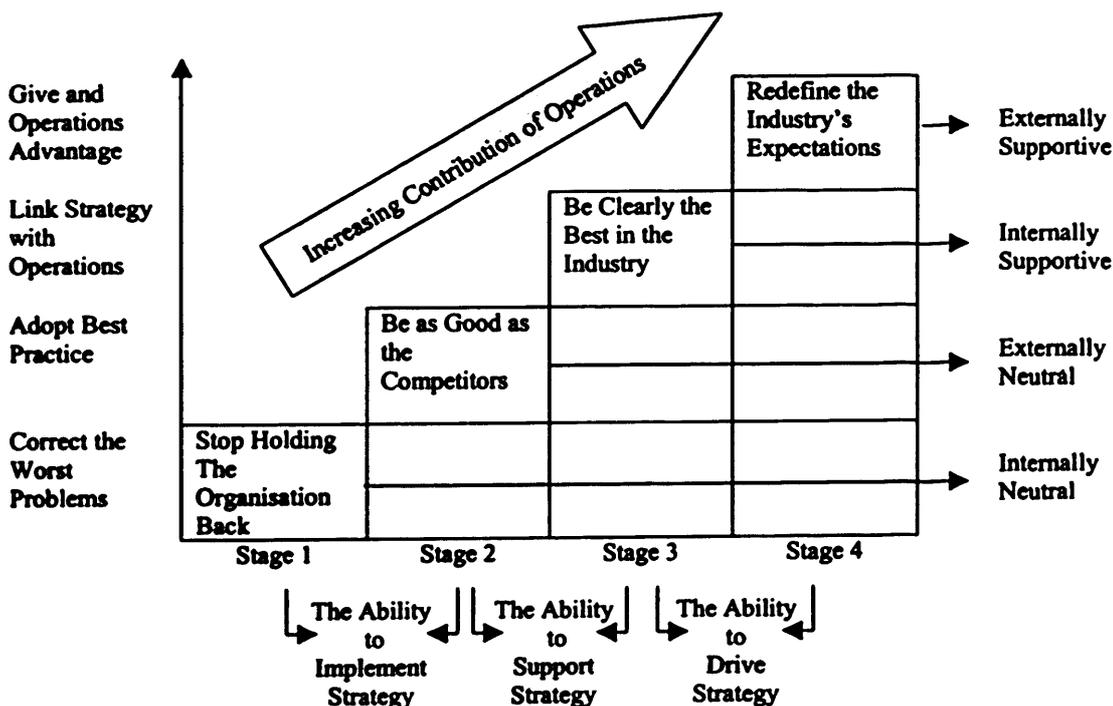
Wickham Skinner is widely acknowledged as the first and "the most influential of the originators of the strategic approach to operations" (Slack et al. 2004, p661). Skinner (1969) proposed that manufacturing had traditionally been dominated by industrial engineers and then computer experts, which had led to a situation where top executives tended to avoid involvement in manufacturing. They delegated authority to manufacturing managers, who were ignorant of corporate strategy. This meant manufacturing effectiveness was viewed solely in terms of high efficiency and low cost, where "Too often top management overlooks manufacturing's potential to strengthen or weaken a company's competitive ability". This process was further entrenched by an education system that focused manufacturing or operations teaching on industrial engineering and quantitative analysis, leading to a perception of operations as technically-orientated.

Skinner (1986) reported that many US companies had undertaken massive programmes to try to revitalise their manufacturing programmes, after suffering large losses in market share in nearly all sectors of the economy. Such programmes were typified by high expenditure and poor results. Skinner (1986) coined the phrase "productivity paradox" - where increasing numbers of industrial engineers were employed, establishing departmental productivity committees and appointing senior level productivity managers, analysing operations, streamlining, installing complex computerised control systems and retooling. Skinner derides these programmes as "doing the same, only better", and that a solely cost reduction focus can damage long term strategy as it locks the company into low cost strategies. These strategies involve high plant investment, limit managerial innovation, hinder innovation and lead to "an unhappy, quota measured culture". Despite large expenditures, these efforts largely failed, leaving companies in worse competitive situations than ever before. Further, "No organisation can cut costs deeply enough to restore competitive vitality... An obsession with cost reduction produces a narrowness of vision and an organisational backlash that works against its underlying purpose". McDonald and Wilson (2002) echo these sentiments some two decades later and comment: "Most boards are spending too much of their valuable time on

internal operational efficiency (doing things right) at the expense of external operational effectiveness (doing the right thing)” (p27)

Wheelwright and Hayes (1985) and Hayes and Wheelwright (1984) suggest one of the first models of ‘World Class Manufacturing’ (WCM), based on their study of Japanese, German and US auto manufacturers (Figure 5.2). They proposed operations should make a strategic level contribution to the organisation, thus allowing (American) manufacturing to regain a competitive edge. To facilitate this, they developed a four stage model, used to map current operational ability by considering organisational aims and aspirations of the organisation. Hayes and Wheelwright (1984) identified operations as moving from an inward looking, reactive position, to making comparisons with competitors in similar markets, and developing an awareness of strategic goals. This allows the development of appropriate operations in these areas to permit the organisation to compete. In the final stage of development, operations takes a long term, proactive approach to strategy setting, and takes a central role in strategy setting. Slack et al. (2004) note that some commentators have questioned operations ability to drive strategy, instead proposing the market should determine strategy and operation’s should react. Research and speculation has highlighted the general feasibility of the model, and that very few firms have passed the stage three level in practice, with most still at stage two of the model (Hum and Leow 1996, Sin-Hoon and Lay-Hong 1996, Flynn et al. 1999).

Figure 5.2 The Role and Contribution of the Operations Function
 Source: Hayes and Wheelwright, 1984.



Various expansions and modifications followed Hayes and Wheelwright (1984). This sought to expand on the notions of world class manufacturing. Schonberger (1986, 1990, 1996) specifically describes 'world class manufacturing' as consisting of employee involvement, just-in-time supply chain, total quality management and total productive maintenance. Alternatively, Schroeder and Flynn (2001) developed a high performance manufacturing (HPM) model, which they proposed as 'Hayes and Wheelwright (1984) plus JIT and information systems' or 'Schonberger (1986) plus manufacturing strategy and information systems'. Harrison and Storey (1996) echo these calls and present their concept of "new wave manufacturing", to embrace concepts such as just-in-time, total quality management and lean production. Womack et al. (1990) and Womack and Jones (1996) describe the new concept of 'lean thinking', as based on the work of the International Motor Vehicle Programme. They describe a new operating philosophy for operational design, based on the Toyota Production System, underlining a strategic role for operations as a value creator.

Despite repeated calls for strategic elevation of manufacturing capabilities for competitive advantage, Hausman et al. (2002) comment: "Although the strategic importance of manufacturing was first articulated by Skinner in the late 1960s, it took more than two decades for empirical research in manufacturing strategy to ramp up" (p243). However, despite long established calls for operational strategic input, the works of Skinner (1969, 1974), and later works by Hayes and Wheelwright (1984), Schonberger (1986) and Schroeder and Flynn (2001), all focus on manufacturing rather than broader operations strategy. They emphasise little role for customer sensing and understanding in 'operations strategy', suggesting a continued inward-looking perspective by operations experts. Hayes and Pisano (1994) contend that adoption of techniques such as JIT, TQM, lean production, reengineering, team-working and benchmarking does not constitute strategy in its own right. They propose: "Simply improving manufacturing... is not a strategy for using manufacturing to achieve competitive advantage. In today's turbulent competitive environment a company more than ever needs a strategy that specifies the kind of competitive advantage that it is seeking in its market and articulates how that strategy is to be achieved" (p77).

5.9 Conflicting Viewpoints of Marketing and Operations

Research on the influence, orientation, effectiveness or general perspective of marketing within the firm have largely focused on one sub-unit (be it marketing or manufacturing). Relatively few focus on more than a single unit or function of analysis (for instance, Ruekert and Walker 1987, Homburg et al. 1999, Workman et al. 1998). Homburg et al. (1999)

comment (when considering functional influence) that previous researchers “have focused on absolute rather than relative levels of influence” (p3). Reukert and Walker (1987) attributed the absence of significant research on marketing relationships with other functional areas in general due to: “a natural preoccupation by both practitioners and academics with issues of vertical control and coordination within each functional area” (p1).

Stock (2002) comments that the historical development of logistics/operations has remained largely independent (of marketing or management), with continuing academic specialisation (in terms of research focus, journal publications and society memberships). Takeuchi and Quelch (1983) made suggestions for customer service improvement based on a better marketing focus with better integration of production and customer service. They call for a focus beyond simple product quality to customer service. This focus on quality rather than service continues to dominate many operational and manufacturing mind-sets and literatures (Piercy and Rich 2004). Jones and Clarke (2002), in considering the use of increased electronic point of sale tracking and electronic commerce, even make the statement “We are entering a new era in managing supply chains – for the first time we can include the customer” (p1). Such a statement suggests in itself that operations experts such as the experts have remained largely disconnected from traditional marketing and intelligence gathering in theory and practice. Skinner (1969) draws parallels between the dominance of the technical and computer expert in 1960s manufacturing and the previous dominance of industrial engineers and efficiency experts such as Taylor. This leads, he claims, to an efficiency-centred orientation that hindered US manufacturing, and prevented it coping with the pressures of new markets, technologies and shortening product life cycles.

Conversely, marketing has been accused of having little appreciation of the facilities required to realise objectives (Shapiro 1977). Bonoma (1985) highlights that marketing strategies are good, but that strategy implementation, is often less adept. He comments: “marketing for a number of years has been long on advice about what to do in a given competitive or market situation and short on useful recommendations for how to do it within company, competitor or customer constraints” (p200).

Indeed, Hulbert et al. (2003) highlights the different areas of expertise of marketing and manufacturing or operations functions, suggesting current shortcomings, and the need to move beyond them presents: “[a] remarkable opportunity to integrate marketing issues and marketing processes into the new supply chain designs being developed” (p165).

A review of literature revealed an absence of any academic work on the relationships between marketing (as a function) and operations (as a function). There was, however, found to be significant streams of relevant research: (i) explicitly on the functional relationship between marketing and manufacturing; (ii) on marketing orientation or effectiveness (which considers the relationship between marketing and manufacturing); and, (iii) on the relationship between marketing and sales as a function (although much of this overlaps significantly with the measures and literatures on marketing-manufacturing and marketing effectiveness).

These works are all grounded in the organisational literature reviewed earlier in this chapter, as the literature exists in the context of functional/scientific management. It examines the relationships between functions in terms of the behavioural/human relations. Ruekert and Walker (1987) took the view of interactions between marketing and other functions in the form of an open social system. This thesis echoes these sentiments, and consequently the grounding for this: "The dominant meta-theoretical perspective for explaining behaviour within social systems can be classified as systems-structural perspective. This perspective, which is widespread within both the organisation theory and marketing literature, holds that a social system can be examined by exploring the interrelationships among its environment, its organisational structure and processes and outcomes. The system-structural view holds that there are contingent relationships among these three structural dimensions" (p2).

The failure of operations-based literature on relationships with other functions presents a problem. This can be of absence addressed by the transference of findings from the manufacturing sector to the operations context within this review and research application. Despite the differing contexts, the replication of manufacturing-based measures and research in non-manufacturing organisations has established precedent – Roth and Van der Velde (1991), for example, used manufacturing strategy measures in evaluating service operations strategy in retail banks, and Adam and Swamidass (1989) highlight that one promising avenue for operations is to exploit and transfer concepts from manufacturing strategy.

Specific measures of relationship constructs can be transferred from manufacturing to operations (the grounding for such measures is organisational rather than manufacturing), however, the replicability of findings in different industrial sectors is more contentious. The majority of research on marketing-manufacturing (operations) has been conducted in industrial manufacturing settings. There is therefore, a need for better investigation of both retail and internet retail companies inter-functional relationships. Shapiro (1977), for instance, highlighted how consumer goods companies often have broader products lines and that co-

operation between the two functions is of greater importance than in traditional industry. Slater and Narver (1994) highlighted how different industries' measures of performance complicate comparisons. However, Homburg et al. (1999) found no difference in influences on marketing impact in consumer goods versus industrial goods as both had similar levels of marketing development.

The majority of works reviewed survey managers of a single function, with only a minority considering the views of two functions (for instance, Ellinger 2002, Calantone et al. 2002, Deshpande 1997). While this is considerably easier than trying to gain co-operation of two functional managers in companies (especially as those functions may not collaborate or have high quality relationships), it limits the research to a single side of the equation and presents an incomplete picture of the behavioural actions in play. There is recognition of this viewpoint - O'Leary-Kelly and Flores' (2002) findings highlight the need to consider the viewpoints of both marketing and operational managers, rather than just one specialism: "The results indicate that marketing/sales and manufacturing respondents have very different perceptions regarding the level of integration for decision areas that they traditionally control; this has important implications for both researchers and managers who desire to assess the level of decision integration" (O'Leary-Kelly and Flores 2002 p238).

Deane et al. (1991) highlighted that marketing and manufacturing are interdependent, and both marketing and non-marketing managers or executives should be considered in analysing relationships, or firm strategy, or effectiveness, and that: "any study that purports to predict... success based only on an analysis of manufacturing decisions is suspect" (p329).

5.10 Customer Perception Management

Due to the differing roles and expectations of operations and marketing departments, as outlined above, it is reasonable to assume that they will have different perceptions of what customers are demanding (with marketing theoretically more knowledgeable about this as the customer-facing department), and what customers experience in reality (with operations theoretically more knowledgeable as they are the group who actually deliver this). Related to the understanding of customer needs and operational capability is the issue of expectations management. This concerns the expectations created in customers by marketing and operation's ability to fulfil customer demands. In describing the outputs of fulfilment in the traditional functional organisation, where there is imperfect information and coordination between those activities, linked in the process of customer fulfilment but separated by functional boundaries, Day (1994) comments: "Things can go awry if unrealistic promises are

made to customers, these promises are not kept, blame is passed around and inventories expand as each function seeks to protect itself from the shortcomings of another” (p42).

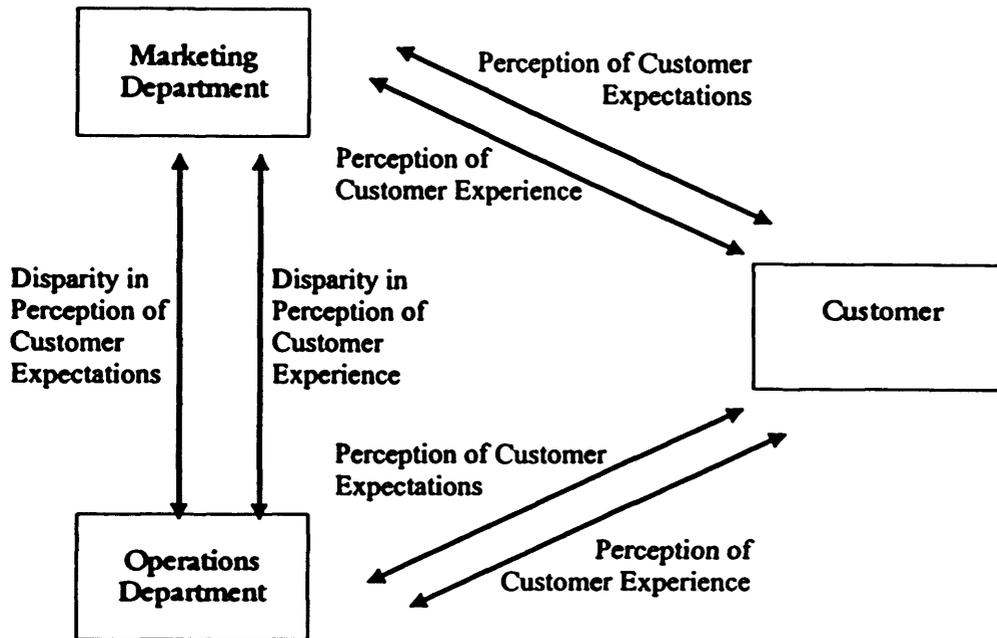
Zeithaml et al. (1990) proposed the fourth service quality gap as a mismatch between what is promised by the organisation and what is ultimately fulfilled. They highlight how company communications shape customer expectations about services and how over-promising can lead to disappointed (and dissatisfied customers). They further observe “appropriate and accurate communication about services is the responsibility of both marketing and operations: marketing must accurately ... reflect what happens in actual service encounters; operations, in turn, must deliver what is promised in communications” (Zeithaml et al. 1990 p115). Kordupleski et al. (1993) claim advertising without sufficient quality to back up the communications will not improve market position, while Groonroos (1984) emphasised the need to align expected service (influenced by advertising or marketing), with what is likely to be delivered: “All traditional marketing efforts have an impact on the expectations of the customer, and an advertising campaign which gives the impression that the technical and/or the functional qualities of the service are better than they really are, will result in an increased expected service” (p40). If this increased expectation cannot be met then customer will be disappointed.

Due to the need for accurate representation of customer data, and accurate representation of data from managers within both operational and marketing areas, sampling of each of these groups has been conducted. This reflects the potential for differences in customer expectations and experiences, represented in Figure 5.3 below. To present a complete picture, both marketing and operations managers were surveyed as part of the research conducted within this thesis.

The question of how accurately customer expectations are understood and fulfilled by the company has been analysed by transferring the service quality factors established through customer research to a managerial survey. Managers of both operations and marketing functions are asked to rate the expectations and delivery of each item. The accuracy of perceptions is proposed to be moderated by the level of cross-functional integration between the two functions. A closer relationship between the two areas will mean both have a better perception of the role of the other function and knowledge of the customer. Key questions emerging from this review regard: whether marketing holds superior knowledge about customer expectations while operations knows more about fulfilment; whether more accurate

expectations setting leads to more satisfied customers; and, how perceptions of expectations setting of the other function is related to the relationship between.

Figure 5.3 Marketing-Operations-Customer Knowledge Gaps.
Source: Developed by the researcher.



5.11 Marketing-Operations Relationships

In reviewing the literature examining marketing-operations relationships, two themes were explored. Firstly, accepting a true theoretical definition of the marketing concept as organisation wide customer focus and delivery, work on realising this concept is investigated, due to the need to consider cross-functional working relationships. Findings on this topic revealed three groups of research on marketing orientation, market orientation and customer orientation, analysed in the next section. The later theme investigated was a more general search and review of literature on the working relationships between marketing and operations, the review of which is also provided. This search highlighted segmented research considering issues in isolation, not holistic working relationships, most frequently considering manufacturing not operations relationships with marketing. The issues revealed across these literatures have been constructed into a new holistic consideration of the relationships between marketing and operations, as they relate to customer fulfilment of service quality requirements online.

5.12 Marketing-Operations Relationships: Marketing Orientation

The late 1980s saw three groups of researchers working independently towards the development of an empirical measure of market(ing) orientation in practice (Deshpande and Farley 1996, 1998). Each group of researchers used slightly different definitions, but all

acknowledge marketing orientation as based on the marketing concept. The three groups of researchers, all based in North America consisted of: Deshpande, Farley and Webster (1993, 1997); Kohli and Jaworski (Kohli and Jaworski 1990, Jaworski and Kohli 1993, Kohli, Jaworski and Kumar 1993); and, Narver and Slater (Narver and Slater 1990, Slater and Narver 1994). In the late 1990s, Deshpande and Farley conducted a meta-analysis of the three marketing orientation scales to test consistency and reduce them into a single shorter measure. The development of the orientation construct by each group and subsequent meta-analysis/reduction will now be considered.

Table 5.3: Marketing Orientation: Constructs and Definitions
Source: Constructed by the researcher.

Source	Marketing Orientation Definition ^{1,2}	Marketing Orientation Construct
Narver/Slater	"the organization culture... that most effectively and efficiently creates the necessary behaviours for the creation of superior value for buyers and, thus, continuous superior performance for the business" (Narver and Slater 1990 p21)	Customer orientation
Narver and Slater (1990), Slater and Narver (1994)		Competitor orientation Interfunctional coordination Long term horizon Profitability
Kohli/Jaworski	"the organizationwide generation of market intelligence pertaining to current and future customer needs, dissemination of the intelligence across departments and organizationwide responsiveness to it"	Intelligence generation (customer focus)
Kohli and Jaworski (1990), Jaworski and Kohli (1993), Kohli, Jaworski and Kumar (1993)		Intelligence dissemination (coordinated design) Responsiveness (and consequence of profitability)
Deshpande, Farley and Webster (1993, 1997)	"the set of beliefs that puts the customer's interest first, while not excluding those of all other stakeholders such as owners, managers and employees in order to develop a long-term profitable enterprise" (p27)	Customer orientation (competitor orientation)
Deshpande Meta-Analysis	"the set of cross functional processes and activities directed at creating and satisfying customers through continuous need assessment" (1996 p14)	Customer related activities
Deshpande and Farley (1996, 1998)		

¹ Customer orientation for Deshpande et al. (1993 and 1997)

² Market orientation for Kohli/Jaworski

5.12.1 Narver and Slater: Marketing Orientation

Narver Slater (1990) highlight the continuing theme in the literature of market orientation as the basis for superior customer delivery: "A business that increases its marketing orientation will improve its market performance. This proclamation has been issued continuously by both marketing academics and managers for more than thirty years... Judged by the attention paid

to it by practitioners and academicians in speeches, textbooks, and scholarly papers, marketing orientation is the very heart of modern marketing management and strategy - yet, to date, no one has developed a measure of it or assessed its influence on business performance” (Narver and Slater, 1990, p20).

Narver and Slater (1990) sought to develop a measure of market orientation and determine the effect of this on business performance. They define market orientation as: “the organization culture... that most effectively and efficiently creates the necessary behaviours for the creation of superior value for buyers and, thus, continuous superior performance for the business” (p21).

To measure this concept, they identify from the literature: three behavioural components (customer orientation, competitor orientation and interfunctional coordination); and, two decision criteria (long term and profitability). Interfunctional coordination is included as the coordination of company resources in creating superior value for customers involves more than the marketing department. They identify coordination as requiring alignment of incentives, creation of interfunctional dependency, and departments being sensitive to the needs of other departments. Market-level factors are included as control variables (growth, concentration, entry barriers, buyer power, seller power and technological change). Their findings indicated market orientation as an important indicator of profitability in both commodity and non-commodity businesses. However, the behavioural antecedents (other than those behavioural constructs of customer, competitor orientation and a limited measure of interfunctional coordination, and management policy determinants of generic strategy and human resource policy) that lead to market orientation or impact upon it are not considered. Environmental factors were included in the study, however, these were as control variables and the relationship between environment and profitability was considered, not environment and orientation.

5.12.2 Deshpande, Farley and Webster: Customer Orientation

Deshpande et al. (1993 and 1997) conducted quadrads (double dyads) of interviews in Japan (1993), and later Japan, England, France, Germany and America (1997), to investigate corporate culture, innovativeness, customer orientation and market performance. They comment: “Like culture, customer orientation has been given little empirical study despite great attention to the concept from marketing scholars” (p27).

The double dyad consisted of two interviews with identified manufacturers who were asked to provide details of (business) customers, in which companies two further interviews were conducted with purchasers. The measure of customer orientation (including competitor items) is equivalent to the marketing orientation measure - "we see customer and market orientations as being synonymous" (p27). Customer orientation was based on a nine-item scale regarding customer and competitor focus, analysis of culture was limited to scales developed to define clan, adhocracy, hierarchy and market. No consideration of interfunctional coordination, relationship, alignment, power and politics, pay and reward was included. Relationships of marketing with other functional units were not considered. The findings did highlight the different views of marketing and customers on the level of customer orientation, while customer orientation was strongly related to business performance, customer perception of customer orientation was more important than marketing's own perceptions. They comment: "The inconsistency between self-reported and customer-reported perceptions of customer orientation is troubling for practice. Marketing managers seem unaware of how their customers really see them" (p33).

Deshpande et al. (1997) replicated their earlier work on Japanese firms, with a five country reapplication to examine in more detail the effects of different factors on organisational performance. In addition to the measures used in the previous study (customer orientation, culture, innovativeness and performance), a measure of organisational climate was developed. This investigates: communication, trust, decision making, atmosphere and empowerment. Differences in customer orientation between countries were observed, but the mitigating effects of national culture or organisational climate were not considered in relation to customer orientation, only in relation to each other across regions.

5.12.3 Kohli and Jaworski: Market Orientation

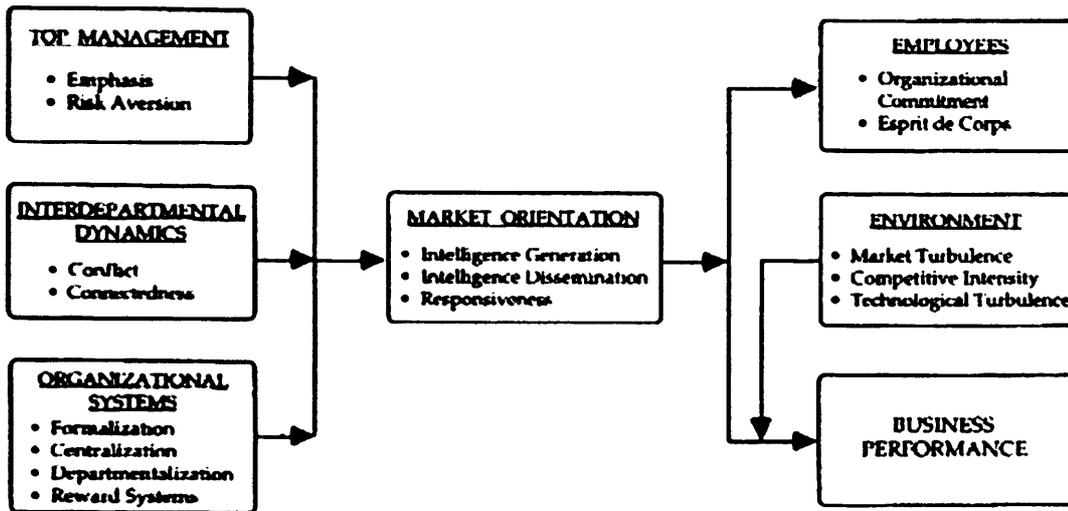
Kohli and Jaworski (1990) developed an extensive construct of market orientation, and antecedents and consequences of market orientation, based on literature and interviews. They use the term market rather than marketing orientation to focus attention on customers (markets), and avoid political issues of focusing on the marketing department. They note: "Though the marketing concept is a cornerstone of the marketing discipline, very little attention has been given to its implementation... Given its widely acknowledged importance, one might expect the concept to have a clear meaning, a rich tradition of theory development, and a related body of empirical findings. On the contrary, a close examination of the literature reveals a lack of clear definition, little careful attention to measurement issues and virtually no empirically based theory" (p1).

Kohli and Jaworski (1990) themselves define market orientation as the implementation of the marketing concept. A market-orientated company as one in which the three pillars of the marketing concept (which they identify as customer focus, coordinated marketing and profitability) are present. These are translated into aspects of a market orientated company as intelligence generation (customer focus); intelligence dissemination (coordinated marketing); and, responsiveness to market intelligence (generating profitability).

They also propose antecedents of market orientation: “organisational factors that enhance or impede the implementation of the business philosophy represented by the marketing concept” (p6), They consider these under three headings: individual (cultural signs and values generated by senior management that set organisational culture and focus, education, upward mobility of executives, willingness to take risks, innovativeness, ability to win peer confidence); inter-group/interdepartmental dynamics (conflict reduces communication and therefore market orientation, interdepartmental connectedness, concern for ideas of other departments); and, organisation-wide/organisational systems (departmentalism, centralisation, formalisation, pay and reward, political behaviour). Linkages among market orientation components are also considered including: esprit de corps (teamwork); job satisfaction; and, employee commitment. Business performance, customer satisfaction and repeat business all increase with marketing orientation. They also consider environmental moderators of the link between market orientation and business performance: market turbulence, competition strength, general economic conditions (increases market orientation-business performance link), and technological turbulence (decreases market orientation-business performance link).

Jaworski and Kohli (1993) revisited market orientation, antecedents and consequences conducting empirical investigation of the constructs. This included an extensive number of items including: market orientation (32 items), top management emphasis and risk aversion (4 and 6 items), interdepartmental conflict and connectedness (7 and 7 items), formalisation (7 items), centralisation (5 items), reward orientation (6), commitment (7), esprit de corps (7), market turbulence (6), competitive intensity (6), technological turbulence (5). These were represented by a model that echoes those concepts first proposed by Kohli and Jaworski (1990) and are shown in Figure 5.4.

Figure 5.4 Antecedents and Outcomes of Market Orientation
Source: Jaworski and Kohli (1993):



Jaworski and Kohli (1993) found from a sample of marketing and non-marketing managers: top management emphasis impacted intelligence generation, dissemination and responsiveness; risk aversion inversely affects responsiveness; interdepartmental conflict inhibits dissemination and responsiveness; connectedness promotes market orientation; a strong relationship between reward emphasising customers all aspects of market orientation; centralisation is inversely related intelligence dissemination; formalisation is not related to market orientation; there is a significant relationship between market orientation and business performance (although no relationship to market share was found, although market share is identified as a not particularly useful indicator of performance); and, finally there was no moderating effect of market turbulence, competitive intensity and technological turbulence on market orientation and performance. Slater and Narver (1994) in evaluating the moderating effect of competitive environment on the market orientation-profitability relationship also found little evidence of any significant impact. They propose that companies dedicated to understanding customers will achieve superior performance regardless of conditions. Kohli et al. (1993) further validated the market orientation scale, reducing it to twenty items and emphasised that application is optimised when responses are from one marketing and one non-marketing person in a company.

5.12.4 Meta-analysis and Reduction

Several works emerged in 1990s and were subsequently verified and moderating/antecedent effects investigated (see Table 5.3 above). Within the last ten years there has been no new validation or replication, either in general retail (as opposed to manufacturing contexts), or in the internet market itself. Kohli and Jaworski (1990) describe “a resurgence of academic as

well as practitioner interest in the marketing concept and interest” (p1), which may have waned of the past fifteen years as a result of increasing focus on internet business models or operational linkages.

The choice of these three groups of researchers for detailed review as key works in the area of marketing orientation/effectiveness is supported by Min and Mentzer (2000), who identify the same three collaborations. Tuominen et al. (2004) also identify and operationalise market orientation from these same three bodies of research.

Deshpande and Farley (1996, 1998) conducted a meta-analysis of the three scales of market/marketing/customer orientation proposed by Kohli et al. (1993), Narver and Slater (1990) and Deshpande et al. (1993). They note “In the late 1980s, more or less without knowledge of each others’ work, three sets of researchers developed measurements of market orientation” (Deshpande and Farley 1996 p5).

The aim of the meta-analysis was to compare scale interchangeability and characteristics, with managers submitting a combined questionnaire, and responses drawn from America and Europe (it was identified as a shortcoming of the original Narver and Slater (1990) and Kohli et al. (1993) development that the United States was the sole testing ground). Strong correlation was found between the three scales. Therefore to reduce the scales from 44 individual items into a shorter more manageable questionnaire with non-redundant/duplicated measures, a factor analysis was conducted. This produced ten items which are proposed by Deshpande and Farley (1996, 1998) as a unified scale of market(ing) orientation that focuses on the cross-functional activities devoted to specifying target market needs.

This ten item scale “inevitably has lost some of the information contained in the original 44 items” (Deshpande and Farley 1996, p13). They identify other limitations: it does not cover non-customer related activities such as competitor intelligence “focusing on competitors part of a strategic planning agenda might have taken many firms’ eyes off their customers” (Deshpande and Farley 1998 p226). The new scale also does not deal with market orientation as culture, but as activities: “market orientation is not a ‘culture’ but rather a set of ‘activities (i.e. a set of behaviours and processes related to continuous assessment and serving of customer needs)” (Deshpande and Farley 1998 p226). Despite the many studies conducted by Deshpande, Farley and Webster, Kohli/Jaworski, and Narver/Slater, these were not in the internet market. Thus, within the internet companies being researched it is worth examining the level and impact of marketing orientation on performance.

It is also worthy of investigation to consider to what extent other literature concurs with Deshpande and Farley (1996, 1998) that market orientation is not culture but activities. This should reflect the numerous works that suggest activity is shaped by culture and that any cross-functional activity will be subject to culture. This includes those explicitly considering culture (Homburg and Pflesser 2000, Kohli and Jaworski 1990, Jaworski and Kohli 1993) and those considering cultural consequences such as conflict, power and politics (Ruekert and Walker 1997, Hausman et al. 2002, Piercy 1985, Shapiro 1977, Malhotra and Sharma 2002, Berry et al. 1995). Key questions emerging from this review concern whether: higher market orientation will be related to higher levels of customer satisfaction; whether marketing and operations departments in the same company will display different levels of market orientation, such that differences will exist between marketing and operations managers understanding of customer needs, and whether differences will exist between marketing and operations managers understanding of company fulfilment of customer needs.

5.13 Conclusion

In Chapters two, three and four, issues in analysing the customer marketplace were considered. These chapters considered respectively: the foundation model of analysis (ServQual), adaptations needed to apply this offline tool in the online context, and methods of segmenting customers within this model.

In Chapter five, the organisational side of this service model is considered. The composition and validation of a new model of online service quality, and evaluation of its implications for market segmentation and targeting is in itself a major task. However, without considering the organisations delivering service quality, such analysis appears incomplete. Within consideration of the organisational issues in service quality, the focus of analysis has been on how co-operation, or failure in co-operation, between the two value-adding functions of the corporation (marketing and operations) relates to delivered service quality.

The review conducted in this chapter starts with the original work on ServQual which included significant organisational considerations (PZB 1985, ZBP 1990), notwithstanding that it is the ServQual customer tool that has been most utilised by subsequent researchers. The need to consider the organisational side of service delivery has been noted by many researchers (for instance, Chenet et al. 1999, Heskett et al. 1994, Schlesinger and Heskett 1991, Bitner 1990). Without considering how the company delivers service, any understanding of

customer service priorities is inherently weaker than a more holistic consideration of service states and service delivery processes.

Initial investigations into the academic literature concerning service delivery suggested two key areas or functions when considering the organisational side of service delivery - the marketing area that interfaces with the customer, and the operations area that actually makes or delivers products and service to the customer (Kotler 1972, 1977, Chopra et al. 2004, Berry et al. 1991a, Hausman et al. 2002, Fitzsimmons et al. 1991, Deshpande 1999, Min and Mentzer 2000, Christopher 1992). Building on a review of this literature, this chapter considers the interdependency in the relationship between the two areas as requiring co-operation and collaboration, so that each area has a common understanding of what customers want, and the company's ability to deliver this. Despite longstanding acknowledgement of such a requirement in the academic literature, the same literature reveals a generally hostile and uncooperative relationship between the two functions (Shapiro 1977, Berry et al. 1995, Hausman et al. 2002). A review of key works has suggested that while the relationship between marketing and manufacturing or marketing and service quality have been considered before, in isolation, there is a clear lack of work that has identified market-defined measures of customer requirements, and then traced these back to the organisation in question.

This chapter has therefore framed the issue of delivery of online retail customer requirements in terms of how marketing and operational areas of the corporation exist as interdependent units, that serve this service delivery. This chapter therefore serves as the business context for the customer service analysis that results from the previous chapters. In analysing this business context, literature has suggested that key issues include: the orientation of each functional unit (specifically, whether each unit is 'market orientated'); the quality of the relationship and cross-functional working across the two functions; and, how this comes together to align (or not) the customer understanding that each unit holds. Thus, the third and final research question concerns:

What differences exist in the marketing versus operations views and orientation towards customer priorities?

The three research questions (and propositions) developed provide the basis for investigation into the holistic nature of online service quality. Important considerations include: the determination of what this actually is; what potential sources of variation (and therefore segmentation) may be applicable in the contemporary online marketplace; and, finally, the

context of organisational delivery of this service. Having concluded an extensive literature review, the gaps in knowledge regards each of these issues has been highlighted. The direction of investigation to resolve these gaps will now be addressed before the research findings are presented.

Chapter 6. Research Methods

6.1 Introduction

Many definitions of what constitutes research exist. Elliot (2002) comments: "The human desire to solve problems and answer questions is the root of research". In a more academic context, research can be defined as: "Systematic inquiry directed toward the creation of knowledge" (Groat and Wang, p7) or "regardless of discipline, research is usually a systematic and objective search for reliable information" (Kroelinger, 2002). In a specific marketing sense, the American Marketing Association (1960) defines marketing research as: "The systematic gathering, reducing and analysing of data about problems relating to the marketing of goods and services". Boyd et al. (1977) state that: "marketing research applies to any phase of marketing" (p4). They go on to highlight how in complex, modern organisations, where managers and decisions makers are far removed from customers: "Increasingly the final link in the communication channel through which consumers communicate with the company is marketing research... management is turning more and more to rigorous marketing information as a way of reducing the uncertainties inherent in its decision making" (p3). The three research questions seeking to reduce uncertainty and inform analysis through building understanding in the online marketplace, specifically concern:

What are customers service quality demands online?

What is the impact of purchase situations on customer service quality demands online?

What differences exist in the marketing versus operations views and orientation towards customer priorities?

In seeking to determine what customers demand from online service, the principal service quality tool, ServQual (PZB 1988, ZBP 1990) has been reviewed as the foundation approach to this analysis. From an analysis of this approach (in Chapter two) several issues emerged: the need for considerable adaptation for the electronic marketplace in terms of specific service criteria and secondly the need to reconsider the issue of the inclusion of expectations in service analysis. Following a detailed review of the literature it was decided that there was value in including both performance and prior customer requirements in a single analysis.

These benefits include: richer diagnostic information, managerial relevance, and the ability to generalise findings beyond the specific purchase situation (PBZ 1993, Buttle 1996). This requires some form of requirements measurement. Due to the problems of the expectations component of ServQual (Teas and Wilson 1988, Tse and Wilton 1988, Boulding et al. 1993, Buttle 1996, Caruana et al. 2000), the ServQual approach has in this thesis been modified to focus on item importance rather than expectations. This mirrors Importance-Performance Analysis (Martilla and James 1977). In developing the ServQual instrument, PBZ (1988) always noted that it formed a basic skeleton, with additions and removals possible, dependent on context. Thus, it is within the scope of ServQual to apply such modification for the internet environment.

This process of adaptation required a detailed review of pre-existing works on online or electronic services quality, conducted within Chapter two. With varied validity and rigour in development of academic and industrial scales, the majority of works on online service quality do not provide a clear or consistent picture of customers' demands in internet shopping (ZPM 2000, Chen and Wells 1999, Busch 1999, Wolfenbarger and Gilly 2002, 2003, Yang and Jun 2002). While PZB (2005) have attempted to generate a new electronic services quality model to replace ServQual online, there is yet to be any investigation of the validity of this model. Many have already criticised both its construction and content, most notably the strange separation of customer service and recovery, that may misdiagnose customer service (Collier and Bienstock 2003, Wolfenbarger and Gilly 2003). A broad review of studies into online service quality, produced three clearly emergent themes: site design, trust and security and information provision. However, while this identified broad themes, a lack of validated and replicated research into online service quality requires further investigation of this issue and leads to the first research question regarding the determination of online customer service quality.

The impacts upon this service quality is the next concern addressed. Specifically, concern is with the issues that may alter the online service requirements of customers. A review of approaches to such segmentation, conducted in Chapter four, highlight that traditional models of segmentation have been based on demographic or psychographic variables. However, researchers as far back as the 1960s have identified severe shortcomings in demographic segmentation in general (Day 1969, Rossi et al. 1996, Bucklin et al. 1985, Dickerson and Gentry 1983, Fennell et al. 2002). In the online marketplace there is increasing consensus that just as offline, demographics provide only rough guides about product-class usage and little information about brand usage or behaviour (Bellman et al. 1999, Karjalutot et al. 2002,

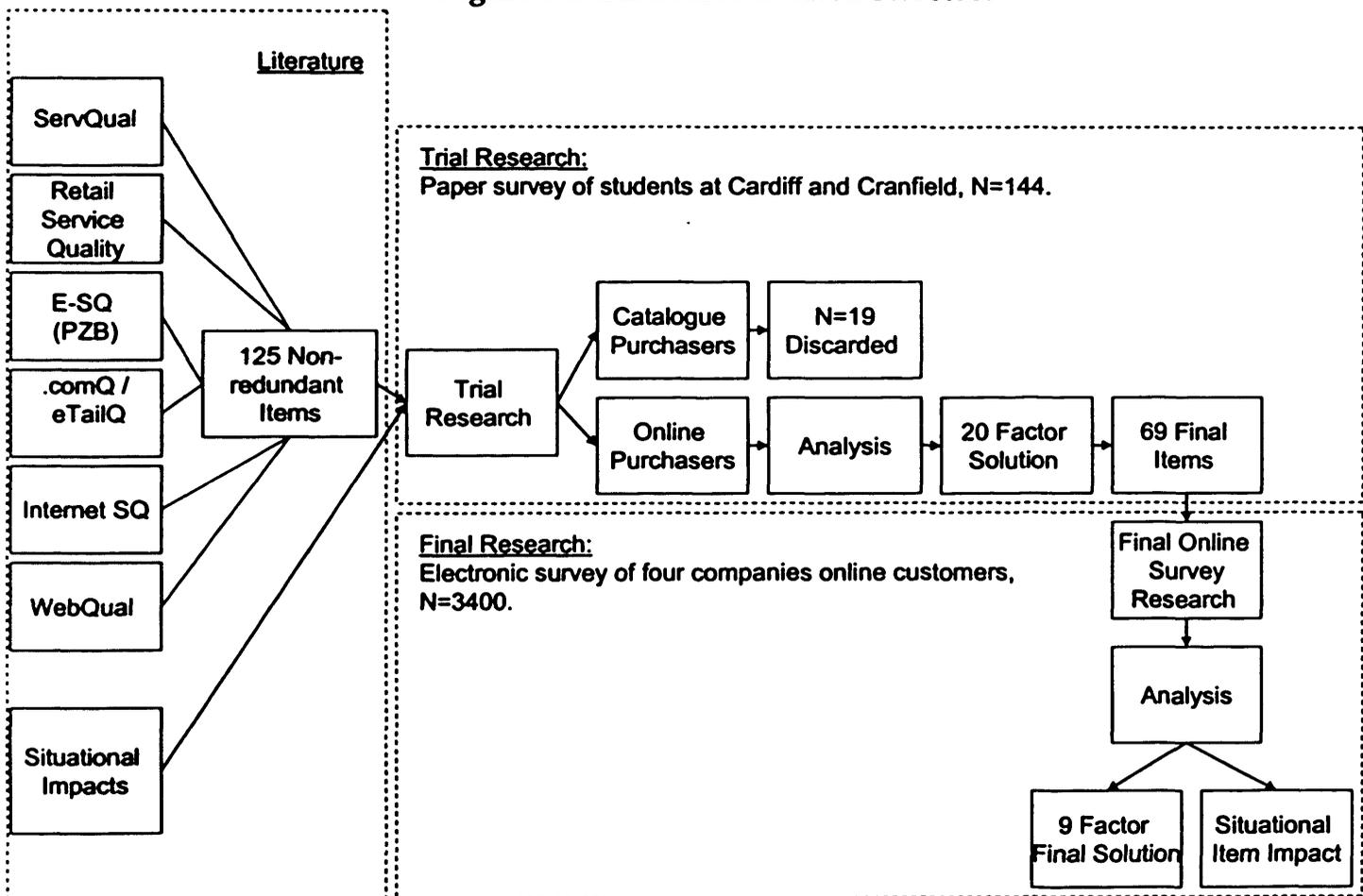
Modahl, 2000, Bellman et al. 1999, Bhatnager and Ghose 2004). Several contemporary researchers have also emphasised the increasing fragmentation of the marketplace and customer behaviour (McDonald and Wilson 2002, Brown 1993a, 1993b, 2001, 2003, 2005; Baker 2003). Several suggest that purchase situations may form a useful basis of market segmentation (Engel et al. 1969, Ward and Robinson 1973, Belk 1975, Silpakit and Fisk 1985, Beal et al. 2002, Gehrt and Pinto 1990, 1993), and note application in both online and other technology related areas (Smith and Sivakumar 2004, Kay 1993). A broad review of the literature revealed a wide range of potential sources of variation in purchase situations, but also highlighted a lack of any holistic consideration bringing together all these different issues either online or in the offline marketplace. Thus, the second research question concerns how different situations, revealed through literature review, may impact on customer requirements.

The third research question concerns the extension of customer service quality research into the organisation providing the service. This extension is based on a desire to present an holistic analysis that considers the organisational processes that deliver service quality, rather than simply analysing customer's requirements in isolation. Such a desire echoes the original work in ServQual (PZB 1984, ZBP 1990). However, almost all replications of ServQual have focused solely on customer analysis. The need for holistic analysis has been acknowledged as vital to truly consider the issue of service quality (Schlesinger and Heskett 1991, Chenet et al. 1999, Bitner 1990, Deshpande et al. 1993, 1997, Brown and Swartz 1989). The focus of analysis here is on the marketing and operations departments in the company, as the two 'value creating' functions (Porter 1985) that deliver service quality. The relationship between these two areas has been highlighted as vital to customer service (Ruekert and Walker 1987, Chopra et al. 2004, Hausman et al. 2002, Fitzsimmons et al. 1991). However, the literature focusing on marketing and operations relationships, as opposed to marketing and manufacturing is extremely limited while none has considered this issue in the online marketplace. Thus, the final research question addressed within this thesis concerns the impact of marketing-operations relationships on online services quality.

Synthesising the literature into a series of three research questions provided the first phase of research. It was needed to adequately frame the identified research questions. The second phase of research concerns primary field research. Literature on online and offline service quality was combined into a new research survey that included situational items and was tested on students (n=144), before application to the customers of four collaborating organisations (n=3400). The managers in the marketing and operations departments of those companies then completed detailed surveys on their working relationships, understanding and delivery of

measured customer service quality. The detailed methods employed to address the research questions listed is described within this chapter. This includes both practical terms and the philosophical rationale behind the approaches employed. The overall research process for the customer research activity is shown in Figure 6.1 below. This highlights the extensive literature review process to generate a broad and in-depth understanding of customer service quality and moderators of this, to construct an initial survey instrument. This leads to the process of refinement and reduction through trial research, and to final research application. The components of this diagram and the philosophical, strategic and operational decisions in the realisation of this structure are the content of this chapter.

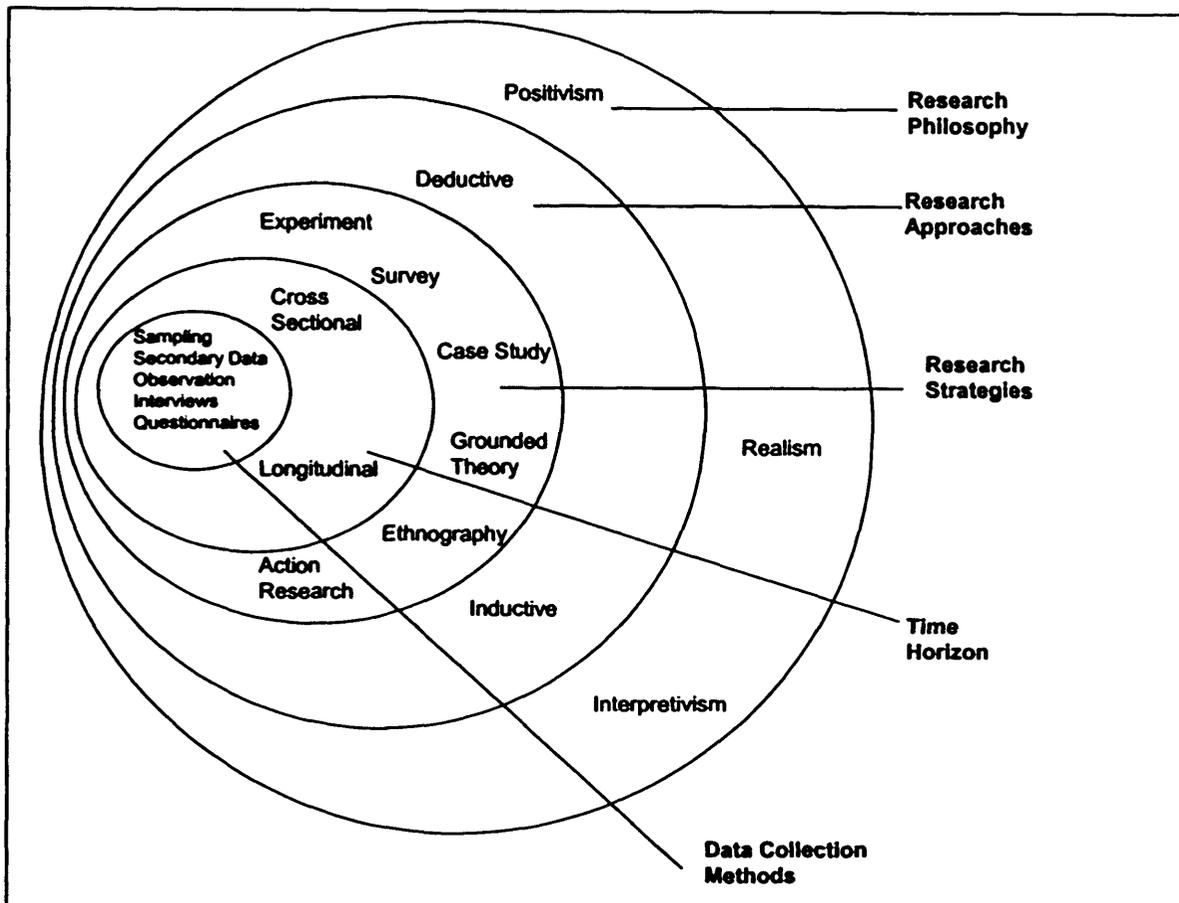
Figure 6.1. Customer Research Structure



6.2 Structuring Research Methodologies

To assist in conceptualising the multiple areas of research processes, Saunders et al. (2003) have constructed a diagrammatic 'research onion' (Figure 6.2). They conceive a multi-stage process: the first step in conducting research is to decide the research philosophy to be adopted; secondly, the subject of the research flows from that philosophy; thirdly, research strategy is chosen; fourthly the time horizon for research is decided; and, finally the data collection methods are selected. This structure has been emulated within this chapter.

Figure 6.2 The Research Process 'Onion'
 Source: Saunders, M., Lewis, P. and Thornhill, A. 2003.



6.3 Philosophical Approaches to Research

It is necessary to review the multiple philosophical base of this enquiry. Kane and O'Reilly-de-Brun (2001) comment: "there is no single way to accumulate knowledge... there are many paths to knowing things" (p14). Wass and Wells (1994) echo this sentiment, explaining further: "The common objective of social science is to explain social behaviour. It is the interpretation of explanation in this context and how explanation can be gained through study of the empirical world, that divides researchers. Opposing positions in this debate are characterised by alternative philosophical assumptions about the nature of human action (ontological assumptions) and about how this nature can be revealed through research (epistemological assumptions)" (p2).

The literature on research methodology identifies three philosophical approaches to research, but differs on the names applied to these approaches. For the purposes of this thesis the titles used by Saunders et al. (2003), and shown in Figure 6.1 will be used: positivism, realism and interpretivism. These paradigms are summarised in Table 6.1 below.

6.3.1 Contrasting Social Science and Marketing Language of Research Philosophy

Despite the existence of these broad philosophical trends, language in the marketing literature (e.g., Muncy and Fisk, 1987; Anderson, 1983; Peter and Olson, 1983; Hunt, 1990) and social science literatures (e.g., Saunders, Lewis and Thornhill, 2003; Wass and Wells, 1994) diverges into different terminology to describe the same approach, highlighted in Table 6.2.

Table 6.1. Contrasting Philosophical Approaches to Research
Source: Constructed by the Researcher

Approach	Summary
Positivism	<ul style="list-style-type: none"> - referred to as the 'test' paradigm (Channon, 1982). - positivism involves working with an observable social reality with the end result being law-like generalisations similar to those produced by natural scientists (Saunders et al. 2003). - observation is independent of subjective interpretation by the researcher (Wass and Wells 1994, Saunders et al. 2003). - often with a highly structured methodology to allow replication, tends to be based on quantitative methods for statistical analysis. (Saunders et al. 2003). - empiricist in nature: "explanation comprises of causal laws inferred from empirical regularities" (Wass and Wells 1994 p2).
Interpretivism	<ul style="list-style-type: none"> - often described as the 'search' paradigm (Channon, 1982) - the opposite extreme of positivism - based on the assumption that social reality does not exist outside the consciousness of the subject and concludes that empirical regularities are meaningless because the external world is subject to individual interpretation (Wass and Wells, 1994). - counters positivistic claims that there are universal laws -while such laws may exist in the physical sciences, in social science and management the complexity and uniqueness (of people and circumstances of each instance) of social science or management situations is lost in law like generalisations (Saunders et al. 2003)
Realism	<ul style="list-style-type: none"> - a third way between the extremes of universalistic positivism at one end of the philosophical spectrum and wholly contingent interpretivism at the other end: "Realism is based on the belief that a reality exists that is independent of human thoughts and beliefs. In ... business and management this can be seen as indicating that there are large scale social forces and processes that affect people... that are external to, or independent of, individuals [that] will therefore affect the way in which these people perceive their world" (Saunders et al. 2003 p85) - acknowledges the positivistic stance on large scale forces but denies the study of people as objects in natural science. - recognises interpretivistic claims of understanding based on socially constructed interpretation, but seeks to understand these within the context of broader social forces, structures or processes (Saunders et al. 2003). - a broad spectrum of realist approaches exist (Hunt, 1990)- Wass and Wells (1994) have sought to clarify the central positions as positive realism and critical (naturalistic) realism.

Table 6.2 Epistemological and Ontological Perspectives and Titles
Source: Columns 1-4 based on Wass and Wells (1994 p8), Column 5 collated by the researcher

Epistemological Perspective	Ontology	Nature of Scientific Knowledge	Research Methods	Epistemological Perspective Also Referred to in Social Sciences as:
Positivism	- 'etic' – real world exists independent of social consciousness	- Value-free - Rational - Impersonal	- Quantitative , systematic, precise - Sample-survey, experiment - Questionnaire, structured interviews, simulation, use of secondary data	Quantitative Objectivist Scientific Experimentalist Traditionalist (Hussey and Hussey 1997) Positivist/Empiricist (used within the marketing literature – e.g. Muncy and Fisk, 1987; Anderson, 1983; Peter and Olson, 1983; Hunt, 1990, 1992, 1994)
Realism	- real world exists independently of subjective consciousness but experience of the real world is through subjective consciousness	- Value-bound - Plausible - Personal	- Methodological pluralism: quantitative and qualitative triangulation - Interactive, participatory, action research - Complete set of research tools, often in a case study	Positive Realism (positivist extreme of realism) Critical Realism (naturalist extreme) Scientific Realism (collective term for realism used by Hunt, 1990, 1992, 1994)
Naturalism	- 'emic' – real world does not exist outside consciousness of the individual, multiple	- Value-bound - Non-rational - Particular	- Qualitative, subjective - Participant observation, unstructured interviews, textual analysis	Interpretivism (Saunders, Lewis and Thornhill 2003) Postpositivist (Kane and O'Reilly-de-Brun 2001) Postmodern Perspective (Quantz 1992) Qualitative, Subjectivist, Humanistic, Phenomenological (Hussey and Hussey 1997) Relativist, Relativistic/Constructionalist (used within the marketing literature – e.g. Muncy and Fisk, 1987; Anderson, 1983; Peter and Olson, 1983; Hunt, 1990, 1992, 1994)

6.3.2 Evaluating Research Philosophies

Several commentators have questioned “the true nature of theory in marketing”. Halbert (1964) argues “marketing... has no recognised theoretical basis such as exists for many other disciplines, notably the physical sciences, and, in some cases the behavioural sciences”. Bagozzi (1983) adds “In recent years we have witnessed considerable degrees of dissatisfaction and controversy with the way research has been done ... This author believes that at least part of the problem is due to a failure to mold together the theoretical domain with the empirical”.

Peter and Olson (1983) in reviewing approaches to research within the marketing field, labelled the two philosophical extremes as positivist/empiricist and relativist/constructionalist. Mendalbaum (1979) notes: “The most basic common denominator [of relativism] appears to be the contention that assertions cannot be judged true or false in themselves but must be so judged with reference to one or more aspects of the total situation in which they have been made” (p403). Muncy and Fisk (1987) further explain: “The central tenet of cognitive relativism is that the ‘truth’ or evaluation of ‘truth’ is relative to the conceptual schema of an individual, a group of individuals or some other situational aspect of the context within which the assertion has been made” (p21). They go on to further elaborate six types of cognitive relativism, shown in Table 6.3.

Table 6.3. Types of Cognitive Relativism
Source: Muncy and Fisk, 1987 p24.

		What is relative:	
	<i>Truth</i>	<i>Criteria Used to Evaluate Truth</i>	
What it is relative to:	<i>An individuals beliefs and attitudes</i>	Subjective Aletheic Relativism	Subjective Epistemic Relativism
	<i>A particular position or purpose</i>	Objective Aletheic Relativism	Objective Epistemic Relativism
	<i>The conceptual scherre in which it was developed</i>	Conceptual Aletheic Relativism	Conceptual Epistemic Relativism

Munch and Fisk (1987) contend: “ most people who accept an empiricist orientation do not accept the extreme position of positivism... in a similar way, one can accept a constructionalist perspective for understanding science and totally reject relativism (in fact, it could be argued that one must accept some form of empiricism to study science from a constructionalist perspective)”.

Hunt (1990) in further reviewing the marketing literature on research philosophy highlighted a 'crisis literature' in the late 1980s in both marketing and social science. This questioned many aspects of social sciences' philosophical foundations. In marketing, the 1980s saw the trend of the adoption of relativist approaches, replacing previous marketing standpoints identifiable as positivistic in nature and searching for a single truth (defined as 'that which is unequivocally the case', a concept the relativists rejected). Hunt (1990) questions whether relativistic approaches are suitable for marketing and whether the abandonment of the concept of truth is inappropriate for social science. Hunt (1990) further highlights the concept of realism, which he proposes the marketing literature had largely ignored, commenting: "the omission is unfortunate, because not only do the majority of philosophers of social science profess to be scientific realists (Causey, 1979, p192), but much marketing research seems implicitly to assume a realist perspective" (p8).

This problem is identified as attributable to the multiple different versions of realism which precludes the formation of a single theoretical approach, Hunt (1990) notes: "there is (as only a sample) the transcendental realism of Bhaskar (1979), the ontic realism of MacKinnon (1979), the methodological realism of Leplin (1986), the evolutionary naturalistic realism of Hooker (1985), the referential realism of Harre (1986) and the constructive realism of Giere (1985). Speaking somewhat loosely we can lump together all the versions of realism and refer to them as 'scientific realism'" (p8).

Despite these many competing approaches, Hunt (1990) maintains that for marketing realism is the most suitable approach for research, due it being intelligent, coherent and critical without being nihilistic (the belief that knowledge and truth are impossible to achieve). Realism is proposed as embracing the superior aspects of both positivism and relativism: "scientific realism makes 'sense' of science and gives due regard to the obvious success of science over the last 400 years... it is open to all techniques and procedures that honestly adopt the pursuit of truth as an objective, while denying the anarchistic 'anything goes' view that all procedures and techniques are either equally viable or equally likely to warrant our trust" (Hunt, 1990 p13).

Hunt (1994) reiterates this point and highlights that scientific realism provides the best philosophical foundation for the qualitative research methods increasingly favoured by marketers. For instance, the work on 'new marketing' by Baker and McDonald (Baker 2003) emphasises the use of qualitative research in fragmented markets as superior to quantitative

methods. Hunt (1994) notes that the traditional view of the relativist as a firm rejecter of positivistic (quantitative methods) can lead to relativist/qualitative research being maligned by positivistic/quantitative researchers, who condemn and deride relativist rejections of positivistic approaches. Hunt (1994) proposes that the adoption of scientific realism based approaches for qualitative research can counter this problem and offer a superior philosophical approach beyond this.

6.3.3 Selected Research Philosophy

This research thesis follows the recommendations Hunt (1990, 1992, 1994) regarding the use of scientific realism as the superior philosophy for management research. This approach offers a middle ground between positivist assumptions about the application of truth in all circumstances and the relativistic (interpretivistic) belief that truth is meaningless beyond the context. As Peter (1992) comments “scientific realism argues that truth is an appropriate goal for marketing science, though absolute truth is unobtainable”.

Indeed, this sentiment is inherently suitable to this body of research. The aim to determine the consumer service quality demands and perceptions through quantitative study has a positivistic stance. However, by seeking to clarify the situational factors that impact on these, and the acknowledgment that applicability beyond specific markets and situations is limited, belies positivistic assumptions and echoes the approaches of scientific realism. Further, the work to be conducted within organisations on marketing understanding, effectiveness and marketing-operations relationships uses both quantitative survey as a first step but follows this with interviews and questioning of executives for greater detail and triangulation purposes. This process is congruent with scientific realism and its research tenets.

A positivistic assumption of universal truth is simply unsuitable for this body of research. Interpretivistic rejections of quantitative methods would make the majority of consumer research intended within this thesis simply impossible. This reflects the need to gather a large number of individual responses for analysis due to the high number of situational factors and service quality factors. This would make qualitative research so time consuming as to be unworkable. The nature of the research collection, with online surveying, is far better suited to questionnaire application than interactive, qualitative research.

In discussing research methodologies in practice, Wass and Wells (1994) comment: “Most research in the management field tends to draw from more than one ontological or epistemological school, in a more or less successful form eclecticism, although normally one

philosophical perspective is dominant” (p8). This sentiment is echoed by Saunders et al. (2003, p85) and Hunt (1990, 1992, 1994). Reichardt and Cook (1979) further consider realism as a superior approach to research due to its rapprochement of positivist and naturalist perspectives, allowing for a more holistic picture of the phenomenon being studied. The methodological pluralism of realism (Wass and Wells, 1994) also allows for triangulation and confirmation of results (Francis, 2002). Having determined a research philosophy, the research approach (deductive or inductive), strategies (experiment, survey, case study, grounded theory, ethnography or action research), time horizon (cross sectional or longitudinal) and data collection methods (sampling, secondary data, observation, interviews or questionnaires) must be determined in turn (Saunders et al. 2003).

6.4 Research Approach

Saunders et al. (2003) classify two research approaches: inductive and deductive. The deductive approach requires the development of an hypothesis which is tested (an approach dominant in the natural sciences, and most identifiable with a positivistic approach). The inductive approach involves the gathering of data and formation of a theory based on the results found. They further identify key characteristics of the deductive approach: (i) a highly structured methodology to facilitate replication; (ii) the researcher is independent of what is being observed (iii) controls exist to allow testing the hypothesis (for example to ensure results are a function of what is being tested, not another variable); and, (iv) the generalisation of results (attained through a sufficiently large sample). In practice, Robson (1993) proposes five sequential stages of a deductive approach: firstly, form a hypothesis from the theory (a testable proposition about the relationship between two or more events or concepts; secondly, express the hypothesis in operational terms (how the variables are to be measured); thirdly, test the hypothesis (through experiment or other empirical inquiry); fourthly, examine the specific outcome of the inquiry (whether it confirms the theory or indicates the need for modification); and, fifthly, if necessary, modify the hypothesis in light of the findings. This modified theory can then be verified through returning to the start of the process.

The deductive approach has been criticised for the assumption of a cause-effect links made between particular variables, without an understanding of the way in which humans interact with the social world. It is also accused of rigid methodology that does not permit the consideration of alternative explanations outside of its constructed research design. Equally, an inductive approach - more concerned with the context of events would - likely see a smaller sample than a deductive approach, and use qualitative data (Easterby-Smith et al. 2002). Saunders et al. (2003) further identify an inductive approach as more useful in determining

why something is happening rather than simply describing what is happening. While acknowledging the need for consideration of 'why', the examination of the first two research questions here needs to be through large scale survey which dictates a deductive approach. The survey approach adopted within the managerial research conducted reflects the same logic.

Table 6.4 Research Strategies
 Source: Compiled by the researcher from Saunders et al. (2003)

Research Strategy	Typical Grounding	Description
Experiment	Natural Sciences	Typically involves: - definition of hypothesis - selection of samples from known populations - allocation of samples to different experimental conditions - introduction of planned changes on one or more variables - measures on a small number of the variables - control of other variables
Survey	Deductive	Tends to deal with 'what' and 'how' Includes: - Questionnaires - Popular in management as allow for collection of large amounts of data from a sizeable population in an economical and standardised way - Structured Observation or Interviews
Case Study		An empirical investigation of a phenomenon within its real life context Deals with 'why' as well as 'what' and 'how' Allows a rich understanding of the context of the research Multiple research tools (questionnaires, interviews, observation)
Grounded Theory	Inductive/ Deductive	Theory is developed from data generated by a series of observations These data lead to the generation of predictions that are then tested in further observation The continual references to the data means that 'theory' is 'grounded' in the data
Ethnography	Inductive Anthropology	Interprets the social world the research subjects inhabit in the way in which they interpret it Can be time consuming and conducted over a long period of time In management usually associated with participant observation
Action Research	Lewin (1946)	Three key themes: 1. The purpose of the research is management of a change 2. Researcher is closely involved with practitioners in the research and is part of changes process taking place 3. The research should have implications beyond the specific project – results should inform other contexts

6.5 Research Strategies and Methods

Saunders et al. (2003) clarify a difference between research strategy (regarding the choice of strategies as experiment, survey, case study, grounded theory, ethnography, action research; and the time horizon), and actual operationalisation (for example, sampling, secondary data, observation, interviews or questionnaires). This suggests that: “[strategy] is concerned with the overall approach you adopt; [tactics] is about the finer detail of data collection and analysis method” (p91). Table 6.4 details the main research strategies and provides a brief description of them.

6.5.1 Data Collection Methods

Data collection methods can be categorised in many ways. Primary methods of research include observation, interview (both qualitative) and the questionnaire (quantitative) (Saunders et al. 2003) - see Table 6.5 below. Primary data consists of information collected for the specific research purpose at hand, while secondary data is information that already exists elsewhere, having been collected for another purpose (Kotler et al. 1999).

Table 6.5: Data Collection Methods
Source: Compiled by the researcher.

Approach	Description
Observation	<ul style="list-style-type: none">- the systematic observation, recording Saunders et al. (2003), description, analysis and interpretation of people’s behaviour.- “observational research can obtain information that people are unwilling or unable to provide... in contrast, some things are simply not observable, such as feelings, attitudes and motives or private behaviour” (Kotler 1999)- two types of observation: participant (qualitative observation of a person or process) and structured (quantitative recording of the frequency of actions of a person or process) (Saunders et al. 2003).
Interview	<ul style="list-style-type: none">- may be: structured (based on questionnaires with standardised, identical questions), semi-structured (based on a non-standardised list of themes and questions) and unstructured or in-depth interviews (where the interviewee talks freely about events, behaviour and beliefs in relation to the topic area). (Saunders et al. 2003)- unstructured and semi-structured interviews may be helpful in exploratory research to identify variables before quantitative research or structured interviews are conducted to verify them. (in marketing, this would constitute focus-group research used to identify variables for discussion of further research).
Questionnaires	<ul style="list-style-type: none">- surveying of users or customers and quantitative analysis of scale based or open ended data (Kotler 1999)

6.6 Customer Analysis Research Approach

For marketing research, Boyd et al. (1977) emphasise the importance of objectivity and accuracy, the problems of gaining a representative sample of customers, and of then obtaining accurate information and interpreting it correctly. They cite problems as:

1. Obtaining a representative sample (they suggest that informal talks with customers may not lead to accurate results as the sample may not be representative)
2. How much consumers remember of their past actions
3. Consumers may not understand their buying motives
4. If consumers do not know an answer to a question, they may not say so or give a socially acceptable answer

In assessing the research strategies available, when considering the consumer portion of research, two strategies can be immediately dismissed. The experiment is unsuitable for the research proposed due to its general unsuitability for business research, the large number of variables under consideration, and the inability to control those variables. Ethnography can also be dismissed as observation is not used in this research body. Customer observation while adept at providing detail of action does not explain the reasons for that action, as a structured survey methodology can investigate. Further, the practicalities of observing a large number of customers (for validity), and of observing them actually purchasing online inside their own homes is not feasible.

It might be then that this research constitutes action research. The results of this study may well lead to a change within the organisational contexts examined. Indeed, the aim of many organisations participating in this study has been to reveal areas that require, such change. However this is beyond the focus of this specific investigation and limits of this thesis, so the action research approach is not utilised. Equally, the consumer research aims to establish predictions from the data, but these will not be tested in further observation due to time constraints, so the research undertaken will not constitute grounded theory. Case study research is unsuitable for the building of a general model of customer behaviour, with the organisational issues examined being studied as a comparison between different variable levels across organisations, not within them. This later issue of qualitative versus quantitative research in organisations is considered in more detail in the section of this chapter specifically related to organisational research.

The strategies for research chosen, mirror those most commonly used in management research: the survey (Saunders et al. 2003; Malhotra and Birks 2000), and the adoption of quantitative survey methodology. Quantitative methods by their nature facilitate larger samples, easier analysis and much better generalisability than more time consuming and complex qualitative methods (Kotler 1999). As a result, a quantitative questionnaire survey is

planned in the consumer market as the sole research tool. In the organisational research, a questionnaire will be administered, followed by interviews with executives to further explore the answers revealed and gain greater richness of data found in qualitative interviews (Wass and Wells 1994). As the scope of this research is already ambitious, encompassing both consumer and organisational research, a cross-sectional approach will be used rather than a longitudinal comparison.

Kotler (1999) identifies the questionnaire as the most common research tool used in marketing research, due to the many advantages it offers – the interviewer bias present in interviews is eliminated (assuming questions are neutrally worded), it is quicker and cheaper than interviews, and, it can provide more in-depth information than observation. Woodside et al. (1989) comment “Beyond a shadow of a doubt... hard-nosed, quantitative, systematic measures of customer satisfaction are the best single indicators of the organisation’s future health or lack thereof” (p16). Peterson and Wilson (1992) comment “customer satisfaction appears to most typically have been measured through surveys... Their popularity derives from the directness, ease of administration and interpretation, clarity of purpose, and face validity. Although unobtrusive, indirect measures of customer satisfaction (e.g., sales, profits, complaints) are also utilised, they are typically viewed as complementary to direct survey measures” (p61).

Not all marketing researchers support such methods. Fournier and Mick (1999) challenge the dominance of survey-based disconfirmation research, seeking through in-depth longitudinal interviews to highlight the complex nature of consumer satisfaction and behaviour. They propose “a more holistic, context-dependent, and dynamic process of satisfaction... a multi-model, multi-modal blend of motivations, cognitions, emotions, and meanings, embedded in socio-cultural settings, which transforms during progressive and regressive consumer-product interactions” (p5). They go on to propose “managers should consider more advanced satisfaction analysis involving socio-cognitive mapping... the supplementation of rating-scale information with substantial qualitative data, lest their insights be impoverished by the belief that consumer satisfaction is solely a matter of quantity, absent of quality” (p17). Equally, Brown (2001) reaches the: “inevitable conclusion that much of post-war marketing scholarship has proved to be a complete waste of time and effort, an heroic but utterly wrongheaded attempt to acquire the unnecessary trappings of ‘science’ a self-abusive orgy of mathematical masturbation which has rendered us philosophically blind, intellectually deaf and spiritually debilitated” (p108). While accepting that the predisposition of marketers to quantitative methodologies has sometimes been at the expense of more in-depth analysis, the

need for comparability and validity requires a large sample. Critics of quantitative methods have yet to propose any viable alternative to quantitative investigation for achieving these ends. Therefore quantitative approaches have been adopted within this thesis.

Within this thesis a middle ground has been sought – acknowledging the need to capture in-depth data beyond a few questions (hence a long, in-depth questionnaire is used), but also the need for high response rates to provide validity to scale development, situational appraisal and generalisability (hence a quantitative rather than qualitative method). The benefits of the depth of qualitative research are, of course acknowledged, however, the time involved in collecting such data and the limited sample size that results, means that none of the aims of this thesis could be satisfied. The large number of consumers that form the main body of the market research results can be said to be representative of the consumers within each marketplace as a whole, something a qualitative study could not achieve.

6.6.1 Breadth of Sample: Customer Research

Four companies form the basis of research within this thesis: ToolCo, SportCo, EntzCo and ServCo. The first two companies are long-established retail and mail order companies, that have recently added the internet to their sales channels. The latter two companies are new, 'pure plays' that have only ever sold via the internet. This selection of two new and two established companies provides a good breadth for the research sample and encompasses both divergent ends of the online marketplace – the new 'e-enabled' company and the traditional company, that has added electronic commerce to their existing business. It is unclear how customer behaviour may alter between these two settings, but measures that investigate issues such as retail dependence and length of company use will provide some insight into these issues.

ToolCo was founded 1957, developing from a market stall to a nationwide chain of retail stores providing tools and equipment to the building trade. Today, they operate retail, catalogue and online channels, selling in nine different countries across Europe. They maintain over 500 retail outlets in the UK, with over 2000 employees, and remain predominantly a retail chain, with 99% of sales from retail, 0.75% turnover from catalogue sales and 0.25% from the internet (up from 0.1% in 2003 and zero in 2002). This is the largest company analysed, however, only about £350,000 of total operating income was provided via the internet, making this the smallest internet sales company.

SportCo was founded in 1968 and, unlike ToolCo, is predominantly a catalogue mail order sales company. They provide a range of equestrian sporting goods and equipment, as well as renting space and providing assistance in support premises, in the form of stabling facilities. In 2004 they generated total sales of £8million (up from £6 million the previous year). Retail accounted for a quarter of this, facilities provision another quarter, the internet 10% (up from 5% in both 2003 and 2002), and catalogue sales 42% of income. Using these figures, online sales are placed at just under a million pounds in 2004.

EntzCo, founded at the start of 1998, was one of the first UK based internet companies, selling movies via the internet (later adding computer games and accessories). Today, they have customers in 120 countries, 11 million page views, 600,000 subscribers (who subscribe to regular updates and email bulletins of new products), with over a million registered customers in total. As a private company they do not disclose turnover and sales figures, but estimates place pre-tax profits in 2004 of half a million pounds on estimated sales of £14million in 2004 (Daly 2005).

ServCo, founded in 2000, unlike the other three companies provides no physical products and also does not sell a specific service, instead sourcing for customers the lowest price for a range of home utility services (including electric, gas, digital television and - from 2004 - financial services). As a private company they do not disclose turnover and sales figures, but estimates place sales at £10 million in 2004 (Buzton 2005).

These companies have been selected due to the broad range of market sectors they represent. They encompass: the established DVD, CD, video market; the growing tool and sporting goods markets; and, the virtual services market. Such a rationalised selection process has established precedent. For instance, PZM (2005) report on their confirmatory study of eSQ, noting the selection of amazon.com and Walmart as focal firms, due to them representing major different types of online retail (pure play and retail store presence). Similarly, here while ToolCo and SportCo both operate physical and mail order divisions, EntzCo and ServCo operate exclusively online.

The number of companies selected was deemed appropriate, based on examination of past literature on online and offline services quality. PZB (1985) use four companies in the original construction of the ServQual. PZB (1988) use four companies for the final testing of the ServQual instrument, that devised the 22-item standard. In refinement PZB (1991) use five companies and PZB (1994a) again use four companies. Later work on the development of

electronic measures of service quality were not company-based, instead focusing on the use of customer databases and internet service provider customer lists, to generate samples across a range of companies (for instance, PZM 2005, Wolfinbarger and Gilly 2003). This precludes the valuable company or sector based comparisons conducted here. Early work on ServQual conducted analysis of each company separately to cross-validate findings (PZB 1988, PBZ 1991). However, PZM (2005), in constructing the eSQ, analyse all 549 responses across ten identified product groups in a single data frame, rather than on a company or product basis, as in the original SQ development. To allow company comparisons on a like-for-like basis, factor analysis of customer results have here been conducted on the entire sample with variance analysed across companies.

A key driving aim of this thesis is to look at how variance occurs based on purchase situation. It was therefore felt necessary to consider four different market sectors, so that cross-product and cross-company comparison could be made, rather than study of companies selling the same goods and services. Indeed, with the exception of the second stage research of PZM (2005) (which looked at Walmart and Amazon.com), or the extraction of books/video/compact discs by Wolfinbarger and Gilly (2003), research on online service quality to date has suffered a major shortcoming with researchers sampling across the marketplace as a whole, not identifying specific product categories or companies. Due to the nature of their research methods (directly contacting customers via internet service providers or the purchase of customer databases), customers of a wide range of product categories are included (noted by Wolfinbarger and Gilly 2003). This results in a lack of ability to produce specific categories of significant size for examination within the sample. Such a result is a major limiting factor in considering the service models derived to date in online research.

6.6.2 Sampling

When administering research instruments, such as survey questionnaires, decisions must be made about the sample to be used. Kotler (1999) identifies three choices in sampling: determining the sample unit (who is to be surveyed); the sample size (large or small); and, the sampling procedure. Different sampling procedures are shown in Table 6.6. While conducting a probability sample would allow for the sample to be statistically chosen at random (and therefore inferences about the population as a whole to be made more readily), in business research, such as market surveys and case study research, probability sampling is simply not possible and customer self-selection is primarily used (Saunders et al. 2003).

Table 6.6 Types of Sampling
Source: Saunders et al. (2003) Research Methods for Business Students.

(i) Probability Sample	
Simple-Random	Select the sample at random from the sampling frame (e.g. using random number tables)
Systematic	Selecting the sample at regular intervals from the sampling frame
Stratified-Random	The population is divided into a number of sub-sets and a random sample (simple or systematic) is drawn from each sub-set
Cluster (area)	The population is divided into a number of clusters and a random sample of these clusters is selected
(ii) Non-Probability Sample	
Quota	Usually used for interview samples where interviewers are given quotas for responses based on groups of the population
Purposive	Cases are selected which best answer research questions. Often used in very small samples.
Snowball	One or two cases are identified, who contact further cases in the population
Self-selection	An individual identifies their desire to take part in the research
Convenience	Those cases easiest to identify are selected

6.6.3 Time Horizon

Research may be longitudinal, providing a representation of events at different time periods, or cross sectional, studying a particular phenomenon at a particular time. The longitudinal method can provide information on change over time but is of course much more time consuming (Saunders et al. 2003). The research conducted within this thesis is concerned with measurement of phenomena at a single point in time. Due to the ambitious nature of combining customer and organisational research within a single thesis, it is not feasible to conduct multiple investigations at different points in time. In the customer research, measurement of situational issues, that include different levels of company usage and time purchasing with the company, allows for some temporal comparisons of long term versus new users.

6.7 Customer Survey Construction Methods

Having reviewed the relevant literature on service quality, situational purchase influences, and marketing organisation, it was decided that while none of these issues had been considered together before, the wealth of secondary data on these topics on their own meant that it was unnecessary to conduct primary research to form the research instruments. Specifically focus-group research was not conducted. All of the studies which were used had initially started with focus group research, so together it was felt that they would have covered all issues that new

focus groups would identify. Further, as the consumer investigation was in online shopping it would have been difficult to conduct a focus group, both in terms of the physical process of getting consumers together, the cost and time involved. Indeed, some researchers have also adopted the approach used here, seeking to validate and build on the focus group research of established research. For instance, Filho et al. (2005) also take the focus group results from the early e-SQ work (ZPM 2000), and use this as the basis for constructing a questionnaire survey.

Table 6.7 Focal Service Quality Studies

Service Quality Element	Principal Source Reference	Coding in Table 7.9.2	Original Items and Source	Final Instrument Items
SERVQUAL (SQ)	Zeithaml, V., Parasuraman, A. and Berry, L. 1990. <i>Delivering Service Quality</i> . Free Press New York.	A	97 items from focus group research	22 across 5 dimensions
E-Service Quality (eSQ)	¹ Zeithaml, V., Parasuraman, A. and Malhotra, A. 2000. <i>A Conceptual Framework for Understanding e-Service Quality</i> . Marketing Science Institute Report 00-115. ² Parasuraman, A., Zeithaml, V. and Malhotra, A. 2005. <i>E-S-QUAL: A Multi Item Scale for Assessing Electronic Service Quality</i>	B	121 from focus group research ¹	22 items across 4 dimensions (eSQ) and 11 items across 3 dimensions (recover) ²
.comQ (eTailQ)	Wolfenbarger, M. and Gilly, M. 2002. <i>.comQ: Dimensionalizing, Measuring and Predicting Quality of the E-tail Experience</i> . Marketing Science Institute Working Paper Report 02-100.	C	397 (100 reduced) items from focus groups and SQ	14 items across 4 dimensions
Internet Service Quality	Yang, Z. & Jun, M. 2002. <i>Consumer Perception of E-Service Quality: From Internet Purchaser and Non-Purchaser Perspectives</i> . Journal of Business Strategies, 19, 1, pp 19-41.	D	41 items from literature, customer/academic interview and SQ	21 items across six dimensions
WebQual	Loiacono, E., Watson, R., Goodhue, D. 2002. <i>WebQual: A Measure of Website Quality</i> . <i>Proceedings of American Marketing Association Winter Educators Conference</i> Winter 2002.	E	142 items from literature and website customer/designer interviews	36 items across 12 dimensions
Retail Service Quality	Dabholkar, P.A., Thorpe, D, & Rentz, J. 1996. <i>A Measure of Service Quality for Retail Stores: Scale Development and Validation</i> . Journal of the Academy of Marketing Science, 24(1), 3-16	F	28 items from literature, customer interview and observation and SQ	28 items across five dimensions

Five focal studies on online services quality were selected (based on the rigour of scale development, journal prestige, author reputation and previous work in this area). These were combined with the original service quality research, and a major study on retail service quality (listed in Table 6.7). These studies provide a large range of individual customer service quality items (n=826), that have been reduced into a new online service instrument, described below. Together these studies represent a large range of service quality items, and each of these studies contained unique items relating to purchase service quality (a complete list of all the individual items from each study was provided in Chapter 3).

For the organisational research, it was considered that due to the pressures on executive time, if they were to be questioned for exploratory research, then they may not be prepared to take part in the full research study. Kotler (1999) states that in using secondary data the researcher must determine if it is relevant (fits research needs), accurate (reliably collected and reported), current (sufficiently up to date), and impartial (objectively collected and reported). The past studies used satisfied all of these requirements.

However, there was duplication of items between studies.. To avoid duplication and to assist in organising the items into an applicable format the following stages were followed (shown in Appendix 3.1:

1. All items were entered into a table format. As the e-Service Quality research (Zeithaml et al., 2000) contained the most detailed sub-headings, all the studies were broken down into their main component sections and aligned with the most similar corresponding e-Service Quality heading (for instance, the section of the .comQ research sub-titled 'usability factors' was placed under the e-Service Quality heading 'Flexibility').
2. Once the individual items were aligned by e-Service Quality heading, duplicated statements or issues were consolidated into single statements (for instance, the e-Service Quality item 'site is working correctly', and .comQ items 'the site always works correctly' and 'the website functions as it should' were consolidated into a single new item 'the site is working correctly and functions as it should').
3. The initial scope of research sought to compare online and catalogue home shopping, so two separate questionnaires were to be constructed – one for online and one for catalogue purchasers. Having constructed a list of consolidated items from the six studies identified in Table 6.7, it was necessary to remove any non-applicable items for catalogue purchasing and convert those which referred to an online situation for catalogue situations (for instance, 'the website does not crash' has no corresponding offline equivalent so was excluded from the catalogue questionnaire'; also 'The product that came was accurately represented by pictures and descriptions on the website' was reworded to 'The product that came was accurately represented by pictures and descriptions in the catalogue' for the catalogue questionnaire. This process resulted in a total of 123 online quality of service items and 84 catalogue quality of service items.

4. For final research, in conducting sampling across companies selling significantly different products (and a service), some alteration of survey wording was required. PZB (1994a) in working across four companies (retail, computer manufacture, auto insurer, life insurer) acknowledge minor wording changes are required. For example 'policyholder' for insurance rather than 'customer' for retail, as well as changes such as 'service in store'.

Having compiled the main body of the consumer questionnaire as described above, the situational, demographic and profiling measures selected were added into the questionnaire, the final version of which is shown in Appendix 3.2.

6.7.1 Survey Construction: Single versus Multiple Item Measurement

The number of items being considered has required the reduction of multi-item scales into single item issues (for instance, market complexity has been reduced from five items based on Homburg et al. (1999) and Piercy (1986) to a single question). Standard market research practice notes that longer surveys gain lower response rates (Kotler et al. 1999, Malhotra and Birks 2000). Drolet and Morrison (2001) note from a sophisticated analysis of measurement error "incremental information from each additional item is extremely small", and, further, "added items actually aggravate respondent behaviour, undermining respondent reliability". Buttle (1996) notes that increased length may lead to customer disinterest, where "Boredom and confusion imperil data quality" (p23).

Where it is important to consider a wide range of issues, some reduction of the complex nature of these issues is required. Those authors conducting surveys to gather a wide range of issues have used single or only a few items for each construct so that many can be considered. Deshpande and Farley (1996) highlight the problem of multi-concept survey applications and the need to reduce high numbers of items, applied to investigate a phenomenon in isolation to a shorter list of items that forms part of many different concepts in a single survey. Hausman et al. (2002) used single item measures for limited behavioural antecedents of marketing-manufacturing relationships – including relationship harmony (1 item), marketing morale (1 item), manufacturing morale (1 item), and perceived marketing importance (1 item). Ruekert and Walker (1987) in measuring marketing relationships with other functions, predominantly used one or two items for each issue, due to the large number of factors under investigation. Ranaweera and Neely (2003) use a single measure of price perception when considering several different purchase impacts.

The importance of considering multiple items has been noted - Lehmann and Moore (1983) comment that in marketing "The field's present trend in publishing seems to be toward

narrowly defined studies with tight methodologies, to the virtual exclusion of more ambitious, messy projects: this seems likely to hamper the development of generalizations requiring non-monolithic approaches to the study of a topic” (p133). Cravens et al. (1985) found when asking customers to state the most important item and to rank a series of 21 individual items on their importance (on 1 to 10 scales), “Many respondents indicated that it was very difficult to select a single factor as the most important basis of evaluation, indicating strong support for using multiple factors in evaluating quality” (p299). In the online marketplace, customer problems in defining expectations has been noted (PZM 2000). Giving customers a wide range of potential choice options allows them to consider multiple aspects of service, including those that they could not articulate or verbalise if interviewed or questioned in an open ended format. Thus, by gathering a wide range of items from multiple different sources, and presenting them in a survey, the cognitive limitations of any one respondent are helped by the provision of a wider choice set.

The full range of service quality and situational influences used in the customer research exercise are shown in research operationalisation Tables 6.11 and 6.12.

6.7.2 Survey Construction: Positive versus Negative Wordings

A standard approach to questionnaire design is to divide questions into negative and positive worded statements to avoid leading bias (Malhotra and Birks 2000). PBZ (1991), in their pre-test of the original SERVQUAL 22-item questionnaire, included 16 positive and 6 negative statements. However, they note “the pre-test results indicated that the negatively worded items may be problematic for several reasons” (p422). They describe consistently higher standard deviation for negative versus positive worded statements. Further the two dimensions made up of negatively worded items calculated consistently lower reliability coefficients (Cronbach alphas), than those in the original SQ study, which did not have negative item. They conclude that respondents may have been confused by those items, and also report that managers in collaborating companies reviewing the questionnaire found negative statements “awkward and not as meaningful as the positively worded items” (p422).

Buttle (1996), reviewing SQ literature, also proposes that the reversal of items can lead to confusion, and supports the move to reword SQ items as positive statements, due to the confusions caused by some negative wording. Babakus and Boller (1992) highlight that although general (marketing) research literature suggests the usage of mixed item wording (some statements being positive and others negative), to avoid “the potential ‘yea’ and ‘nay’ saying from respondents” (p256), in reality “linguistics research indicates that respondents

who are given negatively keyed items require more time to read them, make more comprehension mistakes, and are more likely to attach negative emotional connotations than when they are given positively keyed items” (p256). Further they suggest “factor analysis results can become highly distorted if even a small portion of respondents have difficulty with, or do not pay attention to, the wording of items” (p265). Their empirical results highlighted differences in samples responses and factor structure, based on samples given all positive versus mixed item SQ surveys. They conclude “the direction of wording has created data quality problems” (p262). Carman (1990) emphasises that reverse wording is used to avoid halo effects, but that in reality problems exist: “Many retailers are bothered by a research instrument with items that suggest something negative. In a long questionnaire, many respondents find this change in wording difficult to comprehend, and thus they misread the item” (p42). More recently, Wolfenbarger and Gilly (2003), in performing cluster analysis on one hundred sorted statements relating to SQ (grouped in a similarity matrix), find the negative worded items grouped together and had to be removed from analysis. In this research, only positively worded items have been used for the construction of the service quality model.

6.7.3 Customer Exploratory Research

No exploratory focus groups were used, however, an exploratory application of the collated consumer research survey was conducted. As has already been stated, many previous studies were used to compile the questionnaire. While this negates the need for focus group research, the compilation of so many different studies into a new, single format meant that a trial of the combined instrument was needed.

From the literature review, and as described at the start of the methods, six pre-existing studies on service quality were combined into a new pool of service quality items. This pool was screened for duplicate themes and items, with the result of 123 service quality items being combined with a series of situational and demographic measures (see Appendix 3.2). These items were combined into a questionnaire format for trial research, with the intention of reducing the list further, before moving on to a final research application. This trial was also to screen for any grammatical, spelling errors, or phrasing problems, that led to respondent difficulty.

The first stage of trial research concerned testing the initial survey on a postgraduate class of thirty research students at Cardiff University. The purpose of this exercise was to conduct an initial screening of the questionnaire layout, design and content, before moving to secondary

application (initial instrument is shown in Appendix 3.2). An initial intention of this research was to compare the shopping behaviours of online and catalogue home shoppers. To that end, a combined paper survey for both of these groups was designed, with each group being instructed to complete or skip the appropriate sections for their purchase choice. The overwhelming feedback from the trial exercise was that this means of surveying was untenable in practice. The combined research instrument appeared too long, and the process of jumping from section to section, as dictated by purchase, was too complicated in practice. In addition to this finding, several issues of spelling and phrasing were identified as needing amendment.

Following this review, two separate consumer questionnaires were produced – one for online and one for offline purchasers. The physical appearance of the questionnaire was also improved and the use of coloured paper employed to both improve the appearance and colour-code the different samples used. An e-mail was sent to undergraduate and graduate students, asking them if they were interested in completing a questionnaire, if they had recently made a home shopping purchase. A prize draw was offered to offer an incentive for participation. Questionnaires were also distributed in person to an MBA class at a second university. Whilst sampling students alone provides an unrepresentative sample of the population as a whole, for the purposes of testing language, grammar and structure and to conduct preliminary analysis to test construct validity, this limited sample is satisfactory.

This self-selection method of sampling, where respondents identify a specific product, has been used repeatedly in customer research - for instance, Yang and Jun (2002) emailed 1600 ISP subscribers and PZB (1988) asked 200 customers in shopping malls to answer questionnaires after selecting one of five categories identified. Sampling students in this manner is also well established. For instance, Mersha and Adlakha (1990), in constructing a new service quality instrument, also pre-test a final questionnaire on students. Caruana et al. (2000) used a student population to test various arrangements of SQ, commenting that the demographically homogenous population controlled for variances in population, that might explain differences other than those of SQ arrangement that were being analysed.

The need to reduce the number of service quality items to a shorter list for the final research is a common goal of trial research – PZB (1988) sought multiple rounds of reduction from the original 97-item list. Wolfinbarger and Gilly (2003) reduced 82 items into 40 for final examination. Common reduction methods note examination of factor structures, removing items which reduce coefficient alpha scores or which do not load strongly on any one factor (PZB 1988, 1991).

Due to the different focus of online and offline service quality, several service quality items were excluded from the catalogue survey (for instance, “the website does not crash”), as there was no non-internet or offline equivalent item. The majority of the exclusions related to technological issues. In addition several questions had to be rephrased for a non-technology-mediated exchange (for instance, “You know exactly what you’re buying from this website” became “You know exactly what you’re buying from this catalogue”).

This research application gained 144 usable responses. These were submitted to factor analysis with the aim of validating the underlying concepts and reducing the service quality section from the high number of items. Examination of exploratory factor analyses of importance, performance and gap scores for statistical validity and conceptual appeal highlighted the importance scores as producing the best solution. An initial twenty factor solution from 123 items was reduced to a nine factor structure with 69 items, through analysis and removal of duplicated items within factors, and items with low correlations or that reduced factor coefficient alphas. These 69 items were taken forward for the final research.

The research propositions regarding the impact of situational items, developed from literature review, were also tested in the trial research stage. Due to the relatively small sample, simple univariate statistics were used to determine if there was a prima facie case for the inclusion of the construct in the final research. From this analysis, several areas included in the initial research were not included in the final study. These reductions were predominantly for reasons of practicality – seeking to limit the scope of research to the most important situational variables, so that the final survey length could be minimised. These reductions included:

- Removal of the seven item section on anti-consumeristic tendencies, due to this construct being beyond the scope of the research and more of a value-based issue, than contextual or situational variable
- Removal of the section on political tendency, due to the low response rate for this section and consumer motivation to maintain secrecy in this area
- Removal of the section investigating delivery preference, as beyond the scope of this research
- Reduction of the section which asked for channel purchasing behaviour for a range of products, to shorter section asking if the items had been purchased online, as catalogue behaviour was not a final concern of the research

- Reduction of the fifteen item section on motivations for shopping online, to a single open-ended question to gain a better depth of response, and also reducing the overall length of the survey instrument
- Removal of the section asking customer to allocate 100 points across service quality factors, due to several responses not adding up to 100 the final factor structure was unclear, meaning a list of themes could not be constructed and the direct measurement of importance superseded the need for this traditional SQ activity

An early aim of this research was to compare how online and offline shoppers varied in their behaviour. Several operational and conceptual reasons led to the decision to focus exclusively on online research. Firstly, the trial research produced a disappointingly small response from catalogue shoppers, and it was unclear if this would be higher in the final research. Secondly, while several catalogue companies had expressed interest in participating in this research, during the period of research a period of merger and acquisition in the catalogue industries resulted in a turbulent marketplace without a clearly defined customer base. There were also practical problems, as organisations changed research priorities and withdrew support for research, as they sought to move all research in-house for reasons of confidentiality. Thirdly, due to the need to gain large response rate (for comparing situations), it was decided to use online survey software, which would make it impractical to sample non-internet customers.

Several items were added, based on an on-going literature review, that helped to clarify several previously unclear research propositions, specifically:

- Based on the literature, the addition of two items, one measuring behavioural loyalty and one measuring situational loyalty
- Based on literature, the addition of two items measuring overall satisfaction to validate the service quality model derived (likelihood of recommending a company and likelihood of re-using a company).
- The clarification of the forced choice question asking customers to pick low price versus high service into two separate items measuring extent of importance of each issue

A full discussion and analysis of the trial research and reduction period is provided in Appendix 4. Once the questionnaire had been revised on paper, it was possible to produce a final version. The use of the online questionnaire package, Perseus Software Solutions 6 (www.perseus.com), was employed for the final survey. This allows for the construction of an html format (online) questionnaire that can be mounted on a web-server for customers to complete. This package has the benefit of saving time and money compared to physically distributing questionnaires, as well as time in manually entering results, as it can collate these

automatically into a format readable by SPSS, the package chosen for the statistical analysis of results.

6.7.4 Service Quality: Statistical Validity and Reliability

In validating the statistical properties of the results gained, standard measures of reliability were taken (highlighted in Chapter seven which provides these results, utilising correlations, factor analysis, coefficient alpha and confirmatory factor analysis). Beyond these items, various issues of validity must be considered to confirm the usefulness and reliability of the results discovered. PZB (1988) state that “While high reliabilities and internal consistencies are necessary conditions for a scales construct validity – the extent to which a scale fully and unambiguously captures the underlying, unobservable construct is intended to measure – they are not sufficient. The scale must satisfy certain other conceptual and empirical criteria to be considered as having good construct validity” (p28).

PZB (1988) propose the principal conceptual criterion pertaining to construct validity as content validity (also referred to as face validity). Content validity identifies that the scale measures what it is supposed to, and captures facets of the unobservable construct being measured. PZB (1988) describe this as a qualitative process involving “the thoroughness with which the construct to be scaled and its domain were explicated and... the extent to which the scale items represent the construct’s domain” (p28), concluding “the procedures used in developing ServQual satisfied both these evaluative requirements” (p28). Therefore, any scale developing mirroring the ServQual development process can also be considered valid based on this analysis.

PZB (1988) also assess convergent validity, defined as the association between the ServQual scores and separate questions measuring “conceptually related variables” (PZB 1988 p 30) (measured as whether a customer would recommend the firm and if they have ever reported a problem with the firm). Using one-way ANOVA, a significant relationship between overall quality and service-quality scores by dimension is found, providing support for the scale. PBZ (1991) similarly assess convergent validity using a measure of overall service quality (measured on a 10 point scale), regressed on SQ gap scores (finding R² scores in the five companies ranging from .57 to .71, all higher than the 1988 survey).

Responding to various replication studies and criticisms, PZB (1991) re-investigate their own findings and those of other researchers. They determine: “several different forms of validity can serve as criteria for assessing the psychometric soundness of a scale: face validity,

convergent validity and discriminant validity” (p439). They identify discriminant validity as “the extent to which SERVQUAL has five distinct dimensions” (p440). They analyse their own and replicated studies by Babakus and Boller (1991), Bresinger and Lambert (1990), Carman (1990) and Finn and Lamb (1991), PBZ (1991) regarding validity of the SQ scale. They find in practice mixed convergent validity, poor discriminant validity but consistent support for face validity. They conclude the SQ scale is valid, suggesting that the conceptual measure of face validity is the most important determinant of scale usefulness in practice. Tests, descriptions and findings regarding validity are shown in Table 6.8 below.

6.7.5 The Validity of Customer Reports of Quality / Satisfaction

Peterson and Wilson (1992) raise an important question of note - “to what extent do satisfaction self-reports reflect ‘true’ satisfaction?” (p62). They highlight extensive literature that suggests satisfaction studies do not usually follow a normal distribution: “virtually all self-reports of customer satisfaction possess a distribution in which the majority of responses indicate that customers are satisfied and the distribution itself is negatively skewed” (p62), (see Appendix 5). This characteristic is also noted by Wolfenbarger and Gilly (2002), who observe the ‘characteristic negative skew’ of customer satisfaction data.

Figure 6.3 Skew of the Normal Distribution

Source: Peterson and Wilson 1992. p62

Conceptual Distribution of Satisfaction Measurements

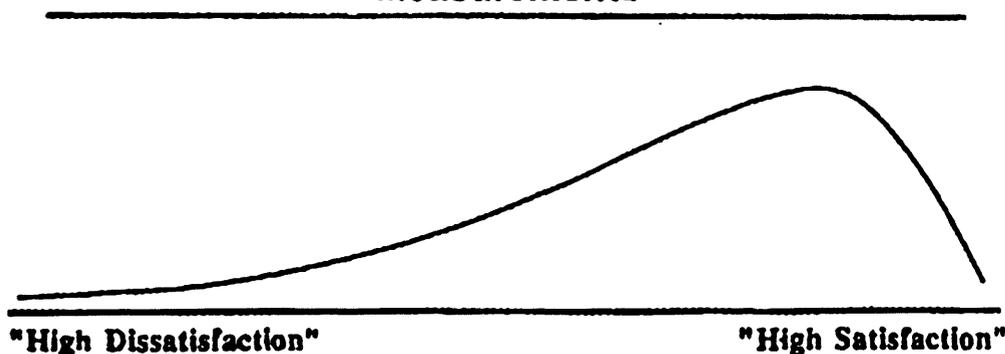


Table 6.8. Statistical Validity and Reliability Checks

Validity Construct	Evidence of SQ Validity	Other Checks in Practice
<p>Face validity “a subjective criterion reflecting the extent to which scale items are meaningful and appear to represent the construct being measure” (p439)</p>	<p>PBZ and Babakus and Boller (1991) – executive feedback; Carman (1990) own review to minor item or wording or changes. Bresinger and Lambert (1990) and Finn and Lamb (1991) don’t explicitly consider but use of 22 SQ “implies meaningfulness” (PBZ 1991 p439) “SQ items appear to be appropriate for assessing service quality in a variety of settings” (PBZ 1991 p439)</p>	<p>Carman (1990) “nomological validity” described as present when items expected to load together on factors actually do so in analysis.</p>
<p>Convergent validity “pertains to the extent to which scale items assumed to represent a construct do in fact do ‘converge’ one the same construct... whether scale items expected to load together in factor analysis actually do so” (p439)</p>	<p><u>Indirect Evidence:</u> Relatively high coefficient alpha on all studies reflects cohesiveness of scale items and an indirect indicator <u>Direct Evidence:</u> Factor loading patterns of PBZ (1991), Bresinger and Lambert (1990) generally fit original five dimensions, Babakus and Boller (1991) and Carman (1990) weaker support due to low loadings on dimensions</p>	<p>Dabholkar et al. (1996) in constructing a model of retail service quality analyse convergent validity as the extent to which items load on the factors expected. Cronin and Taylor (1992): “convergent validity involves the extent to which a measure correlates highly with other measure designed to measure the same construct” (p61)</p>
<p>Predictive or Concurrent Validity “extent to which SERVQUAL scores are associated as hypothesised with other conceptually related measures” (p440/1)</p>	<p>Bresinger and Lambert (1991) find low correlation between SQ and market share (possibly attributable to other issues of share). Babakus and Boller (1991) find perception scores have stronger correlations with measures such as overall quality than gap scores. Regression of PBZ (1991) perception scores finds stronger R² values with perceptions (.72 to .81) than gap-scores (.57 to .71) “These results call into question the empirical usefulness of the expectations data” (PBZ 1991 p441), also identified by Carman (1990) and Babakus and Boller (1991)</p>	<p>Dabholkar et al. (1996) determine the predictive validity of their retail service quality scale by the use of two independent measures: intention to reuse and to recommend correlation to measured service quality. Sousa and Oliveira (2005) measure online loyalty with measures of intention to revisit (reuse) the website and word of mouth recommendation Boulding et al. (1996) used only repurchase intent and recommend to validate behavioural intention PZB 1988 use overall SQ, recommendation and problem encounter (as do Brown et al. 1993) Woodside et al. (1989) use ‘willingness to recommend’ noting this “may be an important as a measure of personal intention to reuse” (p15)</p>

Table 6.8 (cont) . Statistical Validity and Reliability Checks

Validity Construct	Evidence of SQ Validity	Other Checks in Practice
<p>Discriminant validity “the extent to which SERVQUAL has five distinct dimensions” (p440)</p>	<p>“Replication studies differ the most from the original study with respect to SERVQUAL’s discriminant validity... the number of distinct dimensions based solely on the factor analysis results is not the same across studies” (p440), possibly due to data collection differences or “across-dimension similarities and/ or within-dimension differences in customers’ evaluations of a <i>specific</i> company involved in each setting. At a <i>general</i> level, the five dimensional structure... may still serve as a meaningful framework” (p440)</p>	<p>Dabholkar et al. (1996) check discriminant validity through assessing whether covariance and two standard errors add to less than 1.00. They provide that even with correlation between factors, discriminant validity can still be determined with this method. Cronin and Taylor (1992) note: “discriminant validity involves the extent to which a measures is novel and does not simply reflect some other variable” (p61).</p>

Peterson and Wilson (1992) continue to propose four potential explanations: (i) that customers are generally satisfied with the firms they use “what rational consumer would knowingly purchase a product or service that is not expected to satisfy some need or want?” (p62);)ii_ that satisfaction may be caused by underlying cognitive antecedents that shape reported distributions in some way; (iii) that satisfaction may simply possess a non-normal distribution; or, (iv) that the distribution of satisfaction is an artefact of the research methodology employed. Peterson and Wilson (1992) conclude “it is not possible to succinctly identify specific causes”, and further “The phenomenon is too complex for a simple answer” (p68). There are several striking implications: “Given a skewed distribution (of any variable), the arithmetic mean is no longer an appropriate measure of central tendency” (p69), and also “correlations between customer satisfaction measurements and other variables are likely to be attenuated” (p69). Ultimately “Customer satisfaction ratings should not be viewed as absolute measurements... . It is not clear what customer satisfaction ratings are measuring... Attempts to measure customer satisfaction will, in and of themselves, serendipitously increase satisfaction... True satisfaction is probably so intertwined with both intrapersonal characteristics and methodological considerations that it may never be possible to disentangle them” (p69).

The issues raised by Peterson and Wilson (1992) are compiled in Table 6.9 below, as is the countermeasure or stance adopted in this research.

Table 6.9. Methodological Sources of Non-Normal Distribution in Customer Satisfaction Self-Reports
Source: Compiled from Peterson and Wilson 1992.

Issue	Potential Problem	Evaluation	Counterbalance
Ceiling Effect	"scales used to measure customer satisfaction do not have a sufficient number of categories to permit survey participants to make fine discriminations, especially at the positive (highest) end" (p63)	"intuitively appealing, does not appear to be sufficient... although no doubt a contributing factor" (p64) Large scale single item measures and multi-item measures (with much larger scales) all represent same distribution problem	As 69 items, very high overall ceiling, 7 point scale rather than 5 point scales
Response Rate Bias	"satisfaction ratings are inflated due to response rate bias" (p64) More satisfied customers are more likely to respond to surveys.	"there is no logical reason why satisfied customers should be more likely than dissatisfied customers to respond to a satisfaction survey. Indeed, the opposite argument could be made" (p64) 49 studies analysed and no correlation between response rate and satisfaction rate.	Measure of non-respondent bias by last quarter comparisons
Data Collection Mode Bias (Intrusiveness Bias)	Mode of collection (personal, telephone, mail) and intrusiveness of this will bias results (higher levels of satisfaction obtained in personal or telephone interviews than mail/self-administered survey)	"Data collection mode appears to influence the level of reported satisfaction but not the distribution shape of satisfaction ratings" (p65)	Online sampling response rates noted above. Limitations acknowledged.
Question Form	Information processing theory suggests positively framed stimulus leads to positive response - positively worded questions (as most commonly used) will lead to positive ratings	New empirical research presented with statistically significant results - "Posing a satisfaction question in a positive form appears to lead to greater reported satisfaction than posing it in a negative form and may influence the shape of the underlying response distribution" (p65)	Problems of negative worded statements highlighted above so all positive wording adopted.

Table 6.9 (cont). Methodological Sources of Non-Normal Distribution in Customer Satisfaction Self-Reports
Source: Compiled from Peterson and Wilson 1992.

Issue	Potential Problem	Evaluation	Counterbalance
Question Context and Question Order Bias	Some research indicates later responses are shaped by earlier responses	New exploratory research showing that asking a general/overall satisfaction question before a specific item satisfaction leads to higher ratings on specific item. Only one study with two questions immediately after each other.	When multiple questions and items, the impact remains unclear. Also when asking indirect satisfaction (likelihood of recommending or using again) impact unknown.
Measurement Timing	Customer satisfaction appears to be highest immediately subsequent to purchase but to decrease somewhat over time.	Statistics show degradation of satisfaction over time but cause unclear: statistical tendency towards the mean, movement of satisfaction into attitude over time changing what is measured, impact of new information on evaluation over time, impact of information over time as more negative information is retained better. "More research is obviously required" (p66)	Customers purchasing in last six months surveyed, not just those immediately having purchased.
Response Styles	Personal characteristics such as perceived social desirability impact answers	Some impact in certain situations (e.g. mental health studies), "When more general samples are considered... social desirability responding does not appear to be a significant influence"	Online surveying negates social bias.
Mood	"There may be a 'lurking' variable - mood- that influences satisfaction ratings" (p67). Respondents don't consider an item until specifically asked, therefore mood at the time influences response.	New exploratory research showing statistically significant relationships between mood, life satisfaction and product satisfaction.	Beyond the scope of research.

6.8 Organisational Analysis: Research Approach

6.8.1 The Number of Cases under Consideration

Four companies allowed their customers and managers to be surveyed. It is an acknowledged limit of this thesis that the consideration of four companies can provide only limited implications. However, the choice to construct data from a questionnaire survey, rather than interview, allows easy, straightforward comparisons, future verifiability, and replicability. The number of companies under consideration does not preclude there being value in the findings on marketing-operations relationships. Several authors writing on the subject have limited themselves to smaller samples – Swamidass et al. (2001) for instance, used only four companies to draw conclusions about the role of marketing/manufacturing managers in strategy development. To allow valid company-to-company comparisons to be made it is vital that consistency is maintained, therefore questionnaires were used rather than interviews. Swamidass et al. (2001) echo this sentiment: “Even though a small set of cases are used... the reliability of data collecting instruments was ensured across cases by using a formal data gathering document [a questionnaire] to ensure that the questions are consistently and uniformly worded across managers and companies” (p945).

Berry et al. (1991) limited themselves to the study of three companies in considering the possibilities of segmenting markets based on operational capabilities. Dyer and Wilkins (1991) argue for case researchers to use single ‘deep cases’, and Eisenhardt (1989) argues that between four to ten case studies constitutes a rigorous approach. Piercy et al. (2002) in linking marketing-orientation to retail operations conducted three detailed cases: “Methodological theory indicated that a small sample of in-depth case studies would be more appropriate than a large sample of companies, since a case study approach provides the detail and depth required for the study of employee attitudes and beliefs” (p264).

The need for comparable, survey-based data has precedent, as the majority of authors providing empirical data in the area of the relationship of marketing to other functions have used survey data (see Table 4.12 above). Roth and Van der Velde (1991) also comment: “Empirical research is important to verify the commonly recurring themes emanating from cases to build theory inductively, and to lay the groundwork for normative decision making and testing of theory” (p305).

The case companies under consideration vary in annual turnover. However, their marketing and operations departments were of generally equal size, which should negate the impact of

turnover. Indeed, Capon et al. (1990) produced 'compelling evidence' that firm size had no impact on financial performance (O'Leary-Kelly and Flores 2002). Swamidass et al. (2001) studied the relationships within four companies, in multiple product manufacturing industries, of multiple sizes, finding consistent results were produced from three, with only the company with very small turnover in a unique market displaying consistently different results.

6.8.2 Qualitative versus Quantitative Research

In addressing the depth versus volume issues, the literature indicates some researchers choose a high volume of companies with single responses from each, or look at one company or multiple divisions within it. Within this thesis, several managers from each company are surveyed, to rule out individual bias or limited experience, that would be risked if only individual responses were considered. An in-depth analysis is sought rather than volume. Qualitative research often seeks to justify findings based on one or two responses from a company being from informed respondents. However, such a notion of one or two people in a company providing a complete and accurate picture is highly suspect. Mintzberg (1994) highlights the fallacy of an all-knowing manager, informed and knowledgeable about all the information and data of the company, aggregated into a useable form (for strategic planning). He notes that as information is aggregated and passed up the chain, loss and distortion occurs. Further, in large complex organisations, the sheer volume of information cannot be adequately summarised for one, or even a small group of people, to gain any meaningful insights, as human beings can only have a limited perception of all possible effects of a situation. This provides that any one or two respondents from a company will not have an adequate picture of the complete situation in isolation, and that multiple responses provide a superior and more accurate perception of the corporate environment.

Research has also highlighted that different managers have different perceptions of the same situation, requiring many responses (i.e. more than one or two per company) to 'average out' distortion effects. Mezas and Starbuck (2003) highlight that most managers have very unrealistic perceptions of their organizations, and further that perceptions vary significantly between different people. Issues such as length and nature of experience, education, background, social context and receptiveness to stimuli can have an impact. Further, the actual first-hand experience of each person will be different. Even when two people are doing the same job, personalities, styles and interactions with colleagues and the environment will differ. Winter (2003) notes when going beyond narrowly-defined factual matters, individual perceptions will differ. Maule and Hodgkinson (2003) highlight that thirty years of work within the behavioural-decision-making school has shown that human judgement and decision

making are subject to error and bias. They conclude that research should accommodate notions of objective reality, subjectivity and power relations. Winter (2003) describes the “re-constructive functioning of memory” (p40) and lack of reliability in eye witness reports as “perception is shaped by the needs and prior beliefs of the perceiver, rather than the ‘objective facts’ presented” (p40). Winter (2003) also notes the issue of deliberate misrepresentations of negative issues (such as hazards and accidents). Daniels (2003) note the role of affective states, highlighting evidence that affective state impacts attention, with sadness altering recall to negative information, while euphoric affects direct processing of positive material: “managerial judgement might be biased toward more pessimistic or optimistic interpretations of the environment, depending on the nature of a manager’s affective state” (p21). Such biases are also likely to be represented, not only in decision making, but in conducted research. Maule and Hodgkinson (2003) note “If managers are unable to provide accurate data, then we must question the reliability and validity of theory and research that depends on managers’ perceptions” (p33).

Mezias and Starbuck (2003), testing managers perceptions of verifiable company data (business unit sales last year, change in industry sales over time), find large errors in manager knowledge, with between 61% and 97% of managers making errors outside of a 50% range from the actual figure. They (positively) note that “for some variables, as many as 40% [of managers] may have accurate perceptions” (p11). They conducted a second study in a company concerning a major quality improvement initiative. They asked managers about quality rates, and find quality experts display marginally better knowledge than non-experts, with 73% rather than 68% being within 50% of the actual defect rate (although these figures dropped to 50% and 26% when asked to express defect rate in sigma terms). This highlights that even when commenting on areas very close to their specific jobs, management error occurs. Mezias and Starbuck (2003), note: “When forced to provide ‘answers’ about topics on which they lack definite facts, managers seem to be content to fill in the gaps with folklore that has been socially constructed” (p16).

Ruekert and Walker (1987) also note that different personnel within a functional grouping will interact with members of other functional groups in different ways than their colleagues: “Such differences are clearly relevant for understanding variations in interfunctional relationships, but they can be captured only by studying such interactions at the individual level of analysis” (p4).

Due to the combined effects of the lack of knowledge of all situations (problems in describing service quality, company delivery and financial performance), and of subjective perceptions and interpretations (of increased importance when dealing with subjective issues such as relationships, politics and conflict), to gain an accurate picture of any single company requires far more than one to two interviews with spuriously claimed 'representative' managers. A true representation of the whole situation requires aggregation of multiple responses, as this allows the averaging out of atypical behaviour. Such aggregation requires a quantitative research design and approach, with scale-answer items in survey format, as has been employed here.

Therefore, many responses from within the same organisation are more valuable than single responses from many organisations. Ruckert and Walker (1987) focused on three distinct divisions within the same organisation, commenting: "The fact that the test was based on interactions within a single company may make the findings less representative than if data had been collected from a broader sample of firms. However, focusing on only a limited number of divisions within the same company enabled us to obtain a relatively complete picture of interfunctional interactions by conducted a consensus of the marketing personnel involved" (p8).

6.8.3 Causality

The inference of causality is impossible to determine – for instance, does the adoption of market orientation increase communication and relationship quality or does better relationships between functions and higher levels of communication determine whether a market orientation exists? The issue is one of 'chicken and egg' and is in part illustrated by the 'strategy and structure' arguments of Chandler (1962) and Williamson (1975, 1985) who tried to establish the causation between organisational strategy and organisational structure. If a new policy is implemented to improve previously bad communication, and an improvement in relationship quality is seen while all other factors remain constant, then the relationship improvement could be attributed to communication. However, it would require great depth of research to make sure all other factors remained constant, and time required for longitudinal study. In most instances, there will not be green-field policy implementation, but policy applied to an organisational context with many previous overlapping policies, with entrenched behaviours and cultures where it is hard to established causality such that factor 'a' leads to relationship quality level 'b'. It is in practice hard to establish if good communication leads to high relational interaction, or in turn if high relational interaction leads to good communication. This phenomenon is termed here 'infinite loop causation'. Hausman et al. (2002), considering the marketing-operations interface (in terms of harmony, morale,

perceived functional importance and business performance), found the relationship between antecedent and consequence as unclear. Within this body of research it is not sought to establish causation (it could indeed be argued that any such proposed causation was illusory), instead measurement of correlations between features (i.e. their presence) is taken to classify principal features of higher performing organisations (are market orientation, good communication and interfunctional relations all present in higher performing organisations, or is for instance, communication irrelevant?).

6.9 Organisational Survey Methods

The research conducted on organisational antecedents and understanding of service quality was intended as descriptive and exploratory rather than conclusive. As with the consumer research portion, no new focus group research was conducted to determine the questionnaire components. Nonetheless, several discussions were held with company executives prior to the start of research, which drew out certain key issues of concern for them which were included in the study, (for example, levels of information sharing with original equipment manufacturers vs distributors was added). All the studies that were used to compile the organisational research instruments were verified and established studies in the areas of marketing organisation, many of which had involved focus group research at various stages.

The organisational research consisted of three separate questionnaires: a data classification sheet (company turnover, profit and standard sales measures) required from one person per company; and the two main questionnaires measuring market orientation and marketing-operations relationships. Minor modifications were required for the marketing and operations surveys (for instance, 'your relationship with the operations department' to 'your relationship with the marketing department'). The construction of the measures used in these surveys is shown in Table 6.14 while the surveys themselves are contained within Appendix 3.3. The key contact in each organisation was asked to complete a classification sheet and distribute paper surveys to colleagues in marketing and operations departments. These were then collated by the researcher and analysed, the results of which can be found in chapter eight. Some self-selection bias may be evident in this sample. However, as noted previously, this research was intended as exploratory rather than conclusive, and such bias was therefore deemed tolerable. While for the customer research breadth and sample size required detailed statistical checks of analysis, the organisational research sample size precludes anything more than descriptive statistics using chi-square and bivariate correlations.

6.10 Limitations

As with all bodies of research, this one has a number of limitations. The purpose of this section is to both acknowledge those inherent limitations in the review, methodology and analysis, and to highlight what counter measures have been taken to minimise their impact. Many of these issues have been discussed throughout this chapter and are summarised here for reference in Table 6.10 below.

Table 6.10. Limitations and Countermeasures

Limitation	Description	Countermeasure
Lack of initial focus group research	No initial focus group research conducted to generate scale items.	Over eight hundred ready validated measures available for customer research and established items of organisational study negate the need for focus groups. See section "Customer Survey Construction Methods".
Low online response rate	Lower response rates observed in online research than traditional offline research.	No established precedent for online response rates. Large sample size and checks that this represents company customers in place. See sections "Sample Response Rate" and "Sample Validation"
Non-response bias	Returned customer responses may not be representative of the whole customer base as non-respondents have different characteristics to respondents.	Logically impossible to compare differences without sampling non-respondents. Established measures seek to compare last quarter of responses with remainder, assuming these are most similar to non-respondents. See section "Sample Validation"
Validity of customer reports of service quality	Self-reports of customer service quality may display a 'skew' of the normal distribution.	Problem acknowledged and steps taken to minimise occurrence (see section "The Validity of Customer Reports of Quality/Satisfaction" and Table 6.11.
Validity of statistical analysis	Statistically derived numerical values of validity insufficient to completely validate a real world phenomena	Checks of face-validity, construct and divergent validity included in study. See section "Service Quality: Statistical Validity and Reliability"
Small number of companies considered in customer research.	The customers of only four companies surveyed.	Strength of research that can make company by company comparisons rather than a general customer survey. Large sample size and inclusion of company in most established online market (entertainment products) validates company sample.

Table 6.10 (cont). Limitations and Countermeasures

Limitation	Description	Countermeasure
Small number of companies considered in organisational research.	The managers of four companies surveyed to asses inter-functional relationships.	Research on this area only exploratory and depth rather than breadth sought to conceptualise phenomena. See section: "The Number of Cases under Consideration"
Single item measurement of complex phenomena	Only single of few items used to conceptualise issues traditionally measured with many items.	Need to consider many items in a single study necessitates reduction and has been practiced by researchers in the past. See section: Survey Construction: Single versus Multiple Item Measurement.
Low turnover companies	Companies may be non-representative of online companies as a whole due to small turnover online.	No such thing as a 'typical' online retailer. Most companies still derive only a very small amount of income online. Two internet pure plays and two traditional retail/mail order companies considered for validity.

6.11 Conclusion

As noted at the start of this work, the purpose of the investigation is to examine the multi-faceted nature of service quality in online retailing. The absence of in-depth, validated, verified work in this area presents a need for consideration of this issue, as companies struggle with dissatisfied customers and academia has yet to provide meaningful guidance for them to improve the situation.

The primary investigations conducted within this thesis seek to analyse the customer marketplace for online retailers. Such investigation is based on the belief that to serve the customer, one must first know the customer - both who they are and what they want. In Chapter two, the foundation for such an analysis of service quality was considered - specifically, the ServQual framework of Parasuraman et al. (1984, 1988). This first review provided guidance for methodological modifications to the framework - most notably the substitution of 'expectations' based analysis with 'importance' analysis. Further issues underlined the suitability (and indeed requirement) of large scale, quantitative work, for the identification of key dimensions and customer results within service analysis. The decision of include measurement of both performance and a disconfirmation standard was identified as a prerequisite for analysing true customer demands (versus simple descriptions of performance).

The second chapter sought to review the many different works on online customer service, to identify general research themes, as well as specific scale items for new survey research. Within this chapter, five core research studies were identified (shown in Table 6.7), in addition to the original ServQual tool. The scale items from all six studies were grouped into conceptually-related factors, checked for redundancy, and then placed into an initial survey tool. Exploratory research with students adjusted the initial design of this instrument, and then quantitative work provided for the reduction of the 125 original items into a reduced list of 69, for final survey research. The results of the final research are provided in the following chapter which uses exploratory and confirmatory factor analysis to generate a new model of online service quality.

The third chapter underlined the importance of market segmentation, as a basis for marketing action, but also produced clear evidence that traditional demographic tools are failing in addressing the changing characteristics of contemporary markets. This review produced a list of propositions that seek to test the usability of post-demographic or situational approaches to market segmentation. This investigation is described in Chapter nine, and uses regression and structural equation modelling to compare the results of demographic and non-demographic tools.

The primary research conducted in this thesis, in accordance with the original work on ServQual, and subsequent replications online and offline, utilises a quantitative survey tool to investigate online service quality. The need for a very large sample to validate a new model of online service necessitates quantitative research. In considering philosophical approaches, due to the discovery aspect of this investigation a simple positivist approach was deemed unsuitable and a guided approach of critical realism was adopted, mirroring recommendations of reviewed market researchers (Hunt 1990, 1992, 1994). This research has been conducted with the co-operation of four online companies that cover 'pure play' online retail, service, traditional retail and mail order companies. Surveying the customers of these companies produced a usable sample of $n=3403$ for analysis.

The final literature chapter extended the consideration of customer service quality into the organisation that delivers that service. This review suggested that relationships and co-operation between marketing and operations functions are key in the delivery of service to customers. Investigation into these relationships focused on the four companies which allowed access to their customers. The desire for directly comparable metrics resulted in the

use of a questionnaire survey. However, exploratory interviews with managers adds weight to the findings produced, and notes some interesting findings, elaborated in Chapter eight.

The two principal research activities of this thesis, a survey of online customers and a survey of organisational managers, are both through quantitative survey. The operationalisation tables for these surveys are shown in Tables 6.11 and 6.12. The final survey instruments developed from these tables can be found in Appendices 3.2 (customer) and 3.3 (company).

The subsequent chapters report in turn on the new model of online service quality produced through research (Chapter seven); the organisational issues involved in service delivery (Chapter eight); and finally, the consideration of post-demographic variances in the service quality model (Chapter nine).

Table 6.11 Consumer Research Table of Operationalisation

Construct	Variables	Source and Notes / Modifications
	Section 1: Product Purchased	
Company	Company purchased from	Developed by the researcher.
Product Type	What product(s) did you purchase last time you used the company?	Developed by the researcher.
	What was your main reason for deciding to purchase this product online?	Developed by the researcher
Price	Approximately how much did you spend on this product? Up to £10, £11 - £20, £21 - £50, £51 - £100, £101 - £200, Over £201	Developed by the researcher.
Usage	Are the product(s) (please circle): For Personal Use For Business Use For a gift	Suggested by Kotler, P. . Armstrong, G., Saunders, J. and Wong, V. 1999. Principles of Marketing (2nd European Ed). Prentice Hall.
Purchase Prompt	Were the products purchased personal, business or a gift? Planned, Impulse, Prompted by and advert or promotion Online	Developed by researcher.
Frequency of Product Purchase	How often do you purchase this type of product? (please circle): First time; Once or More a Fortnight; Once or more a month ;Less than once a month	Suggested by Kotler, P. . Armstrong, G., Saunders, J. and Wong, V. 1999. Principles of Marketing (2nd European Ed). Prentice Hall.
Product Research	Before purchasing, did you research the product: Not at all, online, in a catalogue, in a retail store	Developed by the researcher.
Purchase Involvement	When buying this product I choose very carefully 5-item likert scale from strongly disagree to strongly agree	Mital, B. 1989. Measuring Purchase-Decision Involvement. Psychology and Marketing, 6, 147-162. (Scales book p204-5) To fit scale, modified from: "How important would it be to you to make a right choice of this product" with a 7-item likert scale from 'Not at all important' to 'Extremely important'
	Consumer reports are relevant to me 5-item likert scale from strongly disagree to strongly agree	Skanam N, & Tashciahn, 1985. Selected Socio-Economic and Demographic Characteristics associated with purchasing involvement. Journal of Marketing, 49, 72-82. Modified from "Consumer reports are not very relevant to me" Originally 6-item likert scale where 33 PI statements scores were summed to form an overall PI score.
	It is important to me to be aware of all the alternatives before I buy this type of product 5-item likert scale from strongly disagree to strongly agree	Skanam N, & Tashciahn, 1985. Selected Socio-Economic and Demographic Characteristics associated with purchasing involvement. Journal of Marketing, 49, 72-82. Originally 6-item likert scale where 33 PI statements scores were summed to form an overall PI score.
Price Perception (Negative)	"In relation to the type of product you have purchased, please indicate the extent to which you agree or disagree with each statement:" The money saved by finding lower prices is usually not worth the time and effort 5-item likert scale from strongly disagree to strongly agree	Lichtenstein, DI Ridgway, N. & Netemeyer, R. 1993. Price Perceptions and Consumer Shopping Behaviour: A Field Study. Journal of Marketing Research, 30, 234-245. Price Consciousness (Negative role of prices scales): Degree to which consumer focuses exclusively on paying low prices. Price does not relate to quality. Originally 7-item likert, reduced to 5-item from strongly disagree to strongly agree. Means developed for each of 7 subheadings (5 negative, 2 positive).

Price Perception (Positive)	<p>“In relation to the type of product you have purchased, please indicate the extent to which you agree or disagree with each statement.”</p> <p>The price of a product is a good indicator of its quality 5-item likert scale from strongly disagree to strongly agree</p>	<p>Lichtenstein, D, Ridgway, N. & Netemeyer, R. 1993. Price Perceptions and Consumer Shopping Behaviour: A Field Study. <i>Journal of Marketing Research</i>, 30, 234-245.</p> <p>Price-Quality Schema (Positive Role of Price Scale): Generalised belief across product categories that the level of the price cue is related positively to the quality of that product Price related to quality.</p> <p>Originally 7-item likert, reduced to 5-item from strongly disagree to strongly agree. Means developed for each of 7 subheadings (5 negative, 2 positive).</p>
Information Overload	<p>I do not have time to fully research products so rely on names I trust 5-item likert scale from strongly disagree to strongly agree</p>	<p>Suggested by: Winzar, H. and Savik, P. 2002. Measuring Information Overload on the World Wide Web. <i>Proceedings of the American Marketing Association Conference</i>, Winter, 2002.</p>
Price Importance	<p>When purchasing the type of product you have, how important is: Low Price 5 item scale from very unimportant to very important.</p>	<p>Developed by the researcher.</p>
Quality Importance	<p>When purchasing the type of product you have, how important is: High Quality 5 item scale from very unimportant to very important.</p>	<p>Developed by the researcher.</p>
Section 2: Making the Purchase		
Reason selected company	<p>What is the main reason you purchased this product from this company? (Open Ended)</p>	<p>Developed by the researcher.</p>
Company / Internet Usage	<p>How often do you purchase goods or services: a) Online? b) Online from this company?</p> <p>Usage/history measure devised for company and internet usage based on sum of three individual items.</p> <p>First time; Once or More a Fortnight; Once or more a month ;Less than once a month</p>	<p>Suggested by Kotler, P. . Armstrong, G., Saunders, J. and Wong, V. 1999. <i>Principles of Marketing</i> (2nd European Ed). Prentice Hall.</p>
	<p>How long have you been purchasing: a) Online? b) Online from this company?</p> <p>This is the first time, up to 6 months, 7-12 months, 1-2 years, over 2 years.</p>	<p>Suggested by Kotler, P. . Armstrong, G., Saunders, J. and Wong, V. 1999. <i>Principles of Marketing</i> (2nd European Ed). Prentice Hall.</p>
	<p>Over the last year, approximately what is the total value of your purchases: a) Online? b) Online from this company?</p> <p>Up to £20; £21-50; £51-100, £101-£200, Over £201</p>	<p>Suggested by Kotler, P. . Armstrong, G., Saunders, J. and Wong, V. 1999. <i>Principles of Marketing</i> (2nd European Ed). Prentice Hall.</p>
Company Channel Usage	<p>Which methods have you used to purchase form this company? Internet, catalogue, retail store, digital TV</p>	<p>Developed by the researcher.</p>
Company Loyalty / Number of Companies	<p>When purchasing the type of product you indicated at the start, how many companies do you purchase from? Always the same company, 1 or 2 companies, 3 to 5 companies, Many different companies</p>	<p>Suggested by Kotler, P. . Armstrong, G., Saunders, J. and Wong, V. 1999. <i>Principles of Marketing</i> (2nd European Ed). Prentice Hall.</p>
Returns	<p>Have you ever returned products to this company? Yes / No.</p>	<p>Suggested by PZB 1988. Only included in EntzCo survey.</p>

Nature of Loyalty (attitude vs behaviour)	I shop with the company because there are no alternatives for the product I require 5-item likert scale from strongly disagree to strongly agree	Developed by the researcher
	I shop with the company because their offering best matches my needs 5-item likert scale from strongly disagree to strongly agree	Developed by the researcher
Satisfaction	I would recommend this company to others 5-item likert scale from strongly disagree to strongly agree	Developed by the researcher
	I am likely to shop with this company again 5-item likert scale from strongly disagree to strongly agree	Developed by the researcher
Multi-Channel Effects	I prefer to purchase from internet companies that I know from the high street 5-item likert scale from strongly disagree to strongly agree	Developed by the researcher.
	If I received poor service from an online purchase, I would not buy from that company through any means again 5-item likert scale from strongly disagree to strongly agree	Developed by the researcher.
	I would purchase from a company only reachable via the internet 5-item likert scale from strongly disagree to strongly agree	Concept of multi-channel impacts devised from ICSA Report
Section 3: Service Quality		
SQ Heading	Final Service Quality Item	Contributory Source Items Sources: KEY: A - SQ - SERVQUAL - Zeithaml, Parasuraman and Berry, 1990. B - eSQ - e-Service Quality - Zeithaml, Parasuraman and Malhotra, 2000. C - .comQ/eTailQ - Wolfenbarger and Gilly, 2002 D - Internet Service Quality - Yang and Jun, 2002 E - WebQual - Loiacono, Watson and Goodhue, 2002 F - Retail Service Quality - Dabholkar, Thorpe and Rentz, 1996
PRODUCT IDENTIFICATION AND AVAILABILITY	The website has a useful search function	C The search function at this website is helpful
	It's easy to get around and find what you want at this site	B by price/section or colour/size etc, search way you want to C It's easy to get around and find what you want at this site (easy trans to cat)
	The website is laid out in a logical fashion	D The organisation and structure of online catalogues was logical and easy to follow C The website is laid out in a logical fashion
	The layout of the site is clean and simple	C The layout of the site is clean and simple B site that contains just the basics B not too many web pages B no scrolling from side to side
	The website has a good user interface	B. good user interface B ability to find a page previously viewed B being able to go back when you make a mistake
	Pricing is clear and easy to understand	B running total of purchases as order progresses B running total of purchases and shipping costs B prices shown with the items on the screen B up-front pricing D All the terms and conditions (e.g. payment, warranty and return policies) were easy to read / understand (EASE)

	I know what all my options are when I shop at this website	B no fine print that is difficult to read and hard to find C I know what all my options are when I shop at this website D The contents in the Web site were concise and easy to understand
	The contents of the website are concise and easy to understand	C The site gives me enough information so that I can identify the item to the same degree as if I am in the store E The website adequately meets my information needs E The information on the Web site is effective
	The site gives me enough information so that I can identify the item as well as if I am in a store	B want to know up-front what shipping charges are (can determine if purchase or go elsewhere) C Every process at this site moves like a well oiled machine C This site doesn't waste my time
	The website lets know me delivery charges upfront	C The website has products I can't find in store C There are hard to find products on this site
	This site doesn't waste my time	B Items are available B items are available in my size F This store has merchandise available when the customer wants it
PRODUCT LOCATION (Subsection of Identification and Availability)	The website has products I can't find in stores	C The website has good selection
	There are hard to find products on this site	B well known name
	All the items I want are in stock	E The website projects an image consistent with the company's image E The website fits with my image of the company E The websites image matches that of the company
COMPANY IMAGE	The website has a good selection	B advertises on other media so that name is well known
	The company has a well known name	B reputation of site C The company behind the site is reputable
	The website fits with my image of the company	C The website instils confidence in customers A The behaviour of employees in excellent _ companies will instil confidence in customers.
	The company advertises on other media	F This store offers high quality merchandise
	The company behind the site is reputable	D I received special rewards and discounts from doing businesses with the Internet retailer
	The website instils confidence among its customers	C When you have a problem, this website shows a sincere interest in solving it A When a customer has a problem, excellent companies _ companies will show a sincere interest in solving it
CUSOMTER SERVICE	The website offers high quality merchandise	F This store willingly handles returns and exchanges
	I receive special rewards and discounts from doing business with this website	C Customer service personnel are always willing to help you B having a brick and mortar option to return items B being able to return the items to a store
	When you have a problem, the company shows a sincere interest in solving it	C After sale support at this site is excellent C The product is delivered by the time promised by the company C My order is delivered by date promised A Excellent _ companies will provide their services at the time they promise to do so A When excellent _ companies promise to do something by a certain time,
	The company willingly handles returns and exchanges	
	Customer service personnel are always willing to help you	
	I can return items ordered online, to the company's retail stores	

		they will do so.
		D The product/service I ordered was delivered to me within the time promised by the Internet retailer
The company refunds shipping charges when the product doesn't arrive in time		B refund shipping charges when product doesn't arrive in time
I feel like the company wants to provide me with a good buying experience		C I feel like the company wants to provide me with a good buying experience
		C The website appreciates my business
The website has good pictures of the products		C The website has good pictures of the product
		B being able to see the products clearly
It is quick and easy to complete a transaction at this website		B speed of execution
		C It is quick and easy to complete a transaction at this website
The company offers free delivery for orders over a certain value		B knowing that shipping is free
You get good value for money at this website		C You get good value for the money spent at this website
The site has competitive prices		C The site has competitive prices
The website is always available for business		B Available for business
		A Excellent _ companies will have operating hours convenient to all their customers.
The website is working correctly and functions as it should		B Site is working correctly
		C The site always works correctly
		C The website functions as it should
CONTACTING THE COMPANY	A contact telephone number is displayed on the site so that I can talk to a 'live' person	B contains a telephone number to reach the company
		B ability to talk to a 'live' person using a telephone number
		D If I want to, I could easily contact a customer service representative over the phone.
		B. ability to talk to the person who processes the order
Telephone calls are answered promptly		C Inquiries are answered promptly
		A Employees in excellent _ companies will give prompt service to customers.
		A Employees in excellent _ companies will never be too busy to respond to customers' requests.
A contact address is shown on the website		D The Web site showed its street and email addresses, and phone and fax numbers
When the company promises to email or call by a certain time it does so		B fast response to email queries
		A Employees in excellent _ companies will have the knowledge to answer customers questions.
		D When the Internet retailers promised to email or call me by a certain time, it did so.
TRUST IN THE COMPANY	I feel secure giving out credit card information to this site	D I felt secure in providing sensitive information (e.g. credit card number) for online purchase
		C I feel secure giving out credit card information to this site
I feel safe in my transactions in this site		C I feel safe in my transactions in this site
		E I feel safe in my transactions on the Web site
		D I felt the risk associated with online purchase was low
		A Customers of excellent _ companies will feel safe in their transactions.
I feel like my privacy and personal information is protected at this site		B not having to give my credit card information until right at the end

		B. doesn't keep my credit information on file C I am worried about this site knowing everything about me B. personal information should not be compromised B. doesn't give other sites or companies access to my information B. doesn't use banner ads with cookies to collect information on me B. doesn't give my information away to other companies. C I trust this site will not mis-use my personal information C I feel like my privacy is protected at this site C I trust that this site will not give my information to other sites without my permission E I trust the Web site to keep my personal information safe 1 E I trust the Web site administrators will not misuse my personal information 1
	You know exactly what you're buying from the website The website has adequate security features	C You know exactly what you're buying at this website C This website has adequate security features B symbols and messages that signal the site is secure B verification from third parties
ADMINISTRATIVE EFFICIENCY	The site confirms exactly what is ordered The quantity and quality of the product was exactly as ordered	B Pages confirm exactly what was ordered. D The quantity and quality of the product/service I received was exactly the same as I ordered
	The billing process was accurately handled and its records kept accurately	D The billing process was accurately handled and its records were kept accurately B Billing is accurate(product and shipping costs)
	The product that came was accurately represented by pictures and descriptions on the website I can set up an account with the company to be billed monthly The company has bulletin boards and chat rooms for customers to seek support	C The product that came was accurately represented by the website B - Flexibility - choice of ways to pay (ESQ) D For more information, I could turn to the Internet retailer's chat rooms, bulletin boards or others
	I have the option to pay by cheque by post There are no pop-up advertisements There are no advertisements on the website I do not receive junk mail from being on their mailing list	B. would like to pay my way using cheques Added by the researcher. B no or few advertisements B options to be on an email list buy not receive junk mail
NO ADVERTS (Subset Administrative Efficiency) WEBSITE	The website is easy to customise The website does a good job of guessing what kind of things I might want	B - Customisation / Personalisation - Easy to customise C This site does a pretty good job guessing what kinds of things I might want and making suggestions A The employees of excellent _ companies will understand the specific needs of their customers.
	The website has a 'wish list' capability that allows me to save items I might want to buy The level of personalisation at this site is about right, not too much, not too little	B. has a wish list capability that allows me to save items I might want to buy C The level of personalisation at this site is about right, not too much, not too little.
	The website stores my information to facilitate future transactions	B - Customisation / Personalisation - Stores customer information to facilitate future transactions
	It's fun to shop at the website	C The site almost says 'come in and shop'

INFORMATION

There are features at the site that are entertaining to use

I receive notification when the product will be delivered

It's easy to track the shipping and delivery items of items purchased on this website

The website lets me know about product availability during search

Most products are available for delivery within 48 hours

The website provides in-depth information

The site helps me research products

C The website has good surprises

C There are features at this site that are entertaining to use

C Buying at this website is exciting

C It's really fun to shop at this website

E I feel happy when I use the Website 9

E I feel cheerful when I use the website 9

E I feel sociable when I use the website 9

B received information about when the order was coming

A Employees in excellent companies will tell customers exactly when services will be performed.

C It's easy to track the shipping and delivery items of items purchased on this website

C The website lets me know about product availability during search

C You get you merchandise quickly when you order it

C At this site, I have the full information at hand

C The website provides in-depth information

C The website has comprehensive information

C The website is a very good source of information

C The site helps me research products

E The information on the Web site is pretty much what I need to carry out my tasks

Section 4: Lifestyle

Techno-Readiness

I can usually figure out new hi-tech products and services without help from others

New technology is often too complicated to be useful

"Please indicate your extent of agreement with each of the following statements"

I like the idea of doing business via computers because you are not limited to regular business hours

When I get technical support from a provider of a high tech product or service, I sometimes feel as if I'm being taken advantage of by someone who knows more than I do

All items 5-item likert scale from strongly disagree to strongly agree

Technology gives people more control over their daily lives

I do not consider it wise giving out a credit card number over a computer

In general, I am among the first in my circle of friends to acquire new technology when it appears

I do not feel confident doing business with a place that can only be reached online.

Technology makes me more efficient in my occupation

If you provide information to a machine or over the internet, you can never be sure if it really gets to the right place.

Parasuraman, A. & Colby, C. 2001. Techno-Ready Marketing: How and Why Your Customer Adopt Technology. The Free Press, NY.

Techno-Readiness (Result): Single score developed on literature methodology.

Time Usage	I have a very hectic life 5-item likert scale from strongly disagree to strongly agree I do not seem to have enough time to do all the activities I would to each day 5-item likert scale from strongly disagree to strongly agree I am always rushing around 5-item likert scale from strongly disagree to strongly agree	Developed by the Researcher Combined Measure of three items "Please indicate your extent of agreement with each of the following statements"
Products Purchase Online	Which of the following items, if any, do you currently purchase online? Books, CDs, DVDs or Videos, Clothing, computing Products, Groceries, Electrical Equipment, DIY / Tools / Hardware, Beauty / Healthcare Products, Sports or Hobby Supplies, Travel, insurance or financial services	Developed by the researcher. Each product group purchased counted to give a total out of 11.
Ethical Shopping	Which of the following items, if any, do you purchase (by any means)? Fair-trade, socially or ethically responsible products; GM-Free or organic products	Developed by the researcher.
Online Activities	S4. 24. What other online activities, if any, have you undertaken in the last three months? Searching the Web; Getting News; Online Chatting; Playing Online Games; Tracking Stocks; Email	Developed by the researcher. Each activity undertaken counted to give a total score out of seven.
Online Connection	S4. 25. What type of internet connection, if any, do you have? No Connection; Modem; ISDN; Cable or ADSL; T1/T3; Through TV; Not sure	Developed by the researcher. Coded into Low (dial-up), Fast (ISDN, Cable, T1/T3), None, TV, Unknown.
Online connection	S4. 26. Do you access the internet: At Home; At work; At home and Work	Developed by the researcher.
Section 5: Personal Details		
Gender	Gender: Male Female	Suggested by Kotler, P., Armstrong, G., Saunders, J. and Wong, V. 1999. Principles of Marketing (2nd European Ed). Prentice Hall.
Occupation	Which of the following titles best describes your occupation: Higher managerial / administrative or professional; Intermediate managerial / administrative or professional; Supervisory, junior administrative or professional; Skilled or unskilled manual worker; Retired or Pensioner; Student; House-wife or house-husband; Other casual work.	National Readership Survey. Cited in Lancaster (2004) Higher managerial, admin or professional = Upper Middle Class (A) Intermediate managerial, admin or professional = Middle Class (B) Supervisory, clerical, junior administrative or professional = Lower Middle Class (C1); Skilled manual worker = Skilled Working Class (C2); Semi and unskilled manual worker; Casual work = Working Class (D) State pensioner or Student (E)
Age	What is your age? Under 18; 18-24; 25-34; 35-44; 45-54; 55-65; Over 65	Suggested by Kotler, P., Armstrong, G., Saunders, J. and Wong, V. 1999. Principles of Marketing (2nd European Ed). Prentice Hall.
Education	What is the highest educational qualification you hold? None; GCSE or 'O' Level; Vocational Qualification; 'A' Level; Under-graduate Degree; Postgraduate Degree	Suggested by Kotler, P., Armstrong, G., Saunders, J. and Wong, V. 1999. Principles of Marketing (2nd European Ed). Prentice Hall.
Household Income	What is your household income? Under £15,000; £15,001-£20,000; £20,000-£30,000; £30,001-£40,000; £40,001-£100,000; Over £100,000	Suggested by Kotler, P., Armstrong, G., Saunders, J. and Wong, V. 1999. Principles of Marketing (2nd European Ed). Prentice Hall.

Table 6.12. Organisational Research Table of Operationalisation

Construct	Variables	Source and Notes
Customer Understanding	<p>Column 1- How important this is to your customers (1 very unimportant to 7 very important)</p> <p>Column 2 – How well our company performs (1 perform very badly, 7 performs very well)</p> <p>Website Design, Trust in the company, Customer service, Information provision about products on the website, Ease of Contacting the company No advertisements/spam, Website customisation and personalisation, Product range and availability, Company image, Special features (e.g. ability to have monthly accounts / bulletin boards)</p>	<p>Developed by the researcher from service quality factors.</p>
Marketing Orientation	<ol style="list-style-type: none"> 1. Our business objectives are driven primarily by customer satisfaction 2. We constantly monitor our level of commitment and orientation to serving customer needs 3. We freely communicate information about our successful and unsuccessful customer experiences across all business functions 4. Our strategy for competitive advantage is based on our understanding of customer needs 5. We measure customer satisfaction systematically and frequently 6. We have routine or regular measures of customer service 7. We are more customer focused than our competitors 8. I believe this business exists primarily to service customers 9. We poll end users at least once a year to assess the quality of our products and services 10. Data on customer satisfaction are disseminated at all levels in this business unit on a regular basis. (1 strongly disagree to 5 strongly disagree) 11. High-quality customers service is of similarly high importance to us as the quality of our products (1 strongly disagree to 5 strongly disagree) 12. In our business we expect that customer requests are answered at once (1 strongly disagree to 5 strongly disagree) 13. The managers in our company regularly interact with customers 14. Customer complaints are used to improve customer service (1 strongly disagree to 5 strongly disagree) 15. Outstanding performance in customer service is highly appreciated 16. Employees with a distinctive service orientation have very good opportunities for career development 17. Outstanding performance in customer service is rewarded in the context of compensation for example through bonuses (1 strongly disagree to 5 strongly disagree) 	<p>Core marketing orientation scale.</p> <p>Deshpande and Farley, 1996. Understanding Marketing Orientation: A Prospectively Designed Meta-Analysis of Three Market Orientation Scales MSI Working paper report 96-125</p> <p>Reduced all three surveys to a combined to 10-item scale on market orientation</p> <p>Developed into: Desphande and Farley, 1998, Journal of Market Focused Management, 2, 213-232.</p> <p>Homburg, C, Fassnacht, M. & Guenther, C. 2003. The Role of Soft Factors in Implementing a Service Orientated Strategy in Industrial Companies. Journal of Business-to-Business Marketing, 10, 2, pp23-51</p> <p>Homburg, C. and Pflesser, C. A Multiple-Layer Model of Market-Orientated Organisational Culture. Journal of Market Research, Nov 2000, pp449-462.</p> <p>Adapted from: In our SBU, we expect that customer requests are answered at once</p> <p>Developed by the researcher.</p> <p>Homburg, C, Fassnacht, M. & Guenther, C. 2003. The Role of Soft Factors in Implementing a Service Orientated Strategy in Industrial Companies. Journal of Business-to-Business Marketing, 10, 2, pp23-51</p>

Expectations Management	<p>18. The company supports customer focus by telling stories of people providing exemplary customer service. (1 strongly disagree to 5 strongly agree) On the following items, please rate the expectations marketing creates in customers compared to company ability to fulfil the expectations</p> <ol style="list-style-type: none"> 1. Product Quality 2. Product Range Availability 3. Product Delivery Lead Time <p>Expectations are: Far Too High, Too High, Correct, Too Low, Far too Low Please state your agreement or disagreement with the following statements: There is high level, effective integration of the marketing and operations functions</p>	Developed by the researcher.
Cross Functional Working	(1 strongly disagree to 5 strongly agree)	Developed by the researcher.
Relationship Quality	<p>Cross functional teamwork is the common way of working in this business (1 strongly disagree to 5 strongly agree) In this business marketing and operations get along well with each other</p>	Adapted from Kotler, P. 1977. From Sales Obsession to Marketing Effectiveness. Harvard Business Review. Nov-Dec, pp67-75.
Power Impact	<p>Marketing and operations work well together in this company (1 strongly disagree to 5 strongly agree)</p>	Adapted from: Integrated Marketing Organisation
Power	<p>There is little or no interdepartmental conflict in this business unit (1 strongly disagree to 5 strongly agree)</p> <p>What impact does the marketing function have on the business What impact does the operations function have on the business (1-5 none to very large impact) Departments in firms are likely to have different degrees of power within the firm. How would you rank the power of the following departments in your firm at the moment? Please rank 1st, 2nd, 3rd etc Operations/Logistics/Distribution, Finance/Accounting, Marketing, Human Resource Management, Sales, E-commerce</p>	D Is there high level marketing integration and control of the major marketing functions? 0 No. Operations and marketing functions are not integrated at the top and there is some unproductive conflict. 1 Somewhat. 2 Yes. The major marketing functions are effectively integrated Adapted from (replaced sales with operations) Low, Cravens and Piercy (undated).
		Hausman, Montgomery and Roth (2002) Adapted from: How well do marketing and operations work together (much worse-better 1-7) Adapted from Jaworski, B. and Kohli, A. 1993. Marketing Orientation: Antecedents and Consequences. Journal of Marketing. 57, July 1993, pp53-70
		Based on a concept from: O'Leary and Benito (quoted by T Landry, HBR Nov-Dec 97 Briefings from the Editors)
		Adapted from: Piercy, N.F. 1986. Marketing Budgeting. Crook-Helm.

Respondent Classification (in survey of both marketing and operations personnel)

Person Classification

1. What is your current job title _____
2. What department do / group do you work currently work in? _____
3. Years in position _____
4. Gender Male / Female
5. Please indicate how many (if any) years experience you have in each of these areas:
 Marketing and sales _____ yrs
 Operations / logistics / distribution _____ yrs

Classification Data

Standard classification data.

Year Founded

What year was your company founded _____

Sales Base

Approximately what percentage of your company's total sales comes from:

Consumer Sales _____ Business Sales _____

Sales Base

Approximately what percentage of your business comes from sales made to:

Demographics

Male Customers _____ Female customers _____

Average Spend

Approximately, what is the average total spend per transaction in your company (please state a figure or approximate range): £ _____

Structure

Please approximate the number of full time employees in the following departments:

IT/E-Commerce, Marketing, Sales, Human Resources, Accounting/Finance, Operations

Sales channels

Please approximate what percent of your company sales have come from each of the following channels in each of the past three years:

Retail stores sales, catalogue sales, internet sales, digital TV sales, other _____ .
(to 100 % per year)

Year ending 1 April 2004, 1 April 2003, 1 April 2002

Total Sales

Please approximate items for the following items (if you would prefer not to give exact figures please provide a range (e.g. £10-25million)

Total Sales (£), Pre-Tax Profit (£), Market Share (%), Total Number of Full Time Employees

Year ending 1 April 2004, 1 April 2003, 1 April 2002

CEO Background

What is the functional background of your CEO? (e.g. marketing/sales/accounting etc).

Structure

Please sketch out your organisation structure/chart.

Chapter 7. Online Service Quality

7.1 Research Findings Overview

The following three chapters produce the results for the principal findings of this thesis, addressing the three research questions previously identified:

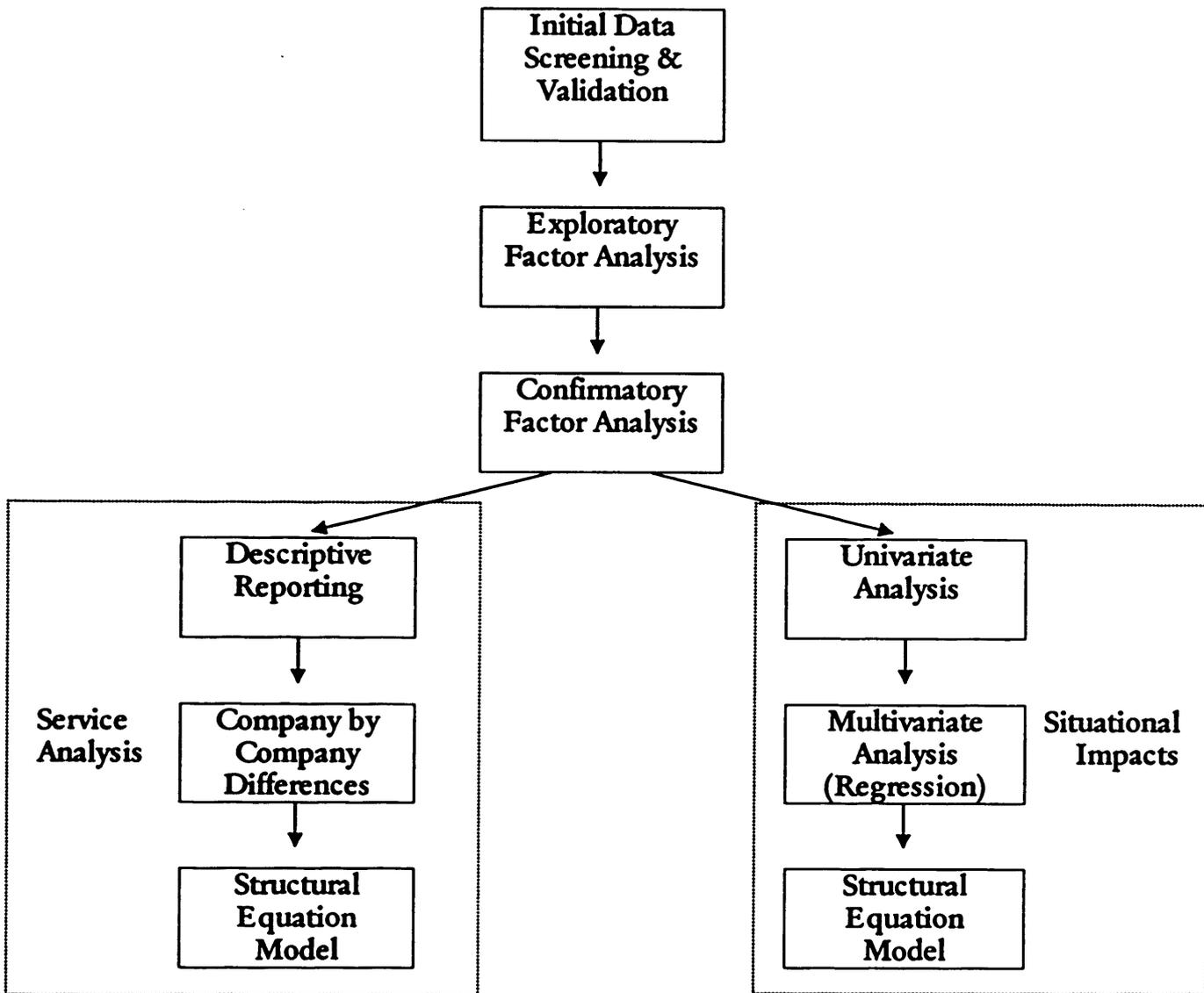
What are customers service quality demands online?

What is the impact of purchase situations on customer service quality demands online?

What differences exist in the marketing versus operations views and orientation towards customer priorities?

To answer these questions a procedural process of statistical refinement and analysis has been followed, and is shown in Figure 7.1 below. The principal research activities concern the analysis of collected customer data (n=3403), through initial screening and refinement, exploratory and confirmatory validation procedures. This model provides a staged process of escalating validity from initial descriptive analysis, to identify key trends, through to structural equation modelling to confirm trend impacts. This model allows for triangulation of findings through increasingly vigorous statistical analysis and falls in line with established procedures for the analysis of self-reported respondent survey data (Pallant 2003, Byrne 2001, Field 2005) It also echoes the procedures used in the analysis of ServQual data by Parasuraman et al. (1988) and later electronic service models (Parasuraman et al. 2005). The company data collected are addressed by consideration of company by company differences (shown in the service analysis section of the Figure 7.1). Due to the exploratory nature of the company investigation, the small sample size provides for descriptive insight into customer understanding by marketing versus operations departments at a company by company comparisons level.

Figure 7.1. Research Analysis Strategy



7.2 Introduction: Service Analysis

This chapter reports on the field-research conducted with the customers of four online retailers. Over a two month period the customers of these companies received e-mail invitations to complete an online survey, yielding a total response of 3403 customer responses. The analysis of these responses and derivation of a model of what customers find important when shopping online, and as a result of this online services quality, is the basis of this chapter.

7.3 Sample Validation

7.3.1 Response Rate

Loiacono et al. (2002) note that for factor analysis (to be used in constructing the service quality model), there should be at least five times as many observations as there are variables to be analysed. Within this study, this aim was more than satisfied with 3403 responses to consider 69 service quality items. In terms of specific response rates per company, to

encourage response rates, standard marketing research practice was adopted and an incentive was offered to potential respondents (Malhotra and Birks 2000). These were: at ToolCo, every person completing a survey was offered a £10 discount voucher for their next purchase; SportCo offered five, fifty pound shopping vouchers in a prize draw; EntzCo offered one £100 gift voucher for a prize draw; and, ServCo offered one £50 amazon.com shopping voucher. Responses were collated automatically by electronic survey software (Perseus Survey Solutions Professional 6), with customers attracted to complete the survey via an e-mail invitation distributed to customers of the company concerned.

Deutskens and Veld (2004) note very little research has been conducted on online response rates. Schillewaert and Meulemeester (2005), testing online response rates, find that when using pop-ups on high traffic websites to attract general customers they achieve 10% of viewers clicking through to complete a survey (also they note that in comparison they got 31% response for traditional mail sampling and 35% for telephone surveying). Deutskens and Veld (2004) gained a 20.4% online survey response rate with financial incentives. Yang and Jun (2002) gained 28.5%, with two follow-up e-mails. Tierney (2002), applying an online service quality questionnaire regarding tourist information sites, gained only a 2% response rate, noting that: "offsetting to some degree the low response the non-response problem is the relatively large number of responses that can be economically gathered with online methods" (p218). The limited research on online response rates suggests that both lower rates than offline are received. Some research has indicated responses of up to 20%, however, those using a specific service quality instrument gained only a 2% response rate. When considering the online service quality instruments used within this thesis, most of the research publications do not disclose their response rate, instead stating absolute numbers of responses. PZB (2005) state three sample responses of 549, 205 and 653. Wolfenbarger and Gilly (2002, 2003) state a total of 1013 and Loiacono et al. (2002) state samples of 511, 336 and 307. The exclusion of response rates and stating of absolute numeric values suggests responses were poor, and not disclosed to focus attention on the volume of responses rather than low response rate. When comparing these figures to the sample conducted within this thesis, reasonable response rates are achieved and a sample larger than those previously considered is analysed.

The low response rate for ToolCo can be accounted for by the fact that not all the e-mail addresses provided were of current customers, but rather a joint database of those who had requested information as well as those completing a sale. For the other three companies, information about the total number of e-mails sent was provided, but it was not possible to confirm the number of delivered versus non-delivered e-mails. PZB (1994a) note in

conducting a field test of a questionnaire that low response rates (12-16%) may be due to the time of year – conducting testing in the November and December ‘holiday’ (Christmas) season may harm response rates. The time frame for the research was November to December 2004. Thus responses may have been lower due to the time of year. Overall the 8.8% response provides a good level of responses in a largely uncharted area of market research (online sample response rates). It may, in fact, be considerably higher. Almost half of the ToolCo invitations were non-deliverable – for the other three companies the deliverable versus undeliverable number of invitations was not available (invitation distribution for those companies were subcontracted by the companies to a third party unable to disclose these figures).

Table 7.1 Response Rates

Company	Invitations Sent	Non-deliverable	Responses	Response Rate
ToolCo	20567	9296	510	5.5%
EntzCo	10,000 (4000 high value customers, 6000 low value customers)	unknown	1850 (high value 875 low value 975)	18.5% (21.8% high value, 16.3%: low value)
SportCo	7579	unknown	583	7.7%
ServCo	6000	unknown	460	7.66%
		Total	3403	8.8% ¹

¹ Based on 3403 responses from 34850 sent.

7.3.2 Sample Validation

Ideally, a sample should be a probability sample, that is statistically chosen at random so that inferences about the population as a whole can be more readily made). In business research, such as market surveys and case study research, probability sampling is rarely possible (Saunders et al. 2003). Customer self-selection is more common. In the consumer marketplace, responses will possess a self-selection bias. However, checks have been devised to reduce the impact of this (described below). Saunders et al. (2003) instruct checking if data are representative involves comparing data collected from the sample with data from another source for the population, such as comparing the socio-economic characteristics of marketing survey respondents with the characteristics recorded from the population as a whole (for instance, using census data).

PZB (1994a), in validating samples, find “formal statistical testing of the samples’ representativeness was not possible because demographic information on the entire customer base was not readily available”. They therefore asked managers in the companies to review the demographic profile of the customer base to validate its representativeness. ZBP (1996) also

suggest the verification of customer samples as representative of the customer population by having managers in companies review demographic profiles to determine if they were representative of the customer base. Within this thesis, details regarding the basic demographics of the company's customers was sought and compared to that of the sample gained. The company where the most accurate information was available, EntzCo shows a very close sample match. For ToolCo and SportCo, due to the emergent nature of their internet channels, managers were only able to provide details about the company customer base as a whole, not just the internet. Due to this factor some variation from the figures provided is noticeable. However, this is not large enough to be of concern, and is accounted for by the variation in retail-internet sales. For ServCo, demographic information was not available, but sample response composition has been identified as representative by company personnel.

Table 7.2 Response Validation

Company	Stated Demographic Split (M/F)	Sample Response (M/F/unstated)
EntzCo	70:30	68:32:1
ToolCo	70:30*	76:19:6
SportCo	20:80*	6:91:3
ServCo	n/a	70:26:4

*figures based on entire company sales not just internet channel

7.4 Data Screening

Whereas the previous section validated the general composition of the sample received, the purpose of this section is to validate the statistical composition of the sample received, prior to analysis. Specifically, this concerns addressing missing data, non-respondent bias, outliers and the normality of the service item responses received.

7.4.1 Missing Data

Missing data, while 'a fact of life' (Hair et al. 1998), can lead to problems in analysis. A key issue in considering missing data is whether it is random or systematic. If random, methods to treat missing data (mean substitution in missing cases, listwise or pairwise techniques) may produce usable results (Hair et al. 1998). If there is a pattern in missing data then the variables concerned may need to be removed from further analysis. In terms of acceptable levels of missing data, Cohen and Cohen (1983) indicate 5% or even 10% as acceptable. An analysis of missing data was performed. The five importance items yielded high missing values, due to their exclusion from the survey of the service company (as they concerned physical goods delivery). Three other importance items had missing value levels of 13% (the option to pay by post and to setup a monthly account). This is likely due to the very low level of importance

recorded for those items. All other importance items had missing values of 10% or less, with the average missing value level at 7%. There were, however, a far higher number of performance items with missing values, with 36 of 69 items having missing values greater than 10% of the total sample, with an average missing value level of 12%. It is likely many items were left blank as customers had no experience of the particular feature. For instance, knowing if telephone calls were promptly answered by the company would require someone to have telephoned the company, which many customers clearly had not whereas it is still possible for someone to state the feature is important to them. This finding indicates that the performance items (and related gap scores) would provide a far less suitable base for factor analysis than the importance scores. This finding also supports the inclusion of a disconfirmation standard within the research conducted, rather than adopting performance-only (recommended by researchers such as Carman 1990) or single item, performance-versus-expectation measurements as recommended (as conducted by PZB 2005). Missing values are listed in Appendix 6.1.

7.4.2 Response Rate Bias

In considering non-response bias in postal surveys, Babakus and Boller (1992) evaluated non-response bias by conducting regression against date of return, and t-tests for early and late responders. Ellinger (2000) echoes the methods of Armstrong and Overton (1977), and estimates non-response bias in mail surveys by comparing the last quarter of respondents to the remainder of the sample, assuming that the last quarter would bare a close resemblance to non-respondents.

For the purposes of this research, the last quarter of respondents for each company was identified, to compile a list of the last quarter of respondents over the sample as a whole. This last quarter was then compared to the remainder of the sample for every service quality importance and performance item. Independent samples t-tests (missing cases excluded listwise) were used to determine if significant differences existed. A total of seven performance and eight importance items yielded significantly different results in the last quarter of the sample, indicated that response bias may indeed be in place for those variables. In comparing the means for each variable the maximum difference was 0.37 - due to the large sample size such a difference may become statistically inflated. Final analysis (described later in this chapter) discounted all but one of these variables, which was deemed to be very important to customers (contact number displayed on the website), and displayed a variation of only 0.22 between the first three quarters and last quarter of the sample. A full list of the analysis of differences is provided in Appendix 6.2.

It should be noted that it is not entirely possible to check for non-response bias, due to the nature of the sampling conducted by the companies in question. E-mail distributions to customers (inviting them to complete a survey) were distributed over a three to five day period, so customers on any one day may have been completing the survey anyway between one and ten days after receiving an invitation. As companies were not willing to disclose their customer e-mail addresses, for reasons of policy, data sensitivity and legal requirements regarding data protection, it was not possible to date any single response, only the collation of responses into the system as a whole.

7.4.3 Outliers

Odd responses that are distant from the mean (outliers) can lead to problems in data analysis and must be screened with various methods – SPSS computation of extreme values, inspection of box-plots, histograms or comparison the standard mean with a 5% trimmed mean (the top and bottom 5% of the sample removed and the mean recalculated) (Pallant 2003). Such analyses were computed for all service quality importance and performance items. Inspection of the box-plots and histograms revealed only three or four responses (from a sample of $n=3403$) as sitting away from the main results, usually at the bottom end of the scale. Inspection of the 5% trimmed mean revealed very little difference between this and the normal mean (maximum variance of 0.19 with an average variance of 0.1). This suggests that the few number of outliers had only very minimal effect on the overall response set. Full results are provided in Appendix 6.3. It was not deemed necessary to remove any extreme values or cases from the analysis.

7.4.4 Normality

Many statistical tests (such as t-tests or factor analysis) assume that the dependent variable is distributed normally (i.e., a bell shaped curve) (Pallant 2003). It is therefore necessary to statistically assess the normality of each item submitted to a procedure. Three standard tests regard skewness and kurtosis for normality measured at 0 (with greater deviation from zero indicating the extent of non-normality), and the Kolmogorov-Smirnov statistic, where a non-significant result (sig. value of more than 0.05) indicates normality. Determination of normality may also be achieved by inspection of the graphical representation of the results in histograms, normal Q-Q plots and de-trended normal Q-Q plots (all available in SPSS).

These statistics were computed for all service quality importance and performance items. Full results are given in Appendix 6.4. Inspection of kurtosis, skewness and the Kolmogorov-

Smirnov statistic indicated that no items were in fact normally distributed. However, with 'reasonably large samples' (quoted as $n \geq 200$), skewness and kurtosis are described as not making any substantive difference in analysis (Tabachnick and Fidell 1996, Pallant 2003). Tabachnick and Fidell (1996) and Pallant (2003) also indicate that with large samples, the test statistics for normality are too sensitive and that inspection of the distribution shape should be undertaken. Similarly, Pallant (2003) notes that significant Kolmogorov-Smirnov statistic (indicating non-normality) are common in large samples. Inspection of the histograms produced, showed that almost items all displayed the characteristics positive-skew highlighted by Peterson and Wilson (1992) as common in measuring customer satisfaction, described in the research methodology chapter.

Due to the sample size ($n=3403$) the statistical tests of normality are inappropriate for drawing firm conclusions as to normality, while the histograms indicate that the pattern of results is in-line with the majority of studies previously conducted where customer measurements of service or satisfaction are taken (Peterson and Wilson 1992). However, as mitigation against any possible impact on analysis, non-parametric analyses (which do not assume normality) are used in place of parametric analysis, when considering variance in customer service requirements. In line with the suggestions by Pallant (2003), rather than independent samples t-tests for analysing variance, the Mann-Whitney test is used and rather than a Pearson's product-moment correlation the Spearman Rank Order Correlation is utilised.

One key theme of this research has been to highlight that different personal or contextual situations influence how customers view service items. Therefore, it is indeed possible that non-normality may in part be attributed to combining results from different populations within a single analysis. For instance, male results may be normal, female results may be normal, but combining them may produce non-normal results. In this sense, the finding of non-normality in part confirms the proposition that different customer enact different behaviours.

7.5 Exploratory Factor Analysis

Having completed initial investigation of the sample condition, it was possible to proceed with statistical analysis. The activity reported in this chapter concerns the determination of a final model of customers' service requirements when shopping online. The sixty-nine items developed from literature, and reduced through trial research, form the basis of this investigation. The first step in their analysis concerned a series of exploratory factor analysis, Principal Components Analysis, using different techniques and focus. At this stage,

importance, performance and gap scores were submitted to factor analysis. While the intention of the thesis is to identify issues of importance to the customer, the predominant literature model of gap score or performance analysis requires that these items also be considered at this time (even though they are later disregarded).

The first factor analysis produced utilised the standard Varimax rotation for Principal Components Analysis, with missing values excluded listwise. The first factor could broadly be described as 'customer service', encompassing trust and security, service, information provision and efficiency. With 31 items and inter-item correlations from .303, the factor and solution is clearly not satisfactory. The remainder of the items are spread across broadly identifiable and usable factors (website, customisation, special features, contactability, image, hard to find products, no advertisements and product research), however, the over-large first factor discounts this rotation as usable in further analysis.

The conceptual base of the research sought to investigate what customers required in online service (i.e., what they find important). The majority of previous SQ studies have utilised gap scores and the majority of validation studies also compared this to performance scores. Accordingly, items for performance and computed gap scores (performance minus importance) were submitted to factor analysis (using Varimax rotation with listwise exclusion of missing values). The rotation of performance items produced a large first factor of fifteen items, broadly identifiable as related to website design and features. Other factors produced are described as trust, customisation, service/problem rectification, information, administrative efficiency, special features, image, contactability, value and hard to find products. The rotation of gap scores produced a smaller first factor related to website design (13 items), with ten further identifiable factors (trust, information, customisation, problem rectification, administrative efficiency, contactability, image, special features, no advertisements and hard to find products). This rotation also produced a factor with no conceptually common theme. All three of these rotations produced factors of similar themes, albeit with slightly different item composition. The principal difference, when comparing importance items to performance/gap scores, is that the latter two explicitly identified a factor related to problem/service rectification (handling exchanges or refunds, help if problems occur and after sales support), whereas for importance these were combined with general customer service issues. While all customers could express how important they found such items, only those who had experienced problems could answer them, likely leading to their loading together when considering performance/gap scores. As can be seen in Table 7.3, all three solutions provided good statistical reliability - good levels of variance extracted, Kaiser-

Meyer-Olkin value of over 0.6, Bartlett's test of sphericity reaching statistical significance, all rotations produced factors with Eigenvalues over one and good levels of correlation between items within factors (Pallant 2003). However, as has been noted, statistical significance is not sufficient for a rational and usable solution (Hair et al. 1998). The conceptual appeal or rationale of a solution - the face or nomological validity required - can only be judged subjectively. On this issue, the first importance model can be dismissed due to the unusably large first factor produced. Due to this, a second set of rotations were conducted, this time using the Equamax rotation. Although not a common rotation (Hair et al. 1998), it has been noted as "the recommended technique under any circumstances" by Willey (1983), who compared analytic techniques in factor analysis, and has been used, for instance by Schulenberg (2001) in measuring technology acceptance, who finds Equamax rotations as 'the most readily interpretable'.

The Equamax importance rotation provided a much more appealing and easily interpretable solution than the previous Varimax rotation. It produced ten distinct and reasonably sized factors, that could be identified and are described below.

- **Website Design** – Issues related to the navigation and location of information on the website (search, layout, interface, information)
- **Trust** – Issues related to feeling safe and secure in transactions with the company, disclosing personal or financial information
- **Customer Service** – Issues related to general customer service such as availability to do business, a feeling of value, problem rectification and post-sales service
- **Information Provision** – Issues related to the provision of good information pre and post purchase including product descriptions and the ability to track products through delivery
- **Contactability** – Issues related to the ability and speed of getting in contact with the company and receiving a response
- **No Advertisements** – No pop-up or other advertisements of SPAM e-mails from dealing with the company
- **Customisation** – Issues related to the users ability to customise or personalise the website and proactive customisation from the company such as suggesting items to purchase
- **Product Availability** – Issues related to the depth of range and availability of items
- **Company Image** – Issues related to the general image of the company as reputable
- **Special Features** – Assorted issues that are non-normal or regular and therefore classed as special (such as the ability to be billed monthly, pay by cheque by post, ability to return items to retail stores)

As noted in Table 7.3, statistical tests supported this rotation with high KMO, significant Bartlett's score, good variance explained and acceptable factor coefficient alpha scores. An

examination of the inter-item and item-total correlations also produced good results (see Appendix 6.5). Detailed examination of this solution identified the need to reposition two items to maintain a clear conceptual linkage with each factor (shown in Table 7.4 below), with re-computed alpha scores. This minor alteration raised the minimum alpha score from 0.68 to 0.69. Although little statistical improvement is gained from these re-allocations the conceptual logic supports their repositioning, as they are more clearly linked with items in the factors to which they have been moved.

The Equamax rotation of importance items produced a far superior solution than the Varimax rotation, however, when considering performance items and gap scores, no major improvement in factor structure was seen. There was some reduction in the number of items loading onto the first factor, bringing this factor more in line with the matrix as a whole, in terms of items contained within it, and coefficient alpha scores marginally improved (by 0.01) in both rotations. However, both gap scores and performance scores provided very similar factor structures as a whole to the earlier Varimax rotations.

Due to the large size of the sample and the statistical sensitivity to missing values, it was deemed necessary for validation purposes to consider a secondary method of dealing with missing values. Whereas previous rotations utilised the common listwise exclusion, the importance items were subject to Varimax and Equamax rotations with pairwise exclusion for comparison and triangulation purposes. The Varimax rotation again produced an oversized first factor (with 25 items), that was broadly about customer service across a whole range of issues. As can be seen in Table 7.3, this solution also saw reduced coefficient alpha scores. The Equamax pairwise solution was less appealing than the Equamax listwise solution due to a higher number of item cross-loadings, and the expansion of the 'no advertisements' factor to include three items about order confirmation, resulting in poor conceptual appeal of the factor and the related solution as a whole.

Comparing all rotations obtained as a whole, the superior results were obtained from the Equamax rotation of importance items. While gap scores and performance item analysis provided interesting results, notably, the identification of a distinct 'problem rectification' factor, it is the importance scores that are of most interest and it is those that were taken forward for submission to confirmatory factor analysis. The full exploratory solution is shown in Table 7.4 below while all factor rotations with reliability analysis are provided in Appendix 6.6.

Table 7.3: Exploratory Factor Analysis Overview

Factored Item Type	Rotation	Missing Values	Number Factors Produced	Iterations to converge	KMO	Bartlett's Signif	Variance Extracted	Coefficient Alpha
Importance	Varimax	Listwise	10 8-identifiable	9	.98	Y	67.753	.67-.97 .82 average
Performance	Varimax	Listwise	11	9	.98	Y	68.896	.75-.96 .87 average
Gap Scores	Varimax	Listwise	12 11-identifiable	9	.97	Y	65.789	.71-.95 .82 average
Importance	Equamax	Listwise	10	25	.98	Y	67.753	.68-.96 .84 average
Performance	Equamax	Listwise	11 10-identifiable	32	.98	Y	68.896	.75-.95 .88 average
Gap Scores	Equamax	Listwise	12 11-identifiable	29	.97	Y	65.789	.72-.95 .83 average
Importance	Varimax	Pairwise	10 9-identifiable	8	.98	Y	67.235	.51-.96 .78 average
Importance	Equamax	Pairwise	10 9-identifiable	26	.98	Y	67.235	.68-.96 .79 average

**Table 7.4: Service Item Importance Factor Structure
(Equamax Rotation with listwise exclusion)**

Item	All loadings below 0.39 suppressed.	SQ1	SQ2	SQ3	SQ4	SQ5	SQ6	SQ7	SQ8	SQ9	SQ10
SQ1 SITE DESIGN											
2	It's easy to get around and find what you want at this site	0.74									
4	The layout of the site is clean and simple	0.73									
3	The website is laid out in a logical fashion	0.72									
6	Pricing is clear and easy to understand	0.71									
5	The website has a good user interface	0.69									
1	The website has a useful search function	0.68									
14	The contents of the website are concise and easy to understand	0.67									
9	The site doesn't waste my time	0.67									
7	I know what all my options are when I shop at this website	0.66									
8	The website lets me know delivery charges up-front	0.62									
13	The website has a good selection	0.59							0.45		
15	The site gives me enough information so that I can identify the item as if I am in a store	0.54									
SQ2 TRUST											
50	I feel secure giving out credit information to this site		0.78								
51	I feel safe in my transactions with this site		0.78								
53	I feel like my privacy and personal information is protected at this site		0.75								
49	The website has adequate security features		0.71								
52	You know exactly what you're buying from the website		0.70								
63	The quantity and quality of the product was exactly as ordered		0.49						0.48		
68	The billing process was accurately handled and its records kept accurately		0.48						0.48		
67	The product that came was accurately represented by pictures and descriptions on the website		0.43			0.41			0.41		

Item	SQ1	SQ2	SQ3	SQ4	SQ5	SQ6	SQ7	SQ8	SQ9	SQ10
SQI 3 CUSTOMER SERVICE										
37		0.41	0.58							
36			0.57							
39			0.55							
42			0.54							
35		0.41	0.51							
41			0.50							
44			0.49		0.40					
43			0.49		0.45					
21			0.48							
40			0.47							
34			0.46							
38			0.44							
47			0.43							
48										
SQI 4 INFORMATION PROVISION										
57					0.65					
56					0.63					
58					0.58					
59					0.57					
55					0.56					
54					0.55					
SQI 5 CONTACTABILITY										
30						0.81				
33						0.80				
31						0.72				
32						0.65				
SQI 6 NO ADVERTISEMENTS										
60								0.72		
61								0.70		
66								0.56		
62						0.49		0.52		

	SQ1	SQ2	SQ3	SQ4	SQ5	SQ6	SQ7	SQ8	SQ9	SQ10
SQI 7 CUSTOMISATION / PERSONALISATION										
27								0.75		
28								0.75		
26								0.72		
25								0.71		
29								0.69		
24								0.67		
23								0.62		
SQI 8 PRODUCT AVAILABILITY										
11									0.82	
10									0.79	
12					0.41				0.48	
22									0.40	0.34
SQI 9 COMPANY IMAGE										
17										0.73
16										0.73
18										0.60
19										0.54
20										0.50
SQI 10 SPECIAL FEATURES										
64										0.80
65										0.75
69										0.70
45										0.53
46										0.48
<hr/>										
Cronbach Alpha	0.96	0.96	0.95	0.89	0.85	0.75	0.88	0.68	0.74	0.78
Variance Extracted (Cumulative)	9.40	18.00	25.60	32.70	39.40	45.90	52.00	57.90	63.00	67.80
<hr/>										
*1 Moved to "No Advertisements Factor" in post-hoc sorting for conceptual reasons										
*2 Moved to "Product Availability Factor" in post-hoc sorting for conceptual reasons										
<hr/>										
Cronbach Alpha Score for Revised item placement in post-hoc sorting		0.96					0.69	0.71		0.77
<hr/>										

7.6. Confirmatory Factor Analysis

Following the exploratory factor analysis, the practical appeal of the importance item rotation and the conceptual desire to investigate what customers considered important in online purchase (as opposed to how certain companies delivered certain services at a certain time, which would be denoted by performance score or gap score usage), the importance items were submitted to confirmatory factor (CFA) analysis in AMOS 5.

The exploratory Equamax (listwise) rotation provided good Cronbach alpha scores, item correlations and high factor loadings. While this is reassuring for the validity of the constructs and items being measured, it provides little guidance on how to reduce the 69 items to the core few that are common across all respondents. Thus, the structure as provided above was submitted in full to AMOS 5 for CFA validation and item reduction. To conform with the AMOS requirement for no missing values to be present for CFA (when modification indices are required), all item missing values were replaced with the mean score.

A variety of indicators exist that evaluate the statistical reliability of confirmatory factor analysis models (as can be seen from Table 7.6 further in the chapter). Byrne (2001) notes that the limitations of the chi-square indicators has led to many other statistics of reliability. Byrne (2001) further provides useful guidance in selecting the most appropriate evaluative measures, noting that the GFI and AGFI are absolute fit indices, the NFI is “the practical criterion of choice” (Byrne 2001 p83), and the later developed but equally popular CFI and IFI adjust the NFI for sample size. Further, Byrne (2001) notes the RMSEA as “one of the most informative criteria in covariance structure modelling” (p84). Thus, it is these statistics that were used for the iterative process of model verification and item reduction that follows.

In the first instance, all items were subjected to CFA in AMOS based on the factor structure provided by Equamax rotation of importance items in SPSS (with the two item movements as shown in Table 7.4 above). As can be seen in Table 7.5 this construction provided a very poor set of CFA reliability statistics. Consultation of the modification indices revealed a high number of items in the covariance matrix and regression weights table with modification indices of over 100. The first stage of model refinement therefore focused on the systematic removal of all items with modification indices over 100. Consultation of the regression weights provided 38 items with such loadings. Conceptual inspection of this list showed that this would entirely remove the ‘Product Availability’ factor and reduce of the ‘Ease of Contact’ factor to a single item. Conceptually, these changes stood out as lacking appeal and reducing

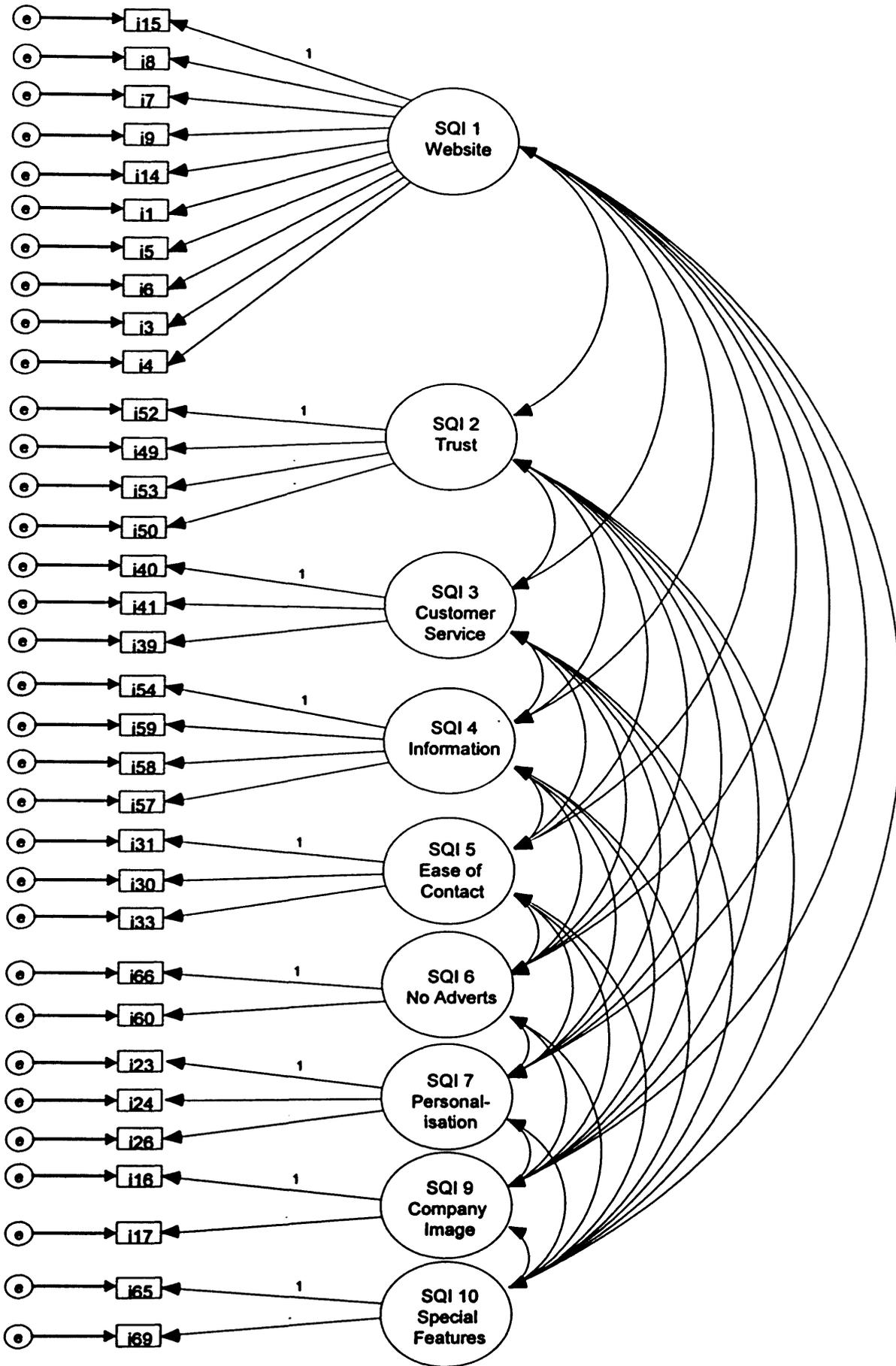
the meaning of the model to an unacceptable degree. Therefore, in the first instance, two items to be removed from 'Ease of Contact' (items 30 and 33) were retained and in the second instance, the three 'Product Availability' items (10, 11 and 12) were also placed back into the model. These additional items marginally reduced the statistical viability of the model, however, the removal of 36 items with loadings over 100 had greatly improved model performance. From this point, the aim was to improve GFI, AGFI, NFI and CFI from the minimum required 0.9 level to superior 0.95 level so various additions and removals were attempted to balance the need for this statistical requirement while ensuring conceptual balance.

The iterative process of item removal and re-computation is shown in Table 7.5. Items with high modification indices, but which did not conceptually add to the model, were systematically removed.

Beyond this gradual improvement process, two other major developments happened within this process. The 'Special Features' factor, already reduced significantly by the removal of items with modification indices over 100, was removed due to the confused meaning of the factor, and lack of any real value contained within it. Indeed, the title 'Special Features' was originally attributed due to the multitude of not very important and atypical items that factored together within it.

In addition, this process included the removal, re-addition and reassignment to other factors of the three items from the 'Product Availability' factor in various arrangements. As these items had been added back into the original model, despite having high modification indices, it was deemed necessary to find the optimal fit for these items. Despite attempts to move these items to other factors to which they were conceptually related and statistically correlated, the optimal result emerged from their consolidation within an independent factor rather than being grouped within other factors. In the final arrangement, items 10 and 11 were retained (as they related to products being hard to find) while item 12 (relating to products being in stock) was removed. This had the effect of changing the focus of the factor from product availability (focused on lead time) towards product range (the depth of product range at the company), resulting in the factor being relabelled (from the original exploratory identification of 'product availability' to 'product range').

Figure 7.2: First Order CFA Model
All Modification Indices/Regression Weights over 100 removed¹



SQI 8: Product Availability deleted by removing all items with modification indices over 100.
¹item 30 and 33 marginally included despite regression weights marginally over 100.

Table 7.5: Iterative Model Improvement Process Results

Model Construction	Items	Factors	GFI	AGFI	NFI	CFI	IFI	RMSEA
1. Full results	69	10	.751	.730	.838	.848	.848	.06
2. All items with modification over 100 removed (except item 30,33)	33	9	.929	.917	.950	.956	.956	.045
3. As (2) but 'Product Availability' factor (item 10,11,12) added back in	36	10	.920	.907	.941	.948	.948	.047
4. As (2), 'Product Availability' added but item 10 removed	35	10	.928	.915	.948	.954	.954	.044
5. As (2), 'Product Availability' added but item 10 and 49 removed	34	10	.932	.920	.950	.956	.956	.047
6. As (2), but item 10 and 49 removed (no Product Availability items 11,12)	32	9	.933	.922	.952	.958	.958	.044
7. As (2), 'Product Availability' added, items 4, 10, 31, 49 removed	32	10	.948	.937	.960	.966	.966	.039
8. As (2), 'Product Availability' added, items 10, 31, 49 removed	33	10	.936	.924	.953	.959	.959	.043
9. As (2), 'Product Availability' added, items 3, 10, 31, 49 removed	32	10	.944	.933	.957	.963	.963	.041
10. As (2), 'Product Availability' added, items 5, 10, 31, 49 removed	32	10	.943	.931	.956	.962	.962	.041
11. As (2) 'Product Availability' added, items 3, 4, 10, 31, 49 removed	31	10	.953	.943	.963	.969	.969	.038
12. As (2) 'Product Availability' added, items 3, 4, 10, 31, 49 removed and 'Special Features' removed	29	9	.953	.944	.964	.970	.970	.039
13. As (2) 'Product Availability' (11,12) added, items 3, 4, 10, 24, 31, 49 and 'Special Features' removed	28	9	.954	.944	.965	.971	.971	.039
14. As (13) but items 10, 11,12 added	29	9	.942	.930	.955	.961	.961	.044
15. As (13), but items 10, 11, 12 added, with 12 reassigned to 'Customer Service'	29	9	.943	.931	.953	.959	.959	.045
16. As (13) but items 10,11,12 added, with 12 reassigned to 'Website'	29	9	.954	.944	.964	.970	.970	.039
17. As (13) but 15 reassigned to 'Product Availability' (with 11,12)	28	9	.955	.945	.965	.970	.970	.039
18. As (13) but item 10 added and 10,11,12 added assigned to 'Website'	29	8	.933	.921	.947	.953	.953	.048
19. As (13) but item 10 removed, 11,12 assigned to 'Website'	28	8	.951	.942	.963	.968	.968	.040
20. As (13) but item 12 removed, 10,11 added and assigned to 'Product Range'	28	9	.957	.947	.967	.972	.972	.038

As noted previously, a wide range of statistical checks of reliability have emerged, as statisticians have sought to address various contentious issues (such as sample size sensitivity) within existing standards. While the iterative refinement table utilised those recommended or prominent statistics (Byrne 2001), the full set of statistical checks for the final model are

provided in Table 7.6. These results all provide good support for the proposed model and note the statistical reliability of the model constructed. The chi-square test marginally failed, however, the limitations of this standard have been noted (Byrne 2001). Further, Homburg and Rudolph (2001) note that even when chi-square statistics that suggest the model fails, good results on other goodness-of-fit indices outweigh these.

Table 7.6: Reliability Indicators for CFA and Final Model Statistical Results

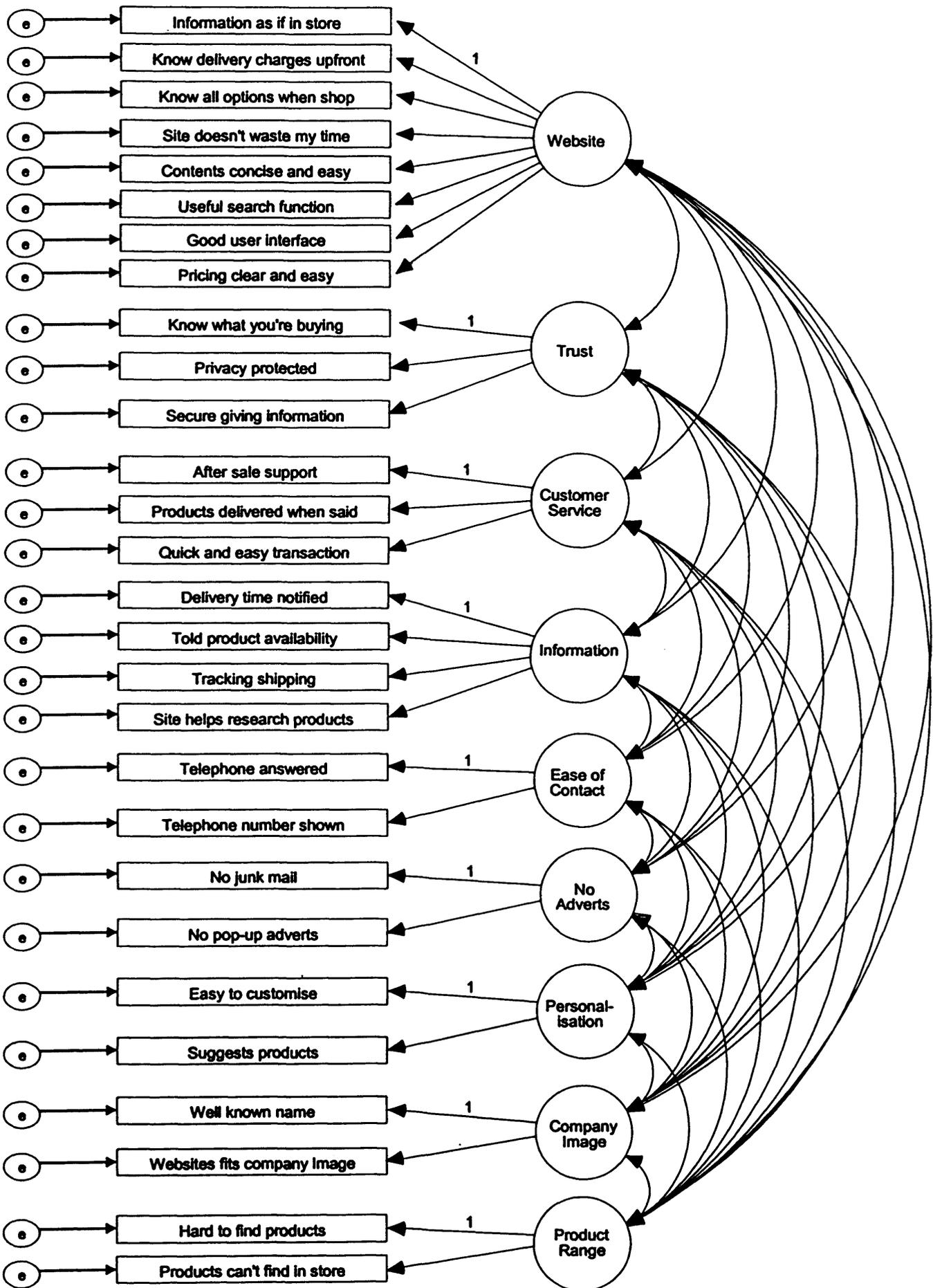
Indicator	Requirement	Result
Chi-square * Not suitable for large samples	Non-significant (χ^2 (significance greater than 0.05))	Significant .000 with 332 degrees of freedom
Normed Fit Chi-square (Adjustment of Chi-Square for large samples).	Values over 1 and up to 5 indicates reasonable fit.	5.922
Root Mean Residual (RMR)	under 0.05	.049
Goodness of Fit (GFI)	over 0.9	.957
Adjusted Goodness of Fit (AGFI)	over 0.9	.947
Normed Fit Index (NFI)	over 0.9	.967
Comparative Fit Index (CFI)	over 0.9, ideally over 0.95	.972
Relative Fit Index (RFI)	over 0.95	.962
Incremental Fit Index (IFI)	over 0.9, ideally over 0.95	.972
Root Mean Square Error of Approximation (RMSEA)	under 0.06 under 0.08 acceptable 0.08 to 0.10 mediocre fit	.038
Consistent version of AIC (CAIC)	Hypothesised model (default)	PASS
Bayes Information Criterion (BIC)	figures smaller than saturated/independent model	PASS
Hoelter Critical N (adequacy of sample size)	over 200	.05 – 650 .01 – 684

The final model constructed is shown in Figure 7.3 below. A nine factor solution comprising twenty eight individual items was computed. The number of items is in-line with other works on both traditional service quality (for instance, PZB 1988), and online service quality (for instance, PZM 2005, Wolfenbarger and Gilly 2003). The number of factors is higher than these models. However, the complexity of the online purchase process suggests that this may indeed be a valid solution – that online purchasing cannot be reduced to the four or five core facets represented by other models. It should also be noted that this solution focuses on

service-importance (how important different aspects of the online experience are to customers), rather than service quality (which takes account of how a company performed, measuring either performance directly or utilising calculated gap scores). A full analysis of the final model and comparison to existing service quality models is presented later in this chapter. In summary the nine factors emergent can be described thus:

- **Website** – issues relating to the functional design of the website and ability of customers to navigate said website
- **Trust** – issues relating to customers trust in the company to protect their personal and financial details
- **Customer Service** – issues relating to pre-sale purchase facilitation, product delivery and after sales service
- **Information** – issues relating to the provision of key information to the customer, such as product research, availability information and the ability to track products through shipping to delivery
- **Ease of Contact** – the ability of customers to contact human staff of an online retailer
- **No Advertisements** – freedom from pop-up adverts while shopping and unsolicited e-mails following purchase
- **Personalisation** – concerning both the reactive ability of a website to be customised by a customer and the proactive features of the website that can suggest products for purchase based on past behaviour
- **Company Image** – both the possession of a ‘well known name’ and a website that is of a quality consistent with that created image
- **Product Range** – The provision of depth of product range that customers cannot easily find in other purchase channels or companies.

Figure 7.3 Final First Order CFA Model



In addition to the reliability statistics provided by AMOS, the factor structure proposed was re-examined in SPSS, checking for item correlations and coefficient alpha scores. To further validate the proposed factor structure, the original sample (n=3403) was subjected to factor analysis in SPSS only utilising those importance items retained from CFA. An Equamax rotation (listwise exclusion) was performed to maintain consistency with the exploratory work with a nine factor extraction specified. The structure proposed by CFA was confirmed exactly, thus supporting the findings. KMO was reported as .95 with Bartlett's test of sphericity finding a significant (.000) result. The rotated component matrix is shown below in Table 7.8 and annotated with variance extracted, coefficient alpha scores and item-to-total correlations (Equamax rotation, Principal Components Analysis).

Coefficient alpha scores found are superior to those in the original refinements ServQual where scores as low as .52 were recorded (PZB 1988). Correlation matrices of these items were also computed with good levels of correlation found for all items (shown in Table 7.7).

Table 7.7 Importance Items Summary Statistics

	Inter-Item Correlations			N of Items	Coefficient Alpha	Item-total-correlations
	Mean	Minimum	Maximum			
Website	.643	.547	.754	8	.936	.73 .78 .78 .78 .82 .71 .74 .83
Trust	.876	.852	.895	3	.955	.82 .85 .80
Customer Service	.709	.690	.740	3	.877	.55 .61 .61
Information	.601	.507	.691	4	.851	.69 .74 .74 .62
Ease of Contact	.672	.672	.672	2	.803	.67 .67
No Advertisements	.438	.438	.438	2	.608	.44 .44
Customization/Personalization	.522	.522	.522	2	.686	.52 .52
Company Image	.627	.627	.627	2	.771	.63 .63
Product Range	.596	.596	.596	2	.747	.60 .60

Table 7.8. Factor Analysis of CFA Items.

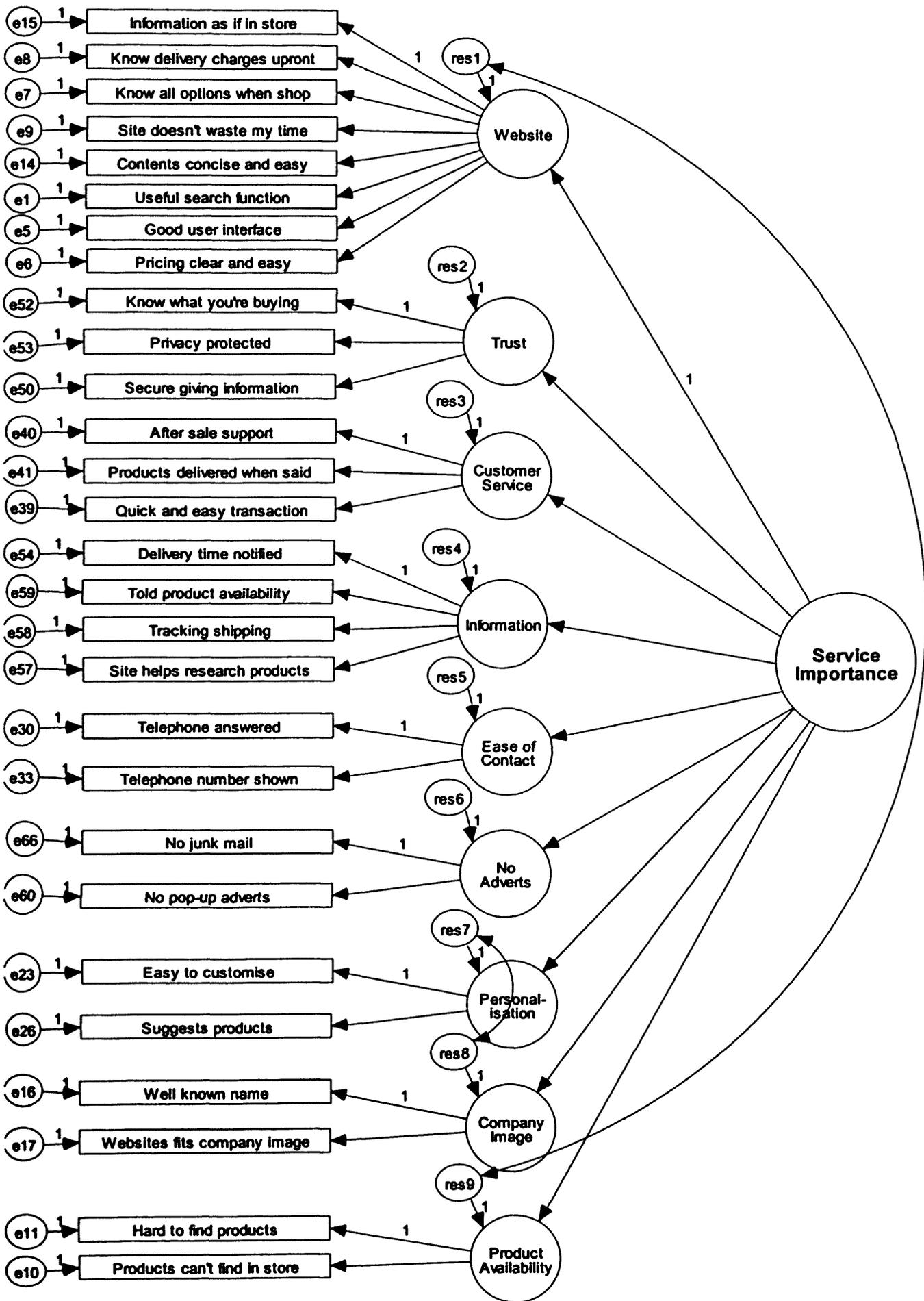
	Website	Trust	Information	Customer Service	Product Range	Contact	No Adverts	Image	Personalisation	Item-total Correlation
Pricing is clear and easy to understand	0.72									0.83
The contents of the website are concise and easy to understand	0.67									0.82
The website lets me know delivery charges up-front	0.66									0.78
The site doesn't waste my time	0.66									0.78
I know what all my options are when I shop at this website	0.66									0.78
The website has a good user interface	0.65									0.75
The website has a useful search function	0.65									0.70
The site gives me enough information so that I can identify the item as if I am in a store	0.59									0.73
I feel secure giving out credit information to this site		0.80								0.89
I feel like my privacy and personal information is protected at this site		0.78								0.92
You know exactly what you're buying from the website		0.75								0.90
It's easy to track the shipping and delivery of items purchased on this website				0.72						0.74
The site helps me research products				0.71						0.62
The website lets me know about product availability during search				0.68						0.74
I receive notification when the product will be delivered				0.57						0.69
After sale support at this site is excellent					0.72					0.74
The products were delivered by the time promised					0.61					0.77
It is quick and easy to complete a transaction at this website					0.60					0.78
There are hard to find products on this website						0.88				0.60
The website has products I can't find in stores						0.84				0.60
Telephone calls are answered promptly							0.90			0.67
A contact telephone number is displayed on the site so that I can talk to							0.87			0.67
I do not receive junk mail from being on their mailing list								0.85		0.44
There are no pop-up advertisements								0.70		0.44
The company has a well known name									0.89	0.63
The website fits with my image of the company									0.85	0.63
The website does a good job of guessing what kind of things I might like										0.84
The website is easy to customize										0.83
Variance Extracted	12.96	10.46	9.20	8.61	8.08	7.72	7.50	6.65	6.19	
Cumulative Variance Extracted	12.96	23.42	32.62	41.23	49.30	57.02	64.53	71.17	77.36	
Coefficient Alpha	0.94	0.96	0.88	0.85	0.80	0.61	0.69	0.77	0.75	

Having statistically proven the reliability of the first order construct described above, the model was further tested by construction of a second order model (shown in Figure 7.4 below). The statistical checks from this model necessitated two covariances added (between factor one and factor nine errors, and between factor seven and eight errors) to achieve the required levels of statistical fit. This modification resulted in good general fit of the model, validating the construct of service importance derived from the factors and associated items as a whole. The statistical indicators are provided in Table 7.9 below.

Table 7.9: Second Order Factor Analysis Results

Indicator	Requirement	Second Order Importance
Chi-square * Not suitable for large samples	Non-significant (χ^2) (significance greater than 0.05)	.000 with 357 degrees of freedom
Normed Fit Chi-square (Adjustment of Chi-Square for large samples).	Values over 1 and up to 5 indicates reasonable fit.	6.977
Root Mean Residual (RMR)	under 0.05	.082
Goodness of Fit (GFI)	over 0.9	.943
Adjusted Goodness of Fit (AGFI)	over 0.9	.935
Normed Fit Index (NFI)	over 0.9	.958
Comparative Fit Index (CFI)	over 0.9, ideally over 0.95	.964
Relative Fit Index (RFI)	over 0.95	.956
Incremental Fit Index (IFI)	over 0.9, ideally over 0.95	.964
Root Mean Square Error of Approximation (RMSEA)	under 0.06 under 0.08 acceptable 0.08 to 0.10 mediocre fit	.042
Consistent version of AIC (CAIC)	Hypothesised model (default) figures smaller	PASS
Bayes Information Criterion (BIC)	than saturated/independent model	PASS
Hoelter Critical N (adequacy of sample size)	over 200	.05 – 550 .01 – 577

Figure 7.4. Second Order Factor: Service Importance



7.7 Service Importance Validity

Thus far, the principal reporting activity has concerned the statistical reliability of the proposed model. Such reliability is however only part of the required process of validation. Byrne 2001 notes "The assessment of model adequacy must be based on multiple criteria that take into account theoretical, statistical, and practical considerations" (p88). Sobel and Bohrnstedt (1985) add "Scientific progress could be impeded if fit coefficients (even appropriate ones) are used as the primary criterion for judging the adequacy of a model" (p158). Considering specifically service quality (although in the first instance this thesis concerns service-importance), PZB (1988) state that "While high reliabilities and internal consistencies are necessary conditions for a scale's construct validity - the extent to which a scale fully and unambiguously captures the underlying, unobservable construct is intended to measure - they are not sufficient. The scale must satisfy certain other conceptual and empirical criteria to be considered as having good construct validity" (p28).

Within the development of SQ and subsequent investigations of SQ, the standard checks of validity have been utilised, specifically:

Content Validity - Face Validity: "a subjective criterion reflecting the extent to which scale items are meaningful and appear to represent the construct being measure" (PBZ 1991 p439)

Construct Validity - Convergent Validity: when scores from two different instruments measuring the same concept are highly correlated, measured through high coefficient alpha reports on multiple studies as well as factor loading patterns and dimensionality (PBZ 1991). PZB (1988) conduct a first empirical assessment of scale validity through assessment of convergent reliability, define this as the association between the ServQual scores and a separate question asking customers to rate overall quality and two further "conceptually related variables" (PZB 1988 p 30) (whether a customer they would recommend the firm and if they have ever reported a problem with the firm). PZB (1998) use one-way ANOVA to find a significant relationship between overall quality and service-quality scores by dimension (based on the combined SQ score of customers in each of the overall quality categories as poor/fair, good and excellent as well as consistent support for related recommendation and problem-encounter variables).

Construct Validity - Discriminant Validity: "the extent to which SERVQUAL has five distinct dimensions" (PBZ 1991 p440) or more generally when factors measured as different are in fact difference (measured through factor correlations)

Criterion Validity - Predictive or Concurrent Validity "extent to which SERVQUAL scores are associated as hypothesised with other conceptually related measures" (PBZ 1991 p440/1), or more generally when separate items postulated as measuring the same construct are in fact correlated.

Despite the pre-requisite of these checks, the results have been noted as contributory rather than absolute indicators - PBZ (1991) conclude a review of multiple SQ studies and despite

mixed convergent validity and poor discriminant validity, “the collective findings of various replications by and large provide consistent support for the reliability, face validity and predictive/concurrent validity for the SERVQUAL scores on the five dimensions” (p441).

Within this thesis face validity was evaluated by review by the author and three senior academics familiar with customer sampling techniques, all of whom indicated support for the findings proposed. As only a single study was conducted, it was not possible to evaluate convergent validity by comparing findings from multiple samples (as PBZ 1991). Instead, the evaluation of convergent validity (and predictive/concurrent validity) utilised the process suggested by PZB (1998) and PBZ (1991) – measurement to ensure the service importance scores were indeed correlated to ‘conceptually related variables’. Whereas those previous studies measured service-quality (performance or gap score based), here the concern is service importance. This is not directly related to the overall service quality or performance measures in the same way as service quality. This difference occurs as importance seeks to measure what customers value in general, whereas service-quality measures how a company performed at a certain point in time. It was therefore more complex to measure convergent/concurrent validity for importance. However, it was possible to measure SI factors and overall SI to one related variables (the importance of high quality service when purchasing the product type), based on the belief that customers stating greater importance scores on individual items would also place greater emphasis on service levels as a whole. Two indirectly related measures were also examined - the overall service-quality/satisfaction measures used in SQ studies. These were: the likelihood of recommending the company and the likelihood of purchasing again from the company. They were used as while importance may not be directly related to these items, there is an implicitly indirect link – that customers would reuse or recommend companies that delivered on importance issues of importance to them. The factors based on importance items were checked for normality and although displaying increased normality versus the exploratory analysis conducted earlier (as measured by Kurtosis and Skewness measures), the Kolmogorov-Smirnov statistic reached significance on all factors, indicating non-normality (shown in Appendix 6.7). Due to this finding, non-parametric correlations were computed (utilising Spearman’s Rho rather than the Pearson correlation). Table 7.10 shows the results of the correlation for each individual factor and overall service importance. As can be seen, correlations for each factor and overall SI with the four validation questions was found, almost all at the .01 level, with only one at the reduced .05 level. Although the correlations are not high, they are all significant. The indirect nature of the predicted relationship between these items and importance factors accounts for the low level of

correlation. The finding of significance confirms that correlation (and therefore convergent/predictive validity) exists.

Table 7.10: Spearman's Rho Correlations for Service Importance Convergent Validity

	Importance of High Quality Service	Attitudinal Loyalty	Recommend the Company to Others	Likely to Shop from the Company Again
Website	.179(**)	.244(**)	.271(**)	.238(**)
Trust	.147(**)	.202(**)	.240(**)	.209(**)
Customer Service	.190(**)	.231(**)	.258(**)	.235(**)
Information	.153(**)	.190(**)	.208(**)	.156(**)
Contactability	.123(**)	.083(**)	.063(**)	.044(*)
No Adverts	.091(**)	.118(**)	.139(**)	.121(**)
Personalization	.069(**)	.097(**)	.092(**)	.081(**)
Company Image	.068(**)	.102(**)	.090(**)	.052(**)
Product Range	.105(**)	.174(**)	.190(**)	.191(**)
Overall Service Importance	.158(**)	.221(**)	.211(**)	.178(**)

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

1 Missing values excluded pairwise.

To assess divergent discriminant validity, the distinctiveness of each dimension was assessed by examination of the correlation between factors. The highest inter-factor correlation was 0.65 while the average was .348, meeting the requirement for low correlation levels (and therefore distinctiveness) for divergent validity (full results in Table 7.11 below).

Table 7.11 Divergent Validity Spearman's Rho Correlation for Service Importance

	Website	Trust	Customer Service	Information	Contactability	No Ads	Personalization	Company Image	Product Range
Website	1								
Trust	.515**	1							
Customer Service	.653**	.610**	1						
Information	.610**	.523**	.640**	1					
Contactability	.376**	.383**	.475**	.400**	1				
No Ads	.406**	.415**	.471**	.438**	.339**	1			
Personalization	.242**	.070**	.182**	.338**	.116**	.089**	1		
Company Image	.286**	.118**	.240**	.334**	.206**	.169**	.474**	1	
Product Range	.470**	.270**	.359**	.375**	.177**	.227**	.261**	.266**	1

** Correlation is significant at the 0.01 level (2-tailed).

1 Missing values excluded pairwise.

7.8 Performance and Gap Scores: Service Quality

The literature on service quality has clearly indicated problems in the usage of gap scores in service quality analysis. The usage of performance scores on their own (as well as in computing gap scores) bounds the analysis to the specific companies under consideration (as opposed to consideration of importance items which are more general expressions of what customers value in a certain situation). Due to these issues generally, as well as the specific desire to analyse what customers find important in online shopping, importance items, rather than gap scores of performance items form the principal basis of analysis within this thesis. It is these importance items and the importance item factor structure which will be taken forward to consider the impact of various situations.

However, in order to provide some insight into online services quality and delivery, as well as to determine how the companies in this study performed, a comparison of importance item scores to performance item scores and associated gaps is presented here. Before any such presentation can be made it is necessary to determine if the factor structure proposed by the importance item is a valid method of analysing performance or service gaps. To this end, coefficient alpha scores and correlation matrices were computed for performance item and gap scores in the structure suggested by importance item factor analysis (shown in Tables 7.12 and 7.13 below).

Table 7.12: Performance Item Indicators

	Inter-Item Correlations			N of Items	Coefficient Alpha	Item-total-correlations
	Mean	Minimum	Maximum			
Website	.633	.528	.710	8	.931	.76 .77 .73 .81 .78 .80 .72 .76
Trust	.807	.773	.843	3	.926	.85 .88 .82
Customer Service Information	.590	.523	.639	3	.806	.65 .63 .71
	.561	.451	.656	3	.837	.60 .75 .70 .64
Ease of Contact	.653	.653	.653	2	.790	.65 .65
No Advertisements	.512	.512	.512	2	.675	.51 .51
Customization/Personalization	.564	.564	.564	2	.720	.56 .56
Company Image	.582	.582	.582	2	.735	.58 .58
Product Range	.607	.607	.607	2	.755	.61 .61

Table 7.13: Gap Score Indicators

	Inter-Item Correlations			N of Items	Coefficient Alpha	Item-total-correlations
	Mean	Minimum	Maximum			
Website	.565	.471	.660	8	.911	.74 .71 .66 .75 .73 .75 .70 .67
Trust	.789	.751	.838	3	.918	.84 .86 .80
Customer Service	.555	.481	.595	3	.783	.60 .60 .69
Information	.558	.464	.639	4	.835	.60 .74 .68 .65
Ease of Contact	.621	.621	.621	2	.766	.62 .62
No Advertisements	.430	.430	.430	2	.599	.43 .43
Customization/Personalization	.442	.442	.442	2	.613	.44 .44
Company Image	.544	.544	.544	2	.703	.54 .54
Product Range	.560	.560	.560	2	.717	.56 .56

These items were also submitted to confirmatory factor analysis in AMOS to determine the fit of this model. The results from this process are shown in Table 7.14 below.

Table 7.14 Performance and Gap Score CFA Results

Indicator	Importance Scores	Performance Scores	Gap Scores
Chi-square * Not suitable for large samples	Significant .000 with 332 degrees of freedom	Significant .000 with 333 degrees of freedom	Significant .000 with 332 degrees of freedom
Normed Fit Chi-square (Adjustment of Chi-Square for large samples).	5.922	9.774	7.367
Root Mean Residual (RMR)	.049	.067	0.53
Goodness of Fit (GFI)	.957	.932	.948
Adjusted Goodness of Fit (AGFI)	.947	.917	.937
Normed Fit Index (NFI)	.967	.942	.946
Comparative Fit Index (CFI)	.972	.948	.953
Relative Fit Index (RFI)	.962	.934	.938
Incremental Fit Index (IFI)	.972	.948	.953
Root Mean Square Error of Approximation (RMSEA)	.038	.051	.043
Consistent version of AIC (CAIC)	PASS	BORDERLINE	PASS
Bayes Information Criterion (BIC)	PASS	BORDERLINE	PASS
Hoelter Critical N (adequacy of sample size)	.05 - 650 .01 - 684	.05 - 394 .01 - 414	.05 - 523 .01 - 550

As can be seen, the fit and reliability of models based on performance or gap scores are slightly lower than for importance items (such difference actually highlights the value of directly considering importance items when analysing service quality rather than coupling them to performance or gap scores). Even though these indicators are slightly lower than for corresponding importance items, they still meet statistical requirements and are more than sufficient for the analytic purposes here - that is - a comparison of importance to company performance and associated gap scores.

7.8.1 Performance and Gap Score Validity

As with service importance, it was necessary to examine the validity of the performance and gap scores measures, as a added level of model verification beyond the statistical reliability outlined above. To assess convergent validity for performance and gap scores, correlation with independent but conceptually related measures was examined. For each factor and an overall performance of gap measures, the relationship was examined with: (i) behavioural loyalty (with the belief that an inverse relationship would exist as this measures forced loyalty, so lower performance or lower (negative) gap scores should be related to greater levels of behavioural loyalty); (ii) attitudinal loyalty (with the belief that better performance or positive gap scores should be positively related to greater levels of attitudinal loyalty or positive sentiment towards the company); and, (iii) recommendation and likelihood of re-shopping (as better performance or better (positive) gap scores should increase these variables, as in the original SQ verification process of PBZ (1988)). Three performance measures and one gap score did not reach a significant inverse relationship with behavioural loyalty, however, the overall performance and gap measures did reach a significant inverse relationship. All other factors and overall measures were significantly related as postulated. The direct relationship between performance and gap scores with conceptually related variables (as opposed to the indirect relationship between importance items and the conceptually related measures investigated above) accounts for the better levels of correlation for performance and gap scores versus importance measures.

Several authors have noted that performance scores form better correlations than gap scores (or expectations measures) (Babakus and Boller 1991, Carman 1990, PBZ 1991). As can be seen in Tables 7.15 and 7.16 below, the gap scores reached lower levels of correlation than performance items on all items. This is an interesting finding, however, our interest here is principally with service importance rather than the ongoing debate on the usefulness of performance versus gap scores for service quality analysis. Thus, the findings below serve only

to validate the factor structure or dimensionality of performance or gap scores based on the original refinement and reduction conducted on importance items (so that comparisons between importance and performance/gap score can be made based on the service importance item factor structure).

Table 7.15: Spearman's Rho Correlations for Service Performance Convergent Validity

Performance	Behavioural Loyalty	Attitudinal Loyalty	Recommend the Company to Others	Likely to Shop from the Company Again
Trust	-.173(**)	.300(**)	.412(**)	.387(**)
Customer Service	-.184(**)	.349(**)	.476(**)	.447(**)
Information	-.114(**)	.328(**)	.395(**)	.355(**)
Contactability	-.031	.217(**)	.284(**)	.249(**)
No Adverts	-.160(**)	.263(**)	.366(**)	.339(**)
Personalization	.037(*)	.212(**)	.240(**)	.211(**)
Company Image	-.005	.205(**)	.286(**)	.267(**)
Product Range	-.018	.273(**)	.337(**)	.304(**)
Website	-.185(**)	.389(**)	.497(**)	.454(**)
Overall Service	-.107(**)	.391(**)	.483(**)	.432(**)
Performance				

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

1 Missing values excluded pairwise.

Table 7.16: Spearman's Rho Correlations for Service Gaps Convergent Validity

Gap Score	Behavioural Loyalty	Attitudinal Loyalty	Recommend the Company to Others	Likely to Shop from the Company Again
Product Range	-.034	.064(**)	.117(**)	.081(**)
Website	-.092(**)	.207(**)	.324(**)	.307(**)
Trust	-.087(**)	.188(**)	.282(**)	.281(**)
Customer Service	-.084(**)	.177(**)	.284(**)	.279(**)
Information	-.082(**)	.179(**)	.237(**)	.230(**)
Contactability	-.046(*)	.145(**)	.240(**)	.228(**)
No Adverts	-.111(**)	.157(**)	.230(**)	.229(**)
Personalization	-.077(**)	.078(**)	.118(**)	.095(**)
Company Image	-.101(**)	.061(**)	.141(**)	.169(**)
Overall Service	-.146(**)	.218(**)	.329(**)	.302(**)
Gap				

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

1 Missing values excluded pairwise.

In addition to the checks for convergent validity, as with importance items, it was necessary to check for divergent validity. Correlation matrices utilising Spearman's Rho correlations were calculated for performance factors and gap score factors and are presented below. For performance items, the maximum correlation was .717 while the average was .477. For gap

scores, the results were slightly improved with maximum correlation at .574 and average correlation at .307 (full results shown in Tables 7.17 and 7.18 below). Both gap scores and performance items were well within tolerance for divergent validity to be present and it was therefore accepted that direct comparison of importance, performance and gap score values could be made based on the factor dimensions devised through exploratory and confirmatory factor analysis of importance items alone.

Table 7.17: Divergent Validity Spearman's Rho Correlation for Service Performance

	Trust	Customer Service	Information	Contactability	No Adverts	Personalisation	Company Image	Product Range	Website
Trust	1.000								
Customer Service	.695**	1.000							
Information	.615**	.677**	1.000						
Contactability	.409**	.508**	.366**	1.000					
No Adverts	.597**	.596**	.509**	.380**	1.000				
Personalisation	.324**	.417**	.489**	.367**	.293**	1.000			
Company image	.380**	.412**	.336**	.487**	.344**	.405**	1.000		
Product Range	.424**	.469**	.447**	.315**	.398**	.364**	.329**	1.000	
Website	.678**	.717**	.678**	.421**	.575**	.455**	.454**	.571**	1.00

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

1 Missing values excluded pairwise

Table 7.18: Divergent Validity Spearman's Rho Correlation for Service Gap Scores

	Product Range	Website	Trust	Customer Service	Information	Contactability	No Adverts	Personalisation	Company Image
Product Range	1.000								
Website	.377**	1.000							
Trust	.235**	.480**	1.000						
Customer Service	.233**	.509**	.520**	1.000					
Information	.316**	.533**	.513**	.574**	1.000				
Contactability	.205**	.388**	.412**	.472**	.404**	1.000			
No Adverts	.183**	.384**	.439**	.408**	.375**	.370**	1.000		
Personalisation	.254**	.271**	.173**	.198**	.285**	.130**	.090**	1.000	
Company Image	.226**	.203**	.180**	.177**	.201**	.159**	.155**	.331**	1.00

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

1 Missing values excluded pairwise

7.9 Service Results

As noted previously, the principal concern of this thesis is service-importance (as a general indicator of what customers value when purchasing online), rather than more traditional service-performance (Carman 1990) or service-quality (gap score) (PZB 1988). These are both measurements that utilise the performance of a specific company at a specific time to provide a general model, which is conceptually dubious. In this thesis, importance representing general importance when purchasing a product category, has been used to devise a general model, which will be broken down by situation/context in the following chapter, to specifically define what level of importance occurs in different situations.

The purpose of this section is to broadly report on the service quality levels delivered by the entire sample population, as a general investigation into online services quality. Obviously this cannot be claimed to be representative of the entire marketplace. However, the inclusion of four broadly different companies does allow some generalisation, as does the inclusion of EntzCo which sells the most dominant product category on the internet (entertainment products). The collation of all results into a single analysis follows the precedent set by PZM (2001, 2005) and Wolfenbarger and Gilly (2003), in developing online service measurement tools. While differences may well emerge between different companies (something that could not be examined in the previous studies listed, due to methods that sampled customers across a very high number of companies with very few from any one company), such difference is the concern of the following chapter where product category or company is taken as the first situational distinction that alters service quality demands. Thus, the analysis here is contended as a broad representation of the sample as a whole, not indicative of any single variation accounted for within that sample.

The results from the entire sample have been computed for each factor for importance, performance and gap scores. As can be seen in Table 7.20 and Figures 7.5 and 7.6, for the top six factors (ranked by importance), performance is below the level of importance placed on the issue by customers. For the three least important factors, performance exceeds importance. This finding is consistent with ZBP (1990), who found customers rated SQ tangibles as consistently the best performing but least important item. Consideration of the implications of different levels of different service factors will be analysed in detail in the following chapter, where the moderators on these results are taken into account. The remainder of this chapter will, however, focus on a comparison of the construction of the model to previous service research studies.

Table 7.20: Service Results from Entire Sample

	Importance	Performance	Gap Scores
Website	6.267984	5.973497	-0.3039
Trust	6.664875	6.309065	-0.36276
Customer Service	6.402351	5.994755	-0.41984
Information	6.231366	5.776337	-0.46883
Contact	5.944882	5.427021	-0.52065
No Adverts	6.385178	6.118439	-0.27961
Personalisation	3.962163	4.490361	0.454931
Company Image	4.64849	5.55078	0.873633
Product Range	5.36185	5.439069	0.043391

Figure 7.5: Service Scores from Entire Sample

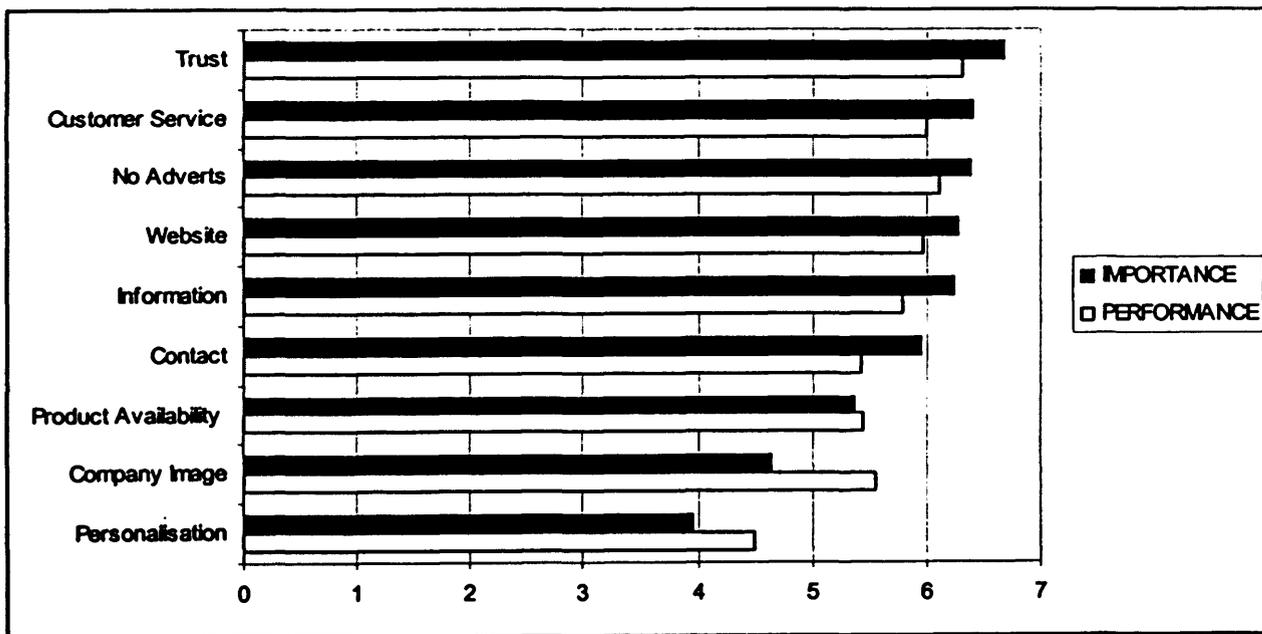
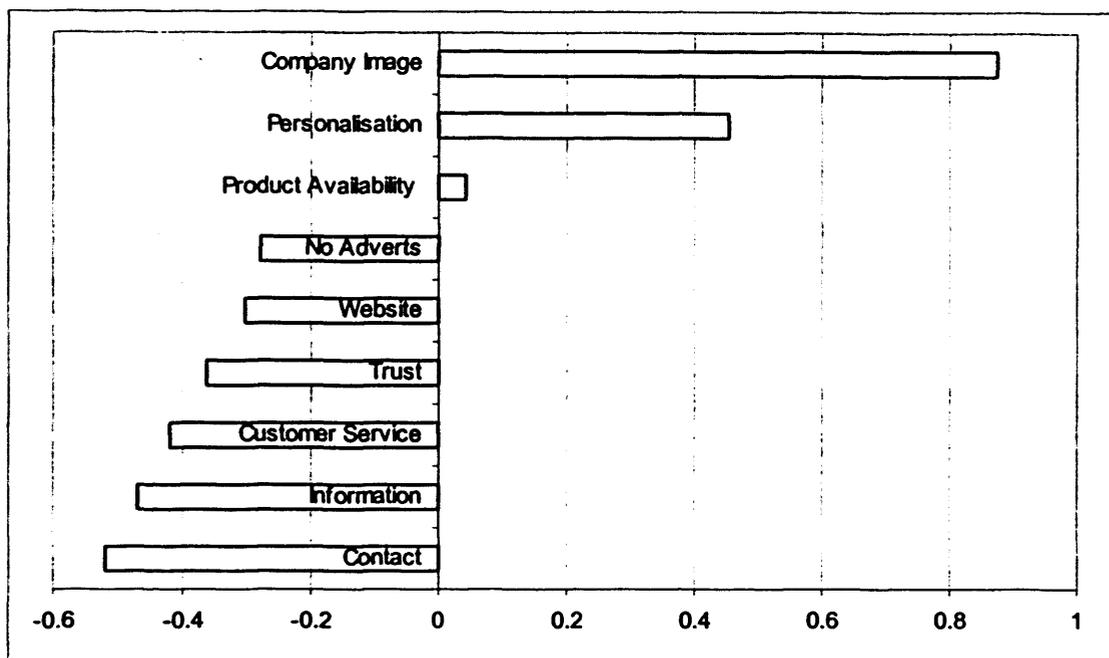


Figure 7.6: Service Gaps from Entire Sample



7.10 The Role of Service Importance and Service Quality

The results above clearly highlight a discrepancy between overall importance and factor scores. To investigate how performance relates to satisfaction and the moderating role played by importance, a structural equation model was constructed. This model (shown in Figure 7.7) seeks to measure the direct effect of performance on satisfaction, as well as the indirect effects (i.e., how importance moderates the performance-satisfaction relationship). The literature review (see Chapter two), highlighted a continuing stream of arguments in service quality literature regarding the appropriateness of including any expectation measure in measuring service quality. Many suggest the direct measurement of performance alone is a superior alternative (Caruana et al. 2000, Carman 1990, Babakus and Boller 1991, Cronin and Taylor 1992, Brown et al. 1993, Peter et al. 1993, Van Dyke et al. 1997). PZB (1993, 1994c) have always argued for the inclusion of expectations, due to the conceptual appeal and managerial requirement for measuring what customers expect beyond what they actually receive (that is, measuring more than simple company performance and investigating what matters to the customer), but have never been able to dispute that the impact of performance on satisfaction has outweighed the effect of gap scores. It should be noted, that examination of the moderating role of importance on performance as conducted here has not previously been conducted. Previous analyses have focused on the impact of gap scores versus performance scores on satisfaction using R^2 regression results. A more rigorous structural equation model approach has been adopted here rather than the weaker regression approach.

Due to the potential differential effects of service importance and performance across different product categories (as demonstrated in chapter eight), only one company was examined, EntzCo, was selected as it had the largest sample size ($n=1850$). The model constructed overall performance and overall importance scores based on the nine factors discovered, described and verified earlier in this chapter, and used two outcome measures (likelihood of re-using the company and likelihood of recommending the company to a friend), as a measure of service-outcome.

The initial model provided the result that when performance goes up by one (scale point) then satisfaction goes up by .443, suggesting a large impact of performance on satisfaction. However, the moderated effect of performance with importance leads to only a very small (negative) effect of .004 (a .004 drop in satisfaction for every 1 point rise in performance). This would suggest almost no moderating role for importance on the performance-satisfaction relationship.

Further consideration of this issue suggested that another effect may be in operation in the importance-performance relationship. In the ServQual and CS/D literatures, the issue of previous usage altering expectations or experience-based norms was discussed in chapter two (Woodruff et al. 1983, Cravens et al. 1985, Buttle 1996). Research suggested that customers who have purchased with the company previously or who have purchased within the general product class may moderate what they expect based on past performance and experience. Specifically, for those who have previously used the company, if they are repurchasing then the company must have broadly met their expectations and demands (otherwise they would shop elsewhere). This would mean that importance and performance reports would be broadly equal (or within limits that would control-out any moderating effect). There is in effect a self-corrective mechanism at work – once a customer has experienced performance, they rationalise expectations according to what can be delivered. More generally, the literature suggests that those who have used other companies within the general product class will have similarly normed expectations – that experience will lead customers to only expect in the future what has previously been delivered. This would suggest that for non-first time users, the nature of the importance attribute is closer to the predicted/expectation measure than true inherent importance scores.

The issue in consideration here is importance rather than expectation. Previous literature investigating experience-based norms has described the impact of experience on expectations not importance, however, the majority of customers interpret operational measures of

expectation as an measurement of what is important to them (Teas 1993a). Therefore, any proposed impact of experience on expectation may be considered conceptually applicable to the importance scores reported here.

Based on these propositions, four further models were run with selective inputs for comparison purposes. Models were computed independently for those shopping the company for the first time, those not shopping with the company for the first time, for those purchasing the product type for the first time and for those not purchasing the product type for the first time.

The direct and indirect effects of all the models computed are shown in Table 7.21 below. The results clearly demonstrate that both those using the company for the first time and those purchasing the product type for the first time, reported a major moderating role for importance (nearly half that of performance itself). This suggests that satisfaction for new customers is indeed moderated by importance and that detailed examination of that importance is valid and worthwhile. The results also confirmed the proposition that experience-based norms were at work and a key moderator variable in the relationship between importance and performance. In spite of a large role for importance for new customers, very little or even no role was shown for importance as a moderator between performance and satisfaction for regular, repeat customers. This highlights a self-corrective measure, where experience of service delivery impacts on what a customer expects or places as important in service delivery. Even though the intent of this thesis was to measure the true importance placed by a customer on a service issue, it is clear from these findings that when asked how important an issue is to them, customers temper this with what they know to be possible or feasible based on past experience – that there is an indirect predictive element that moderates what is important to the customer.

Table 7.21 Moderating Role of Importance on Performance

Model	Direct	Indirect	Total Effects
Entire sample	.443	-.004	.439
Customers Using the Company for the First Time	.335	.155	.490
Customers Not using the Company for the First Time	.443	.010	.453
Customers Purchasing Product Type for the First Time	.830	-.366	.464
Customers Not Purchasing Product Type for the First Time	.439	0	.439

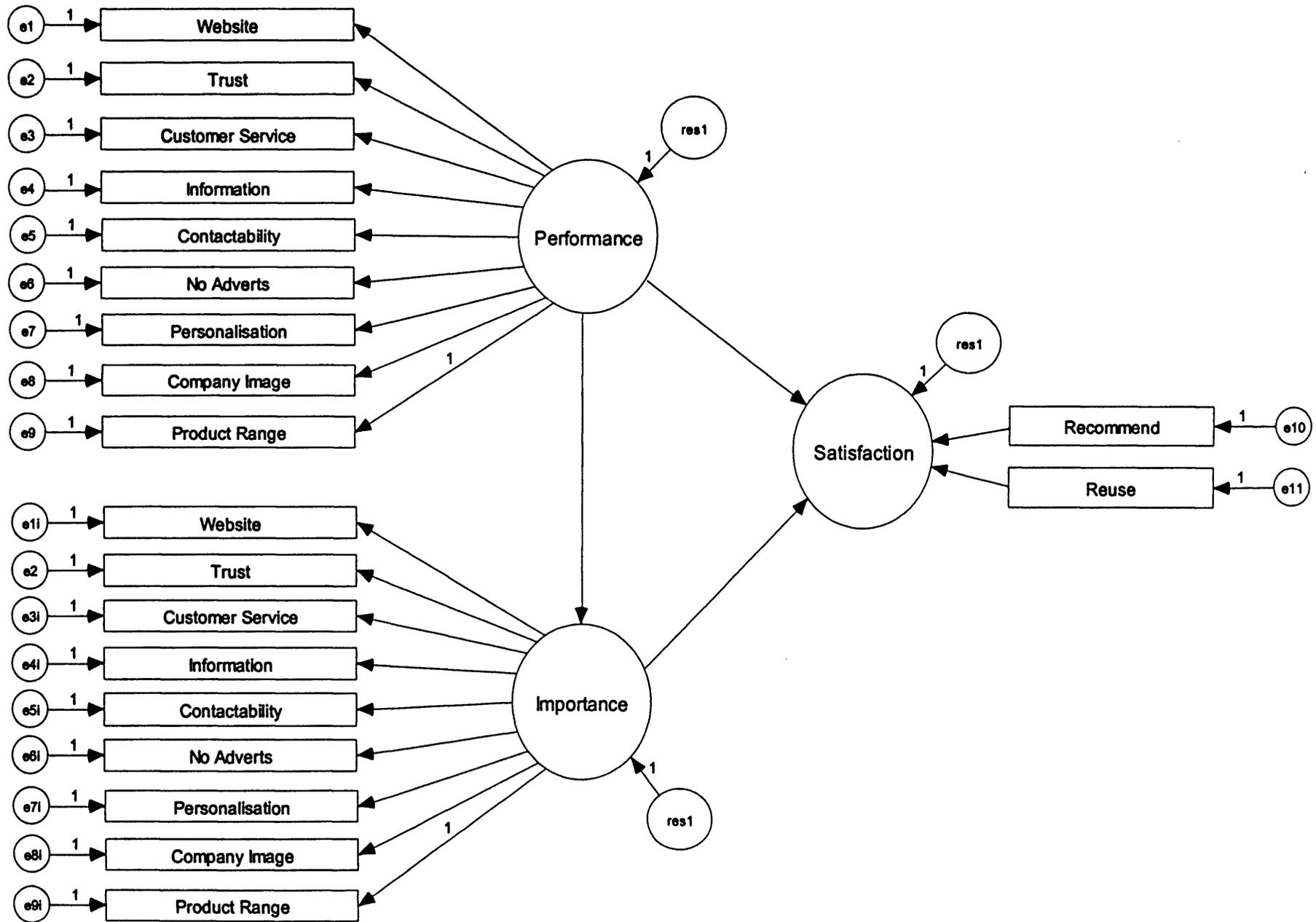
Noting the model fit indicators in Table 7.22, it is clear that the models for first time users display poor goodness of fit indicators. This result can be attributed to the small sample sizes for the first time user group, and the model presented can be accepted as acceptable in each case due to the very good CMIN/DF result and marginal CFI and NFI statistics.

Table 7.22. Model Fit Indicators

	Entire sample	Company Use		Product Class Use	
		First Time	Not First Time	First Time	Not First Time
DF	158	158	158	158	158
CMIN/DF	9.821	1.896	9.067	1.875	9.636
GFI	0.887	0.81	0.913	0.695	0.914
AGFI	0.817	0.748	0.884	0.595	0.885
NFI	0.916	0.817	0.905	0.69	0.906
CFI	0.916	0.902	0.914	0.82	0.915
RMSEA	0.069	0.085	0.07	0.13	0.07
Sample (n)	1850	124	1664	53	1783

* Covariance between each important and corresponding performance source item accounted.

Figure 7.7 Moderating Role of Importance on Performance-Satisfaction Relationship



7.11 Addressing Previous Research Shortcomings

A key impetus for the construction of this work has been the lack of knowledge on online services quality. There has been twenty years of research on services quality, but, the unique nature of the internet, most notably the technology-mediated rather than interpersonal exchange, renders pre-existing service quality models as inappropriate (Bitner et al. 2000, Parasuraman and Grewal 2000, Collier and Bienstock 2003, Wolfinbarger and Gilly 2003). As can be seen above, the unique nature of technology-facilitated exchange has added several factors simply not present in consideration of offline service quality. While the 'website', 'personalisation' and 'no advertisement' factors are the most direct manifestation of the unique characteristics of the technology, the indirect impacts of the new nature of the internet has created a new 'trust' factor. The issue of dislocated customers (ordering at home) has also emphasised the issue of 'contactability' and 'customer service'. These issues are, of course, present in catalogue based home shopping, however, service quality models have never been successfully adapted and validated in this marketplace, instead focusing on traditional retail adaptations of the ServQual measurement tool (for instance, Dabholkar et al. 1996).

Several existing works have sought to redress the lack of knowledge on online service quality. However, as noted, these have in practice been extremely limited. ZPM (2000) dismissed early research as 'anecdotes, activity monitoring or commercial surveys' which provide little validated information about service or even basic behaviour. The early research focus on frequency or activity measures has been highlighted as of little value to the service researcher (Chen and Wells 1999, Tierney 2002, ZPM 2002b, Busch 1999, PZM 2005). While out of this purely technical base of work grew work on more detailed customer analysis-based evaluations and surveys, these principally focused on the issue of appearance and functionality of the website design (such as Yoo and Donthu 2001, Szymanski and Hise 2000, Nicholson and Sethi 2002). They neglected broader, service-based analysis of online purchase (PZM 2005). Industry-derived measures have been proposed that span all areas of online activity, however, many have criticised these works for a lack of validity, reliability and verification (ZPM 2002b, Wolfinbarger and Gilly 2003). Swinyard and Smith (2003) express a common sentiment clear for literature review: "the academic literature for Internet shopping has not reached mature development". Some comprehensive studies on internet service quality have taken place, these have not been widely acknowledged. Evanschitzky et al. (2004) and Srinivasan et al. (2002) '8Cs' of importance factors focused on loyalty, not service quality, while others focused on behaviour rather than service quality (such as Francis and White 2002). Others such as Barnes and Vidgen (2002) or White and Nteli (2003) have been criticised for small or convenience samples (PZM 2005). It is clear that this body of work addresses many of the concerns

identified. It examines the holistic process of service delivery, encompassing both website design (which emerges as a distinct factor), customer service and fulfilment based issues both during and after service. The validity and reliability of the instrument development has been highlighted above, while the comprehensive nature of the items gathered and placed into the construction of the instrument has been assured by the use of a wide source pool of previously validated studies. These studies include: including ServQual (PZB 1988); a retail adaptation of ServQual (Dabholkar et al. 1996); appearance/design based website issues (Loiacono et al. 2002); electronic adaptations of traditional ServQual (ZPM 2000, 2005); and, newly-constructed online service quality measurements (Wolfenbarger and Gilly 2003, Yang et al. 2002). The emergence of a set of factors that span these divergent works is clearly evidence of the complex nature of the online purchase, and need for a broad range of considerations, beyond those previously narrowly defined works. A more detailed comparison of the model produced here to previous work is produced later in this chapter. However, first a comparison to the general themes emergent from literature review is conducted.

7.12 Comparison to Key Literature Themes

In Chapter three, three key themes emerged in previous analysis of online services quality (excluding those focal studies which will be considered later). These themes concerned website design, trust and security and the importance of fulfilment.

As noted above, the issue of the appearance and functionality of websites was one of the first key themes to emerge in online service research. Studies looked at issues such as: attitudes, design, entertainment, informativeness, organisation (Chen and Wells 1999, Lang 2001, Barnes and Vidgen 2002, Yoo and Donthu 2001, Szymanski and Hise 2000, Nicholson and Sethi 2002). While these works provide useful guidance for the design of a website, their analysis of the service provided by the company is limited. They ignore issues such as fulfilment, delivery and actual customer service – that is, those issues which span the organisation and consist the ‘back end’ operations to the ‘front end’ website. That is not to say that website design is unimportant – indeed as the key interface with the customer the design of the website is of paramount importance as this supports the image of the company, allows customers to find products, and assists their purchase. Due to the importance of this issue, a study that focused solely on website design was included in the construction of the online service quality model in this study (Loiacono et al. 2002). Website design has emerged as separate factor, as has personalisation - often related to website design. Personalisation was rated as the least important factor to customers (echoing the exploratory research), ‘website design’ was the fourth most important issue to customers, while the related ‘no adverts’ factor was third most

important. It is interesting to note that the 'website design' issues retained in this study relate to website functionality (product location, clear pricing, information provision) rather than appearance (as noted in previous studies). However, the 'good user interface' item included within website design does relate to appearance rather than to pure functionality.

The second literature theme of trust and security was clearly represented in all the previous online studies that comprised the items used in this study. Items grouped together to form the 'trust' factor, which was rated overall as the most important by customers. This finding is consistent with other studies that highlight continued customer apprehension about online as opposed to offline shopping (ABA 2004, Dunnhumby 2001, Wyner 2001, Ratchford et al. 2001, Harrison 2000y, Pickering 2000). This is true for both new and experienced online shoppers (Horrigan 2000).

Considering the third literature theme of fulfilment, McKinnon and Tallam (2002) actually note that fulfilment had superseded security as the principal customer concern. This proposal was not validated in this study, although 'customer service', which included fulfilment issues was ranked as the second most important issue to customers. Many authors have highlighted the importance of fulfilment (Porter 2001, Seanz 2001, Browne and Jackson 2001). Some suggesting this is a 'weak link' for companies (Jones and Sullivan 2000, Cooke 2001, Chen and Leteney 2000). This suggests that over-emphasis on the front-end of operations has led to a lack of focus on how to actually deliver goods and services to customers (Bromage 2001, Watson 2005, Collinge 2000). The issues of fulfilment and trust are, of course, interlinked – widespread press coverage of poor online fulfilment (noted above) has done little to improve customers trust in websites. The results gained here show that 'trust' and 'customer service' factors are both higher rated than 'company image'. The latter was rated as last but one in terms of customer importance, suggesting that image and brand building alone will not be enough to build customer trust, but that actual delivery is the key issue. For new companies without established brands, that do not have the recognition factor important in building trust, this issue of ensuring fulfilment will be highly important while established companies that fail to deliver will soon be displaced in the market.

A subset of the third key theme in Chapter three (of website design, trust/security and fulfilment) was the issue of 'more than fulfilment', emphasising the organisational side of online service as the least understood of element of online service (Rappa 2004). This highlights the need to strategically focus on organisation-wide alignment towards the customer (Grieger 2001, Hagel 2001, Porter 2001). Examining the range of key factors emerging the

bundle of issues highlighted as important to customers crosses all functional boundaries and divisions and concerns all areas of the company. The progress towards this ideal is the concern of the later chapter on marketing-operations relationships. However, the need for such a consideration cannot be called into question based on the findings to date.

7.13 Comparison to Findings of Focal Research

The research presented in this chapter has been based on the items generated from the six identified focal research studies. It is therefore possible to perform a comparison of the final model to these works.

7.13.1 Comparisons to ServQual

ZPB (1990) note reliability as consistently the most important ServQual factor. The nearest factor in the current research is that of 'customer service', concerning issues of product delivery when promised, smooth transactions and after sales service. This 'customer service' factor emerged as the second most important factor to customers, after trust, and echoes aspects of both SQ reliability and responsiveness dimensions. In the traditional ServQual model there is no direct trust factor. However, the 'assurance' factor (described in part as a means of inspiring trust and confidence) plays a similar role - although due to the different nature of the internet, trust plays a more important role in this market. The equivalent of the 'tangibles' SQ factor concerns 'website' design in the online environment. ZPB (1990) note that tangibles consistently constitutes the least important element to customers in SQ. However, in this current study the website was placed as the fourth most important factor. The tangible aspects of a service-encounter clearly play a different role than the website when considered in detail. Indeed, the issues grouped under 'company image' (website fitting with company image and being a well known name) are similar to the role played by the 'tangibles' dimension in SQ, and in this study was rated as the least important factor. Similarly, the ServQual 'empathy' dimension is similar to the 'personalisation' dimension online. Both concern individualised service, albeit offline driven by employees and online driven by the technology. It is clear that all the themes represented in the original SQ work are present in the current study. However, many of them have been moderated or recompiled with a technology-based rather than employee-based dimension.

This increased role of technology and decreased role of human interaction was a principle driving the electronic marketplace adaptations of ServQual (such as the E-S-QUAL and E-Rec-SQUAL models developed by the PZM (2005)).

Table 7.23: ServQual Dimensions
Source: Constructed from ZPB 1990.

Label	Concise Definition
Tangibles	Physical facilities, equipment, and appearance of personnel
Reliability	Ability to perform the promised service dependably and accurately
Responsiveness	Willingness to help customers and provide prompt service
Assurance	Knowledge and courtesy of employees and their ability to inspire trust and confidence
Empathy	Caring, individualised attention the firm provides to its customers

7.13.2 Comparisons to e-ServQual

The items from the research on eServQual were taken from the exploratory focus group work, reported in ZPM (2000). The later verification and reduction of these items reported by PZM (2005) was not available at the time. However, it is this validated work with which comparisons of the final model produced in this thesis are drawn.

The most notable difference between the research in this thesis and eServQual is that PZM (2005) differentiate two distinct scales – one related to electronic services quality and one for those customers that had experienced problems with the company. This division has been challenged in the literature (Collier and Bienstock 2003, Wolfenbarger and Gilly 2003). More generally, it conflicts with the research within this thesis, due to the small sample size and limited validity of the service recovery as well as the composition of this scale actually included items not related solely to service recovery but to general service quality. In the exploratory factor analysis within this thesis, factor reduction of performance and gap scores did identify a separate recovery scale. However, at issue here is what customers find important, not how a company performed. In confirmatory factor analysis of importance items, all but one recovery type item was removed. The ‘after sale support was excellent’ item was retained, highlighting that customers do indeed value service recovery, but calling into question whether it should be analysed as a separate set of factors. Considering the recovery scale specifically, the issue of contact emerged clearly as a highly important factor for all customers, while the issues of responsiveness was included in the ‘customer service’ factor.

Table 7.24. Electronic Service Quality
Source: Constructed from PZM (2005)

Model	Factor	Description
E-S-QUAL (Service Quality)	Efficiency	The ease and speed of accessing and using the site
	Fulfilment	The extent to which the site's promises about order delivery and item availability are fulfilled
	System Availability	The correct technical functioning of the site
	Privacy	The degree to which the site is safe and protects customer information
E-Rec-QUAL (Recovery)	Responsiveness	Effective handling of problems and returns through the site
	Compensation	The degree to which the site compensates customers for problems
	Contact	The availability of assistance through telephone or online representatives

Comparing the main E-S-QUAL scale and the research reported here, there are some similarities. Factors of 'efficiency' and 'fulfilment' are covered here in the broader 'customer service' factor. This also includes issues of 'efficiency' present in the 'website' factor, which encompasses 'system availability'. The four factor e-S-QUAL scale appears limited in scope compared to the nine factor scale developed here, and overlooks issues of company image, personalisation, and, an advert-free environment, while issues of customer service are covered in a separate recovery scale.

7.13.3 Comparisons to .comQ / eTailQ

As with the research on e-ServQual, the early focus group work on .comQ (Wolfenbarger and Gilly 2002) was superseded by a later research publication (Wolfenbarger and Gilly 2003), after the research here was begun. Source service items are drawn from the earlier work, and comparisons with the final factor structure of Wolfenbarger and Gilly (2003). Wolfenbarger and Gilly (2003) report a four construct solution for eTailQ, comprised the four dimensions described in Table 7.25 below.

This four-construct solution covers many of the themes covered in this research. The 'Website Design' factor comprises a very similar set of issues, relating to product search and location, as the 'website' factor in this research. The distinct 'customer service' factor here engulfs issues contained within Wolfenbarger and Gilly (2003) 'customer service' and 'fulfilment/reliability' factors, covering both general service and the fulfilment issues highlighted. Areas of the 'fulfilment/reliability' factor relating to product display and information are represented in this research in their own distinct factors on 'information' as

well as covered in 'website'. The 'security/privacy' of Wolfinbarger and Gilly (2003) is largely the same as the 'trust' factor reported here.

Table 7.25 . eTailQ Dimensions
Source: Constructed from Wolfinbarger and Gilly (2003) p193

Construct	Description
Fulfilment/Reliability	the accurate display and description of a product so that what customers receive is what they thought they had ordered and delivery of the right product within the time frame promised
Website Design	all elements of the customer's experience at the website (except for customer service), including navigation, information search, order processing, appropriate personalisation and product selection
Customer Service	responsive, helpful, willing service that responds to customer inquiries quickly
Security/Privacy	security of credit card payments and privacy of shared information

Wolfinbarger and Gilly (2003) note fulfilment/reliability and website design as the largest and most consistent predictors of quality. In the research conducted here, 'customer service' was of less importance than trust while 'website' was only the fourth most important factor to customers. Whereas here 'trust' was clearly the most important factor, analysing the importance of the four constructs and the relationship to overall quality finds that privacy/security is "eclipsed by the other three factors". This stands in stark contrast to this research where 'trust' emerged overall as the most important factor. Wolfinbarger and Gilly (2003) go on to suggest that initially security is inferred from website design for new shoppers, and for more frequent usage derived from experience – parallel to retail environment where store credibility derived from physical conditions. The differential important of trust relative to experience with the company will be considered in the next chapter which specifically considers how contextual factors such as experience impact on service requirements. Wolfinbarger and Gilly (2003) that such situations do alter the importance customer place on issues, noting differential impacts of website design and service based on user type.

7.13.4 Comparison to Internet Service Quality

The Yang and Jun (2002) 'Internet Service Quality' scale consisted of six distinct dimensions: reliability, access, ease of use, personalisation, security and credibility. These six areas are echoed in the current research. The 'reliability' factor, concerns issues of 'customer service' (product delivery when promised), 'access' was very similar to the 'ease of contact factor' (ability to contact the company), although represented more the spread of contact options than the actual ease of making contact itself. The 'ease of use' was very similar to the 'website' factor here, representing design, layout and search issues, while 'Personalisation' also shared a

high level of similarity. The 'security' factor mirrored the theme of that in this research, while 'credibility' concerned company length of trading (similar to the theme of the 'company image' factor here) but also the issue of discounts (represented in the deleted 'special features' factor in this research). Although the themes are clearly very similar, the actual factor construction is different. Several of the Yang and Jun (2002) factors are fairly brief and do not consider more general issues of customer service or wider service issues as represented in this thesis.

7.13.5 Comparisons to WebQual

The WebQual construct of Loiacono et al. (2002) was designed to assess website design rather than holistic services quality. However, as the website is a key part of online service quality it was deemed necessary to include such items into the research conducted here. The emergence of a large 'website' factor in the final factor analysis justifies that decision. As a specific website design instrument, WebQual covers a wide range of design features (shown in Table 7.26) covering both the appearance, functionality and accessibility of the website.

Table 7.26 WebQual Concepts and Dimensions
Source: Loiacono et al. (2002)

Higher Level Concept	Dimension
Usefulness	Informational Fit to Task
	Interactivity
	Trust
	Response Time
Ease Of Use	Ease of Understanding
	Intuitive Operations
Entertainment	Visual Appeal
	Innovativeness
	Flow - Emotional Appeal
Complimentary Relationship	Consistent Image
	On-Line Completeness
	Better than Alternative Channels

As website design was only part of the wider service experience, several of the themes covered in WebQual were removed during the refinement process. In analysing the final 'website' factor, it more concerns the functionality of the website rather than the appearance or emotional appeal, issues covered in WebQual. Several of the themes of WebQual did emerge in separate dimensions - issues of company image and personalisation. The relatively high importance given to 'website' in this research (fourth of nine factors), highlights that the website is a key part of the online shopping experience, as the principal interface with the company. However, the fact that customer service and trust were placed above it emphasise

the importance of holistic service delivery, rather than focusing on the ‘front end’ to the exclusion of all other areas.

7.13.6 Comparison to Retail Service Quality

The Dabholkar et al. (1996) Retail-Service-Quality scale was itself an adaptation of the original SQ scale, adding eleven new items to seventeen SQ items. Dabholkar et al. (1996) sought to emphasise specific areas of retail that were different to pure services (such as store layout, design or convenience). Three of the companies in this research were providers of physical products, so it was felt necessary to include a retail-based adaptation of the service-derived, ServQual tool. Many of the Retail-Service-Quality dimensions were found to be present in this thesis – ‘Convenience’ issues of product location were covered in the ‘website factor’, while ‘Courteousness/helpfulness’ issues were similar to those in the ‘personalisation’ factor, albeit technology- rather than human-based. The issue of ‘physical appearance’ did not replicate in ‘website’ as expected. Instead, as noted above, this factor concerned functionality rather than actual appearance. The remainder of the Retail-Service-Quality dimensions drew close parallels to the issues covered here in customer service.

Table 7.27: Retail Service Quality
Source: Dabholkar et al. (1996)

Dimension	Sub-dimensions
Physical Aspects	Appearance Convenience
Reliability	Promises Doing it right
Personal Interaction	Inspiring confidence Courteousness/ Helpfulness
Problem Solving Policy	

7.14 General Comparisons

Following the specific considerations of the themes of the different focal studies described above, a table was constructed that highlights alignments and exclusions from the research presented in this thesis and that previously conducted (Table 7.28 below). As can be seen, there is good congruence between the general themes represented, suggesting that they are valid constructs. The fact that no other study encompasses all these issues suggests that the research conducted here is a useful contribution towards a comprehensive model of online services quality.

To analyse in more detail where the final items that constitute the nine factors originated, each item was traced back to the original source work. In some cases, the final item used in this research was exactly the same as that in previous work. For others, wording adaptations were required. Some were reductions based on two or three items in multiple works that had a common meaning. The sources of all the service quality items used in the final study are presented in Table 7.29. The two principal sources can be seen as the eSQ exploratory focus group work of PZM (2000), and the exploratory findings on .comQ of Wolfinbarger and Gilly (2002). The Internet-Service-Quality scale of Yang and Jun (2002) also contributed a few items, as did the specific website design factor of the Loiacono et al. (2002) WebQual scale. As noted previously, the general themes of SQ and Retail-Service-Quality were represented in the final study. However, few items were drawn from SQ, while none were replicated from the Retail-Service-Quality scale. The emphasis on human or employee interaction in the specific items compared to the general service theme of the high level factors in these studies accounts for this discrepancy. In common with Table 7.28, in Table 7.29, it is clear that the constructed scale in this research brought together a wide range of items from multiple different sources, with no other single piece of research giving the same breadth of coverage as has been presented here.

Table 7.28: Comparison of Factors in Online Service Quality Research

Service-Importance	SERVQUAL	eSQ (2000)	eSQ (2005)	.eTailQ	Internet SQ	WebQual	Retail-SQ
Website		Ease of Navigation Efficiency	System Availability Efficiency	Usability	(Ease of Use)	Ease of Understanding Intuitive Operations	Convenience
Trust	Assurance	Assurance/Trust Security/Privacy	Privacy	Security	Trust	Trust	
Information		Price Knowledge		Informativeness		Info-Fit	
Customer Service	Reliability Responsiveness Empathy	Reliability Responsiveness	Responsiveness (Recovery) Fulfilment Efficiency	Reliability Customer Service	(Reliability) (Access)		Promises Doing it Right Inspiring Confidence Problem Solving Policy
Product Range				Selection		Better than alternative channels	
Ease of Contact		Access	Contact (Recovery)				
No Advertisements							
Company Image		Site Aesthetics			(Credibility)	Innovativeness Consistent Image	
Personalisation	Empathy	Personalisation		Personalisation	Personalisation	Interactivity	Courteousness/ Helpfulness
Non-represented factors:	Tangibles (visual not functional like website)	Site Aesthetics	Compensation (Recovery)	Price		Visual Appeal Response Time Flow - Emotional Appeal On-line completeness	Appearance

Table 7.29: Sources of Final Service Importance Items

	SQ	eSQ	.comQ	Internet SQ	WebQual	Retail-SQ
Website						
Pricing is clear and easy to understand		x		x		
The contents of the website are concise and easy to understand				xxx		
The website lets me know delivery charges up-front		xx				
The site doesn't waste my time			xxx			
I know what all my options are when I shop at this website			xxx			
The website has a good user interface		xxx				
The website has a useful search function			xxx			
The site gives me enough information so that I can identify the item as if I am in a store			xxx			
Trust						
I feel secure giving out credit information to this site			x	x		
I feel like my privacy and personal information is protected at this site		x	x		x	
You know exactly what you're buying from the website			xxx			
Information						
It's easy to track the shipping and delivery of items purchased on this website			xxx			
The site helps me research products			xxx		x	
The website lets me know about product availability during search			xxx			
I receive notification when the product will be delivered	x	x				
Customer Service						
After sale support at this site is excellent			xxx			
The products were delivered by the time promised	x		x	x		
It is quick and easy to complete a transaction at this website		x	xxx			
Product Range						
There are hard to find products on this website			xxx			
The website has products I can't find in stores			xxx			
Ease of Contact						
Telephone calls are answered promptly	x		x			
A contact telephone number is displayed on the site so that I can talk to		x		x		
No Advertisements						
I do not receive junk mail from being on their mailing list		x				
There are no pop-up advertisements		x				
Company Image						
The company has a well known name		xxx	x			
The website fits with my image of the company					xx	
Personalisation						
The website does a good job of guessing what kind of things I might like	x	x	x	x		
The website is easy to customize		xx				

x – item topic directly represented in source scale; xx – item wording very similar in source scale; xxx – identical wording as source scale

1 eSQ items are drawn from PZM (2000) exploratory focus group work not the final PZM (2005) research tool as this was unavailable at the time research began.

2 .comQ items are drawn from the research of Wolfinbarger and Gilly (2002) not the later Wolfinbarger and Gilly (2003) study which was unavailable at the time research began.

7.15 Conclusion

The need for a new, comprehensive model of online customers' demands has been noted. Butler and Peppard (1998) comment that "before marketers can effectively respond to customer demand, they must understand the customer" (p603). The lack of a detailed and comprehensive tool for analysing online services quality has been repeatedly noted (Bitner et al. 2000, Parasuraman and Grewal 2000, Collier and Bienstock 2003, Wolfenbarger and Gilly 2003, Nicholson and Sethi 2002). Increasingly, online companies seek to move beyond simple low price competition, that typified early e-commerce, to an holistic service delivery based system (PZM 2005), or what Porter (2001) has described as a return to core, traditional strategic principles. This period has seen growing awareness of the value of online customer loyalty or satisfaction (Harris and Goode 2004, Yang and Jun 2002, Sousa and Oliveira 2005, Andruss 2001, Mirsky 2002, Evanschitzky et al. 2004), and the need for a detailed understanding of the customer as a basis for this (ZPM 2000, 2002b).

The purpose of the research conducted within this thesis is to address a major deficiency in organisational and academic understanding regards online customer behaviour and service quality. This first results chapter has addressed the first research question generated to frame the enquiry into online customer behaviour, specifically, "*What are customers' service quality demands online?*"

A sample of some 3403 customer responses was gained from survey research among the customers of four online companies. The response rate for this collection (8.8%), while lower than traditional market research, is in-line with previous research that has utilised online surveying. The results were checked for normality, missing-data, outliers and non-response bias, which all validated the sample. The data collected were then submitted to a process of statistical refinement and analysis (shown in Figure 7.1) to address the stated research question. A staged process of escalating validity from initial descriptive analysis, to identify key trends through to structural equation modelling was adopted. The research analysis process adopted here follows the recommendations of statistical analysis (Pallant 2003, Byrne 2001, Field 2005), as well as echoing the procedures used in the analysis of ServQual data by Parasuraman et al. (1988), and later electronic service models (Parasuraman et al. 2005).

The results from the customer online survey (n=3403) were subjected to data screening procedures and submitted to exploratory analysis, after which a series of rotated component matrixes were compiled, using different methods and rotations, for importance, performance and gap scores. A review of these findings clearly indicated the importance scores as

generating the most conceptually appealing set of dimensions. A confirmatory factor analysis procedure was then applied to generate a final online service importance model, comprised nine factors totalling twenty eight items (from the original pool of sixty nine items). Model fit statistics, checks of convergent and discriminant validity, construction of a second-order factor model and re-analysis of the original survey data with exploratory factor analysis of only the final items, all supported the validity of the nine factor solution as a reliable depiction of online customer service demands. The nine factors that emerged can be described:

- **Website** – issues relating to the functional design of the website and ability of customers to navigate said website.
- **Trust** – issues relating to customer trust in the company to protect their personal and financial details.
- **Customer Service** – issues relating to pre-sale purchase facilitation, product delivery and after sales service.
- **Information** – issues relating to the provision of key information to the customer, such as product research, availability information and the ability to track products through shipping to delivery.
- **Ease of Contact** – the ability of customers to contact human staff of an online retailer.
- **No Advertisements** – freedom from pop-up adverts while shopping and unsolicited emails following purchase.
- **Personalisation** – concerning both the reactive ability of a website to be customised by a customer and the proactive features of the website that can suggest products for purchase based on past behaviour.
- **Company Image** – both the possession of a ‘well known name’ and a website that is of a quality consistent with that created image.
- **Product Range** – The provision of depth of product range that customers cannot easily find in other purchase channels or companies.

As a tool for understanding the online customer, the service quality model developed here serves to span both functional issues of website design and personalisation, service constructs of customer service and the ability to contact the company, as well as broader issues of trust and security.

This chapter sought to provide a foundation model of online service quality that builds on the methodological framework of the original ServQual (offline) service quality tool (Parasuraman

et al. 1988), and that incorporates the many different trends and concepts that researchers have discussed when considering online customer behaviour (reviewed in Chapter three). Taking this model forward, the following chapters use the work reported to further investigate specific issues in online consumption. In the following chapters, bases of market segmentation by different reported service demands are considered (addressing the second research question), as are the organisational issues in service delivery to customers.

Chapter 8. Inter and Intra Organisational Issues

8.1 Introduction

Having addressed the first of the three research questions in the previous chapter, the purpose of this chapter is to consider the organisational issues apparent from the research, both in terms of customer analysis and managerial process. Specifically:

What differences exist in the marketing versus operations views and orientation towards customer priorities?

What is the impact of purchase situations on customer service quality demands online - Proposition 1. Product type will impact customer service quality requirements online.

The remainder of the propositions regarding the influence of purchase situations and demographics on customer behaviour will be addressed in Chapter nine. As noted in Chapter seven, when analysing data various screening procedures are required before analysis can begin.

8.2 Data Screening

This process followed that at the start of the previous chapter – checks of the data for normality, missing values and outliers. As measured situations and demographics as well as the computed factor scores (based on the CFA conducted in the last chapter) will be used in the analysis in this and the following chapter, all were subjected to data screening.

As noted before, given the unavoidable issue of missing data from survey collection (Hair et al. (1998), a level of between 5-10% has been considered acceptable (Cohen and Cohen 1983). The full list of missing values is provided in Appendix 7.1 and shows good levels of collection, with most responses giving well under 5% missing value for situations and an average missing value level across all situations of 3.55%. The computed importance factor scores showed a slightly larger level of missing values at 8.38% respectively. This can be attributed to the fact each comprises multiple measured items, each with their own individual level of missing values. When summed there is an increased likelihood that at least one of the items will have a

missing value, leading to a failure to compute a factor score. Despite this, the missing values level for importance scores is well within tolerance.

To assess the impact of outliers, an inspection of 5% trimmed means for all variables was conducted. This highlighted only minimal variance from the standard mean, proving it unnecessary to manually remove any extreme outliers. Given the sample size ($n=3403$) with maximum seven point scales, such a finding is not unexpected. The full results of this exploration are shown in Appendix 7.2.

An inspection for normality of the continuous situational variables and computed factor scores was also conducted. Skewness and kurtosis measures indicated some deviation from the normal distribution for most variables, which was confirmed by inspection of Kolmogorov-Smirnov statistics, which showed all continuous situations and computed factor scores to be non-normal (shown in Appendix 7.3). As noted in the previous chapter, such a finding is common when considering customer self-reports of satisfaction, which would include the computed factor scores (Peterson and Wilson 1992). Further, as Pallant (2003) and Tabachnick and Fidell (1996) highlight, normality tests are over-sensitive for large samples, suggesting this issue may not be a substantive problem for further analysis (allowing for certain countermeasures, specifically the use of non-parametric statistical techniques that do not require normal distributions for validity).

8.3 Construction of Multi-Item Situations

Due to the large number of variables, most of the situations being measured consist of single item measures (to reduce survey length and therefore improve responses rates). However, some multi-item measures of situations were proposed which require validation, rather than automatic assumption of association. These measures concerned: company usage, internet usage, purchase involvement, satisfaction, time capacity and techno-readiness.

Techno-readiness was computed from ten single item measures based on the index provided by Parasuraman and Colby (2001), where the sum of the five negative measures is subtracted from the sum of the five positive measures to give a techno-readiness index, based on their previous studies.

For the remainder of the multi-item situations, Spearman's Rho correlations were computed. Both online usage and company usage comprised three measures: frequency of purchase, length of time purchasing and amount spent in the last year. Online history and company

history both showed significant correlations between all three composite items at the 0.01 level, confirming the validity of combining the measures into a single measure comprising the sum of the three individual items.

Purchase involvement also comprised three separate measures (choosing carefully, the use of consumer reports and need to be aware of alternatives), which all showed correlation significant at the 0.01 level, and were therefore summed into a single new measure of purchase involvement. Three measures comprised the time capacity scale (having a hectic life, not enough time to do all planned activities and always rushing around), which showed very high correlations, all significant at the .01 level and were summed to form a new time capacity measurement. The outcome measure, satisfaction, comprised two measures – likelihood of reusing the company and likelihood of recommending the company to others (the standard measures previously used in service quality studies, for instance PZB (1988)). These were also found to be highly correlated with .01 level significance and were summed into a new, single satisfaction measurement.

Having calculated the new measures, all were checked for normality, missing values and outliers, with inspection and results in-line with those provided for the individual items as described previously – low levels of missing values and outliers with results following a non-normal distribution. The full validation of the multi-item situational measures is provided in Appendix 7.4. Following these combinations the final list of situations and the constructs they sought to measure are as follows:

- Purchase value** – the amount spent on the product or service in question
- Personalisation of purchase** – whether the purchase for personal use, a gift or business use
- Spontaneity of purchase** – whether the purchase planned, prompted by an online advert or entirely spontaneous
- Frequency of purchase** – whether the customer was a first time or regular purchase of the product type in question
- Pre-purchase research** – whether the customer had researched the product before purchase
- Purchase involvement** – customer level of involvement in the purchase
- Negative role of price** – customer desire to have the lowest price possible
- Positive role of price** – customer belief that high price signifies high quality
- Brand dependence** – due to a lack of time the use of brand names as a simplifying behaviour
- Importance of low price** – the value customer places on having a low price
- Importance of high quality service** – the value the customer places on high quality service
- Online history** – the length of time, frequency of shopping and amount spent over the internet

Company history – the length of time, frequency of shopping and amount spent with the company

Basic loyalty – the number of companies the customer uses to purchase the product type from

Behavioural loyalty – the use of the company due to a lack of alternative sources for the products required

Attitudinal loyalty – the use of the company out of choice due to their best matching the customer needs and wants

Preference for high street names – customer desire to shop from online companies who are also present on the high street

Likelihood of using an online only company – likelihood of whether the customer would purchase from a company only contactable via the internet or e-mail

Technoreadiness – attitude, adoption and propensity to use new technology

Time capacity – lifestyle measurement of how hectic a customer's lifestyle is

Products purchased online – the number of product categories the customer had purchased online (a surrogate measure for online history)

Online activities – the number of different online activities a customer had conducted (a surrogate measure for online history)

Connection speed – the speed of the customer's principal connection to the internet

Demographics – measures of gender, age group, class/occupation, education and household income.

8.4 Inter-Organisational Differences

Having checked the suitability of the source data it is possible to address the first research question and proposition:

What is the impact of purchase situations on customer service quality demands online - Proposition 1. Product type will impact customer service quality requirements online.

Each of the four companies, whose customers were surveyed, provides significantly different products – EntzCo predominantly sells DVDs (only approximately 3% of the sample had purchased other products from the company); ToolCo provides only tools, SportCo provides only sporting equipment, and, ServCo provides utility services. Each company can therefore be considered to comprise a single product type, and evaluation of different behaviour by product type will be considered in terms of company to company comparisons. It is conducted in three stages: differences in reported service demands, differences in continuous and finally categorical situations.

8.4.1 Service Quality

Due to the finding of non-normality, a Mann-Whitney test (rather than t-test) was conducted to compare the mean service importance and performance scores on a company by company basis. The results are shown in Table 8.1. As can be seen by inspection of the significance test results, only a few comparisons fail to show significance of less than .05, suggesting that only a

few commonalities exist across the companies and that service demands do indeed differ by product type under consideration, supporting the research proposition.

An inspection of the order of importance rather than just magnitude of importance suggests, however, some similarity does exist – while different actual scores are reported, all four sets of customers place trust as the most important service issue for them and personalisation, company image and product range as the least important issues. The order of importance of the remainder of the service issues varies by company. For instance, EntzCo and ServCo customers place contactability as less important than customers of ToolCo and SportCo. Such a finding is consistent with previous work and supports the concept of ‘differential generalisability’, described in Chapter two. PZB (1988) and ZBP (1990) both highlight that across all ServQual studies they had conducted, reliability emerged as consistently the most important dimension. Similarly, Mersha and Adlakha (1990) and Cravens et al. (1985) note in conducting multi-company service research, that the most important issues to customers did not vary by firms. This would support the idea of universal service features across product groups at the boundary (most important) level that must be delivered, while the intricacies of service delivery vary by product category or situation. The importance of trust and security in online shopping was noted in Chapter three – with many customers still hesitant about online shopping due to the inherent newness of the shopping medium coupled with continuing reports of security lapses at online companies that has led to even experienced online shoppers to be concerned about the trust issue (Horrigan 2000, Wyner 2001, Ratchford et al. 2001, Maklan et al. 2002).

The relatively low universal placement of personalisation would suggest that early speculation about customer desires for websites as sources of entertainment, and the desire for customised shopping experiences, is largely unfounded. The similarly low placement of company image supports the idea that customers are not judging companies based on adverts and publicity, but on the actual issue of service delivery (hence the high placement of customer service across companies) and actual product fulfilment, supporting the idea that such fulfilment is the key to online service (McKinnon 2002, Porter 2001, Jones and Simons 2000, Saenz 2001, Parker and Gulliford 1996, Chen and Leteney 2000). Thus, the proposition that “*Product type will impact customer service quality requirements online*”, proves to be supported (in terms of significant levels of magnitudes at each company), while the finding of commonality at the extreme ends of high and low reports when considering the order of factors importance provides evidence for the concept of cross-category customer requirements (even though the actual level of these requirements does differ in different product types).

Table 8.1 Analysis of Service Importance and Performance Reports by Company

	All	EntzCo	Means ServCo ¹	ToolCo	SportCo	Mann-Whitney Test: Asymp. Sig. (2-tailed)					
						EntzCo vs ServCo	EntzCo vs ToolCo	EntzCo vs SportCo	ServCo vs ToolCo	ServCo vs SportCo	ToolCo vs SportCo
Website Importance	6.27	6.36	6.10	5.96	6.33	0.000	0.000	0.144	0.272	0.000	0.000
Trust Importance	6.66	6.76	6.56	6.28	6.73	0.000	0.000	0.441	0.000	0.000	0.000
Customer Service Importance	6.40	6.52	6.14	5.99	6.54	0.000	0.000	0.334	0.157	0.000	0.000
Information Importance	6.23	6.31		5.96	6.16		0.000	0.002			0.005
Contactability Importance	5.94	5.69	6.07	6.11	6.48	0.000	0.000	0.000	0.887	0.000	0.000
No Ads Importance	6.39	6.46	6.25	6.23	6.37	0.001	0.001	0.024	0.959	0.325	0.346
Personalisation Importance	3.96	4.05	3.87	3.63	4.01	0.065	0.000	0.621	0.022	0.259	0.001
Company Image Importance	4.65	4.53	4.60	4.61	5.08	0.459	0.405	0.000	0.941	0.000	0.000
Product Range Importance	5.36	5.57	4.92	4.79	5.46	0.000	0.000	0.032	0.281	0.000	0.000
Website Performance	5.97	6.30	5.60	5.15	5.80	0.000	0.000	0.000	0.000	0.005	0.000
Trust Performance	6.31	6.56	5.85	5.55	6.31	0.000	0.000	0.000	0.000	0.000	0.000
Customer Service Performance	5.99	6.33	5.41	5.12	5.89	0.000	0.000	0.000	0.002	0.000	0.000
Information Performance	5.78	6.14		4.95	5.06		0.000	0.000			0.114
Contactability Performance	5.43	5.35	4.98	5.36	5.98	0.000	0.562	0.000	0.000	0.000	0.000
No Ads Performance	6.12	6.37	5.60	5.54	6.05	0.000	0.000	0.000	0.366	0.000	0.000
Personalisation Performance	4.49	4.68	4.38	4.11	4.24	0.000	0.000	0.000	0.000	0.054	0.175
Company Image Performance	5.55	5.43	5.20	5.62	6.11	0.000	0.002	0.000	0.000	0.000	0.000
Product Range Performance	5.44	5.70	5.16	4.71	5.33	0.000	0.000	0.000	0.000	0.009	0.000

Missing cases excluded analysis by analysis. ¹ServCo - no information factor as includes physical product delivery

8.4.2 Situational Difference by Product Type: Continuous Situations

To analyse the difference in continuous situational variables, due to the finding of non-normality, a Mann-Whitney test (rather than t-test) was conducted to compare the mean results obtained. The output from this is shown in Table 8.2. As can be seen by inspection of the significance test results, only a few comparisons fail to show significance of less than .05, suggesting that only a few commonalities. This supports a major degree of variation in the level of situations reported in each of the four companies concerned. Due to this finding, when considering the differential impacts that situations have on service demands in the following chapter, it has been deemed appropriate to investigate the effects at each company individually.

Considering some of the key variations by the situations described, the different nature of the purchase situations in play becomes clear. For instance, customers at SportCo and EntzCo show significantly greater levels of purchase involvement than the other two companies. SportCo customers show higher levels of brand dependence and show a greater role for price as a quality indicator, both simplifying behaviours. Correspondingly, SportCo customers also indicate far higher time deprivation, explaining why greater emphasis is placed on such simplifying behaviour. The customers of EntzCo show greater online history, more products purchased online, more online activities conducted, and high techno-readiness – all indicators of online experience and use. As EntzCo sells one of the most established online products (DVDs) this is unsurprising. Both SportCo and ToolCo customers showed a greater preference for online companies with names they recognised from the high street, logically appealing as both these companies maintain retail stores, whereas the other two do not. Beyond these simple comparisons, the core aspect of interest is how these different situational issues will impact the specific issues of service importance at a factor by factor level. Having highlighted above how there is both differentiation and commonality in the importance placed on service factors at different companies, the interplay of situations and factors will be considered in the next chapter in more detail. However, it is clear from analysis thus far that variation in each situation is apparent in each company due to the different customers and products interacting.

Table 8.2 Analysis of Continuous Situations by Company

	Sample	EntzCo	Means ServCo	ToolCo	SportCo	EntzCo vs ServCo	Mann-Whitney Test: Asymp. Sig. (2-tailed)				
							EntzCo vs ToolCo	EntzCo vs SportCo	ServCo vs ToolCo	ServCo vs SportCo	ToolCo vs SportCo
Purchase Involvement	11.55	11.18	12.90	10.96	12.19	0.000	0.082	0.000	0.000	0.000	0.000
Negative Role of Price	2.16	2.04	1.91	2.48	2.50	0.524	0.000	0.000	0.000	0.000	0.892
Positive Role of Price	2.82	2.63	2.72	3.02	3.36	0.020	0.000	0.000	0.000	0.000	0.000
Brand Dependence	2.90	2.81	2.70	3.02	3.23	0.089	0.000	0.000	0.000	0.000	0.001
Importance of Low Price	3.82	3.95	4.08	3.68	3.36	0.000	0.000	0.000	0.000	0.000	0.000
High Quality Service	4.18	4.30	4.03	3.93	4.15	0.000	0.000	0.000	0.642	0.000	0.000
Online History	11.95	12.27	11.55	11.41	11.62	0.000	0.000	0.000	0.834	0.676	0.536
Company History	2.98	3.22	1.69	3.15	3.08	0.000	0.239	0.046	0.000	0.000	0.307
Behavioural Loyalty	1.83	1.60	2.17	2.34	1.85	0.000	0.000	0.000	0.072	0.000	0.000
Attitudinal Loyalty	4.07	4.21	4.02	3.69	4.02	0.000	0.000	0.000	0.000	0.762	0.000
Overall Satisfaction	9.00	9.38	8.29	8.31	8.97	0.000	0.000	0.000	0.150	0.000	0.000
Preference for High Street Names Online	2.73	2.50	2.87	3.06	3.09	0.000	0.000	0.000	0.000	0.000	0.901
Purchase from an Online Only Company	2.97	3.09	2.94	2.65	2.88	0.032	0.000	0.001	0.000	0.445	0.004
Technoreadiness	6.14	6.91	4.92	5.71	4.93	0.000	0.000	0.000	0.066	0.716	0.025
Time Capacity	11.32	10.96	10.64	11.63	12.74	0.032	0.000	0.000	0.000	0.000	0.000
Products Purchased Online	4.90	5.07	4.76	4.86	4.51	0.046	0.306	0.000	0.506	0.069	0.022
Online Activities	3.49	3.70	3.37	3.29	3.10	0.000	0.000	0.000	0.735	0.000	0.002

Missing cases excluded analysis by analysis.

8.4.3 Situational Difference by Product Type: Categorical Situations

To analyse the differences between companies for the categorical situations a series of chi-square tests were performed. The principal results from this are shown in Table 8.3, which produces highly significant differences by company for each of the situations considered.

Table 8.3 Chi-Square Comparison of Categorical Situations

Pearson Chi-Square		Value	df	Asymp. Sig. (2-sided)
Spend ¹		978.111	10	0.000
Personalisation		1,135.52	6	0.000
Spontaneity		183.838	6	0.000
Frequency Product Type Purchase		1,715.30	9	0.000
Pre-Purchase Research		127.624	3	0.000
Number of Companies Use		522.309	9	0.000
Used Retail Store ²		1,507.69	3	0.000
Gender		844.484	3	0.000
Age		416.804	18	0.000
Class		138.543	21	0.000
Education		86.049	15	0.000
Income		138.646	15	0.000

¹ Excludes ServCo as facilitates rather than sells products

² Excludes EntzCo and ServCo as they do not operate retail stores.

Addressing each of the situations in turn, the differences by company are clear to see. Considering purchase value (Table 8.4), the largest purchase groups at EntzCo are lower than the other two companies with far fewer customers spending over £100. This would be expected due to the more expensive nature of sports equipment and tools compared to DVD and entertainment products.

Table 8.4 Purchase Value

		Up to £ 10	£ 11 - £ 20	£ 21 - £ 50	£ 51 - £ 100	£ 101 - £ 200	Over £ 201	Total
EntzCo	Count	157	892	607	126	45	22	1,849
	% within Company	8.5%	48.2%	32.8%	6.8%	2.4%	1.2%	100.0%
ToolCo	Count	3	30	194	116	82	65	490
	% within Company	0.6%	6.1%	39.6%	23.7%	16.7%	13.3%	100.0%
SportCo	Count	36	50	155	211	88	27	567
	% within Company	6.3%	8.8%	27.3%	37.2%	15.5%	4.8%	100.0%

Considering the purpose of the product purchase (shown in Table 8.5), only ToolCo shows a substantial number of purchasers buying for business use (principally builders and tradesmen). Only EntzCo shows any substantial amount of purchasers buying gifts. Across all companies the majority purchase group is products for personal usage. At ServCo, almost all products are

for personal use, as would be expected given the nature of their market offering – utility services are unlikely gifts, and as the company is aimed at the consumer marketplace, unlikely to be used for business purposes.

Table 8.5 Purchase Purpose: Personalisation

		For Personal Use	For Business Use	For a Gift	Total
EntzCo	Count	1,307	24	515	1,846
	% within Company	70.8%	1.3%	27.9%	100.0%
ServCo	Count	452	4	0	456
	% within Company	99.1%	0.9%	0.0%	100.0%
ToolCo	Count	304	159	2	465
	% within Company	65.4%	34.2%	0.4%	100.0%
SportCo	Count	534	13	24	571
	% within Company	93.5%	2.3%	4.2%	100.0%

The internet medium has provided an expanded opportunity for companies to prompt customers with adverts during browsing, while the wide range of goods on offer provides a wide source of possible impulse purchases. As can be seen in Table 8.6, the majority of purchases were planned. EntzCo, selling products most likely to prompt an impulse buy (relatively inexpensive consumer goods), shows the most impulse buyers. All companies except ToolCo (which has the least developed website, and the least amount of advert prompting during browsing) show very few advert-prompted buyers.

Table 8.6 Purchase Spontaneity

		Planned	Impulse	Prompted by an Advert	Total
EntzCo	Count	1,337	281	228	1,846
	% within Company	72.4%	15.2%	12.4%	100.0%
ServCo	Count	345	36	78	459
	% within Company	75.2%	7.8%	17.0%	100.0%
ToolCo	Count	482	16	4	502
	% within Company	96.0%	3.2%	0.8%	100.0%
SportCo	Count	496	37	40	573
	% within Company	86.6%	6.5%	7.0%	100.0%

Considering the frequency of product type purchase (Table 8.7), very few EntzCo customers are buying for the first time. As DVDs are commonly sold online, and are relatively inexpensive, frequently purchased goods with many new titles every month, it is not surprising that few first time purchases exist, and the company generates the highest amount of very frequent purchasers. For the more expensive and less frequently required products of the other companies there are many more first time purchasers and infrequent shoppers.

Table 8.7 Frequency of Purchase Product Type

		This is the first time	Less than once a month	Once or more a month	Once or more a fortnight	Total
EntzCo	Count	53	548	897	338	1,836
	% within Company	2.9%	29.8%	48.9%	18.4%	100.0%
ServCo	Count	272	175	6	1	454
	% within Company	59.9%	38.5%	1.3%	0.2%	100.0%
ToolCo	Count	263	204	20	14	501
	% within Company	52.5%	40.7%	4.0%	2.8%	100.0%
SportCo	Count	174	344	41	8	567
	% within Company	30.7%	60.7%	7.2%	1.4%	100.0%

The nature of the internet as an information source provides that many customers research products before committing to purchase (be it for detailed product information or simply to compare price across companies). Considering the issue of pre-purchase research (shown in Table 8.8), ServCo shows a markedly lower number of customers conducting this activity than others. While this may at first seem surprising, given the complex nature of the products they offer, the company itself positions as a research and search agent for the customer, offering to remove the trouble and time-consuming activity of information search. Thus, the finding is unsurprising. Equally, selling lower cost and less involving products, it is logical that EntzCo shows a lower amount of research orientated customers than the other two companies, which sell more complex, unique and involving products and would logically have customers conducting research prior to purchase.

Table 8.8 Pre-Purchase Research

		Yes	No	Total
EntzCo	Count	1,387	463	1,850
	% within Company	75.0%	25.0%	100.0%
ServCo	Count	292	168	460
	% within Company	63.5%	36.5%	100.0%
ToolCo	Count	414	96	510
	% within Company	81.2%	18.8%	100.0%
SportCo	Count	534	49	583
	% within Company	91.6%	8.4%	100.0%

Examining the basic measure of loyalty, the number of companies from which the customer purchased the product type, some interesting patterns emerge (shown in Table 8.9). The lower levels of customers always using only their company, and higher levels using many different companies, observed at EntzCo and SportCo is explained by different reasons. EntzCo, sells a product for which there are many competitors, and for which most customers search for the lowest price across companies. However, SportCo is a more specialised company, where one might expect in-depth relationships to be formed with customers, so the result is more perplexing, especially given the relatively high level of attitudinal loyalty and satisfaction with the company. However, considering the nature of the company the behaviour becomes more

easily explained –they are very specialised but they are relatively small and cannot offer all possible types of equipment required within the broad market they compete. This results in customers using different companies for areas that cannot be fulfilled from this company. The generally high levels of customers always using the same, or only one or two companies, at ServCo and ToolCo reflects to some extent the fact that these companies have very few competitors in their target marketplaces, and the generally good levels of satisfaction of their customers with the companies.

Table 8.9 Number of Companies Purchase From

		Always the same company	1 or 2 companies	3 to 5 companies	Many different companies	Total
EntzCo	Count	280	604	700	261	1,845
	% within Company	15.2%	32.7%	37.9%	14.1%	
ServCo	Count	186	138	78	53	100.0%
	% within Company	40.9%	30.3%	17.1%	11.6%	455
ToolCo	Count	235	200	49	12	100.0%
	% within Company	47.4%	40.3%	9.9%	2.4%	496
SportCo	Count	38	222	235	76	100.0%
	% within Company	6.7%	38.9%	41.2%	13.3%	571

Considering the use of a retail store before purchase (Table 8.10) for the two companies who operate these, there is a clear difference in response levels, attributable to the nature of the companies' operations. While both companies operate retail stores and home shopping catalogues, SportCo has relatively few stores and principally trades through catalogue sales, while the opposite is true for ToolCo.

Table 8.10 Use of a Retail Store

		No	Yes	Total
ToolCo	Count	176	334	510
	% within Company	34.5%	65.5%	100.0%
SportCo	Count	464	119	583
	% within Company	79.6%	20.4%	100.0%

Noting the issue of gender (reported in Table 8.11) the dominance of male shoppers is apparent in all but SportCo, where women dominant. The dominance of men at ToolCo is unsurprising given they sell tools and equipment which are principally purchased by men, whereas SportCo sells goods for a sport dominated by women. The male dominance at EntzCo and ServCo is not entirely unexpected, and is in line with the market analysis reported by the companies, and used for sample validation at the start of Chapter seven.

Table 8.11 Gender

		Male	Female	Total
EntzCo	Count	1,246	586	1,832
	% within Company	68.0%	32.0%	100.0%
ServCo	Count	323	121	444
	% within Company	72.7%	27.3%	100.0%
ToolCo	Count	387	99	486
	% within Company	79.6%	20.4%	100.0%
SportCo	Count	34	533	567
	% within Company	6.0%	94.0%	100.0%

Considering the age groups of the shoppers in question (Table 8.12), minor differences are apparent - SportCo has the most youngest shoppers (as they sell sporting goods for a marketplace where younger shoppers dominate), whereas ServCo has the most oldest shoppers - a reflection of the utility location service they offer appealing more to the older marketplace, who have time to find the best possible prices, something not appealing to the younger areas of the marketplace.

Table 8.12 Age

		Under						Over	Total
		18	18 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65	
EntzCo	Count	10	174	603	544	309	160	33	1,833
	%	0.5%	9.5%	32.9%	29.7%	16.9%	8.7%	1.8%	100.0%
ServCo	Count	0	15	84	120	96	85	45	445
	%	0.0%	3.4%	18.9%	27.0%	21.6%	19.1%	10.1%	100.0%
ToolCo	Count	0	21	162	168	93	39	3	486
	%	0.0%	4.3%	33.3%	34.6%	19.1%	8.0%	0.6%	100.0%
SportCo	Count	33	101	152	184	77	22	2	571
	%	5.8%	17.7%	26.6%	32.2%	13.5%	3.9%	0.4%	100.0%

Considering the class/occupation structure below (Table 8.13), the companies follow a generally similar pattern with the higher two categories dominating, with fall off towards the lower end of the marketplace. The breakdown of the 'E' group into pensioners, students, housewife/husband or other casual work has highlighted student and housewife/husband shoppers at SportCo, as well as some at EntzCo. The good spread across all groups suggests the sample provides useful representation of a cross-section of society (in terms of the product categories the companies are providing).

Table 8.13 Class / Occupation

		C2/								Total
		A	B	C1	D	E ¹	E ²	E ³	E ⁴	
EntzCo	Count	329	622	301	210	106	104	90	61	1,823
	%	18%	34%	17%	12%	6%	6%	5%	3%	100%
ServCo	Count	116	121	66	33	82	5	9	6	438
	%	27%	28%	15%	8%	19%	1%	2%	1%	100%
ToolCo	Count	2	3	1	0	0	0	0	0	6
	%	33%	50%	17%	0%	0%	0%	0%	0%	100%
SportCo	Count	5	8	0	2	0	4	2	1	22
	%	23%	36%	0.0%	9%	0%	18%	9%	5%	100%

¹ Retired or pensioner ² Student ³ Housewife or husband ⁴ Other casual work

Considering the education of respondents (Table 8.14) it is clear that most are educated to a fairly high degree, with around a fifth of the entire sample holding post-graduate level degrees. The higher amount holding such degrees at ServCo may be a reflection of the nature of the product they offer appealing most to those with greater levels of education and desire to engage with such material. The higher levels with no qualifications purchasing from EntzCo reflects the product type on offer – appealing to the entire marketplace as a general entertainment product, rather than more specialised service or product.

Table 8.14 Education

		None	Vocatio nal	GCSE or O- Level	'A' Level	U/G	P/G	Total
EntzCo	Count	129	168	379	353	436	330	1,795
	%	7.2%	9.4%	21.1%	19.7%	24.3%	18.4%	100.0%
ServCo	Count	20	44	67	57	124	126	438
	%	4.6%	10.0%	15.3%	13.0%	28.3%	28.8%	100.0%
ToolCo	Count	13	42	87	77	158	106	483
	%	2.7%	8.7%	18.0%	15.9%	32.7%	21.9%	100.0%
SportCo	Count	23	38	130	138	132	99	560
	%	4.1%	6.8%	23.2%	24.6%	23.6%	17.7%	100.0%

The results for income (Table 8.15) tend to reflect those seen in education and class – EntzCo has the highest proportion of low income customers, while most companies have a broad spectrum of customers over all income ranges, with a clear majority in the £40-100,000 household income bracket. Demographic variables as a whole suggest the companies represented provide to the higher ends of the marketplace as a whole.

Table 8.15 Income

		Under £ 15,000	£ 15k - £ 19,999	£ 20k - £ 29,999	£ 30k - £ 39,999	£ 40k - £ 100k	Over £ 100k	Total
EntzCo	Count	223	207	359	327	471	86	1,673
	%	13.3%	12.4%	21.5%	19.5%	28.2%	5.1%	100.0%
ServCo	Count	29	40	83	77	149	28	406
	%	7.1%	9.9%	20.4%	19.0%	36.7%	6.9%	100.0%
ToolCo	Count	10	23	79	87	225	28	452
	%	2.2%	5.1%	17.5%	19.2%	49.8%	6.2%	100.0%
SportCo	Count	35	68	81	96	194	33	507
	%	6.9%	13.4%	16.0%	18.9%	38.3%	6.5%	100.0%

Considering all the results produced above, there are clear variations by companies in the situational and demographic composition, and the levels of service experienced, by the customers completing the questionnaire survey. This finding necessitates the consideration of situational and demographic impacts on service requirements on a company-by-company basis, rather than across the sample as a whole. Such analysis forms the basis of the next chapter, which uses a multi-stage research process to build towards a structural equation model of how variance in purchase situations and demographics impact on online customer

service requirements. Before moving on to that detailed analysis, and while considering the variations in company in terms of customer survey response, it is here that the managerial survey responses from each will be analysed and compared.

8.5 Intra-Organisational Effects: Marketing – Operations Relationships

This section of the chapter seeks to address the research question regarding the organisational side of service quality and variations in the interpretation and realisation of customer requirements, specifically:

What differences exist in the marketing versus operations views and orientation towards customer priorities?

Across the four companies who provided access to their customers for the customer survey, which forms the major findings of this thesis, a survey of managers was conducted which provided a total sample of twenty seven completed responses from fifteen marketing managers and twelve operations managers. Although this provides a relatively small sample, suitable only for descriptive analysis, the small size of each of the companies in question provides around a sixty to seventy percent completion rate (indistinct boundaries between functional areas and continually changing levels of staffing make it impossible to precisely identify the completion rate).

Considering the organisational side of service quality is highly important, even with a small sample. As noted in reviewing the literature on this area, the need to move beyond simple measures of customer requirements and performance to analyse the sources of the organisational systems that fulfil these requirements has been highlighted (Chenet et al. 1999, Heskett et al. 1994, Schlesinger and Heskett 1991, Bitner 1990). More specifically, discrepancies between customer reports and managerial understanding has been underlined (Deshpande et al. 1993, 1997). Management may often not correctly understand or deliver customer desires. Indeed, this discrepancy was described in detail by PZB (1988) and ZBP (1990), in defining the four organisational service-gaps that led to the fulfilment-gap (as measured by the ServQual instrument).

The cross-functional nature of company delivery to the customer requires that a multi-functional survey take place to gauge the opinions of all those cross- and inter-functional activities that lead to service fulfilment (Kotler 1977, Ruekert and Walker 1987, Chopra et al. 2004). Specifically, the two value-creating groups in the organisation – marketing and operations (Porter 1985) - whose relationship in practice has often been problematic and

distant (Shapiro 1977, Berry et al. 1991a, Berry et al. 1995, Hausman et al. 2002). This weak relationship is reported, despite the clear benefits of co-operation and collaboration (Hausman et al. 2002, Fitzsimmons et al. 1991, Davenport 1993, Deshpande 1999, Min and Mentzer 2000, Christopher 1991, Ellinger 2000)

For the sample in question, the majority of managers had been in post less than two years. Operations managers were, on the whole, less experienced - with 55% in post only one year, compared to only 26% of marketing managers (full results in Table 8.16). The marketing response was made up of 53% male managers, while the operations survey was 66% male.

Table 8.16 Years in Post

Years	1	2	3	4	5	6	7	8	10
Marketing	27%	33%	7%	7%	-	7%	7%	7%	7%
Operations	55%	22%	-	-	22%	-	-	-	-

Several constructs were specifically measured as part of the survey: managers were presented with a list of the service factors that emerged from the previous customer research and asked to state how important they thought each factor was to the customer, and how well their company performed. The intent was to measure both company understanding and also to compare the similarities and differences between marketing and operations managers' customer knowledge. In addition to this, multi-item measurements were taken of marketing-orientation, the value placed on a good working relationship between functions, the level of cross-functional working in the company, as well as single measurements of the amount of impact managers believed each function had in the business, and how powerful each function was in the company as a whole. These measures sought to analyse the level of marketing-operations relationships in the organisations studied, and how this may relate to the accuracy of managers' customer understanding as well as more generally whether current relationships reflected the typical dominance of marketing over operations as a functional area.

8.5.1 Verification of Multi-Item Measurements

The first multi-item measure concerned market orientation. This was comprised the ten market orientation measures of Deshpande and Farley (1996), as well as supplemental measures from Homburg et al. (2003), Homburg and Pflesser (2000) and three new measures on customer interaction. Correlations were computed for the eighteen final items which showed good levels of significant correlations (shown in Appendix 7.6). Cronbach Alpha was calculated as .908, suggesting the construct was well represented by the component items.

Cross-functional working practices was measured by two items - existence of high level, effective integration/control and cross-functional team working being the common way of working in the company. Correlation between these items was high (.626) and significant at the .01 level. Both items were summed into a new measure of cross-functional working.

Relationship quality was constructed to measure the quality of the relationship between marketing and operations, comprising three items - measures of getting along together, working well together and an absence of interdepartmental conflict. Correlations showed all items significantly related with good levels of correlation (.85, .59 and .47). The three measures were therefore summed into a new measure of relationship quality.

8.5.2 Marketing Orientation

Having constructed the measures, the results for cross-functional working, relationship quality and marketing orientation for the entire sample and for the reports from marketing and operations managers were taken.

Movement towards cross-functional perspectives in management theory and in marketing practice have been highlighted as preferential, due to the cross functional nature of product and service delivery – no single function delivers everything from pre-sales, product and post-sales to the customer (Kotler 1977, Ruekert and Walker 1987, Chopra et al. 2004). The issue of cross-functional organisation and cross-functional marketing organisation has been noted, with some authors suggesting the decline of the formal marketing function with marketing becoming the responsibility of everybody in the organisation (Webster 1998, Greyser 1998, Homburg et al. 2000, Deshpande 1999). Cross-functional working is a key part of this, requiring people from different functional areas to work together across functional boundaries. Such working, of course, requires co-operation and collaboration, something that literature has highlighted as notably absent in the traditional working relationships between marketing and operations functions (Shapiro 1977, Berry et al. 1991a, Berry et al. 1995, Hausman et al. 2002).

More generally, the approach to the marketplace by the market orientated firm has been described by several authors (Narver and Slater 1990, Slater and Narver 1994; Kohli and Jaworski 1990, Jaworski and Kohli 1993, Kohli et al. 1993; and Deshpande et al. 1993, 1997) as focused around issues of customer orientation, competitor orientation, intelligence generation/dissemination, and responsiveness. These were synthesised by Deshpande and

Farley (1996, 1998) in a meta-analysis and reduction which produced the final ten item measure which has been used in this study.

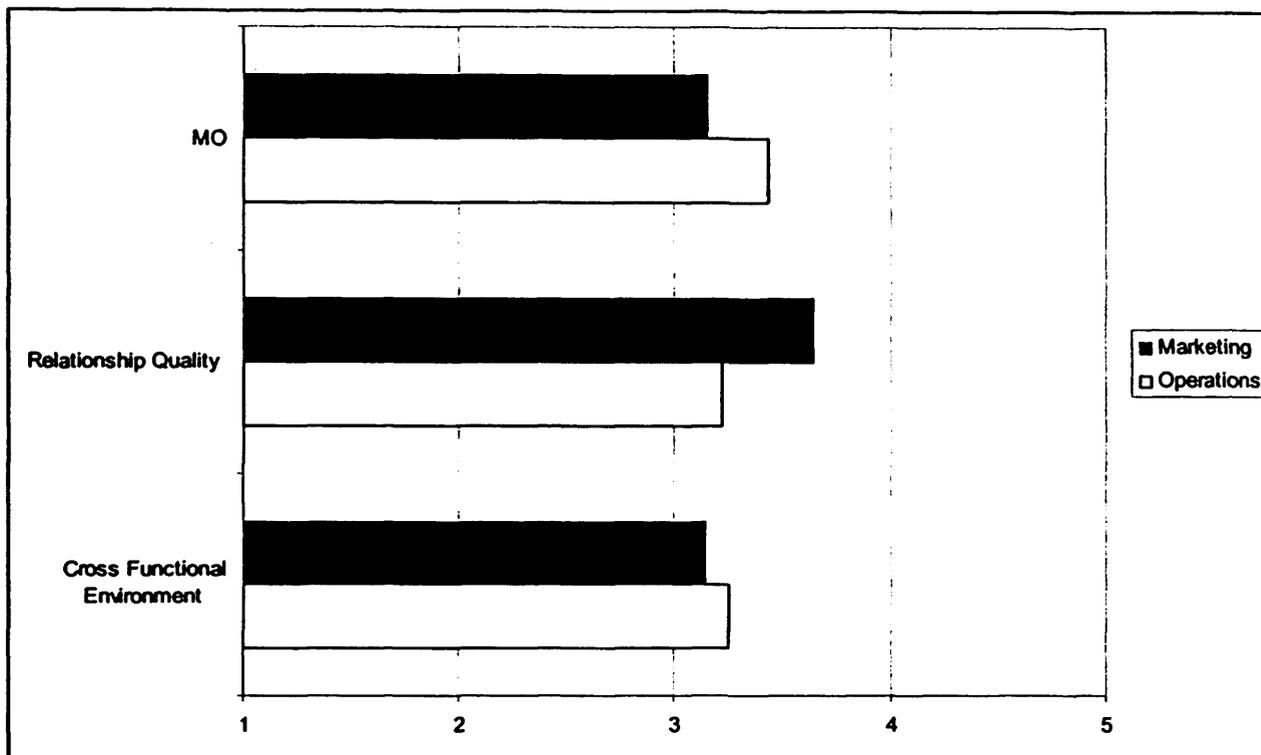
In considering the results gained from this new research on the issues of relationship quality, cross-functional working and market orientation, the principal results are given in Table 8.17 and shown in Figure 8.1. As can be noted, the levels of market orientation, cross-functional working and relationship quality are not especially high - only slightly above a neutral score. More interesting, however, is the finding that operations managers actually report higher market orientation than marketing managers. This suggests that traditional viewpoints on operations as distant and removed from the customer (Shapiro 1977), are questionable in the companies analysed here. Such a finding also supports the proposals of those who have suggested an organisation-wide marketing orientation or the dispersal of marketing and activities and thought to non-marketing areas of the organisation (Webster 1992, 1998; Greyser 1998, Day 2003)

Marketing managers also report higher relationship quality but lower cross functional working. This may reflect that they are happier with the relationship with operational colleagues when they perceive them to be more distant and not involved in collaborative projects, which would support the traditionally unfriendly relationships reported between the two functions in the literature (Shapiro 1977, Berry et al. 1991a, Berry et al. 1995, Hausman et al. 2002).

Table 8.17 Organisational Orientation Reports

	Marketing Managers	Operations Managers	Out of a possible...	Where...
Cross Functional Environment	3.15	3.25	5	Higher score = greater cross functional working Neutral = 3
Relationship Quality	3.64	3.22	5	Higher score = greater relationship quality Neutral = 3
Market Orientation	3.15	3.43	5	Higher score = greater market orientation Neutral = 3

Figure 8.1 Organisational Orientation Reports



Considering the inter-relationships between the three constructs, cross-functional working was found to be highly correlated to marketing orientation (.57 Pearson correlation significant at the .01 level). This finding is conceptually appealing as several of the market orientation measures indicate cross-functional approaches to organisation such as information sharing and collaboration, which in part supports the validity of the measurement. Cross-functional working had a weaker link to relationship quality (.41 Pearson correlation significant at the .05 level). This suggests, as noted above in considering marketing responses, that cross-functional working does not always improve the relationships between traditionally adversarial groups. Interestingly, relationship quality was not found to be significantly related to market orientation, which would suggest that relationships have not been linked to an increasing the market orientation of the non-marketing areas, and that operations may have independently moved into marketing areas (possibly due to top managerial direction), or even that operations' increasing market orientation (and associated activities) may have even damaged working relationships with marketing. These factors could explain the lack of link between relationship quality and market orientation. This finding would also suggest that a good relationship between marketing and operations is not required for both to maintain a customer-focused orientation, even if a good working relationship would conceptually be required to 'make good' on a market orientation and deliver products to the customers.

8.5.3 Functional Power and Impact

Extending the issue of cross-functional organisation and the suggested downgrading and dispersal of marketing influence (Webster 1998, Dennison and McDonald 2003, Day 2003), in opposition to earlier proposals of a marketing-controlled corporation practicing 'total marketing', as the ultimate form of market facing organisation (Keener 1960), or more recently 'total integrated marketing' (Hulbert et al. 2003), it is interesting to note the traditional role of operations as the least influential group in the organisation (Slack et al. 2004), yet potentially most important source of strategic advantage (Skinner 1969, Hayes and Wheelwright 1984). The results from this survey aggregated across four companies highlight that operations, is in fact, the most powerful function in all four organisations (and is viewed as such by both marketing and operations managers). Marketing as a function is far less powerful in the company, behind financial and sales functions. This would support those authors who have speculated on the reduction of marketing influence, at a time when operations as a functional area is gaining in power (Piercy and Morgan 1997).

Figure 8.2 Power Rank in the Company
(Lower score signifies more powerful function)

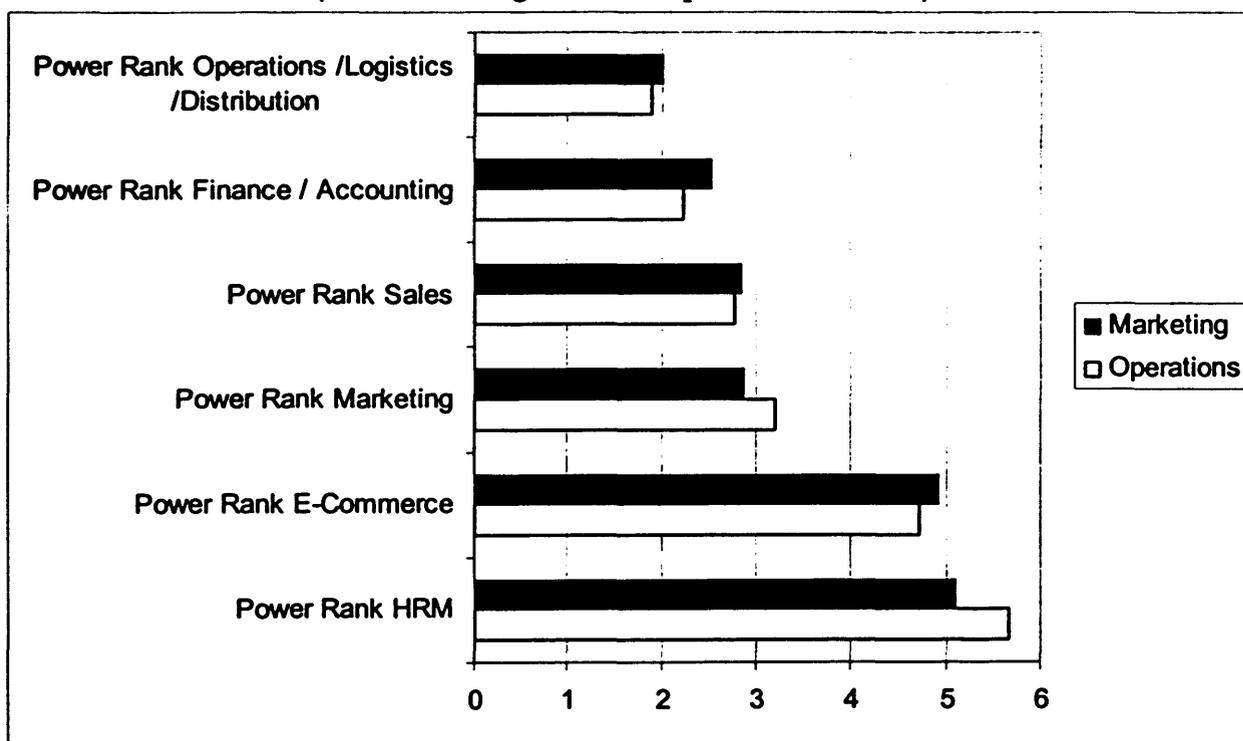


Table 8.18 Power Rank of Functions

	SportCo	EntzCo	ServCo	ToolCo
Power Rank Operations /Logistics /Distribution	2.00	2.11	2.50	1.57
Power Rank Finance / Accounting	1.75	1.44	2.00	3.43
Power Rank Marketing	2.80	3.67	1.50	3.14
Power Rank HRM	6.00	6.00	6.00	4.57
Power Rank Sales	2.60	2.83	4.00	2.86
Power Rank E-Commerce	5.00	4.29	5.00	5.29

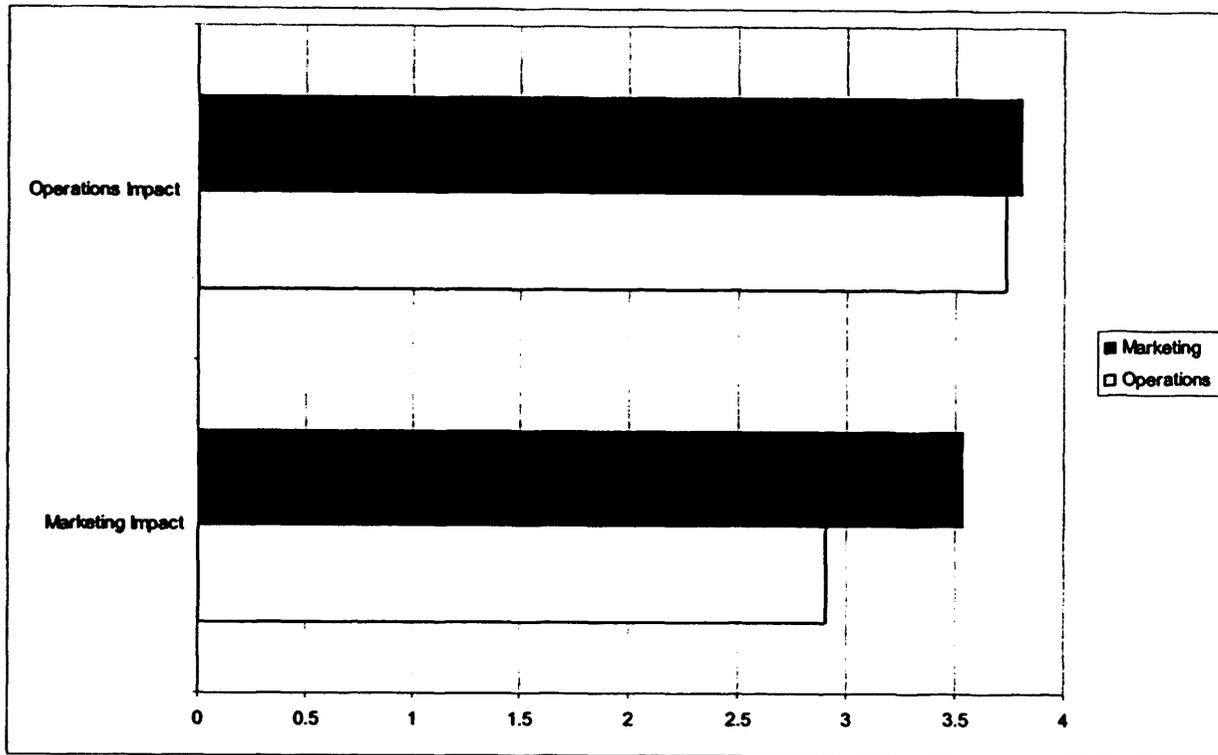
Considering each company in isolation this pattern is reproduced in all three physical product companies, with operations being reported as being far more powerful in the company. At ServCo, however, marketing is reported as the most powerful function, with operations third behind finance and accounting. This would suggest that operations as a function has gained prominence in those companies where physical goods must be moved and shipped (and the role of operations is clear and apparent), but in service marketing still dominates.

In addition to being asked how powerful each function was within the company, managers were also asked what impact they believed their respective functions made. The results are illustrated in Figure 8.3 and Table 8.19 below. These results support those who highlight the strategic role of operations in the organisation (for instance, Skinner 1969, Hayes and Wheelwright 1984). Both marketing and operations managers perceive operations to have the greater impact within the company. Of interest is the discrepancy between marketing and operations managers views on the impact of marketing – operations managers seem to view marketing as having far less of an impact than do marketing managers. This is likely attributable to marketing's desire to maintain the perception of its contribution, and operations' under-valuation of marketing impact, due to the legacy of conflict between the two functions. These results were replicated in each of the four companies in the sample, except ServCo. Here, both marketing and operations managers viewed their function as making equal contribution to the other function. Even though at ServCo, marketing was viewed as being more powerful than operations (reported above), both functions were seen as having equal impact, which would support the declining overall impact of marketing within the organisation.

Table 8.19 Functional Impact
Higher score indicates higher impact.

	Marketing Impact	Operations Impact
SportCo Marketing Managers	4.00	4.00
SportCo Operations Managers	2.50	4.00
ToolCo Marketing Managers	3.17	3.50
ToolCo Operations Managers	4.00	4.00
EntzCo Marketing Managers	3.75	4.00
EntzCo Operations Managers	2.67	3.67
ServCo Marketing Managers	4.00	4.00
ServCo Operations Managers	3.00	3.00

Figure 8.3 Functional Impact within the Organisation



8.5.4 Managerial Perceptions of Customer Service

Managers were asked to state how important they believed each service factor to be to their customers, and how they perceived their organisation to have performed. For the initial analysis, of these scores, a total importance and total performance score was calculated, and a total gap score then computed as performance minus importance. The customer reports of service importance and performance were then submitted to the same calculation, so that the overall service gap reported by customers and the managers' perceptions of this could be compared. The negative findings for all but one of the gaps indicates importance as exceeding reported performance (thus a service failure), with a larger negative gap indicating a larger service failure.

Table 8.20 Service and Organisational Reports

	ServCo	ToolCo	SportCo	EntzCo
Customer Gap	-2.87	-3.46	-2.39	0.60
Performance - Importance				
Management Gap	-8.50	-1.83	-2.75	-1.64
Performance - Importance				
Customer Satisfaction	8.29	8.31	8.97	9.38
Out of 10				
Market Orientation	2.89	3.50	3.46	3.11
Out of 5				
Relationship Quality	2.83	3.33	3.80	3.67
Out of 5				
Cross Functional Working	2.25	2.92	3.20	3.50
Out of 5				

Comparing the results of the companies in turn, at ServCo and SportCo managers actually perceived their service delivery to be worse than that reported by their customers. This was by some distance at ServCo, while managers at EntzCo also perceived their service delivery to be worse overall, than that reported by their customers - who actually reported positive service (i.e. performance exceeded importance on all service items). At ToolCo, managers took an opposing view, believing their service to be better than that reported by the customers. While there were clearly discrepancies between manager and customer viewpoints, only at ServCo where these of a severe nature. This suggest overall managers views are not too distant from those of their customers. A more detailed analysis of service beliefs is conducted below where marketing and operations viewpoints are considered with importance and performance scores rather than an overall service gap.

Comparing the organisational issues, the company with the highest market orientation (ToolCo), actually shows the largest customer-reported shortfall in service quality. The company with the least customer service gap (EntzCo) does not have the highest scores for market orientation or relationship quality, although they do report the best score for cross-functional working. While ServCo emerges as having the lowest measures for market orientation, relationship quality and cross functional working, it has the second lowest customer service gap, and the worst discrepancy between what managers think customer want and what they actually deliver. This indicates that managers know there is a severe mismatch between customer desire and delivery but that they have not fixed this, or given the low levels of market orientation, relationship quality and cross functional working, they cannot fix the service problems with their current organisational relationships.

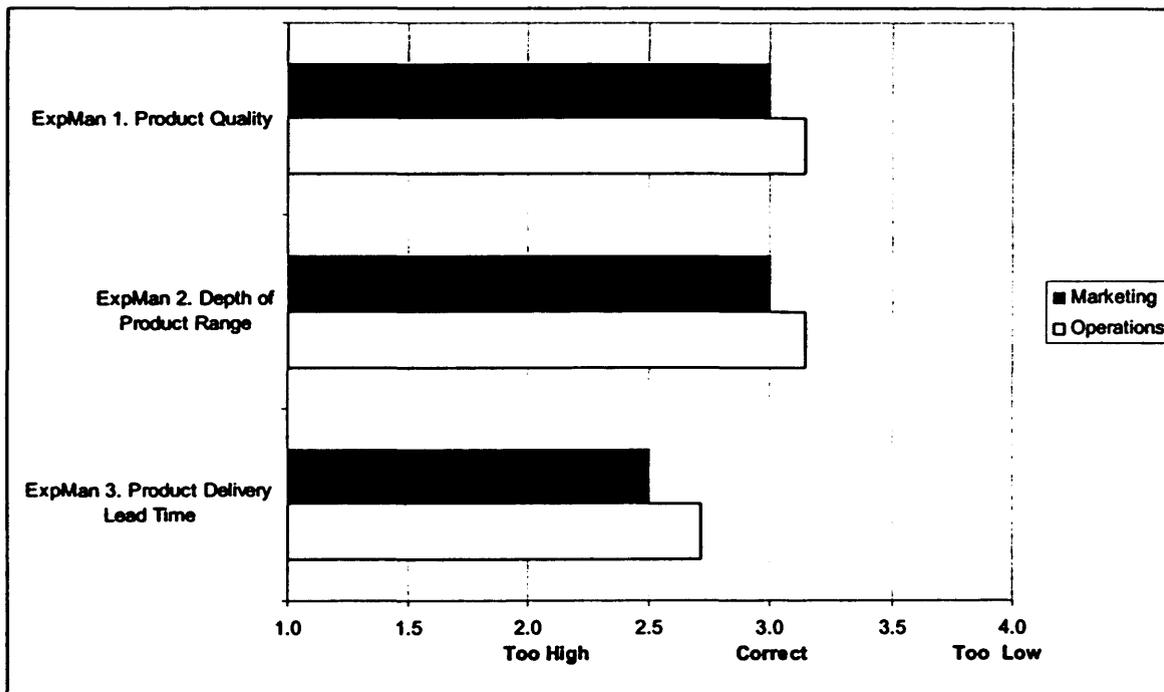
8.5.5 Expectations Management

In addition to the measures already described, managers were probed about the expectations management in the organisation. Specifically, questions addressed whether the expectations that marketing created in customers with regard to product delivery lead time, depth of product range and product quality were accurate, too high or too low. The need to align what customers are promised and delivered is highly important. Over-promising can lead to dissatisfied customers when delivery falls short of what is promised. Under-promising may lead customers to shop at other companies where better levels of service are described (Day 1994, Zeithaml et al. 1990, Kordupleski et al. 1993, Groomroos 1984). Expectations management practices at each of the four companies will now be considered in turn.

8.5.5.1 Expectations Management at EntzCo

Considering EntzCo first (results shown in Figure 8.4), there was general agreement that marketing created fairly accurate perceptions regarding lead time and depth of product range, however, both marketing and operations agreed that expectations for lead time were too high, although it was marketing who viewed the expectations they created as higher than the operational department. This might indicate a discrepancy between what marketing believe operations can actually deliver, and what they can in reality (it being slightly better). It may also be that both functions in the company are aware that lead time expectations in customers are higher than is possible to meet in practice. The general agreement in the expectations created, allowing for some discrepancy, are in line with the good but not outstanding results indicated for the company for relationship and market orientation measures.

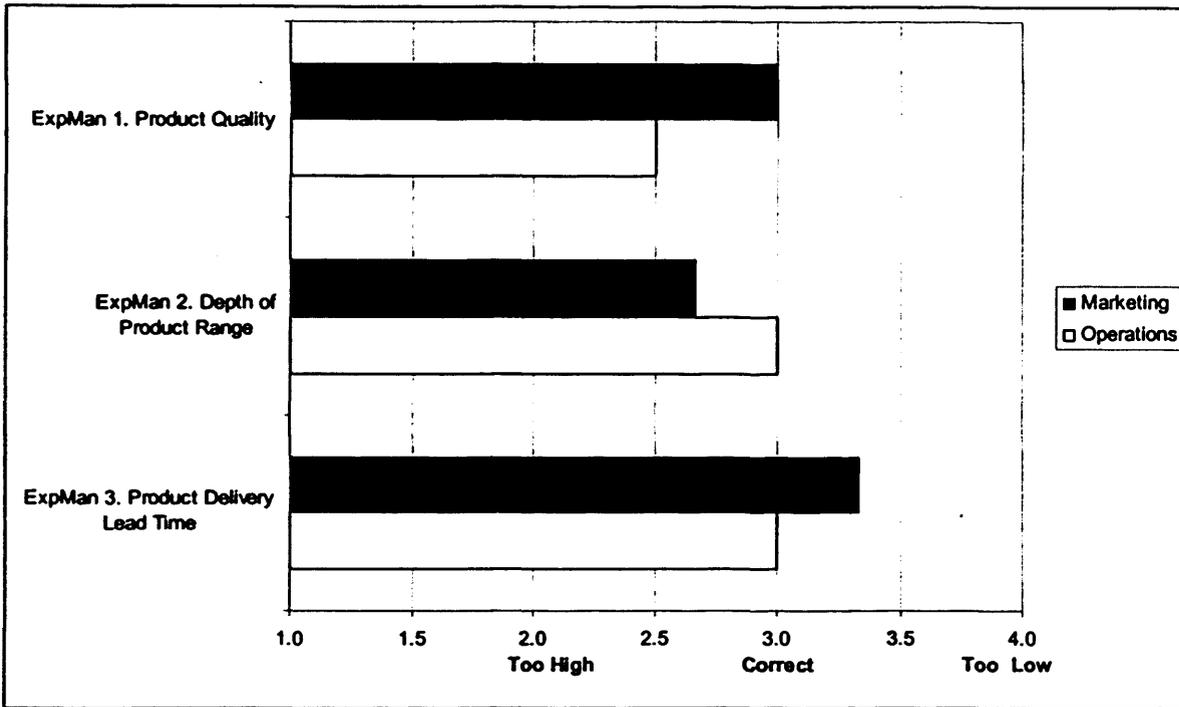
Figure 8.4 Expectations Management at EntzCo



8.5.5.2 Expectations Management at SportCo

At SportCo (results shown in Figure 8.5), there was greater variation in marketing and operations viewpoints than at EntzCo. Marketing managers viewed product quality expectations to be accurate and operations managers indicated expectations as too high. The reverse was true for product range, where marketers viewed themselves as over-promising, but operations reported these to be accurate. For lead time, marketing thought expectations fell short of reality, whereas again, operations saw these as accurate. These results show a significant discrepancy between the issues of expectations management across the two functions. This is an unexpected finding, given the generally good level relationship and levels of cross-functional working at the company. In theory, these would support accurate levels of expectations being created, but in practice significant divergence has been reported.

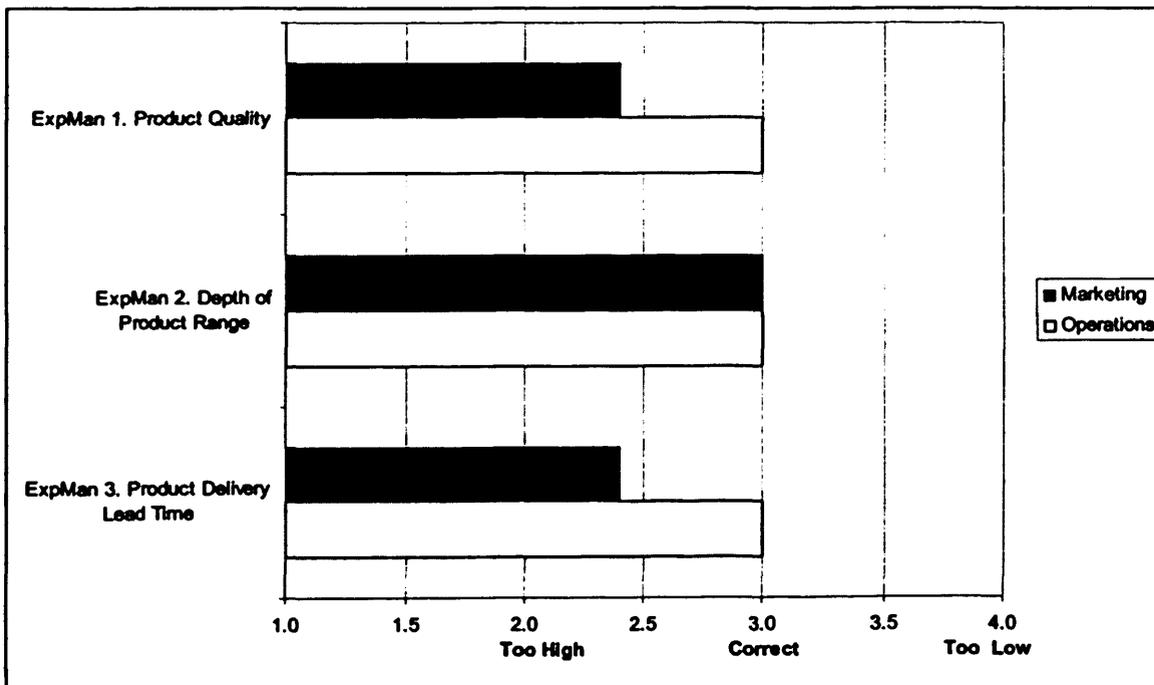
Figure 8.5 Expectations Management at SportCo



8.5.5.3 Expectations Management at ToolCo

At ToolCo (results shown in Figure 8.6) both functions agreed that product range expectations were accurate. However, marketing felt that product quality and lead time expectations created were higher than operations could actually deliver, despite the fact operations viewed expectations as correct. The generally low levels of relationship quality and cross functional working reported at the company would support these discrepancies – that marketing is unaware of what operations can actually deliver.

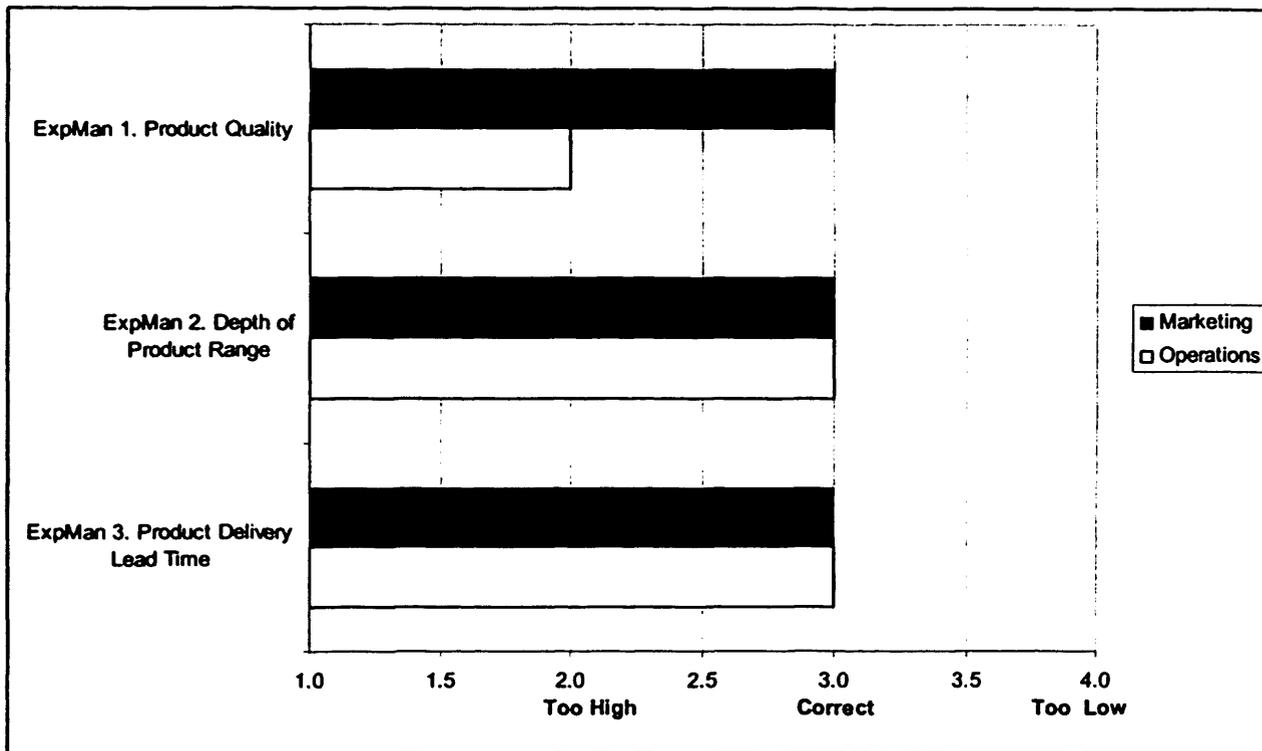
Figure 8.6 Expectations Management at ToolCo



8.5.5.4 Expectations Management at ServCo

At ServCo (results shown in Figure 8.7) operations and marketing were in agreement about range and lead time expectations. However, operations viewed the expectations marketing created about quality as too high. ServCo showed the greatest discrepancy between marketing and operations' viewpoints of any of the four companies, which in part may be explainable by the very poor results for relationship quality and cross functional working uncovered.

Figure 8.7 Expectations Management at ServCo



Overall the linkages found between expectations management, cross-functional working and relationship quality have failed to form a clear pattern across the four companies. Expectations mismatches occur despite good relationships, and matched expectations despite poor relationships. This would suggest that further refinements of the measures and constructs used is required in a larger sample, before any conclusive statement can be made about the links between expectations management and these organisational issues.

8.5.6 Customer Service Requirements Understanding

As noted previously, managers were asked to state how important they believed each service factor was to their customers and how they performed on this factor. From these scores, total importance and performance scores were calculated for each manager. The customer-reported scores from the customer survey were then also used to compute and actual total importance and performance score for each company. These results are summarised in Table 8.21, with gaps of management views versus customer reports shown in brackets. Service failures are

indicated by a negative gap for importance scores (the company is under-estimating what is important to the customer) and positive scores for performance (the company is over-estimating the performance the customer receives).

Table 8.21. Customer and Manager Service Reports

	SportCo	ToolCo	EntzCo	ServCo
Customer Overall Importance	53.15	49.57	52.26	50.71
Customer Overall Performance	50.76	46.11	52.86	47.84
Marketing Stated Customer Service Importance	53.00 (-.15)	49.20 (-.37)	54.00 (+1.74)	54.00 (+3.29)
Operations Stated Customer Service Importance	53.00 (-.15)	57.00 (+7.42)	51.43 (-.83)	50.00 (-.71)
Marketing Stated Customer Service Performance	54.00 (+3.24)	47.60 (+1.49)	54.50 (+1.63)	42.00 (-5.84)
Operations Stated Customer Service Importance	49.50 (-1.26)	54.00 (+7.89)	48.57 (-4.29)	45.00 (-2.84)

Figure shown in brackets is variation from customer reported measure.

At SportCo, both marketing and operations managers under-estimate what is important to the customer, although only by a tiny margin. The good level of accuracy in understanding what customers require is supported by the high level of market-orientation and good levels of relationship quality reported by the company. However, marketing is over-estimating what is being performed which suggests significant dangers that customers are being promised more than is possible. The discrepancy between marketing and operations reports of performance suggest that despite having reported good working relationships, critical information is not being conveyed across the company. This is reflected in the large discrepancies in expectations scores reported previously. Discussions with executives at the company revealed that despite generally good relationships between the marketing and operations personnel, the two functions are located in geographically-dispersed locations in different regions of the country (due to the dispersed nature of the company's management structure across several trading divisions). Such dislocation would prevent the exchange of critical information, despite generally good relationships.

At ToolCo, marketers very marginally under-estimated what customers felt was important, while operations managers significantly over-estimated. In considering performance, both functions over-estimated actual performance, although operations was the further from reality,

despite the company showing high market orientation. While operations felt the expectations that marketing created in customers were all correct, they seem to be out of touch with what the customer wants and actual receives. The low levels of relationship quality and cross functional working would suggest that despite being aware of the customer and the need to serve them (as measured by market orientation), operations managers are not seeking or receiving information about that customer. The impact of operational misunderstanding and over-estimation of performance is clear with the company showing low levels of end-customer satisfaction.

At EntzCo, marketers actually over-estimate customer demands while operations managers fall slightly short of what is required. When considering performance, marketers slightly over-estimate what is being performed while operations under-estimate this. This situation could be viewed as marketing seeking to deliver more than is required (as they perceive more to be important than is in reality), whereas operations strives to deliver more than is required (as they perceive themselves to be falling short of customer demands). The positive effects of this are seen with the company have the highest level of customer satisfaction out of the four studied. The company also reports the best cross-functional working and good relationship quality (which would support the efforts to continually strive for improvement over and over what is required).

At ServCo, marketers are also over-estimating what customers require (with operations managers slightly under-estimating) while both operations and marketers underestimate by some distance what is being performed in reality. Despite being in a similar situation regarding understanding as EntzCo, ServCo shows the lowest levels of market orientation, cross-functional working and relationship quality, as well as the lowest level of customer satisfaction. This suggests that even with good customer awareness, without collaboration and co-operation to utilise this, understanding on its own is not enough to align the organisation to the marketplace.

Across the four companies a trend can be seen that marketers remain most adept at understanding what customers require, despite reporting lower levels of marketing orientation than their operations colleagues. This would suggest that despite the increased role of operations in terms of power and impact in the organisation, marketing still plays a vital role in customer sensing and analysis. The general discrepancies between what is actually performed, and what managers believe to be performed, are of roughly equal levels in both marketing and operations functions – while operations know what is actually happening in the

company, they often do not know how customers experience this, as customer research is still done by marketers (who, while they are aware of what customers report do not seem to be adept at pairing this back to what is actually happening in the organisation). The fact that operations reported higher market orientation, yet still seemed removed from customer understanding, may reflect the measure of market orientation as an index of the spirit and mindset of focus, rather than an actual reality of customer focus. While managers may report activities and issues that identify them as market orientated, what is possible in the organisation and across the organisation may be removed from this. The continuing discrepancies in all organisations in terms of expectations-setting and customer understanding reflect the fact that even while cross-functional working and good working relationships were reported by the companies, this was at a very marginal level (only just above a neutral report), suggesting greater co-operation and collaboration is still required between the functions. The best relationships outcome would seem to be exemplified by EntzCo, where marketers overestimate what customers require and operations underestimate what they can perform, leading to a circle of continual performance improvement and delivery across the company (with good relationships and cross-functional working) and the outcome of superior customer satisfaction.

8.6 Conclusions

In Chapter seven, the first of the three research questions was addressed, through the construction and validation of a new model of online service quality. In this past chapter, the work on that model was extended into the organisations whose customers completed the survey. This chapter has addressed two issues: firstly, addressing the first proposition of the second research question: *“What is the impact of purchase situations on customer service quality demands online”* - Proposition 1. Product type will impact customer service quality requirements online.”; and secondly, addressing the third research question *“What differences exist in the marketing versus operations views and orientation towards customer priorities?”*

In Chapter seven, the service-quality results were screened for data reliability (normality, missing-data, outliers and non-response bias). This chapter continued the same process on the situational and demographic responses, to validate this part of the sample. Having completed this, a series of a series of statistical tests (Spearman’s Rho correlation and a Mann-Whitney tests) suggested that significant differences exist between each company, in terms of customers stated overall importance and performance services scores, as well as the purchase situations and customer demographics that have been measured. When considering service

issues, a pattern was observed, when considering the order of importance of issues (from least important to most important). The most important service issue (trust) and least important service issues reported (personalisation and company image) were consistent across all companies (even though the actual reported service importance levels were different). Such a finding supports previous findings of consistency at the extreme levels of service importance found by PZB (1988), ZBP (1990), Mersha and Adlakha (1990) and Cravens et al. (1985). This suggests that despite differences in service levels by product category, at the extreme there are general constants, specifically in the online environment, that customers value trust above all other service factors and value personalisation the least.

As each company represents a distinct product category (and principally sells only one product category), it is possible to conclude that the proposition that different product types impact service behaviour online is indeed true and well supported from research findings. Due to the finding that differences occur in customer situations and demographics across companies, when considering the following analysis (investigating situational and demographic influences), each company will be considered in isolation. The final analysis which investigates the situational versus demographic base of market segmentation is considered in the next chapter.

Addressing the final research question on in-company, organisational issues in service delivery, managers in each of the four companies were provided a questionnaire survey. This process resulted in a relatively small sample ($n=27$), but one which due to the relatively small size of the marketing and operations groups in all four companies provides a very good response rate and useful insight into the practices of those companies.

This research demonstrated that operations managers' market orientation (customer focus and understanding) was at higher levels than that of their marketing managers (who would be expected to report higher levels as market specialists). Further, the power of marketing in all the product organisations studied was less than that of the operations function, supporting the increasing role of operations within the corporation at a time when marketing power is diminishing (Skinner 1969, Hayes and Wheelwright 1984, Webster 1998, Dennison and McDonald 2003, Day 2003). In considering relationship quality and level of cross-functional working between marketing and operations at each company, although predominantly positive relations were observed, supporting the cross-functional organisational structures and co-operation for which literature calls, but which has not yet generally realised in practice (Shapiro 1977, Berry et al. 1991a, Berry et al. 1995, Hausman et al. 2002).

Managers' understanding of customers was generally good (the impact of which is seen in the relatively high satisfaction scores at all four companies), and in each company marketers still hold the best understanding of what customers require, despite reporting lower levels of market orientation than their operations colleagues. This suggests, despite an increasing role of operations in terms of power and impact in the organisation, marketing still plays a vital role in customer sensing and analysis. The fact that operations reported higher market orientation, yet still seemed removed from customer understanding, may reflect the measure of market orientation as an index of the spirit and mindset of focus rather than an actual reality of customer focus – while managers may report activities and issues that identify them as market orientated, what is possible in the organisation and across the organisation may be removed from this.

Management understanding of what is actually performed is roughly the same in marketing and operations functions – while operations know what is actually happening in the company, they often do not know how customers experience this, as customer research is still carried out by marketers (who may be aware of what customers report, but do not seem to be adept at comprehending what is actually happening in the organisation).

This research has shown that, despite increased market orientation of operations managers (actually over and above that displayed by marketers themselves), operations understanding of the customer marketplace is, in reality, still inferior to that displayed by marketing. Marketing deals with the reality of customer sensing and understanding, rather than the more abstract issues of customer focus and activities described by market orientation. While only a very small sample was considered, it provided a good representation of the four companies whose customers took part in the survey. As such, these results are exploratory and suggestive of the need for greater research on inter-organisational relationships between marketing and operations, rather than providing any distinct conclusions.

In this chapter the measures of company understanding of customer service demands have been considered, and the distinctness of each company customer sample verified. In the following chapter the nature of organisational tools of market segmentation is considered – moving beyond issues of simple understanding and measurement of customer service demands, to a consideration of how customer demands vary based on context.

Chapter 9. Situational Variables

9.1 Introduction

The purpose of this chapter is to report on investigations into the impact of demographic and situational variables on online service quality. To recap, the key research question and propositions to be addressed in this chapter were developed from the literature review (Chapter four) are stated as:

What is the impact of purchase situations on customer service quality demands online?

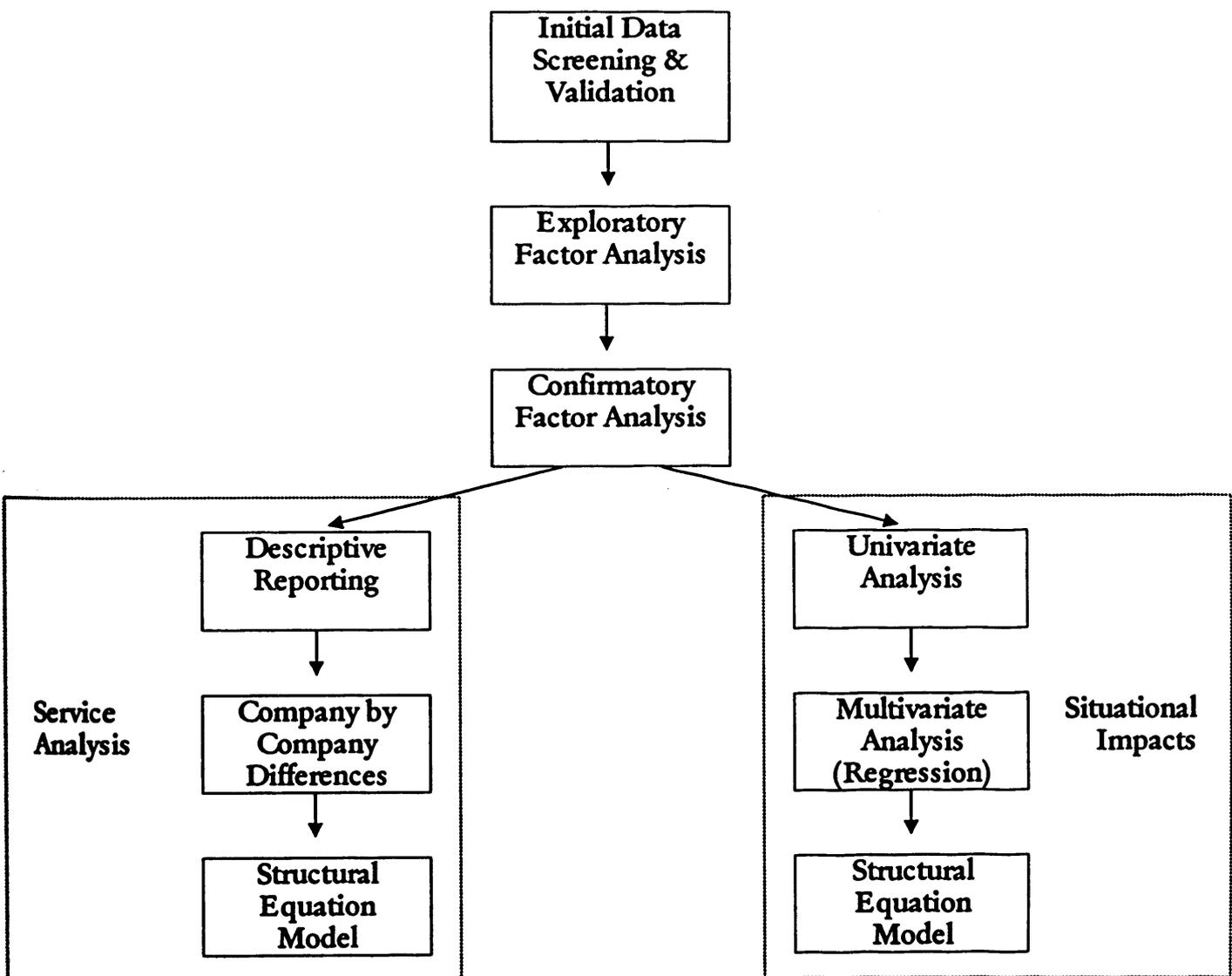
Within this general question, several specific propositions have been developed which highlight specific purchase cues and situations that been developed as potential sources of influence on online customer behaviour. These are summarised below:

- 1. Product type will impact customer service quality requirements online.*
- 2. Demographics will have an impact on customers online service quality requirements.*
- 3. Information overload or brand dependence will impact customer service quality requirements online.*
- 4. People buying for business, personal or gift purposes will have different service quality requirements.*
- 5. Familiarity ('techno-readiness') influences online service quality demands.*
- 6. Familiarity (online experience) influences online service quality demands.*
- 7. Familiarity (company experience) influences online service quality demands.*
- 8. Familiarity (of product type purchase) will influence online service quality demands.*
- 9. Online ability (connection speed) influences online service quality demands.*
- 10. Retail dependent customers will exhibit different service quality requirements to those who do not.*
- 11. Impulse purchasers and planned purchasers will have different online service quality demands.*
- 12. The level and nature of loyalty (behavioural versus attitudinal) will influence online service quality demands.*
- 13. High and low involvement customers will have different online service quality demands.*
- 14. Customers paying different prices will exhibit different online service quality demands.*
- 15. Customers exhibiting different levels of each price orientation will exhibit different online service quality demands.*
- 16. Customers with different amounts of time available to shop will exhibit different online service quality demands.*
- 17. Demographics will have less of an impact on customers online service quality requirements than situational / contextual variables.*

It should be noted, that when referring to 'service quality demands' it is the service-importance scores that are of interest (what customers are demanding in terms of services quality), rather than the service quality as conceptualised by Parasuraman, Zeithaml and Berry (1988). In those works service-quality refers to the calculated gap-score of performance minus expectations. To assist in this clarification, the terms 'service-importance', 'service-performance' and 'service-gap' are used in analysis to describe the different facets of services quality.

As demonstrated in Chapter eight, service quality and situational variables were found overall to be significantly different for each company. Therefore, the results from each company are considered separately in this chapter. The data presented in this chapter follow the three stages in the situational impacts stage of the Research Strategy Model (shown in Figure 9.1) as well as additional data screening as a precursor to the multivariate analysis.

Figure 9.1. Research Analysis Strategy



This procedure provides a process of iterative refinement and triangulation for the research process, where the validity of each situational/demographic measure's impact on service-importance is calculated, using stages of escalating validity from univariate to multivariate to structural equation model. Before this could happen it was however necessary to screen the data in preparation for analysis.

9.2 Data Screening and Preparation

Before considering inter-organisational differences in situations in service quality in the previous chapter, standard data screening methods were applied. These findings highlighted that the continuous situational and overall service variables were not normally distributed. As noted, such a finding is common with large sample sizes (Pallant 2003). Due to this finding, accommodation has been applied in considering the impact of situations on service.

The initial investigation into situational impact on service issues concerned exploratory descriptive or univariate analysis. Due to the finding of non-normality, non-parametric statistics were employed. Specifically, in-line with standard statistical recommendations for dealing with non-normal variables (Pallant 2003), rather than utilise the Pearson correlation for continuous situations, the Spearman-Rho correlation was employed. For categorical variables, rather than use independent samples t-tests, Mann-Whitney U tests were employed. In preparation for regression analysis all categorical situations were arranged in either dichotomous (two levels) or in ordinal scales (ordered) scales and submitted to non-parametric correlation analysis for easier comparison and alignment with continuous variable scores and regression outputs.

Due to the established limitations of univariate analysis (Miles and Shevlin 2005, Field 2005), and the need to consider variance accounted for by all situations at once rather than individually (where univariate analysis may fail to control out variance caused by other variables), multivariate regression was employed. This technique required various modifications to the data handling procedures used in univariate analysis. In univariate analysis, raw, unmodified data were utilised, and as a consequence the service company had no information-factor, as this factor comprised an item concerning the ability of customers to track product shipping. As no corresponding item was present in the survey of service customers, a factor score for 'Information' could not be computed. For multivariate analysis, to ensure all factors were considered, an 'Information' score was computed for ServCo, utilising the other three items in the 'Information' factor. Although this precludes a comparison of company-by-company scores due to the different composition items of the

factor, the computation will allow for a full comparison of demographic versus situational influence across all nine factors for this company.

Investigation of normality tests and histograms revealed service-importance items as negatively skewed. This finding is in-line with the meta-analysis of customer self-reports of quality and satisfaction by Peterson and Wilson (1992) that found a common negative skew. Noting both the need for normally distributed inputs into multivariate regression, as well as the conceptual arguments against data conversion (Pallant 2003, Field 2005), raw service-importance scores were entered into regression, as were converted results that took into account the variable skew of the service-importance scores, utilising two conversion formulas:

$$\begin{aligned} & \text{reflection and square root } (\sqrt{K-SI_n}) \\ & \text{reflection and logarithm } (\log (K-SI_n)), \\ & \text{where } K = \text{largest possible value plus one, } SI_n = \text{service importance factor } n. \end{aligned}$$

In comparing the regression results for unmodified, (reflection) square root and (reflection) logarithm results, the log transformation provided the best results across the range of situations, demographics and companies and was on inspection of normality at each company, for each factor, found to be the closest transformation as suggested by normality curve and literature recommendation (Pallant 2003).

A series of regression calculations were computed – firstly, all demographics were entered; secondly, all situations were entered without demographics; thirdly, a combined model with demographics and situations was computed. These combinations were necessary so that R^2 could be computed for demographics versus situational impacts individually. A model with situations and demographics both entered together was also necessary as a preparatory step to screen for structural equation modelling, which would use both demographics and situations in a single model. Those items that produced significant results in individual demographic or situational analysis, but not in the combined regression model, are noted as such in the results analysis provided.

Before submitting data to regression it was necessary to conduct standard checks for multicollinearity and heteroskedacity (Field 2005). Multi-collinearity was examined by calculation of the variance-inflation-factor (VIF) statistics for each company. Inspection of this statistic for each company showed all variables between 1.0 and 1.8 well within given tolerance that no result should be greater than ten or near to zero (Field 2005). Inspection for heteroskedacity

was conducted by inspection of scatter plots by company for each factor (zresid * zpred plot), which generally confirmed the absence of heteroskedacity. Scatterplots are shown in Appendix 8.0 while collinearity reports are shown in Table 9.1.

Table 9.1. Collinearity Statistics (VIF)

	EntzCo	ServCo	ToolCo	SportCo
S02 Purchase Value	1.088	N/A	1.552	1.327
S03 Personalisation	1.164	1.056	1.961	1.062
S04 Spontaneity	1.074	1.120	1.088	1.116
S05 Frequency of Product Type Purchase	1.383	1.303	1.580	1.153
S06 Pre-purchase research	1.208	1.184	1.224	1.185
S07 Purchase Involvement	1.215	1.223	1.300	1.296
S08 Negative Role of Price	1.278	1.243	1.222	1.187
S09 Positive Role of Price	1.185	1.143	1.221	1.214
S10 Brand Dependence	1.278	1.281	1.341	1.219
S11 Importance of Low Price	1.478	1.486	1.465	1.253
S12 Importance of High Quality Service	1.384	1.359	1.329	1.206
S13 Online History	1.824	1.539	1.457	1.619
S14 Company History	1.750	1.324	1.922	1.574
S15 Number of Companies Use	1.352	1.177	1.238	1.171
S16 Returns	1.177	N/A	N/A	N/A
S17 Behavioural Loyalty	1.141	1.251	1.147	1.113
S18 Attitudinal Loyalty	1.128	1.215	1.162	1.122
S20 Prefer High Street Names Online	1.152	1.197	1.137	1.157
S21 Purchase from Online Only Company	1.090	1.145	1.265	1.120
S22 Techno-readiness	1.354	1.529	1.539	1.272
S23 Time Capacity	1.122	1.295	1.105	1.191
S24 Products Purchased Online	1.462	1.695	1.712	1.503
S25 Online Activities	1.286	1.357	1.532	1.255
S26 Connection Speed	1.075	1.179	1.123	1.200
S28 Retail Store Usage	N/A	N/A	1.087	1.126
D1 Gender:	1.210	1.538	1.175	1.079
D2 Age group:	1.314	1.620	1.364	1.574
D3 Class / Occupation	1.517	1.665	1.365	1.859
D4 Education	1.300	1.374	1.447	1.198
D5 Income	1.333	1.671	1.350	1.269

Performance scores were not used in the regression analysis. This decision was taken as such consideration: was beyond the scope of the research question into service-importance; as the linkage between performance and satisfaction outcomes has already been considered in structural-equation-modelling in Chapter seven; and, for the conceptual reasons of bounding data by organisational context/performance discussed in Chapter two. Due to problems of gap-scores usage in general services quality analysis (Prakash 1984, Brown et al. 1993, Peter et al. 1993), as well as specific criticisms that gap scores should not be used for multivariate

analysis due to a 'double counting' effect caused by the analysis (Carman 1990, Babakus and Boller 1991), gap scores were also excluded from multivariate analysis and final modelling.

Considering the independent variables (situational and demographic), the high number of categorical scales also initially posed a problem for multivariate regression. However, examination of the scale items used highlighted that all situations and demographic categorical variables were either dichotomous (two levels), or in ordinal scales (ordered scales), and thus submission to multivariate analysis was acceptable, without the need to revert to dummy-coding as would have been necessary with scales using nominal measurements (Miles and Shevlin 2005, Field 2005, Pallant 2003).

9.3 Exploratory Results Analysis

This section of the chapter addresses for each research proposition of situational or demographic impact, the univariate analysis of impact and multivariate regression. The findings for each of these two activities are presented for each of the four companies in turn. As noted, the first stage of analysis concerned the descriptive univariate screening of purchase situations and demographics for each of the four companies. In total, the situational variables comprised nine categorical and sixteen continuous variables and demographics comprised five categorical variables

Table 9.2 Independent Variables in Exploratory and Regression Analysis¹

Situational Variables		Demographic Variables
Continuous	Categorical	Categorical
Purchase Involvement	Purchase Value	Gender
Positive Price Role	Usage (business, personal)	Age
Negative Price Role	Planning (spontaneity)	Education
Information Overload	Product-type Purchase	Occupation
Importance Low Price	Frequency	Income
Importance High Price	Pre-purchase Research	
Online Usage History	Number of Companies	
Company Usage History	purchase Product Type	
Behavioural Loyalty	Returned Products	
Attitudinal Loyalty	Connection Speed	
Prefer Retail Names	Retail Store Usage	
Purchase Internet Only		
Company		
Techno-readiness		
Products Purchase Online		
Online Activities		

¹Not all variables are present in all four companies.

The reporting of findings of this stage of research is brief due to the exploratory nature of the investigation and later confirmatory investigations conducted. The full statistical outputs from the investigations are compiled in Appendix 8.1 (demographic variables), 8.2 (categorical situations) and 8.3 (continuous situations) for univariate statistics. The full regression statistics are provided in Appendix 8.4 (demographics), 8.5 (situations), 8.6 (situations and demographics combined) and 8.7 (overall measures). A factor-by-factor breakdown is provided in Appendix 8.8, while a formal analysis and discussion of this exploratory research summarised below is provided in Appendix 8.9.

9.4 Exploratory Investigation Summary

9.4.1 Impact of Situations on Service Factors

Before moving onto the second part of this chapter which concerns the use of structural equation modelling to compare situational versus demographic influences, it is necessary to summarise the key findings from exploratory univariate and multivariate regression analysis. Tables 9.3, 9.4, 9.5 and 9.6 provide a summary of the results for each of the four companies in turn. A full description of the results from this investigation is provided in Appendix 8.9.

At EntzCo a wide range of significant relationships were observed for almost all categorical and continuous situations, with only a few emerging as very weak - notably product purchase value, personalisation, spontaneity, pre-purchase research, the importance of low price and product returns. Time capacity, online activities, attitudinal loyalty, the number of companies used and purchase involvement all stood out as influential situations, while gender, age, income and education all showed good levels of influence on the demographic side.

At ServCo, very few strong significant trends were seen, principally with the importance of purchase involvement, attitudinal loyalty and partially with high quality service. At ToolCo, purchase involvement, time capacity and attitudinal loyalty stood apart as having the greater impacts. At SportCo, a very similar pattern was seen to that at ToolCo, with purchase involvement and time capacity having the greatest impact across all service factors. While only EntzCo showed a high number of situational influences across all service factors, the other three companies still showed a good pattern of influence by situations and demographics and as comparison of the regression findings above has shown, at all four companies the variance accounted for by situations far outweighed that provided by demographics.

Table 9.3 Univariate and Multivariate Results for EntzCo

	Website		Trust		Cust- Service		Information		Contactability		No Adverts		Personalisation		Company Image		Product Range	
	U	M	U	M	U	M	U	M	U	M	U	M	U	M	U	M	U	M
D1 Gender:	.087(**)	xx	.053(*)		.089(**)	xx	.110(**)	0.036	.096(**)	x	.055(*)	x	.072(**)	0.076			.101(**)	0.002
D2 Age group:	.128(**)	0.000	.064(**)	0.001	.098(**)	0.002	.088(**)	0.000	.057(*)	0.050	.087(**)	0.000	0.069	.113(**)	0.002			x
D3 Class							.063(*)	0.007				0.106	.078(**)		.054(*)		.050(*)	
D4 Education	-.129(**)	0.057			-.123(**)	0.027	-.136(**)	xx	-.111(**)	x			-.175(**)	0.000	-.201(**)	0.000		
D5 Income	-.106(**)	0.002			-.060(*)		-.134(**)	0.001	-.072(**)	0.012		0.020	-.178(**)	0.000	-.151(**)	0.001	-.112(**)	0.007
S02 Spend																		
S03 Personalisation							-.059(*)		-.124(**)	0.007								
S04 Spontaneity																		
S05 Frequency Purchase	.061(*)	0.007		0.067		0.022		0.090					0.010				.051(*)	0.061
S06 Pre-Purchase Research		0.068																
S07 Purchase Involvement	.206(**)	0.000	.114(**)	0.007	.170(**)	0.000	.225(**)	0.000	.110(**)	0.013	.074(**)	x	.139(**)	0.000	.154(**)	0.000	.103(**)	0.002
S08 Negative Role of Price	-.104(**)	0.022	-.105(**)	0.019	-.100(**)	0.021	-.102(**)	0.022	-.084(**)		-.051(*)		.067(**)					
S09 Positive Role of Price			-.061(**)			0.063						0.109	.166(**)	0.000	.186(**)	0.000		
S10 Brand Dependence		x		0.039									.089(**)		.125(**)	0.058		
S11 Importance of Low Price									.082(**)									
S12 Importance of High Quality Service	.171(**)		.142(**)		.188(**)	0.103	.142(**)		.131(**)		.095(**)		.069(**)		.066(**)		.094(**)	
S13 Online History					-.067(**)	x	-.097(**)	xx	-.069(**)				-.129(**)	0.000	-.094(**)			
S14 Company Hiostry	.062(*)								-.117(**)	0.000	.053(*)		0.020				.080(**)	x
S15 Number Companies Use	-.112(**)	0.018	-.064(**)		-.095(**)	x	-.103(**)	0.031		0.035	-.059(*)		-.138(**)	0.033	-.151(**)	0.003	-.080(**)	
S16 Returns							-.058(*)											
S17 Behavioural Loyalty	-.056(*)		-.090(**)										.176(**)	0.000	.128(**)	0.065	.116(**)	0.000
S18 Attitudinal Loyalty	.253(**)	0.000	.169(**)	0.000	.226(**)	0.000	.205(**)	0.000	.120(**)	0.043	.114(**)	0.052	.083(**)	xx	.110(**)	0.013	.147(**)	0.000
S20 Prefer High St Names Online					.048(*)		.100(**)	0.017					.241(**)	0.000	.248(**)	0.000	.092(**)	x
S21 Purchase Online Only Company	-.055(*)	0.020			-.050(*)	0.058			-.119(**)	0.000						0.079		
S22 Technoreadiness		0.001	.057(*)	0.000		0.047		0.020	-.090(**)	0.094		0.001	-.108(**)		-.133(**)		-.048(*)	
S23 Time Capacity	.108(**)	0.001	.082(**)	0.046	.101(**)	0.009	.127(**)	0.000	.076(**)	0.020	.103(**)	0.000	.077(**)	0.000			.083(**)	0.002
S24 Products Purchased Online	-.058(*)									0.016			-.139(**)	x	-.134(**)	0.071	-.098(**)	x
S25 Online Activities	-.099(**)	xx	-.074(**)	0.021	-.113(**)	0.009	-.064(**)				-.048(*)	x	-.051(*)	0.018	-.117(**)		-.086(**)	
S26 Connection Speed	-.068(**)		-.091(**)	0.035	-.057(*)		-.100(**)	0.007					-.059(*)		-.076(**)	0.064	-.101(**)	0.008

U - Univariate (spearman's rho regression analysis)

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

M - Multivariate Regression (normalised importance measure)

xx better than .05 relationship indicated when situations / demographics regressed separately

Table 9.4 Univariate and Multivariate Results for ServCo

	Website		Trust		Cust- Service		Information		Contactability		No Adverts		Personalisation		Company Image		Product Range		
	U	M	U	M	U	M	U	M	U	M	U	M	U	M	U	M	U	M	
D1 Gender:																			
D2 Age group:																			
D3 Class				0.098															
D4 Education	-.132(**)	0.007		0.059	-.114(*)	0.022	0.039	-.125(*)	0.037				-.156(**)	0.013	-.124(*)	0.084			
D5 Income																			
S03 Personalisation			x			0.088													
S04 Spontaneity													.125(*)	x	.118(*)		x		
S05 Frequency Purchase																			
S06 Pre-Purchase Research															0.079				
S07 Purchase Involvement	.306(**)	0.104	.171(**)	0.078	.261(**)	0.009	.229(**)	x	.143(**)		.109(*)		.172(**)		.177(**)	0.017			
S08 Negative Role of Price	-.187(**)																		x
S09 Positive Role of Price										0.075		x	.135(**)		.178(**)	0.082			
S10 Brand Dependence	-.100(*)														.168(**)				
S11 Importance of Low Price	.103(*)																		0.090
S12 Importance of High Quality Service									.119(*)				.117(*)		.144(**)	0.094	.113(*)		x
S13 Online History	.141(**)			x															
S14 Company Hiostry													.102(*)				.118(*)		0.038
S15 Number Companies Use																			-.114(**)
S17 Behavioural Loyalty	-.119(*)	0.108									x								.105(*)
S18 Attitudinal Loyalty	.193(**)		.127(*)		.126(*)		.130(*)		.116(*)				.140(**)	0.025	.131(**)	0.104			
S20 Prefer High St Names Online											x		.183(**)	0.007	.295(**)	0.000	.123(*)		x
S21 Purchase Online Only Company										-.143(**)	0.047	-.119(*)	0.056						
S22 Technoreadiness	.154(**)	0.034	.137(**)	0.004				0.094									-.104(*)		
S23 Time Capacity													0.044						
S24 Products Purchased Online	.102(*)																		
S25 Online Activities				x															
S26 Connection Speed																			

U - Univariate (spearman's rho regression analysis)

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

M - Multivariate Regression (normalised importance measure)

xx better than .05 relationship indicated when situations / demographics regressed seperately

x .10 to .05 relationship indicated when situations / demographics regressed seperately

Table 9.5 Univariate and Multivariate Results for ToolCo

	Website		Trust		Cust-Service		Information		Contactability		No Adverts		Personalisation		Company Image		Product Range	
	U	M	U	M	U	M	U	M	U	M	U	M	U	M	U	M	U	M
D1 Gender:	.195(**)	0.007	.148(**)	0.008	.099(*)	x		x	.131(**)	0.082	.114(*)	0.085						
D2 Age group:				0.056								x						
D3 Class		0.008																
D4 Education																		
D5 Income		0.004	-.109(*)	0.008		0.037		0.069		0.075				-.098(*)		-.096(*)		
S02 Spend				0.022	.126(*)	0.007		0.045						-.114(*)	0.055			
S03 Personalisation	.102(*)		.135(**)	0.003		0.012		0.013					0.085					
S04 Spontaneity																		
S05 Frequency Purchase	-.113(*)	0.105																
S06 Pre-Purchase Research														.108(*)				
S07 Purchase Involvement	.260(**)	0.045	.211(**)		.236(**)	0.042	.214(**)	0.094	.254(**)	0.002	.181(**)		.177(**)	0.002	.181(**)	0.005	.200(**)	0.037
S08 Negative Role of Price								x						0.109			.096(*)	0.015
S09 Positive Role of Price															.211(**)	0.017		
S10 Brand Dependence			-.105(*)				-.132(**)	0.011										0.100
S11 Importance of Low Price	.096(*)																	0.054
S12 Importance of High Quality Service	.154(**)		.113(*)		.158(**)		.151(**)		.194(**)		.105(*)			x				0.030
S13 Online History	.126(*)	0.011	.120(*)	0.029	.134(*)	0.009								-.177(**)		-.149(**)		
S14 Company History																		
S15 Number Companies Use																-.095(*)		
S17 Behavioural Loyalty				0.084														
S18 Attitudinal Loyalty	.193(**)	0.059	.225(**)	0.004	.199(**)	0.012	.117(*)		.107(*)		.184(**)	0.023	.121(*)		.165(**)		.195(**)	0.091
S20 Prefer High St Names Online							.114(*)	0.086			.128(**)	0.098	.217(**)	0.001	.357(**)	0.000	.189(**)	0.004
S21 Purchase Online Only Company		0.108				0.103							0.038					
S22 Technoreadiness	.103(*)		.154(**)	0.101										-.150(**)		-.105(*)		x
S23 Time Capacity	.179(**)	0.032	.163(**)	0.009	.112(*)	0.098	.166(**)	0.007	.182(**)	0.024	.105(*)			0.103				0.046
S24 Products Purchased Online	.158(**)		.160(**)		.154(**)		.110(*)											
S25 Online Activities			.096(*)															
S26 Connection Speed																		
S28 Used Retail Store																		

U - Univariate (spearman's rho regression analysis)

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

M - Multivariate Regression (normalised importance measure)

xx better than .05 relationship indicated when situations / demographics regressed separately

x .10 to .05 relationship indicated when situations / demographics regressed separately

Table 9.6 Univariate and Multivariate Results for SportCo

	Website		Trust		Cust- Service		Information		Contactability		No Adverts		Personalisation		Company Image		Product Range	
	U	M	U	M	U	M	U	M	U	M	U	M	U	M	U	M	U	M
D1 Gender:											.103(*)	0.078						
D2 Age group:	.126(**)	0.038			.116(**)	0.108			.090(*)	0.070							.111(**)	0.095
D3 Class				0.014									.111(*)		.114(**)			
D4 Education				0.095							.092(*)	0.008	-.132(**)	xx	-.199(**)	0.005		
D5 Income								-.142(**)	0.002				-.160(**)	0.027	-.148(**)	xx		0.105
S02 Spend																	0.048	
S03 Personalisation																		
S04 Spontaneity																		
S05 Frequency Purchase						0.053				0.077								
S06 Pre-Purchase Research	.142(**)	0.033	.122(**)	0.071	.104(*)	0.071			.115(**)	0.033	.098(*)	0.077					.124(**)	0.099
S07 Purchase Involvement	.235(**)	0.012	.166(**)		.222(**)	0.084	.238(**)	0.002	.127(**)		.156(**)	0.100	.088(*)		.123(**)		.147(**)	0.097
S08 Negative Role of Price																		
S09 Positive Role of Price													.100(*)		.167(**)	0.075		
S10 Brand Dependence															.163(**)			
S11 Importance of Low Price																		
S12 Importance of High Quality Service	.145(**)		.121(**)		.134(**)		.112(*)		.180(**)	0.002					.091(*)			
S13 Online History			.128(**)	0.051	.118(**)	0.047			.109(*)	0.080			-.190(**)	0.022	-.173(**)	0.083		
S14 Company Hiostry					.086(*)				.094(*)									
S15 Number Companies Use			.143(**)	0.087	.090(*)				.085(*)				-.124(**)					
S17 Behavioural Loyalty	-.114(**)		-.114(**)		-.094(*)				-.099(*)								.093(*)	0.026
S18 Attitudinal Loyalty	.150(**)	0.047	.143(**)	0.029	.188(**)	0.030			.105(*)								.098(*)	x
S20 Prefer High St Names Online								0.065				0.085	.182(**)	0.029	.250(**)	0.001	-.090(*)	0.064
S21 Purchase Online Only Company						0.094								0.081				
S22 Technoreadiness			.093(*)							0.031			-.154(**)	0.067	-.152(**)	x		
S23 Time Capacity	.128(**)	0.089	.166(**)	0.008	.188(**)	0.002	.101(*)		.130(**)	0.005	.152(**)	0.008					.093(*)	0.063
S24 Products Purchased Online	.095(*)		.138(**)		.126(**)			0.072					-.144(**)		-.149(**)			
S25 Online Activities	.094(*)													0.084				
S26 Connection Speed								x										
S28 Used Retail Store																		

U - Univariate (spearmen's rho regression analysis)

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

M - Multivariate Regression (normalised importance measure)

xx better than .05 relationship indicated when situations / demographics regressed seperately

x .10 to .05 relationship indicated when situations / demographics regressed seperately

As highlighted in the previous chapter, the level of situations and demographics reported at each company are significantly different. However, in the interests of generalisation and comparison it is possible to examine the results gained thus far to see if there are commonalities across the four companies. In comparing which situations and demographics have common influence across all companies on a factor-by-factor basis, several clear patterns emerge, based on the analysis conducted thus far (Tables 9.3, 9.4, 9.5 and 9.6 have been recombined into a factor level analysis across the four companies and is provided in Appendix 8.8). Considering each factor in turn: the website factor shows consistent influences by time capacity, purchase involvement, attitudinal loyalty with weaker influences by techno-readiness. The website factor concerns both the design as well as functionality of the website, including product location, so a link with time capacity suggests increased emphasis on such location for those with less time. Similarly, as purchase involvement and attitudinal increase it is anticipated that the importance of all service factors will increase, in line with more involved customers and those more loyal to the company expecting more from the company. The impact of techno-readiness, a measure of peoples' feelings towards technology is also consistent with expected results where the attitude towards technology, as manifested by the website alters demands.

For the trust factor, consistent results are shown for purchase involvement, attitudinal loyalty (as noted previously) and also techno-readiness and time capacity influences. As a measure of general attitude and sentiment towards technological mediated environments and exchange, it was anticipated that techno-readiness would impact on trust. For time capacity, it is logical that as peoples' time to search and validate information about a company decreases, the importance placed on trust (rather than logical deduction and verification) increases.

For the information factor, purchase involvement, time capacity and preference for internet companies known from the high street, all show consistent influence. Purchase involvement is acknowledged as an impact on information requirement (where greater involvement leads to greater information search), the positive relationship with time-capacity reflects customers with little time desire for information about product availability and despatch (as they do not have time to wait around), while a preference for high street companies could reflect a need for information credibility – that a recognised name adds credibility to the information provided as a moderating role on the direct link between information and trust.

For the no adverts factor, the only clear influence for more than two companies was seen for gender, time capacity and purchase involvement. The role of purchase involvement in

increasing demands on all factors has been noted, those short on time are, as expected, intolerant of advertisements. The weak gender differential may reflect different gender based tolerances for advertisements and post-purchase company engagement. The general lack of influence for situational and gender impacts for this factor reflects the fact that most customers in most situations are now intolerant of during- and post-purchase advertisements and solicitations, leading to little variation being observed.

For the company image factor, clear influence was seen by education, purchase involvement, the positive role of price and a preference for internet companies recognised from the high street. The decreased importance on image for the increasingly educated suggests that as education increases, trust in image alone decreases and customers start to use more rigorous methods for determining which company to purchase from (such as past experience or recommendation). The positive role of price (that price is an indicator of quality) is conceptually related to the company image factor – both are prompts for quality judgements as surrogates for actual experience or information, so it is unsurprising that both simplifying mechanisms are found to be related. The preference for internet companies recognised from the high street may be regarded as a similar surrogate and signal of quality, and therefore logically related to company image.

For the customer service factor, links were found across most or all companies to purchase involvement, online history, attitudinal loyalty and time capacity. The customer service factor concerned after sale support, quick transactions and products being delivered when promised. It is logical that those with little free time placed a premium on these issues, as did those who were highly involved. Online history was positively related to customer service at two companies and negatively related at a third (EntzCo). For two companies, increasing online usage increased the importance of customer service, suggesting as customers shopped more online they actually begin to expect more from online companies (possibly due to early low expectations based on a general lack of faith in the internet as a purchase channel). For a third company it would seem customers are acting in the opposite way, decreasing demands as time goes on, possibly due to their placing a lack of importance on the service rectification issues as they have not experienced problems and therefore see little point in their presence.

For the contactability factor, relationships were seen across companies for purchase involvement and time capacity. Less time would suggest greater emphasis on contactability in case of problems or to check and confirm delivery details (due to a lack of time to receive delivery) while as noted before, purchase involvement is likely to increase the importance

placed on all service issues. The lack of other clear trends across companies highlights both the differential importance of contact and support by product category, and also the general high importance of this issue, resulting in little variation by demographic or situation as all customers place great emphasis on it.

For the personalisation factor, links were seen across income, education, purchase involvement and preference for internet companies with high street names. As both education and income increased, customers placed less importance on personalisation while the increasing preference for high street names suggests a desire for the safety of a recognised name and the desire for personalised service, which conceptually supports the link to this factor.

For the product range factor, excluding ServCo, clear links were seen with purchase involvement, attitudinal loyalty, preference for high street names and time capacity. The retail ability to instantly provide products would support a link between retail dependence and product range online, while those with less time on their hands are likely to want to be able to get all products without having to shop around, so place value on a depth of range being available at one company.

From these exploratory investigations a series of trends have been observed and on a company by company and factor-by-factor basis a process of verifying situational and demographic influence has been conducted. To confirm these influences it is necessary to move beyond the univariate and multivariate regressions thus far conducted to the a more rigorous process of structural equation modelling.

9.4.2 Demographics versus Situations

While univariate analysis provided some insights into this issue, highlighting both demographics and situations as influencing service quality issues, it was only possible to begin analysing this question with multivariate analysis and comparison of the amount of variance (R^2) produced by situations versus demographic factors. For each factor of service importance and for each company, the impact of situational items and demographic items independently and when combined in a single regression were calculated. The results for this are provided in Table 9.7.

Table 9.7 R-Square Findings for Demographics vs Situational Influence

	Situational Influences	Demographic Influences	Situations and Demographics
EntzCo			
1 Website	0.106	0.034	0.132
2 Trust	0.062	0.007	0.070
3 Customer Service	0.084	0.023	0.096
4. Information	0.100	0.041	0.131
5. Contact	0.073	0.023	0.085
6. No Ads	0.032	0.011	0.046
7. Personalisation	0.155	0.068	0.191
8. Company Image	0.146	0.079	0.182
9. Product Availability	0.076	0.024	0.091
Overall Importance	0.118	0.053	0.151
ServCo			
1 Website	0.103	0.024	0.137
2 Trust	0.080	0.031	0.108
3 Customer Service	0.078	0.027	0.104
4. Information	0.059	0.017	0.083
5. Contact	0.079	0.029	0.096
6. No Ads	0.058	0.021	0.086
7. Personalisation	0.107	0.036	0.133
8. Company Image	0.173	0.044	0.196
9. Product Availability	0.093	0.010	0.101
Overall Importance	0.123	0.047	0.157
ToolCo			
1 Website	0.156	0.056	0.217
2 Trust	0.175	0.036	0.231
3 Customer Service	0.167	0.017	0.187
4. Information	0.148	0.015	0.171
5. Contact	0.121	0.025	0.143
6. No Ads	0.112	0.023	0.135
7. Personalisation	0.174	0.036	0.193
8. Company Image	0.225	0.018	0.234
9. Product Availability	0.140	0.018	0.154
Overall Importance	0.238	0.025	0.270
SportCo			
1 Website	0.108	0.023	0.123
2 Trust	0.104	0.014	0.129
3 Customer Service	0.121	0.015	0.131
4. Information	0.077	0.026	0.101
5. Contact	0.110	0.012	0.123
6. No Ads	0.067	0.027	0.098
7. Personalisation	0.107	0.052	0.126
8. Company Image	0.121	0.065	0.153
9. Product Availability	0.078	0.026	0.094
Overall Importance	0.104	0.040	0.140

The results allow comparison on a factor-by-factor and overall basis, of the impact and variation accounted for by the situations described, by the more commonly used demographic variables, and the impact of them combined. A clear pattern is identifiable across all companies and factors – situations account for significantly more variance than demographics – for EntzCo, ServCo and SportCo the impact of situations compared to demographics is two to three times greater, while at ToolCo, the difference is nearly ten times greater for situations. Comparing the variance explained across all companies, ToolCo stands apart, showing far greater impact from purchase situations. Examination of the data suggests little reason for this difference. While differences may be due to the type of product being purchased, it would be impossible to validate this claim without further study of organisations in the same industry. The only other factor, apart from product type, that sets ToolCo apart from the others is its position as a monopoly supplier of the specific products in question. Therefore, it is likely they encounter a far greater range of customer types and purchase situations than the other companies, which might account for the greater amount of situational influence.

Across the other three companies, comparing the level of impact of situation and demographic factors, the results show ten to twelve percent variance accounted for by situation and four to five percent for demographics. This highlights the limited role of simple demographics in explaining service importance demands of customers. As noted in the literature review, many authors have agreed that, while demographics may explain the use of a certain product class, they do not usefully differentiate customer behaviours within that class (Day 1969, Rossi et al. 1996, Bucklin 1995, Fennell et al. 2002). The large amount of variance explained by situations and demographics combined suggests that the simple and easy nature of the measurement of demographics, coupled with the more rigorous situational analysis, can combined provide useful data about customer demands as a whole.

These findings represent a key contribution towards the supplementation, or even replacement, of demographics as a sole basis of market segmentation. To examine the potential influences of situations and demographics further and on a service factor-by-factor basis, a structural equation model was developed for each service factor, and a determination as to significant predictors on that factor was conducted to identify whether situation or demographics were most useful for such a procedure.

9.5 Structural Equation Model

As noted above, only at EntzCo were a wide range of links between purchase situations and service importance factors being observed. The principal difference with the EntzCo sample is the size, it is approximately four times larger ($n=1850$) than the other company samples. This would suggest that due to the wide range of situations and factors considered, a very large sample is required for detecting the subtle trends of demographics and situational influences combined. As has been demonstrated in Chapter eight, and by comparison of the impacts of situations by company, each company represented a unique set of situations and demographics, so it was not deemed appropriate to analyse the whole data set. Therefore, for the final stage of research using structural equation modelling (SEM) with the AMOS 5.0 statistical package, only the results from the EntzCo company will be utilised.

In the first instance, all situations and demographics were combined into a SEM with each importance factor. The purpose of the entry of all influences into this initial model was to serve as a final stage of triangulation with univariate and multivariate regression results, before situations and demographics were removed from consideration as not making a significant impact on customers stated service importance. As expected, these initial models showed several situations/demographics did not play a role, predominantly confirming the findings of univariate and multivariate regression.

This was not however the final stage of research – due to the large number of situations as well as demographic variables that did not impact on importance the model fit statistics produced indicated poor fit, even after allowing for certain conceptually justifiable covariances. Therefore, those situations/demographics not suggested as having any influence by either univariate, multivariate or initial SEM were removed from the model, and fit indices and estimates recalculated. At this stage it was clear that some situations/demographics were having very minor or non-significant impacts on importance, and these were therefore removed from the model. Further recomputation generated a final model, comprising the significant situational or demographic influences for each importance factor. This process produced for each factor a confirmed list of situations and demographics that exerted an influence, as well as producing confirmatory information on the total effects of situational variables versus demographic variables for comparison by factor. The following sections explain this refinement process for each factor in turn before summarising the impact of situations and demographics across the sample as a whole.

9.5.1 Factor 1. Website

As noted above, an iterative procedure was used to refine the original full list of situations into a final set of issues verified by structural equation model to impact on service importance factors. This process involved:

- Univariate correlation of each situation/demographic in turn to the service factor
- Multivariate regression of all situations and demographics to the service factor
- Structural equation model of all situations with the service factor
- Review of the results of all three of these activities (as shown by Table 9.8)
- Structural equation model with those situations/demographics suggested as significant by any of the procedures conducted
- Review of estimates and direct effects to remove those situation/demographics not at all significant and recalculation
- Continual removal and recalculation until only significant situations/demographics are left and good model fit is indicated

Table 9.8 below presents the results from the univariate correlations, multivariate regressions and first structural equation model (SEM) with all situations entered. As per established guidelines, a critical value greater than 1.96 (and associated p-value of less than .05) indicates a significant result. Review of the findings below highlights the value of the multi-step process – for instance, while situation 12 (importance of high quality service) was found to be significant in univariate correlation, multivariate regression failed to show an impact, however, SEM does show the situation to have an impact. Conversely, some situations shown as significant by univariate and multivariate regression (for instance, gender) were not found to have an impact when the more rigorous SEM approach was adopted.

Considering the specific website factor, we can see several of the variables suggested by initial investigation were not supported by the first SEM.

Table 9.8 Impact Analysis of Website Factor

	U	M	C.R.	P
D1 Gender:	.087(**)	0.179 ¹	1.018	0.309
D2 Age group:	.128(**)	0.000	4.307	0.000
D3 Class				
D4 Education	-.129(**)	0.057	-1.65	0.099
D5 Income	-.106(**)	0.002	-2.868	0.004
S02 Purchase Value				
S03 Personalisation				
S04 Spontaneity				
S05 Frequency Purchase Product Type	.061(*)	0.007	2.654	0.008
S06 Pre-purchase Research	0.018	0.068	-1.07	0.285
S07 Purchase Involvement	.206(**)	0.000	5.459	0.000
S08 Negative Role of Price	-.104(**)	0.022	-2.699	0.007
S09 Positive Role of Price				
S10 Brand Dependence	0.014	0.127 ¹	2.787	0.005
S11 Importance of low price				
S12 Importance of high quality service	.171(**)	0.185	2.417	0.016
S13 Online History				
S14 Company History	.062(*)	0.367	0.505	0.614
S15 Number Companies Purchase From	-.112(**)	0.018	-2.944	0.003
S16 Returns				
S17 Behavioural Loyalty	-.056(*)	0.738	-1.025	0.305
S18 Attitudinal Loyalty	.253(**)	0.000	6.255	0.000
S20 Prefer high street names online				
S21 Purchase from online only company	-.055(*)	0.020	-2.613	0.009
S22 Technoreadiness	0.011	0.001	3.83	0.000
S23 Time Capacity	.108(**)	0.001	2.075	0.038
S24 Products Purchased Online	-.058(*)	0.400	-1.329	0.184
S25 Online Activities	-.099(**)	0.143 ¹	-1.868	0.062
S26 connection speed	-.068(**)	0.220	-0.836	0.403

U - Univariate (Spearman's Rho correlation analysis)

** Correlation is significant at the 0.01 level (2-tailed); * Correlation is significant at the 0.05 level (2-tailed).

M - Multivariate Regression (normalised importance measure)

Shading represents a significant finding. ¹Figure was significant when situations or demographics regressed separately.

Considering the refinement process (shown in Table 9.9), very poor model fit was indicated when all situations and demographics were entered. While marginal improvement was shown when including those variables suggested as important by univariate, multivariate or SEM, goodness of fit indices remained under the .90 acceptance limit (despite RMSEA being below the .08 requirement). As noted above, the model was therefore refined with the least significant situations/demographics removed, and the model-fit and estimates recalculated until acceptable goodness of fit indices were produced. Such fit was indicated when only the significant situations and demographics remained entered in the model. The final model produced good model-fit and RMSEA results and was deemed acceptable. Four conceptually valid co-variances were added to achieve model fit, as suggested by review of modification

indices: between techno-readiness and online activities (both measures of online usage), between the number of companies purchased from and attitudinal loyalty (correlated measures of loyalty), between brand dependence and the number of companies used (with high brand dependence being correlated to fewer companies being used) and between the negative role of price and brand dependence (both simplifying behaviours – the belief that searching for low price is not worth the effort and the use of brand as a purchase cue rather than seeking out information).

Table 9.9 Model Fit Indicators for Website Factor.

	All Variables	Initial Refinement	Final Configuration
(i) Model Fit Indicators			
DF	629	343	166
CMIN/DF	11.893	7.976	6.687
GFI	.781	.898	.943
AGFI	.755	.880	.927
NFI	.559	.793	.899
RMSEA	.077	.061	.055
(ii) Demographic and Situational Effects			
Number of Demographics	5	4	2
Demographics Total Effects	.182	.157	.1
Number of Situations	24	16	10
Situations Total Effects	.754	.658	.566

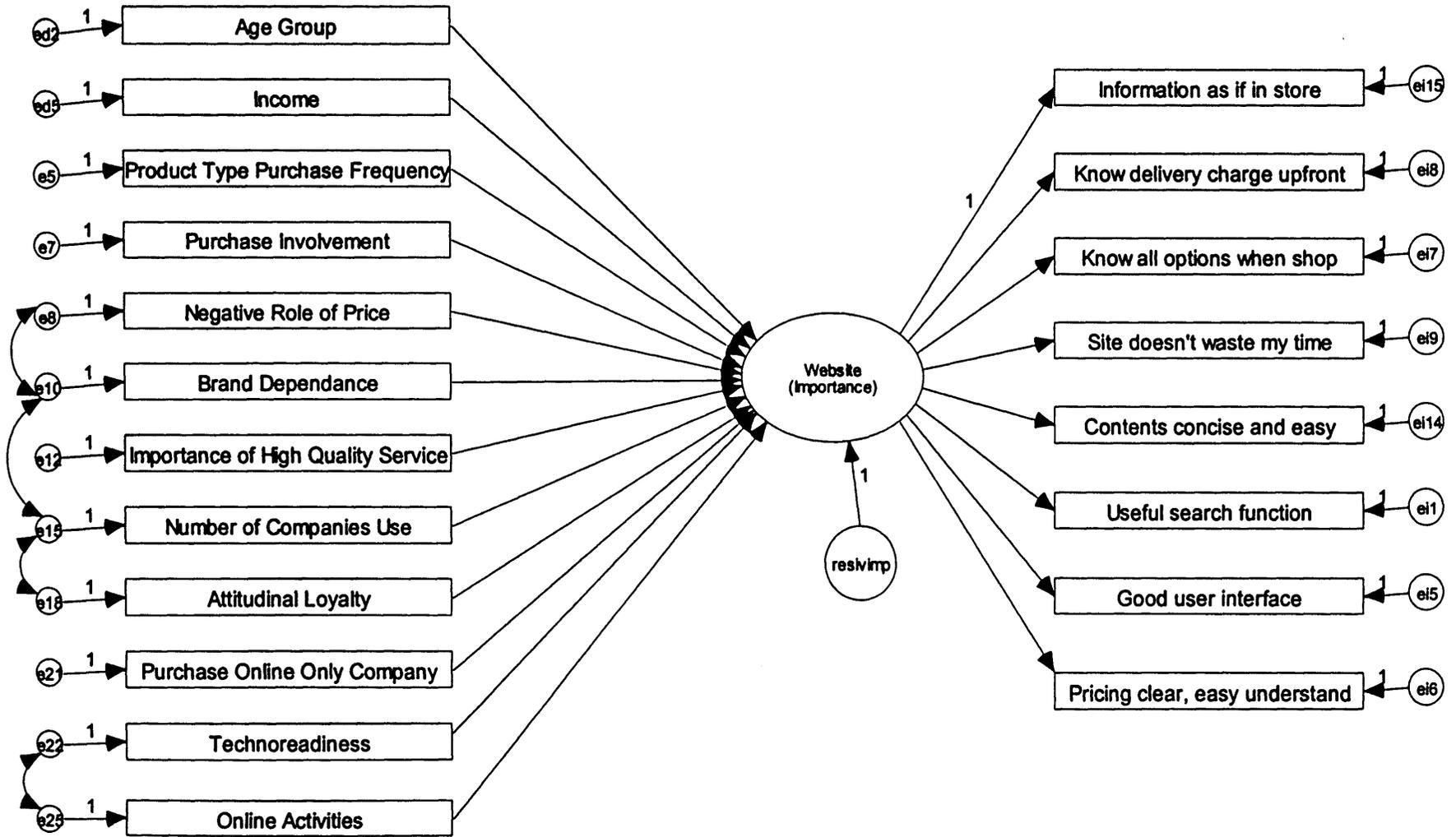
The final model for the website factor (shown in Figure 9.2 and Table 9.10) contained a relatively large number of situations (ten) with only two demographics. All situations and demographics were found to generate highly significant results. The total effects from situations for demographics and situations included in the model was calculated and is shown at the bottom of Table 9.10. As can be seen situations accounted for five and a half times as much variance as demographics, supporting the proposition that situations form a better basis of market segmentation when considering the website factor.

Table 9.10 Final SEM Analysis of Website Factor

	Estimate	S.E.	C.R.	P	Direct Effects
D2 Age	0.057	0.016	3.651	0.000	0.057
D5 Income	-0.043	0.013	-3.248	0.001	-0.043
S05 Frequency Product Type Purchase	0.071	0.025	2.899	0.004	0.071
S07 Purchase Involvement	0.042	0.008	5.037	0.000	0.042
S08 Negative Role Price	-0.051	0.016	-3.11	0.002	-0.051
S10 Brand Dependence	0.043	0.017	2.511	0.012	0.043
S12 Importance High Quality Service	0.047	0.016	2.945	0.003	0.047
S15 Number of Companies Purchased From	-0.066	0.021	-3.163	0.002	-0.066
S18 Attitudinal Loyalty	0.157	0.024	6.564	0.000	0.157
S21 Purchase Online Only Company	-0.039	0.014	-2.828	0.005	-0.039
S22 Technoreadiness	0.013	0.004	3.531	0.000	0.013
S25 Online Activities	-0.037	0.016	-2.34	0.019	-0.037
			Demographics Total Effect		0.100
			Situational Total Effect		0.566

The website factor concerned the ability to utilise the website to locate information in a clear and easy to understand manner. A range of issues impacted on this factor. In terms of demographics it is interesting that increasing age increased the importance of this issue, while increased income decreased the value of the factor. The older purchase groups placed more value on finding information, but the higher income groups placed less emphasis on website, valuing other service factors. Considering situations, the more frequent the product was purchased, the more important was website (this is logical, as common purchasers would want a clear and easy to use interface as it would be regularly used). Similarly, as the number of companies purchased from decreased, and attitudinal loyalty increased then website importance increased. This is attributable to the same reason as purchase frequency. As purchase involvement, and the importance of high quality service increased so did website importance. This is conceptually valid, as both situations should heighten importance of all service issues. It is interesting to note that those expressing greater techno-readiness expressed increased website importance, but those conducting more online activities expressed less importance on the issue. Both situations measure a related issue – online usage – however, techno-readiness measures attitude and adeptness, whereas the activities measure is a more simplistic measure of usage alone.

Figure 9.2 Situational Impacts on Website Factor



9.5.2 Factor 2. Trust

The same iterative process was followed for all factors and the results from univariate, multivariate regression and initial SEM for the trust factor are shown in Table 9.11. As can be seen, fewer influences are seen across all methods of analysis for trust than website importance. This reflects the general importance to a broader group of people than website, which proved to be more susceptible to variation. In common with the website factor, the value of conducting a staged process of different analysis can be seen, with some suggesting variables as important, while others do not highlight the same factor as significant.

Table 9.11 Impact Analysis of Trust Factor

	U	M	C.R.	P
D1 Gender:	.053(*)	0.818	-0.412	0.68
D2 Age group:	.064(**)	0.001	3.332	0.000
D3 Class				
D4 Education				
D5 Income				
S02 Purchase Value				
S03 Personalisation				
S04 Spontaneity				
S05 Frequency Purchase Product Type	0.046	0.067	1.511	0.131
S06 Pre-purchase Research				
S07 Purchase Involvement	.114(**)	0.007	2.275	0.023
S08 Negative Role of Price	-.105(**)	0.019	-2.737	0.006
S09 Positive Role of Price	-.061(**)	0.157	-1.139	0.255
S10 Brand Dependence	0.014	0.039	2.629	0.009
S11 Importance of low price			2.202	0.028
S12 Importance of high quality service	.142(**)	0.582	0.547	0.585
S13 Online History				
S14 Company History				
S15 Number Companies Purchase From	-.064(**)	0.159	-1.426	0.154
S16 Returns				
S17 Behavioural Loyalty	-.090(**)	0.760	-0.248	0.804
S18 Attitudinal Loyalty	.169(**)	0.000	4.852	0.000
S20 Prefer high street names online				
S21 Purchase from online only company				
S22 Technoreadiness	.057(*)	0.000	4.513	0.000
S23 Time Capacity	.082(**)	0.046	1.401	0.161
S24 Products Purchased Online				
S25 Online Activities	-.074(**)	0.021	-2.388	0.017
S26 connection speed	-.091(**)	0.035	-1.753	0.08

U - Univariate (Spearman's Rho correlation analysis)

** Correlation is significant at the 0.01 level (2-tailed); * Correlation is significant at the 0.05 level (2-tailed).

M - Multivariate Regression (normalised importance measure)

Shading represents a significant finding. ¹Figure was significant when situations or demographics regressed separately.

Due to fewer variables being entered into the initial SEM refinement, it generated better goodness of fit indices than the first website model. However, refinement was still necessary,

and non-significant factors were removed until good fit was indicated, achieved when only those variables having a significant effect remained. Good levels of fit were indicated and all statistical checks supported the model (statistics shown in Table 9.12). As with the previous factor, logically supported covariances were accounted for - between the simplifying behaviours brand dependence and negative role of price, and between the measures of online usage, techno-readiness and online activities.

Table 9.12 Model Fit Indicators for Trust Factor.

	All Variables	Initial Refinement	Final Configuration
(i) Model Fit Indicators			
DF	464	147	42
CMIN/DF	15.050	9.545	9.660
GFI	.767	.920	.960
AGFI	.735	.896	.937
NFI	.729	.833	.932
RMSEA	.087	.068	.068
(ii) Demographic and Situational Effects			
Number of Demographics	5	2	1
Demographics Total Effects	.84	.047	.036
Number of Situations	24	14	7
Situations Total Effects	.458	.039	.286

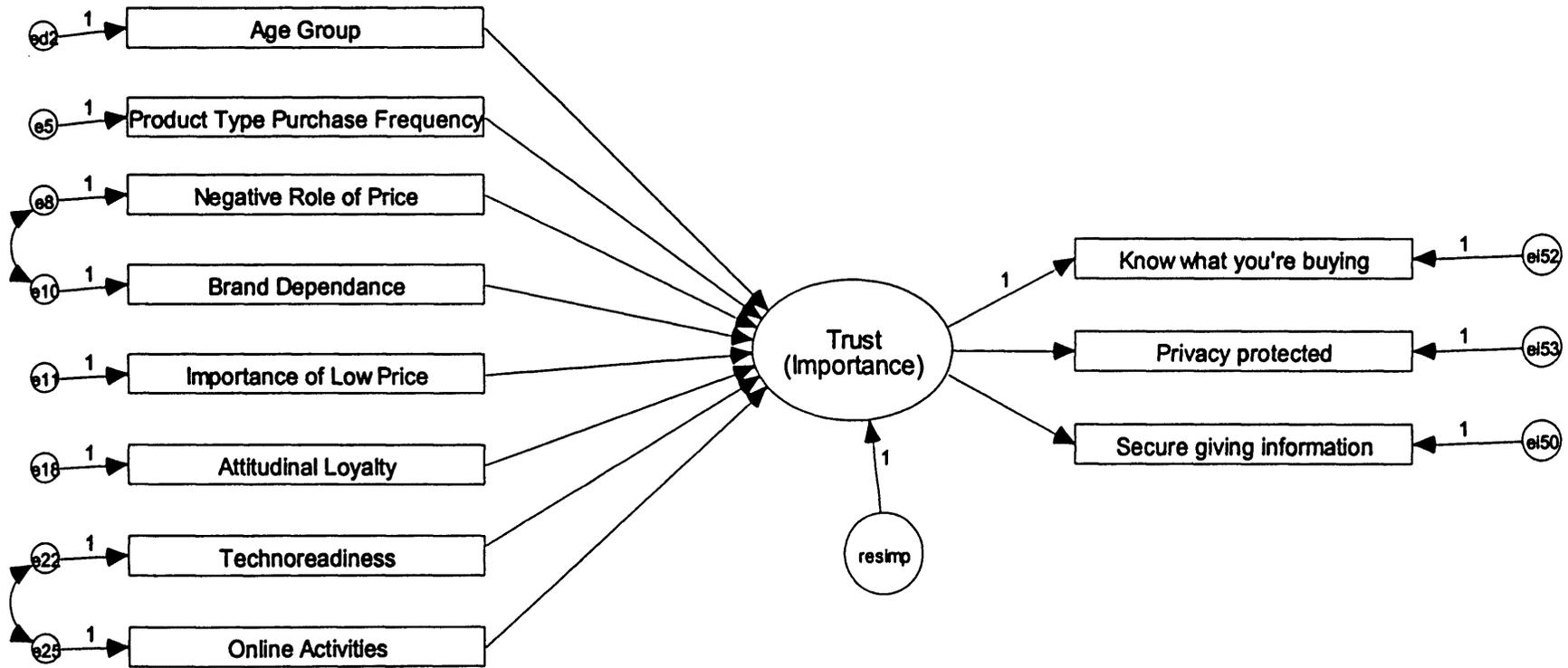
The final model (shown in Figure 9.3 and described in Table 9.13) consisted of only one demographic factor and seven situations. Comparison of the total effects of these variables supported the proposition that situations provide a better segmentation method than do demographics, as greater direct effect was shown by the situational variables. Considering the total effects, these are markedly less than those reported for the website factor, supporting the previous proposal that trust is important to most customers, such that less variation is expected from situations and demographics in general. Even those situations/demographics that do cause variation, generate less variation than the previous website factor.

Table 9.13 Final SEM Analysis of Trust Factor

	Estimate	S.E.	C.R.	P	Direct Effects
D2 Age	0.036	0.012	2.934	0.003	0.036
S10 Brand Dependence	0.029	0.013	2.201	0.028	0.029
S11 Importance Low Price	0.034	0.014	2.44	0.015	0.034
S18 Attitudinal Loyalty	0.1	0.018	5.53	0.000	0.1
S22 Technoreadiness	0.012	0.003	4.251	0.000	0.012
S25 Online Activities	-0.03	0.012	-2.445	0.014	-0.03
S05 Frequency Product Type Purchase	0.041	0.019	2.146	0.032	0.041
S08 Negative Role Price	-0.04	0.013	-3.148	0.002	-0.04
	Demographics Total Effect				0.036
	Situational Total Effect				0.286

Despite the general importance of trust to all customers, some expressed greater or less importance on the trust factor than others. The trust factor represented the customer's desire for a safe and secure trading experience, and that their personal and financial details would be protected by the company. As age increased, so too did the importance of trust, reflecting younger customers earlier and more pronounced adoption of online shopping, whereas the older groups remain sceptical and hesitant, requiring a trusted company. The decreased importance in trust as online activities increased would support the idea that the greater the online experience the more customers became reassured about the trading medium as a whole, placing less overt importance on trust. Acceptance of the internet as a whole, as measured through techno-readiness, expressed a positive relationship with trust, highlighting that even the most pro-technology customers still require reassurance on trust issues. Regular product type purchasers, the attitudinally loyal and the brand dependent also placed greater emphasis on trust, highlighting that experience does not always decrease the importance of trust. Regular users or brand dependent require a highly trusted company for consistent and reliable delivery. As the importance of low price increased, so too did trust importance – as customers seek out and purchase from low price companies, some of these may offer poor service, make false promises or be disreputable, such that customers who see low price as important have learned the importance of being able to trade with a trustworthy company and place great store on trust.

Figure 9.3 Situational Impacts on Trust Factor



9.5.3 Factor 3. Customer Service

Initial investigation of situational and demographics impacts suggested a large number of variables as having an impact on the issue of customer service. However, as can be seen in Table 9.14, many were not supported by the initial SEM. Despite this, for purposes of rigour all variables suggested as important by any analysis were entered into the first refinement model.

Table 9.14 Impact Analysis of Customer Service Factor

	U	M	C.R.	P
D1 Gender:	.089(**)	0.342 ¹	0.675	0.5
D2 Age group:	.098(**)	0.002	3.466	0.000
D3 Class				
D4 Education	-.123(**)	0.027	-1.451	0.147
D5 Income	-.060(*)	0.470	-0.781	0.435
S02 Purchase Value				
S03 Personalisation				
S04 Spontaneity				
S05 Frequency Purchase Product Type	0.034	0.022	1.988	0.047
S06 Pre-purchase Research				
S07 Purchase Involvement	.170(**)	0.000	4.184	0.000
S08 Negative Role of Price	-.100(**)	0.021	-2.802	0.005
S09 Positive Role of Price	-0.034	0.063	-1.349	0.177
S10 Brand Dependence	0.003	0.112	1.683	0.092
S11 Importance of low price				
S12 Importance of high quality service	.188(**)	0.103	2.251	0.024
S13 Online History	-.067(**)	0.199 ¹	-0.522	0.602
S14 Company History				
S15 Number Companies Purchase From	-.095(**)	0.125 ¹	-1.256	0.209
S16 Returns				
S17 Behavioural Loyalty				
S18 Attitudinal Loyalty	.226(**)	0.000	5.415	0.000
S20 Prefer high street names online	.048(*)	0.287	0.879	0.379
S21 Purchase from online only company	-.050(*)	0.058	-2.152	0.031
S22 Technoreadiness	0.003	0.047	2.429	0.015
S23 Time Capacity	-.101(**)	0.009	-2.184	0.029
S24 Products Purchased Online				
S25 Online Activities	-.113(**)	0.009	-3.239	0.001
S26 connection speed	-.057(*)	0.196	-1.41	0.159

U - Univariate (Spearman's Rho correlation analysis)

** Correlation is significant at the 0.01 level (2-tailed); * Correlation is significant at the 0.05 level (2-tailed).

M - Multivariate Regression (normalised importance measure)

Shading represents a significant finding. ¹Figure was significant when situations or demographics regressed separately.

The initial refinement failed to provide good model fit statistics (shown in Table 9.15). A process of removing those variables not found to be significant was conducted, resulting in one demographic and seven situations left in the final model. This produced very high fit statistics (GFI and AGFI above .95) and a good RMSEA despite a borderline NFI.

Table 9.15 Model Fit Indicators for Customer Service Factor.

	All Variables	Initial Refinement	Final Configuration
(i) Model Fit Indicators			
DF	464	223	44
CMIN/DF	15.067	9.346	7.061
GFI	.767	.899	.969
AGFI	.735	.875	.954
NFI	.258	.656	.886
RMSEA	.087	.067	.057
(ii) Demographic and Situational Effects			
Number of Demographics	5	4	1
Demographics Total Effects	.112	.112	.045
Number of Situations	24	15	7
Situations Total Effects	.617	.544	.371

Despite initial investigation suggesting a wide range of issues influencing the importance of customer service, refinement showed that like the trust factor, customer service is in fact important to a broad marketplace, with influence upon its importance by a few key issues (shown in Figure 9.4 and described in Table 9.16). As with the previous two factors, examination of the total effects on importance by situations versus demographics influences supported the proposition that situations account for far greater variance and thus form a better segmentation base than demographics.

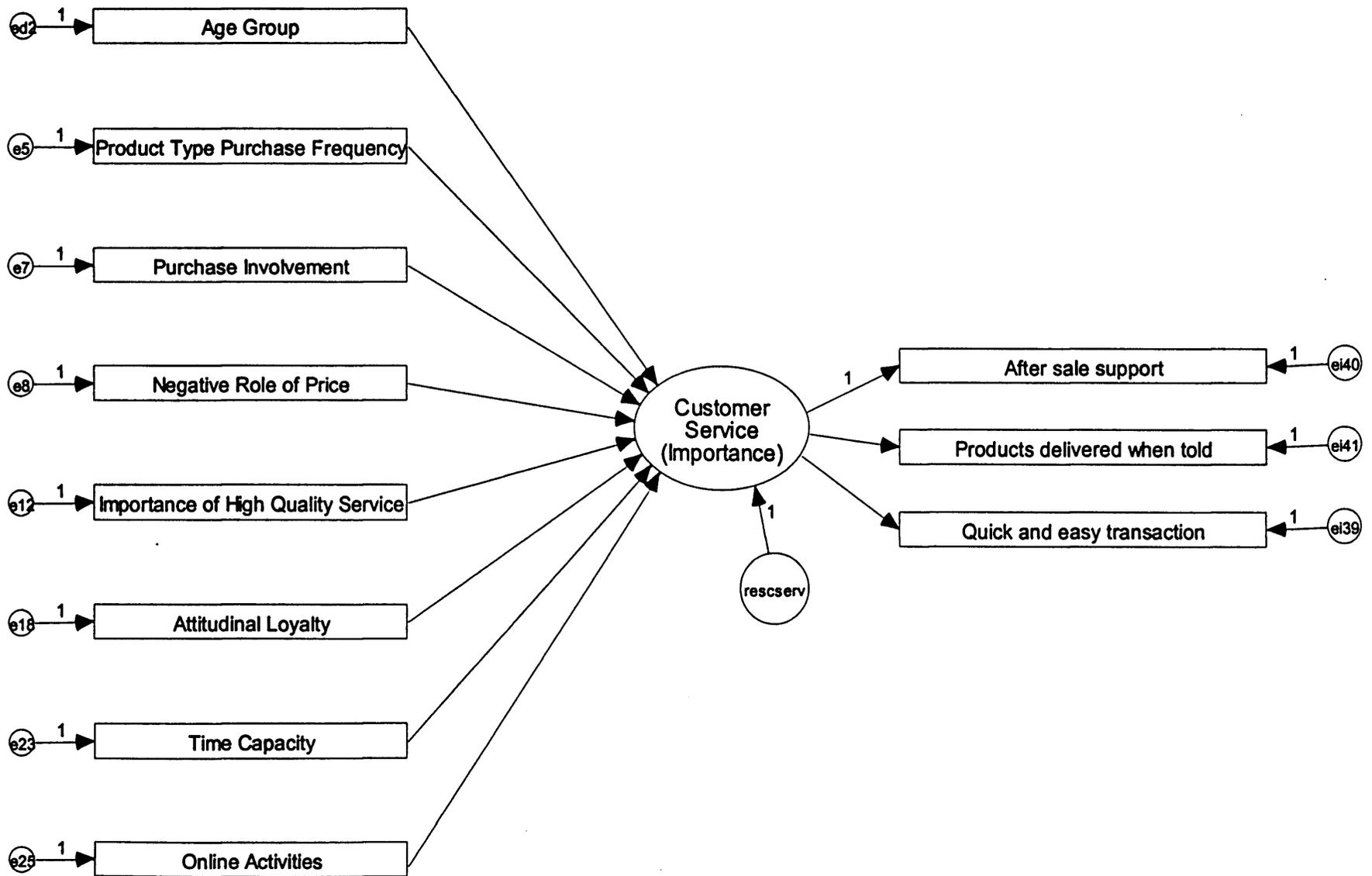
Table 9.16 Final SEM Analysis of Customer Service Factor

	Estimate	S.E.	C.R.	P	Direct Effects
D2 Age	0.045	0.015	3.005	0.003	0.045
S05 Frequency Product Type Purchase	0.047	0.024	1.997	0.046	0.047
S07 Purchase Involvement	0.029	0.008	3.672	0.000	0.029
S08 Negative Role of Price	-0.044	0.015	-2.872	0.004	-0.044
S12 Importance High Quality Service	0.047	0.015	3.026	0.002	0.047
S18 Attitudinal Loyalty	0.139	0.023	6.143	0.000	0.139
S23 Time Capacity	0.013	0.006	2.126	0.033	0.013
S25 Online Activities	-0.052	0.015	-3.601	0.000	-0.052
	Demographics Total Effect				0.045
	Situational Total Effect				0.371

The customer service factor represented a good purchase experience with fulfilment as promised, and good after sale support in the case of problems arising. Considering those impacts on customer service, older shoppers placed greater importance on customer service,

reflecting the greater store placed by the more experienced shopper on the issue of customer service. Those who purchase the product more often expressed greater importance on customer service. As regular purchasers it is likely they require efficient service and prompt help in case of problems (which as more regular use occurs is more likely to occur). Similarly, those with more hectic lifestyles placed greater emphasis on customer service, due to the need to quickly complete transactions and quickly rectify problems should they occur. Those placing greater importance on high quality service as a whole, placed greater importance on customer service, as would be expected due to the conceptual linkages between these issues. Those more involved in the purchase also demanded better customer service, attributable to generally the same desire for improved service across the purchase experience. Those conducting more online activities actually expressed less emphasis on customer service, as did those viewing it as those expressing a negative role for price where searching for low prices was not worth the effort. These results perhaps indicate the general variations in the marketplace for those highly involved in the internet (who see less value in service as a concept and have moved towards conducting more activities in the online environment, where less interaction and service issues are in view compared to the offline world), and those who do not make the effort to search for prices not seeing the value in customer service as a concept.

Figure 9.4 Situational Impacts on Customer Service Factor



9.5.4 Factor 4. Information

Initial investigation into the impacts upon the information factor suggested a wide range of influences, including more demographics than were influential on the previous factors (see Table 9.17). Once again the value of the multi-stage approach to research can be seen, with some analyses finding significant results while others do not. After an initial SEM with all variables entered, those variables not highlighted as having an impact by any analysis were removed from further consideration.

Table 9.17 Impact Analysis of Information Factor

	U	M	C.R.	P
D1 Gender:	.110(**)	0.036	1.984	0.047
D2 Age group:	.088(**)	0.000	3.766	0.000
D3 Class	.063(*)	0.007	2.656	0.008
D4 Education	-.136(**)	0.173 ¹	-0.595	0.552
D5 Income	-.134(**)	0.001	-3.26	0.001
S02 Purchase Value				
S03 Personalisation	-.059(*)	0.396	-1.481	0.139
S04 Spontaneity				
S05 Frequency Purchase Product Type	0.034	0.090	1.696	0.09
S06 Pre-purchase Research				
S07 Purchase Involvement	.225(**)	0.000	6.267	0.000
S08 Negative Role of Price	-.102(**)	0.022	-2.851	0.004
S09 Positive Role of Price				
S10 Brand Dependence				
S11 Importance of low price				
S12 Importance of high quality service	.142(**)	0.425	1.526	0.127
S13 Online History	-.097(**)	0.121 ¹	-1.418	0.156
S14 Company History				
S15 Number Companies Purchase From	-.103(**)	0.031	-1.611	0.107
S16 Returns	-.058(*)	0.286	-1.503	0.133
S17 Behavioural Loyalty				
S18 Attitudinal Loyalty	.205(**)	0.000	3.959	0.000
S20 Prefer high street names online	.100(**)	0.017	1.579	0.114
S21 Purchase from online only company				
S22 Technoreadiness	0.018	0.020	2.603	0.009
S23 Time Capacity	.127(**)	0.000	4.005	0.000
S24 Products Purchased Online				
S25 Online Activities	-.064(**)	0.815	-0.756	0.45
S26 connection speed	-.100(*)	0.007	-2.201	0.028

U - Univariate (Spearman's Rho correlation analysis)

** Correlation is significant at the 0.01 level (2-tailed); * Correlation is significant at the 0.05 level (2-tailed).

M - Multivariate Regression (normalised importance measure)

Shading represents a significant finding. ¹Figure was significant when situations or demographics regressed separately.

The fit indices from the initial investigations were marginal and further refinement was undertaken, with non-significant factors removed from the SEM until a final list of four demographics and five situational influences remained, and good fit statistics were produced

(shown in Table 9.18). Logically supported covariances were expressed in the model to improve fit – linkages between income and class (with higher class groups earning higher incomes, as would be expected due to the occupation based definitions of class which was used) and between age group and class (with increased occupational seniority, as age increases).

Table 9.18 Model Fit Indicators for Information Factor.

	All Variables	Initial Refinement	Final Configuration
(i) Model Fit Indicators			
DF	495	226	66
CMIN/DF	14.182	9.144	7.294
GFI	.772	.901	.962
AGFI	.742	.879	.948
NFI	.306	.669	.875
RMSEA	.084	.066	.058
(ii) Demographic and Situational Effects			
Number of Demographics	5	5	4
Demographics Total Effects	.193	.211	.217
Number of Situations	24	14	5
Situations Total Effects	.591	.539	.297

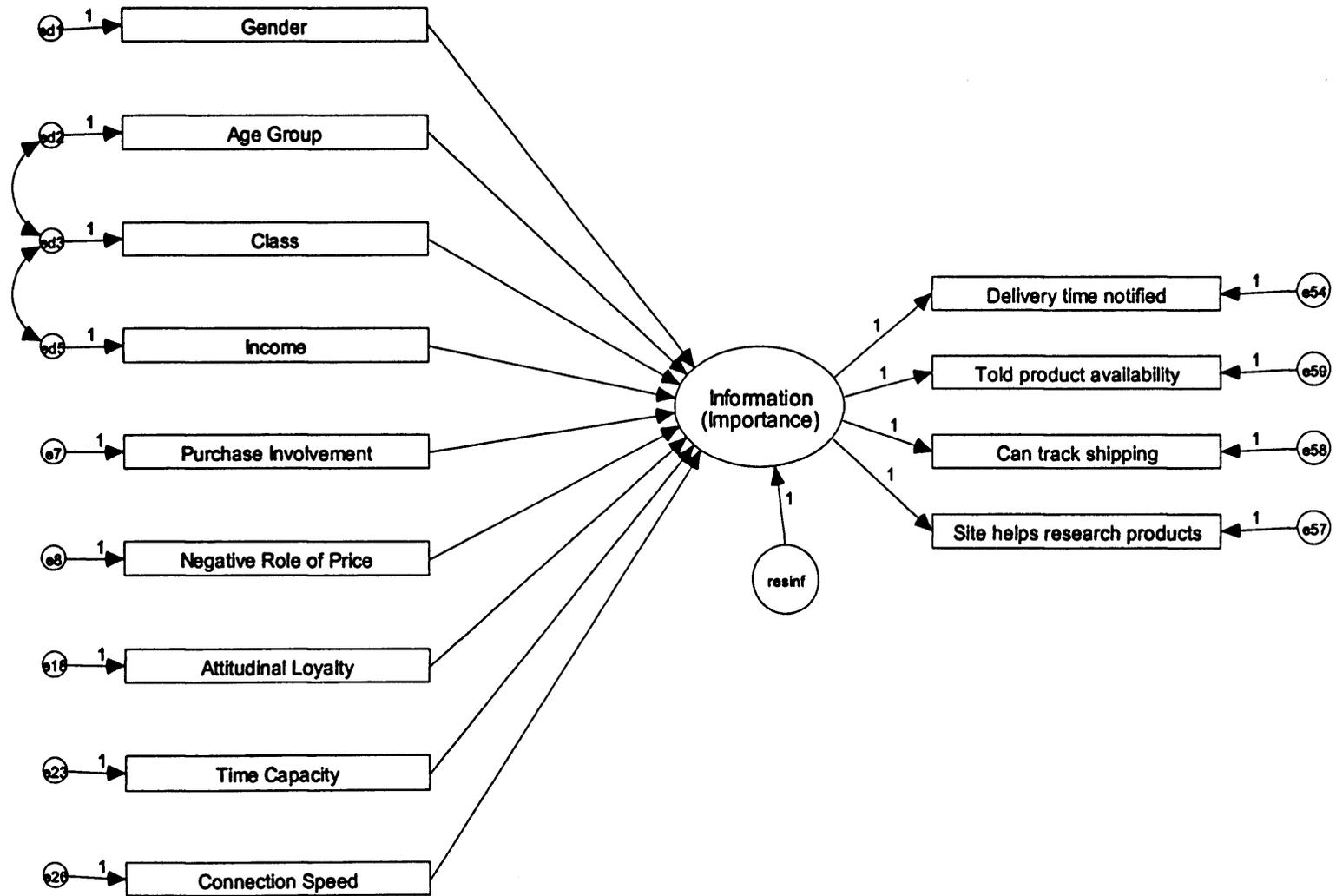
A greater range of demographics were found to influence this factor than the previous factors, with four found to be significant, in addition to five demographics (shown in Figure 9.5 and described in Table 9.19). As with previous factors, the total effect of situations was greater than demographic effect. However, for the information factor, the difference was far smaller than the previous issues, suggesting that demographics still play a useful role in analysing customer behaviour for the information issue.

Table 9.19 Final SEM Analysis of Information Factor

	Estimate	S.E.	C.R.	P	Direct Effects
D1 Gender	0.084	0.037	2.253	0.024	0.084
D2 Age	0.052	0.015	3.462	0.000	0.052
D3 Class	0.039	0.016	2.367	0.018	0.039
D5 Income	-0.042	0.013	-3.203	0.001	-0.042
S07 Purchase Involvement	0.047	0.008	6.002	0.000	0.047
S08 Negative Role of Price	-0.035	0.015	-2.353	0.019	-0.035
S18 Attitudinal Loyalty	0.102	0.022	4.637	0.000	0.102
S23 Time Capacity	0.026	0.006	4.310	0.000	0.026
S26 Connection Speed	-0.087	0.041	-2.133	0.033	-0.087
Demographics Total Effect					0.217
Situational Total Effect					0.297

The information factor concerned the provision of information to the customer prior to purchase (for product research and availability checking), as well as post purchase tracking (including shipping and delivery notification). A total of nine significant influences was found on the importance customers placed on this issue. Gender, age and class all had a positive effect on the importance customers placed on information, while higher earning groups actually placed less importance on this information. The more involved customers, as expected, placed more importance on information provision, due to increased involvement leading to increased information search (Kotler 1997). Those with more hectic lives also placed greater emphasis on information, as would be expected, as those with hectic lives do not have time to research products elsewhere and need to know delivery times/dates so that they can schedule accordingly. Those who did not want to spend time looking for low prices placed less importance on information (as would be expected, as they would not want to spend time searching or utilising the information). Those with slower internet connections also placed more importance on information, possibly due to their slower internet connections meaning they cannot look at as many different websites or sources of information, and are therefore more dependent on the purchase company to provide them with information about the product and delivery.

Figure 9.5 Situational Impacts on Information Factor



9.5.5 Factor 5. Contactability

Initial investigations revealed a wide range of potential influences upon the contactability factor, with the initial SEM confirming many of the initial findings, including the role of several demographic factors (shown in Table 9.20).

Table 9.20 Impact Analysis of Contactability Factor

	U	M	C.R.	P
D1 Gender:	.096(**)	0.235 ¹	0.418	0.676
D2 Age group:	.057(*)	0.050	1.956	0.05
D3 Class				
D4 Education	-.111(**)	0.055	-2.356	0.018
D5 Income	-.072(**)	0.012	-2.958	0.003
S02 Purchase Value				
S03 Personalisation	-.124(**)	0.007	-2.876	0.004
S04 Spontaneity	-0.047	0.125	-2.181	0.029
S05 Frequency Purchase Product Type				
S06 Pre-purchase Research				
S07 Purchase Involvement	.110(**)	0.013	2.272	0.023
S08 Negative Role of Price	-.084(**)	0.330	-1.764	0.078
S09 Positive Role of Price				
S10 Brand Dependence				
S11 Importance of low price	.082(**)	0.704	1.082	0.279
S12 Importance of high quality service	.131(**)	0.155	1.033	0.301
S13 Online History	-.069(**)	0.646	0.472	0.637
S14 Company History	-.117(**)	0.000	-5.34	0.000
S15 Number Companies Purchase From	-0.043	0.035	-2.418	0.016
S16 Returns				
S17 Behavioural Loyalty				
S18 Attitudinal Loyalty	.120(**)	0.043	1.696	0.09
S20 Prefer high street names online			1.703	0.089
S21 Purchase from online only company	-.119(**)	0.000	-4.413	0.000
S22 Technoreadiness	-.090(**)	0.094	-2.345	0.019
S23 Time Capacity	.076(**)	0.020	2.905	0.004
S24 Products Purchased Online	0.033	0.016	3.276	0.001
S25 Online Activities				
S26 Connection Speed				

U - Univariate (Spearman's Rho correlation analysis)

** Correlation is significant at the 0.01 level (2-tailed); * Correlation is significant at the 0.05 level (2-tailed).

M - Multivariate Regression (normalised importance measure)

Shading represents a significant finding. ¹Figure was significant when situations or demographics regressed separately.

Following the initial investigations the established process of refinement was followed until good model fit was indicated. Good results for goodness of fit and RMSEA measures, despite relatively low NFI, meant the final model was acceptable. Several logically valid covariances were expressed between situations and demographics influences – as education increases so too does income; company history and the number of companies used both reflect measures

of company use; techno-readiness was linked with the attitude of purchasing from an online only company (as both reflect internet acceptance); similarly, techno-readiness and the number of products purchased online both reflect measures of internet use; company usage and techno-readiness were linked as usage of an online company over time is conceptually linked to techno-readiness – those in higher techno-readiness groups would have shopped online longer and spent more, likely with the company considered; the greater the number of products purchased online then logically, the greater number of companies used so these issues were also linked.

Table 9.21 Model Fit Indicators for Contactability Factor.

	All Variables	Initial Refinement	Final Configuration
(i) Model Fit Indicators			
DF	434	162	60
CMIN/DF	15.988	9.958	9.934
GFI	.762	.913	.951
AGFI	.728	.887	.925
NFI	.137	.647	.727
RMSEA	.090	.070	.070
(ii) Demographic and Situational Effects			
Number of Demographics	5	4	2
Demographics Total Effects	.196	.157	.111
Number of Situations	24	13	9
Situations Total Effects	1.266	.839	.741

In the final model (shown in Figure 9.6 and described in Table 9.22), two demographic and nine situations were found to have significant impacts on the contact factor. Comparing the effect of each of these on the stated importance, situation impact far outweighs that provided by demographics, supporting the proposition that situations form a better segmenting tool for this factor.

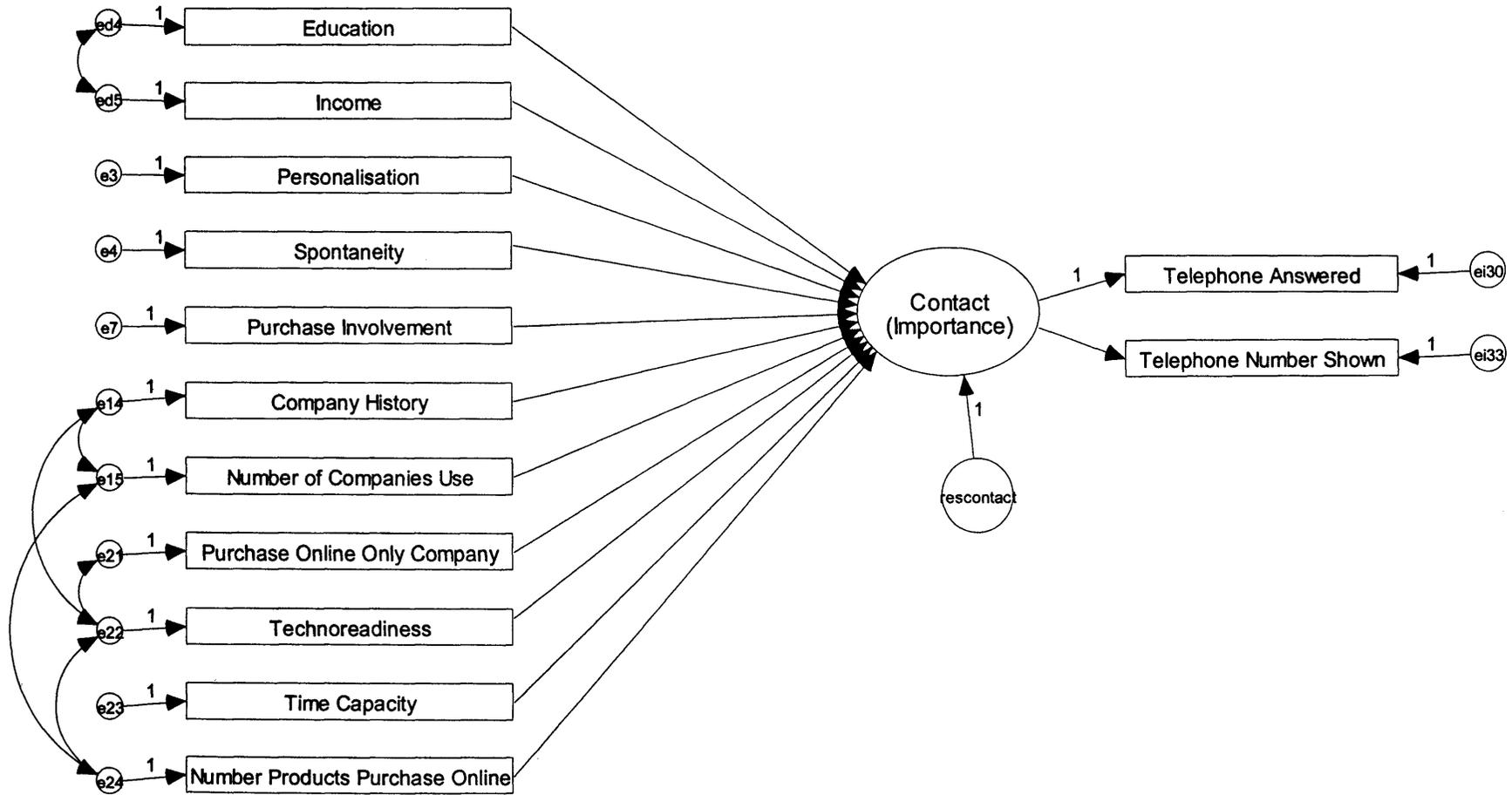
Table 9.22 Final SEM Analysis of Contactability Factor

	Estimate	S.E.	C.R.	P	Direct Effects
D4 Education	-0.053	0.021	-2.565	0.010	-0.053
D5 Income	-0.058	0.022	-2.668	0.008	-0.058
S07 Purchase Involvement	0.038	0.013	2.852	0.004	0.038
S14 Company History	-0.161	0.037	-4.302	0.000	-0.161
S15 Number of Companies Purchase From	-0.084	0.033	-2.498	0.012	-0.084
S21 Purchase Online Only Company	-0.099	0.023	-4.306	0.000	-0.099
S22 Technoreadiness	-0.013	0.006	-2.261	0.024	-0.013
S23 Time Capacity	0.03	0.01	2.968	0.003	0.03
S24 Products Purchased Online	0.048	0.015	3.185	0.001	0.048
S3 Personalisation	-0.178	0.06	-2.938	0.003	-0.178
S4 Spontaneity	-0.09	0.039	-2.292	0.022	-0.090
	Demographics Total Effect				0.111
	Situational Total Effect				0.741

The contactability factor reflected the ability to get in contact with the company (that both a contact telephone number was provided and that when contacted the company would answer the call within a reasonable time). In the online environment the ability to contact the company via traditional means (such as telephone or postal address) serves as reassurance that the company is legitimate. Both education and income had the same negative effect (which was expected due to the commonality between these two demographic measures) of reducing the stated importance on contactability. While contact may be an important issue for lower income/education groups, as a means of reassuring them about the service provided by the company, higher income/education groups appeared to rate this issue as less of a concern. Those with greater purchase involvement placed greater importance on contact, as expected, due to their desire to be reassured and gain information. Those having used the company more placed less emphasis on contactability, which would suggest they are reassured enough from having received products in the past that they do not need the extra reassurance of being able to contact the company. Those who would purchase from an online company also placed less importance on contactability, as would be expected due to the conceptual links between these issues – those most likely to purchase from an online only company do not value traditional contact means, so state less importance on this issue. Similarly, those with greater techno-readiness can also be seen to be expressing the same emotion – their belief and acceptance of technology means they do not place as much value on traditional contact means. Those with more hectic lives however placed greater importance on contactability,

likely so there was the safeguard in place, so they know they can more rapidly and easily resolve any service problems. As purchases became increasingly unplanned, then contact importance decreased, suggesting those planning purchases spend time evaluating the company and its service proposition, such as contactability, and place value on contact methods, whereas those purchasing spontaneously are more interested in that purchase than the wider company. Those purchasing for business purposes expressed lower importance on contact than those purchasing for personal reasons, suggesting business users are less concerned about the ability to complete purchases and resolve problems as the purchase is not for their own use but for a commercial entity (where problem resolution may be others' responsibility, or they do not care as much about this as they are not spending their own money).

Figure 9.6 Situational Impacts on Contact Factor



9.5.6 Factor 6. No Adverts

Similar to the trust factor described earlier, relatively few influences were found for the no adverts factor, due to the broad desire across the marketplace for purchases to be relatively free from adverts. Several of those influences suggested by initial investigations were not supported by the initial SEM model (as shown by Table 9.23).

Table 9.23 Impact Analysis of No Adverts Factor

	U	M	C.R.	P
D1 Gender:	.055(*)	0.324 ¹	0.102	0.919
D2 Age group:	.087(**)	0.000	3	0.003
D3 Class	-0.001	0.106	1.91	0.056
D4 Education				
D5 Income	-0.047	0.020	-2.586	0.01
S02 Purchase Value				
S03 Personalisation				
S04 Spontaneity				
S05 Frequency Purchase Product Type				
S06 Pre-purchase Research				
S07 Purchase Involvement	.074(**)	0.145 ¹	1.056	0.291
S08 Negative Role of Price	-.051(*)	0.285	-1.257	0.209
S09 Positive Role of Price	0.037	0.109	-2.046	0.041
S10 Brand Dependence				
S11 Importance of low price			2.722	0.006
S12 Importance of high quality service	.095(**)	0.652	-0.723	0.47
S13 Online History				
S14 Company History	.053(*)	0.298	1.713	0.087
S15 Number Companies Purchase From	-.059(*)	0.222	-1.281	0.2
S16 Returns				
S17 Behavioural Loyalty				
S18 Attitudinal Loyalty	.114(**)	0.052	2.644	0.008
S20 Prefer high street names online				
S21 Purchase from online only company				
S22 Technoreadiness	0.046	0.001	3.604	0.000
S23 Time Capacity	.103(**)	0.000	3.546	0.000
S24 Products Purchased Online				
S25 Online Activities	-.048(*)	0.277 ¹	-1.647	0.099
S26 connection speed				

U - Univariate (Spearman's Rho correlation analysis)

** Correlation is significant at the 0.01 level (2-tailed); * Correlation is significant at the 0.05 level (2-tailed).

M - Multivariate Regression (normalised importance measure)

Shading represents a significant finding. ¹Figure was significant when situations or demographics regressed separately.

In the first stage of refinement, where those issues suggested as significant by any analysis were entered, fairly good fit indices were obtained. However, further reduction was conducted until these were improved with high goodness of fit indices and acceptable RMSEA support the acceptability of the model, despite poor NFI measurement (shown in Table 9.24). Two conceptually valid covariances were expressed – between age and income (as people grow

older they earn more), and between income and time capacity (people on higher incomes tend to be working harder or have more involving jobs hence have less free time available).

Table 9.24 Model Fit Indicators for No Adverts Factor.

	All Variables	Initial Refinement	Final Configuration
(i) Model Fit Indicators			
DF	434	113	18
CMIN/DF	15.971	12.014	10.647
GFI	.763	.918	.975
AGFI	.729	.888	.949
NFI	.044	.511	.651
RMSEA	.090	.077	.072
(ii) Demographic and Situational Effects			
Number of Demographics	5	4	2
Demographics Total Effects	.131	.099	.072
Number of Situations	24	11	4
Situations Total Effects	.486	.301	.140

In the final model (shown in Figure 9.7 and described in Table 9.25), a total of two demographic and four situations were found to impact the no adverts factor. The relatively small number of significantly important influences supports the earlier proposal that this issue (having no-adverts during purchase and not receiving post-purchase unsolicited emails) is of importance to the entire marketplace, with relatively little variation by situation or demographics. This was further supported by the relatively small effects observed. Considering the impact of situations versus demographics, again we can see that situations account for more variance than demographics, supporting their superior ability to impact on customer behaviour.

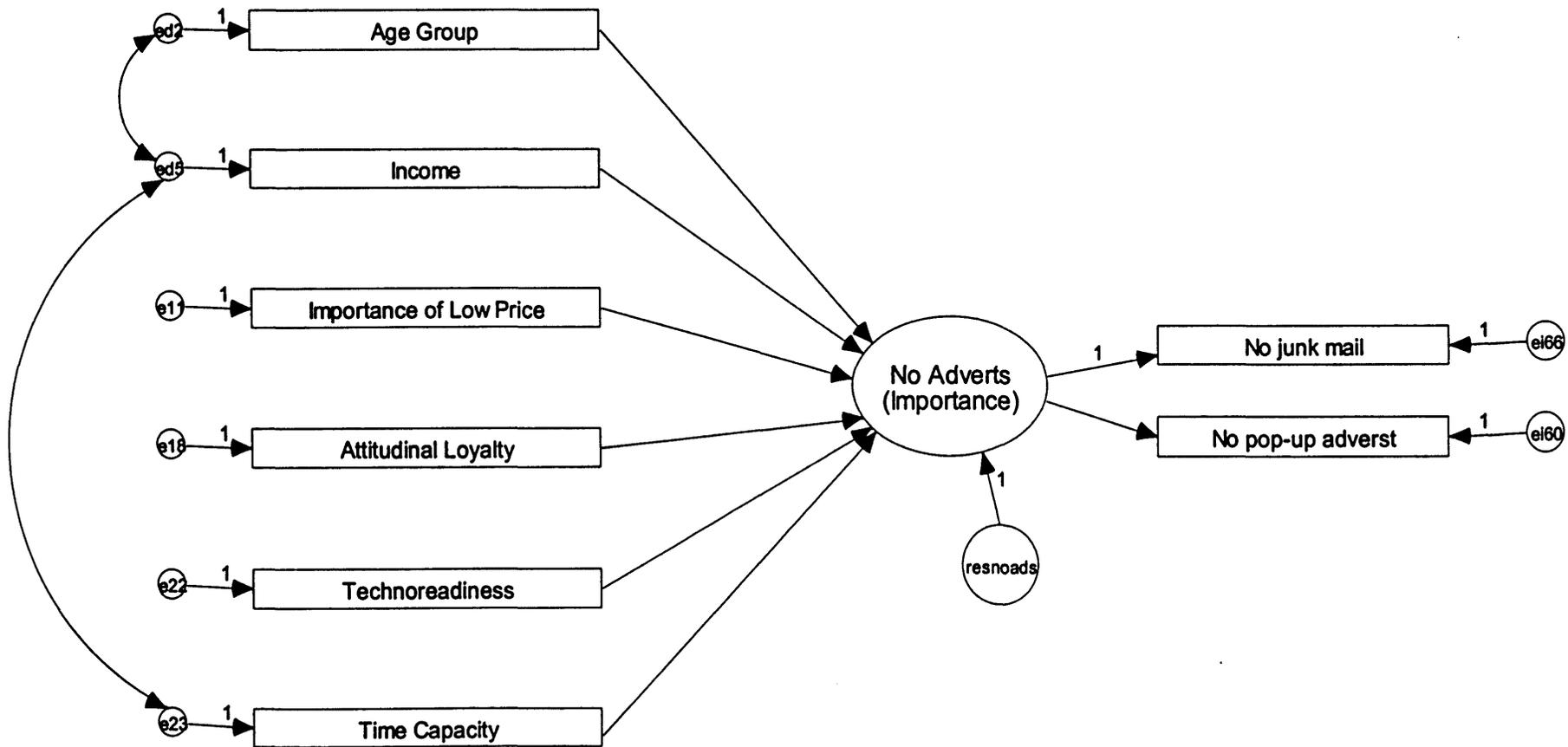
Table 9.25 Final SEM Analysis of No Adverts Factor

	Estimate	S.E.	C.R.	P	Direct Effects
D2 Age	0.034	0.015	2.263	0.024	0.034
D5 Income	-0.038	0.014	-2.812	0.005	-0.038
S11 Importance Low Price	0.037	.017	2.146	.032	0.037
S18 Attitudinal Loyalty	.070	.024	2.928	.003	0.070
S22 Technoreadiness	.011	.004	3.043	.002	0.011
S23 Time Capacity	.022	.007	3.199	.001	0.022
	Demographics Total Effect				0.072
	Situational Total Effect				0.140

As noted, while the issue of being advert and solicitation free during and after purchase is of general importance to a broad spectrum of the marketplace, variation was observed by six

issues in total. As age increased, so too did the importance of the issue, potentially as older people pay greater attention and are more annoyed by adverts than younger, marketing-aware generations, who pay less attention to advertisements in general. Higher income groups reported less importance on the issue, suggesting that these may be a better target for such adverts, potentially due to their higher disposable incomes and therefore receptiveness to new products and solicitations. As low price increased in importance to customers, so too did the importance of not receiving adverts, suggesting customers are not prepared to enter into a trade-off of receiving a lower price in exchange for being subjected to advertisements or solicitations. As loyalty to the company increased, so too did the importance of an advert free environment, suggesting a relationship between improved loyalty and reduced advertising. The higher techno-ready groups expressed increased importance on no adverts, potentially due to their longer time spent and experience online, which due to the prevalence of advertising on the internet has made them more ad-adverse and less willing to tolerate solicitations from companies from which they purchase. Similarly, as customers have increasingly hectic lives, they placed greater importance on no adverts, due to the desire to quickly complete transactions without being held up by adverts, as well as a lack of time to deal with post-purchase solicitations.

Figure 9.7 Situational Impacts on No Adverts Factor



9.5.7 Factor 7. Personalisation

A greater number of influences were suggested on the personalisation factor than the previous no adverts factor (as can be seen in Table 9.26). Personalisation represented the ability to customise the website, and the ability of the website to suggest products that the customer may like to purchase - features that some customers may see as valuable and useful, others may see as unnecessary or even annoying. It is therefore unsurprising to see a wide range of influences having an effect within this factor.

Table 9.26 Impact Analysis of Personalisation Factor

	U	M	C.R.	P
D1 Gender:	.072(**)	0.076	2.161	0.031
D2 Age group:	0.04	0.069	1.577	0.115
D3 Class	.078(**)	0.245	1.498	0.134
D4 Education	-.175(**)	0.000	-4.876	0.000
D5 Income	-.178(**)	0.000	-4.416	0.000
S02 Purchase Value				
S03 Personalisation				
S04 Spontaneity				
S05 Frequency Purchase Product Type	0.018	0.010	2.442	0.015
S06 Pre-purchase Research				
S07 Purchase Involvement	.139(**)	0.000	5.692	0.000
S08 Negative Role of Price	.067(**)	0.254	1.161	0.246
S09 Positive Role of Price	.166(**)	0.000	4.69	0.000
S10 Brand Dependence	.089(**)	0.622	-0.039	0.968
S11 Importance of low price				
S12 Importance of high quality service	.069(**)	0.641	0.534	0.593
S13 Online History	-.129(**)	0.000	-4.402	0.000
S14 Company History	0.042	0.020	2.641	0.008
S15 Number Companies Purchase From	-.138(**)	0.033	-2.993	0.003
S16 Returns				
S17 Behavioural Loyalty	.176(**)	0.000	4.056	0.000
S18 Attitudinal Loyalty	.083(**)	0.200 ¹	1.023	0.306
S20 Prefer high street names online	.241(**)	0.000	6.517	0.000
S21 Purchase from online only company				
S22 Technoreadiness	-.108(**)	0.612	0.494	0.621
S23 Time Capacity	.077(**)	0.000	1.329	0.000
S24 Products Purchased Online	-.139(**)	0.151 ¹	-1.427	0.154
S25 Online Activities	-.051(*)	0.018	3.197	0.001
S26 Connection Speed	-.059(*)	0.143	-1.477	0.14

U - Univariate (Spearman's Rho correlation analysis)

** Correlation is significant at the 0.01 level (2-tailed); * Correlation is significant at the 0.05 level (2-tailed).

M - Multivariate Regression (normalised importance measure)

Shading represents a significant finding. ¹Figure was significant when situations or demographics regressed separately.

From the wide range of issues suggested as important, the standard refinement procedure was followed, until a final model with good fit statistics and RMSEA was generated (as shown in Table 9.27). As noted above, the wide range of influences upon the personalisation factor

meant that several covariances had to be expressed due to the overlap between several of the situational and demographic factors: education and income due to the fact increased income generally requires better education to gain the better job to pay the higher salary; product type purchase frequency to online history and company history due to the fact as frequency of purchasing the product type increases so does the likelihood of using the company, while the nature of the product (DVDs) as one of the first online products suggests a potential link to online usage (which was reflected in the modification indices); similarly, links with online history and company history were seen, as longer internet usage meant it was possible for the customer to have used the online company for longer; online history was also related to the number of companies used to purchase the product type, as a greater length of experience online suggests that the customer will have come into contact with a greater range of customers.

Table 9.27 Model Fit Indicators for Personalisation Factor.

	All Variables	Initial Refinement	Final Configuration
(i) Model Fit Indicators			
DF	434	235	71
CMIN/DF	16.063	9.898	11.348
GFI	.762	.893	.934
AGFI	.728	.864	.902
NFI	.108	.602	.716
RMSEA	.090	.069	.075
(ii) Demographic and Situational Effects			
Number of Demographics	5	5	2
Demographics Total Effects	.442	.455	.234
Number of Situations	24	17	10
Situations Total Effects	1.557	1.334	1.112

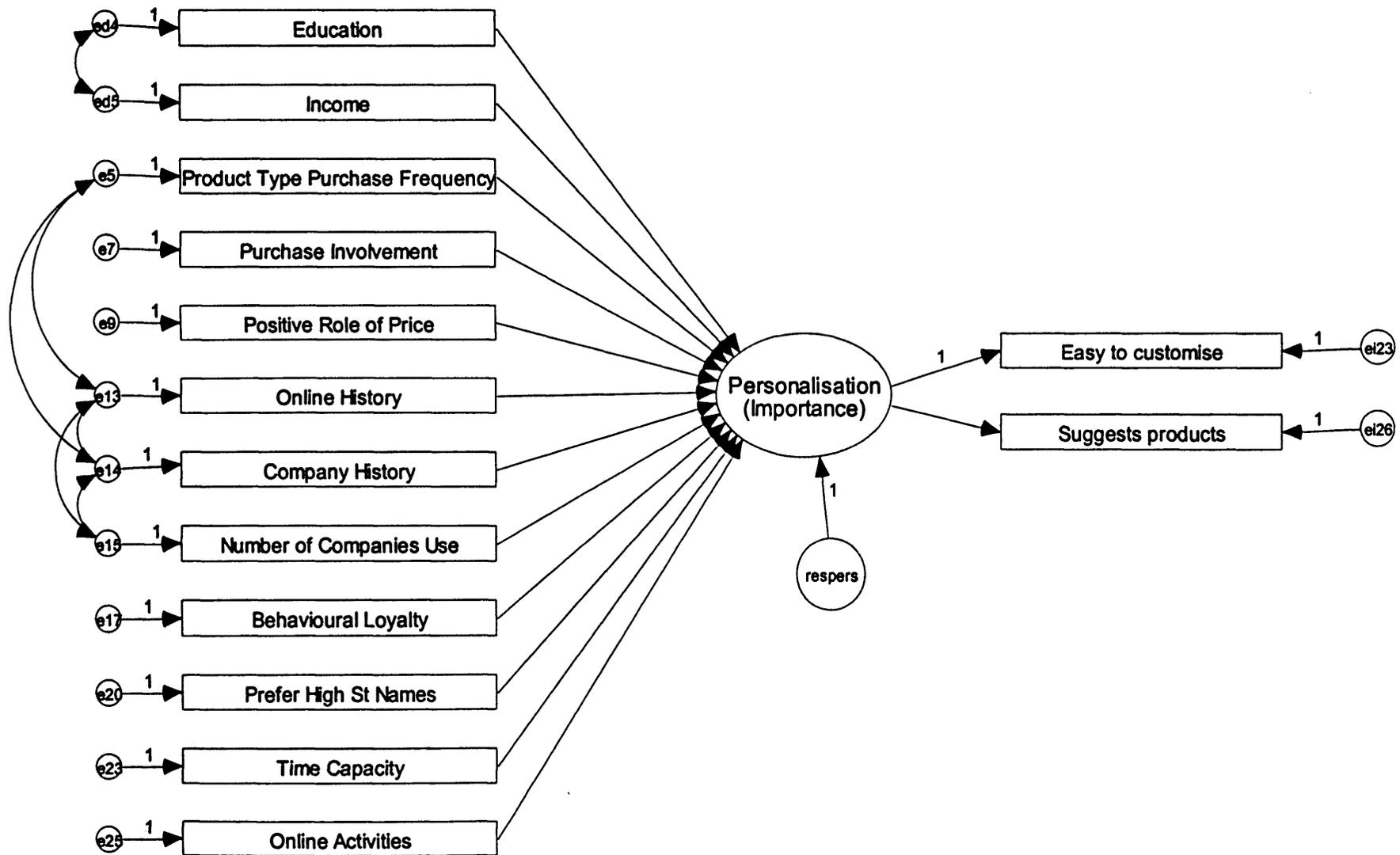
In the final model (shown in Figure 9.8 and described in Table 9.28), a total of two demographic and ten situational influences found to be significant. A far greater amount of variance is explained by the situations than the demographics, again supporting the idea that situations can explain more than simpler demographic measures.

Table 9.28 Final SEM Analysis of Personalisation Factor

	Estimate	S.E.	C.R.	P	Direct Effects
D4 Education	-0.117	0.023	-4.99	0.000	-0.117
D5 Income	-0.117	0.024	-4.765	0.000	-0.117
S05 Frequency Product Type Purchase	0.106	0.049	2.179	0.029	0.106
S07 Purchase Involvement	0.086	0.015	5.714	0.000	0.086
S13 Online History	-0.095	0.022	-4.23	0.000	-0.095
S14 Company History	0.1	0.047	2.134	0.033	0.1
S15 Number of Companies Purchase From	-0.125	0.039	-3.22	0.001	-0.125
S17 Behavioural Loyalty	0.139	0.034	4.09	0.000	0.139
S20 Prefer High St Names	0.207	0.031	6.636	0.000	0.207
S23 Time Capacity	0.048	0.011	4.222	0.000	0.048
S25 Online Activities	0.058	0.026	2.205	0.027	0.058
S9 Positive Role of Price	0.148	0.031	4.869	0.000	0.148
	Demographics Total Effect				0.234
	Situational Total Effect				1.112

Considering the wide range of influences found, the more educated and higher income groups placed less value on personalisation, potentially due to their desire to complete purchases without become involved in site customisation or receiving purchase suggestions. The more involved placed greater emphasis on importance, due to their greater involvement with the purchase. Those having spent longer shopping online actually placed less importance on personalisation, suggesting they are not interested in customising the website or receiving suggestions, preferring to make simple efficient purchases, in line with the method of conducting business facilitated by the internet. Those who had spent longer shopping with the company placed greater emphasise on personalisation, suggesting this is an important issue for them and one on which the company delivers. Those preferring high street names when shopping online (a measure of retail dependence) also placed greater emphasis on personalisation, as it reflects an aspect of personal retail service online, which retail dependence suggests is important. Those viewing price as a quality indicator also placed greater emphasis on personalisation suggesting a link between personalisation levels and quality perception. As customers' lives became more hectic, they also placed greater importance on customisation, suggesting that a customised efficient website is valued due to its ability to quickly transact business, while the ability of the site to suggest potential products of interest means that time is saved in searching for such products (assuming suggestions are broadly accurate).

Figure 9.8 Situational Impacts on Personalisation Factor



9.5.8 Factor 8. Company Image

The company image factor reflected the general image presented by the company to the marketplace, in terms of the company being a reputable name and the website reflecting the expected image of the company. Several issues were highlighted by analysis as a potential source of influence on this factor.

Table 9.29 Impact Analysis of Company Image Factor

	U	M	C.R.	P
D1 Gender:				
D2 Age group:	.113(**)	0.002	3.881	0.000
D3 Class	.054(*)	0.800	0.588	0.557
D4 Education	-.201(**)	0.000	-5.569	0.000
D5 Income	-.151(**)	0.001	-3.63	0.000
S02 Purchase Value				
S03 Personalisation				
S04 Spontaneity				
S05 Frequency Purchase Product Type				
S06 Pre-purchase Research				
S07 Purchase Involvement	.154(**)	0.000	5.942	0.000
S08 Negative Role of Price				
S09 Positive Role of Price	.186(**)	0.000	5.275	0.000
S10 Brand Dependence	.125(**)	0.058	2.697	0.007
S11 Importance of low price				
S12 Importance of high quality service	-.066(**)	0.688	-0.06	0.952
S13 Online History	-.094(**)	0.848	0.451	0.652
S14 Company History				
S15 Number Companies Purchase From	-.151(**)	0.003	-3.184	0.001
S16 Returns				
S17 Behavioural Loyalty	.128(**)	0.065	1.257	0.209
S18 Attitudinal Loyalty	.110(**)	0.013	1.352	0.176
S20 Prefer high street names online	.248(**)	0.000	7.089	0.000
S21 Purchase from online only company	-0.041	0.079	-2.133	0.033
S22 Technoreadiness	-.133(**)	0.652	0.152	0.879
S23 Time Capacity				
S24 Products Purchased Online	-.134(**)	0.071	-1.54	0.124
S25 Online Activities	-.117(**)	0.664	-0.761	0.447
S26 Connection Speed	-.076(**)	0.064	-1.308	0.191

U - Univariate (Spearman's Rho correlation analysis)

** Correlation is significant at the 0.01 level (2-tailed); * Correlation is significant at the 0.05 level (2-tailed).

M - Multivariate Regression (normalised importance measure)

Shading represents a significant finding. ¹Figure was significant when situations or demographics regressed separately.

Refinement of the number of situations and demographics resulted in a total of nine issues found to be significant, which are described in Table 9.30 and represented in Figure 9.9. Several conceptually valid covariances were expressed in the model: age and education (as the youngest group of customers, under-18s would have less education than older groups), between education and income (as noted before, increased income would generally require

higher education); between brand dependence and the positive role of price as a quality indicator (as both are simplifying behaviours that save customers search time); between brand dependence and the number of companies used (as customers relying on a name they know to pick a company should stick with the few names they recognise and have used); between brand dependence and preference for high street names (as both are simplifying behaviours based around brand identification in lieu of information search); and, between the positive role of price and high street name preference (as both reflect simplifying behaviours around company identification).

Table 9.30 Model Fit Indicators for Company Image Factor.

	All Variables	Initial Refinement	Final Configuration
(i) Model Fit Indicators			
DF	434	159	38
CMIN/DF	16.144	11.013	10.337
GFI	.761	.902	.965
AGFI	.727	.870	.939
NFI	.154	.612	.814
RMSEA	.090	.074	.071
(ii) Demographic and Situational Effects			
Number of Demographics	5	4	4
Demographics Total Effects	.332	.314	.32
Number of Situations	24	14	5
Situations Total Effects	1.228	.976	.732

Almost an equal number of situations and demographics were found to influence the company image factor – four demographic and five situational issues. Despite this, the total effect explained by the situations was well over twice that explained by the demographic issues, again highlighting the superiority of situations over demographics in influencing customer demands.

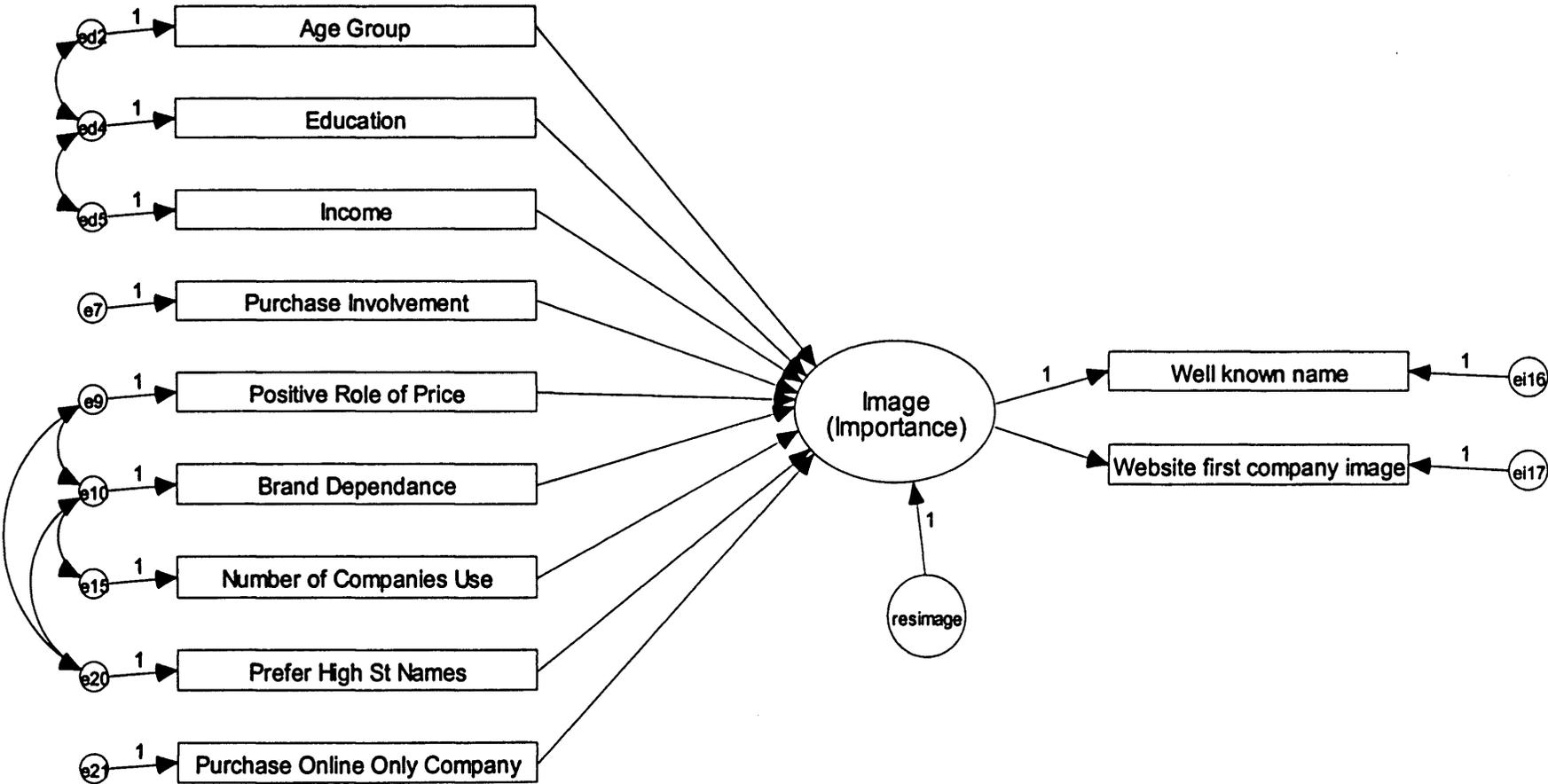
Of those demographic influences impacting on the importance of company image, older customers placed greater importance on this issue, suggesting younger customers are not as interested in image, instead focusing on other issues. The older and more educated customers both placed less importance on company image, likely depending on more rigorous methods of evaluating company performance than simply brand name and image.

Table 9.31 Final SEM Analysis of Company Image Factor

	Estimate	S.E.	C.R.	P	Direct Effects
D2 Age	0.105	0.027	3.884	0.000	0.105
D4 Education	-0.125	0.023	-5.482	0.000	-0.125
D5 Income	-0.09	0.023	-3.834	0.000	-0.090
S07 Purchase Involvement	0.091	0.014	6.286	0.000	0.091
S10 Brand Dependence	0.083	0.029	2.863	0.004	0.083
S15 Number of Companies Purchase From	-0.129	0.035	-3.679	0.000	-0.129
S20 Prefer High St Names	0.223	0.031	7.285	0.000	0.223
S21 Purchase Online Only Company	-0.048	0.024	-2.026	0.043	-0.048
S9 Positive Role of Price	0.158	0.031	5.157	0.000	0.158
	Demographics Total Effect				0.320
	Situational Total Effect				0.732

Those with greater purchase involvement placed greater emphasis on company image – while it would be possible that they did not value company image, instead using other sources of information to make a decision, it would appear that company image is an important part of the involved customers decision making set. Those more likely to purchase from an online company expressed reduced importance in company image – having chosen to disregard other means of contacting the company, the image of that company is also of less importance to them than customers as a whole, as they seek out other issues when making a purchase. The more companies the customer shopped from, the less important was company image, suggesting that other issues, such as service delivery or product range or price, become more important to these customers and they shop around in search of them. The remainder of the situational factors concern simplifying behaviours. This is unsurprising, given one of the roles of company image as a means of reassuring the customer and reducing the need to search out information about the company prior to purchase. Those customers more likely to use brand as a simplifying mechanism (brand dependence and preference for high street names) placed more importance on company image. This is logical, as image is very similar to branding, and can be used for the same purpose. Those more likely to simplify decisions, and seeing price as a quality indicator, also placed greater emphasis on company image, suggesting a link between image and price-quality perceptions.

Figure 9.9 Situational Impacts on Company Image Factor



9.5.9 Factor 9. Product Range

The final factor, product range, showed a good spread of potential demographic and situational influences. Given the variable importance of depth of product range to different customers and purchase situations it is unsurprising that a wide range of potential influences on the importance of this issue were observed.

Table 9.32 Impact Analysis of Product Range Factor

	U	M	C.R.	P
D1 Gender:	.101(**)	0.002	3.362	0.000
D2 Age group:	0.022	0.158 ¹	0.799	0.424
D3 Class	.050(*)	0.112	1.79	0.073
D4 Education				
D5 Income	-.112(**)	0.007	-3.363	0.000
S02 Purchase Value				
S03 Personalisation	0.016	0.517	1.833	0.067
S04 Spontaneity				
S05 Frequency Purchase Product Type	.051(*)	0.061	2.82	0.005
S06 Pre-purchase Research				
S07 Purchase Involvement	.103(**)	0.002	3.833	0.000
S08 Negative Role of Price				
S09 Positive Role of Price				
S10 Brand Dependence				
S11 Importance of low price				
S12 Importance of high quality service	.094(**)	0.203	1.192	0.233
S13 Online History				
S14 Company History	.080(**)	0.112 ¹	2.669	0.008
S15 Number Companies Purchase From	-.080(**)	0.366	-1.3	0.194
S16 Returns				
S17 Behavioural Loyalty	.116(**)	0.000	5.671	0.000
S18 Attitudinal Loyalty	.147(**)	0.000	4.532	0.000
S20 Prefer high street names online	.092(**)	0.144 ¹	1.479	0.139
S21 Purchase from online only company				
S22 Technoreadiness	-.048(*)	0.826	0.151	0.88
S23 Time Capacity	.083(**)	0.002	2.337	0.019
S24 Products Purchased Online	-.098(**)	0.121 ¹	-2.474	0.013
S25 Online Activities	-.086(**)	0.602	-0.515	0.607
S26 connection speed	-.101(**)	0.008	-2.941	0.003

U - Univariate (Spearman's Rho correlation analysis)

** Correlation is significant at the 0.01 level (2-tailed); * Correlation is significant at the 0.05 level (2-tailed).

M - Multivariate Regression (normalised importance measure)

Shading represents a significant finding. ¹Figure was significant when situations or demographics regressed separately.

Through the various stages of refinement undertaken, a total of ten demographics and situations were found to have a significant impact on the importance customers placed on product range, supporting the idea that many different issues impact on the importance customers place on this factor (described in Table 9.33 and Figure 9.10). Two conceptually

valid covariances were suggested by modification indices and added to the model – between income and the number of product types purchased online (as greater income means more disposable income to spend on items, as well as less time available due to more hectic jobs, resulting in a greater propensity to shop online rather than offline). Product purchase type frequency was linked to company usage (as the more often someone purchased the type of product in question, the more likely they are to use a company selling that product type).

Table 9.33 Model Fit Indicators for Product Range Factor.

	All Variables	Initial Refinement	Final Configuration
(i) Model Fit Indicators			
DF	434	163	52
CMIN/DF	15.972	10.764	7.995
GFI	.763	.908	.964
AGFI	.729	.882	.946
NFI	.128	.551	.769
RMSEA	.090	.073	.061
(ii) Demographic and Situational Effects			
Number of Demographics	5	4	2
Demographics Total Effects	.437	.439	.352
Number of Situations	24	14	8
Situations Total Effects	1.596	1.299	1.082

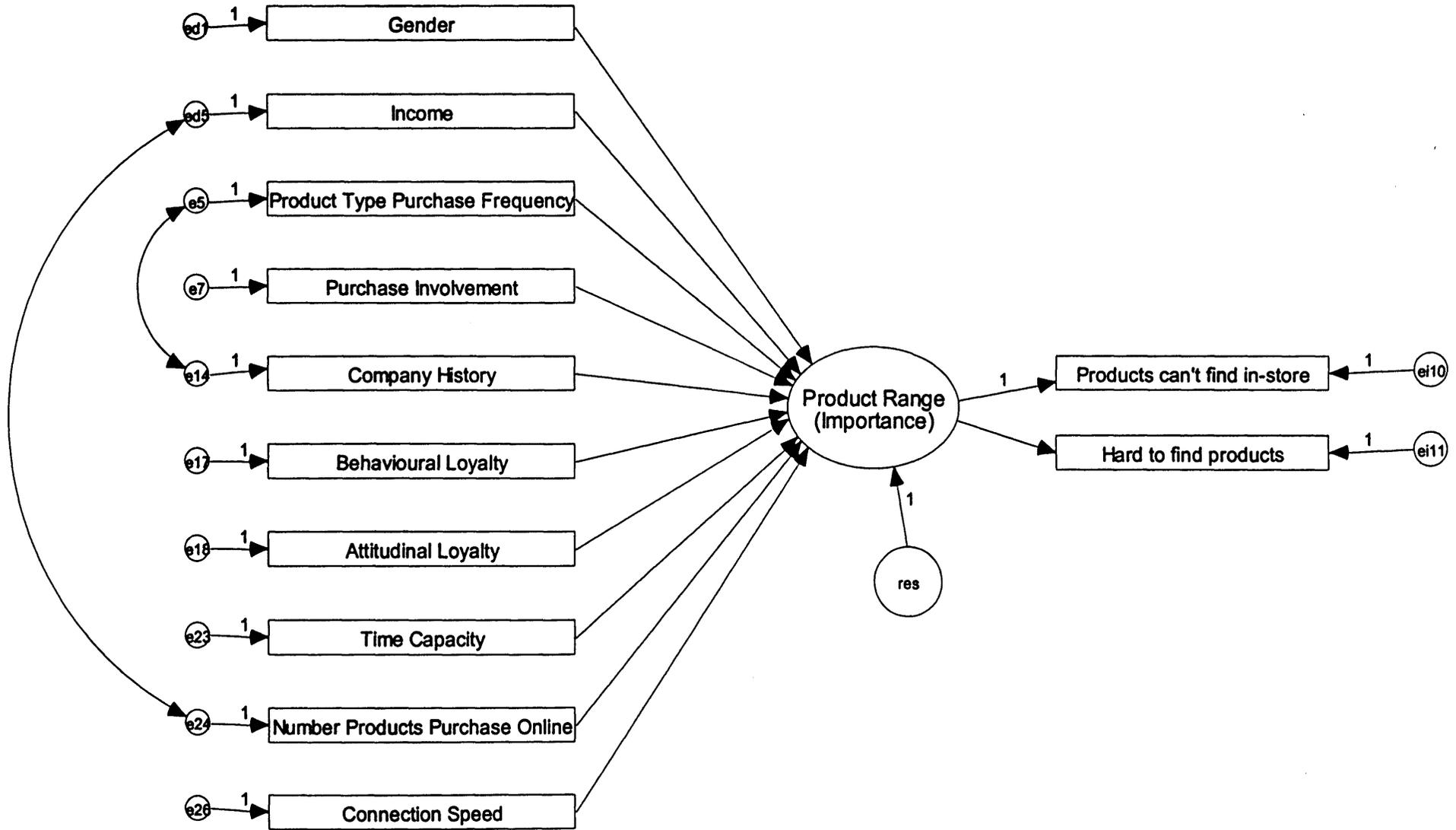
In total, two demographic and eight situations were found to impact on the product range factor, with far greater variance accounted for by the situational issues. For the final factor, again, the proposition that situations have a greater impact on purchase behaviour than simple demographics is supported.

Table 9.34 Final SEM Analysis of Product Range Factor

	Estimate	S.E.	C.R.	P	Direct Effects
D1 Gender	0.246	0.077	3.191	0.001	0.246
D5 Income	-0.106	0.026	-4.054	0.000	-0.106
S14 Company History	0.129	0.047	2.769	0.006	0.129
S17 Behavioural Loyalty	0.224	0.037	6.077	0.000	0.224
S18 Attitudinal Loyalty	0.225	0.045	5.001	0.000	0.225
S23 Time Capacity	0.024	0.012	1.947	0.052	0.024
S24 Products Purchased Online	-0.057	0.017	-3.321	0.000	-0.057
S26 Connection Speed	-0.248	0.084	-2.96	0.003	-0.248
S5 Product Type Purchase Frequency	0.123	0.051	2.39	0.017	0.123
S7 Purchase Involvement	0.052	0.016	3.212	0.001	0.052
	Demographics Total Effect				0.352
	Situational Total Effect				1.082

A significant finding for gender highlighted that women placed greater emphasis on product range than their male counterparts. Those earning higher incomes actually placed less emphasis on range. Considering the situations, company usage and loyalty measures were positively related to range importance, suggesting that the company offers a good range of products and customers are satisfied with this and stay with the company. As customer lives became more hectic, they placed greater emphasis on range. This is attributable to their lack of time to search multiple companies for alternatives, leading to a preference for greater range from the chosen company in question. As the number of products purchased online increased, the importance of range decreased, likely due to those high online purchasers using a wide range of companies and being able to search across them. Similarly, as connection speed increased then product range importance decreased, suggesting those with higher speed connections were willing to shop around, while those with slower connections cannot look at multiple different companies, due to the time to access multiple sites, and prefer all products required to be available at one company. As purchase involvement increased, so did the importance of range - as greater information search and involvement occur, the ability to compare to multiple different products is advantageous for customers. Those purchasing the product type more frequently also place greater importance on product range, potentially so they have a greater choice in making purchases - important due to the frequency of consumption.

Figure 9.10 Situational Impacts on Product Range Factor



9.6 Discussion

Having addressed each factor in turn, it is now possible to analyse the impact of situations and demographics across the service experience as a whole. A summary of those situations making an impact on different factors is shown, and the number of impacts made ordered in Table 9.35.

Table 9.35 Overall Situational Impact Findings

	Website	Trust	Customer Service	Information	Contactability	No Adverts	Personalisation	Company Image	Product Range	Impacts
S07 Purchase Involvement	+		+	+	+		+	+	+	7
D5 Income	-			-	-	-	-	-	-	7
S23 Time Capacity			+	+	+	+	+		+	6
S18 Attitudinal Loyalty	+	+	+	+		+			+	6
D2 Age group:		+	+	+		+		+		5
S25 Online Activities	-	-	-				+			4
S22 Technoreadiness	+	+			-	+				4
S15 Number Companies Purchase From	-				-		-	-		4
S08 Negative Role of Price	-	-	-	-						4
S05 Frequency Product Type Purchase		+	+				+		+	4
S21 Purchase online only company	-				-			-		3
S14 Company History					-		+		+	3
S11 Importance of low price	+	+				+				3
S10 Brand Dependence	+	+						+		3
D4 Education					-		-	-		3
D1 Gender	+			+					+	3
S26 Connection speed				-					-	2
S24 Products Purchased Online					+				-	2
S20 Prefer High St names online							+	+		2
S17 Behavioural Loyalty							+		+	2
S09 Positive Role of Price							+	+		2
S13 Online History							-			1
S12 Importance of high quality service			+							1
S04 Spontaneity					-					1
S03 Personalisation					-					1
D3 Class				+						1
S16 Returns										0
S06 Pre-purchase Research										0
S02 Spend										0

+ / - signifies positive / negative effect (from SEM significant at the .05 or .01 level)

Returning to the original research question: “*What is the impact of purchase situations on customer service quality demands online?*”, each proposition can now be addressed in turn.

P1. Product type will impact customer service quality requirements online.

The impact of online product type as a source of variation on service demands has not previously been rigorously examined, although initial investigations have highlighted it as a source of variation (Yoon and Kim 2001, Parasuraman and Colby 2001, O’Cass and Fenech 2003). Most studies have been limited to investigations of the suitability of products for online sale (Sorace et al. 2002, Keen et al. 2004, Grewal et al. 2004, Zeng and Reinartz 2003), rather than comparisons of how different products alter service demands, even when constructing new online service models (Wolfenbarger and Gilly 2002, 2003; PZM 2000, 2005)

The issue of whether product type impacts service requirements was addressed in the previous chapter, where it was found that significant differences existed across the range of service importance reports at each of the four companies. This supports the traditional belief that people in different product classes maintain different service requirements (Kotler 1997, Kotler et al. 1999; Jobber 2004 Brassington and Petit 1997, Sujana and Dekleva 1987, Cardozo 1980, Bhatnagar and Ghose 2004, Johnson et al. 2004). It also supports findings in ServQual research, that have different factor structures, of associations in applying ServQual in different contexts (Carman 1990, Gagliano and Hathcote 1994, Babakus and Boller 1992, Brown et al. 1993, Bowers et al. 1994, Finn and Lamb 1991). It also fits with the original propositions by PZB (1988) and ZBP (1990) that their original ServQual tool formed a base skeleton for adaptation based on context. So too, it would appear, is this new online metric.

As noted, a pattern was observed, where the order of importance of issues (from least important to most important) where the most important service issue (trust) and least important service issues reported (personalisation and company image) were consistent across all companies (even though the actual reported service importance levels were different). Such a finding supports previous findings of consistency at the extreme levels of service importance, found by PZB (1988), ZBP (1990), Mersha and Adlakha (1990) and Cravens et al. (1985). This suggests that despite differences in service levels by product category at the extreme, there are general constants, specifically in the online environment, that customers value trust above all other service factors and value personalisation the least.

P2. Demographics will have an impact on customers online service quality requirements.

While demographics may impact internet use (Bellman et al. 1999, Swinyard and Smith 2003, Karjalout et al. 2002), research indicates that demographics will play little if any consistent and useful role in analysing behaviour in online shopping (Bellman et al. 1999, Karjalutot et al. 2002, Modahl 2000, Bhatnagar and Ghose 2004a,b). This echoes those who have identified offline demographics as indicative of product class usage but of no real value in analysing the details of behaviour and use (Day 1969, Dickerson and Gentry 1983, Bucklin et al. 1985, Rossi et al. 1996, Palmer 2000, Fennell et al. 2002). The general state of the current internet shopping marketplace, as reflecting the marketplace as a whole has been established (Samji and Gray 2002, ZPM 2000, Dunnhumby 2001), with limited recent research showing some impact of various demographic influences.

Dunnhumby (2001) found that demographic trends did impact some behaviours: women surf less and are more focused and solution-orientated in behaviour, while men are more likely to spend longer online and browse more sites (this is partially supported as women placed greater emphasis on the website factor about information search expediency, placed greater emphasis on product range, while men place less emphasis, may be using more websites, i.e., 'shopping around'). Kau et al. (2003) also found female shoppers preferred well known brands (not supported, as no link to company image was found), females were more inclined to click banner adds (not supported, as no link with gender and the no adverts factors was seen); females were more cautious about online security than men (not supported, as no link with gender and trust was found). Karjalutot et al. (2002) found men more likely to seek information (not supported, as females placed greater emphasis on the information factor), younger consumers were more likely to use for information search (not supported, as the older placed greater importance on information); while the higher educated were more likely to search for information (not supported, as no relationship with age and information was seen).

Examining the results by demographics, the class/occupation issue was very little use. It shows an impact only on information. Gender only impacted three factors, with females placing greater emphasis on website, information and product range. As education increases, importance of contactability, personalisation and company image declines. Age and income were the most useful demographic factors, with older age groups tending to state higher importance (on trust, customer service, information, no adverts and company image), while higher income groups placed less importance on all issues except trust and customer service.

This would suggest the higher income groups may actually be easier to serve online (as long as trust and service are maintained), with older customers more demanding on the whole. The lack of other clear conceptual patterns across service factors, and lack of clear proposed patterns from the literature, supports the proposal that demographics are not a very useful tool for segmenting the internet marketplace, even though on some issues broad patterns are visible (such as older customers being more demanding).

P3. Information overload or brand dependence will impact customer service quality requirements online.

Brand dependence sought to measure the extent customers simplify purchase decisions. Rather than searching and analysing a wide range of information about the company before purchase (as suggested by the 'frictionless' capitalism of Gates 1999), the amount of information over-whelms customers or they simply do not have time to analyse it (Conhaim 2003, Winzar and Savik 2002). For this reason, they use a simpler purchase choice mechanism, relying on brand names as a form of guarantee (Shapiro 1973, Beatty and Smith 1987, Lichtenstein et al. 1993, Oliver 1999, Capraro et al. 2003). The impact of this brand-dependence has not been properly evaluated and requires further examination (De Chernatony and McDonald 1998, Parasuraman and Colby 2001).

The evidence from this study found that increased levels of brand dependence did impact on service factor importance, although only on three issues. As a brand-based simplifying measure, it was anticipated this issue would increase the importance of company image, and this was supported in practice. Those more likely to purchase based on brand name showed increased importance on trust, which would suggest a strong relationship between image, brand and trust - that when reducing search and information efforts (that would validate company potential performance), the customer requires a greater element of general trust and security in the company (as a signal of reassurance in the absence of information substantiating the issue). Brand dependence, as a measure at odds with information search, was positively linked to the website factor (which concerned information search ease), suggesting a general association between information avoidance (brand dependence) and being able to quickly complete a task, without having to contend with lots of extraneous information or systems (described by the website factor). These findings support the idea that certain customers are averse to, and seek to avoid, over-whelming information (Conhaim 2003, Winzar and Savik 2002), and rely on simplifying service issues as has been proposed (Shapiro 1973z, Beatty and Smith 1987, Lichtenstein et al. 1993, Oliver 1999, Capraro et al. 2003). In this instance, image, trust and service issues support the simplifying behaviour

enacted and suggest that branding is still a very important issue for online companies, as the literature suggests (De Chernatony and McDonald 1998, Parasuraman and Colby 2001) .

P4. People buying for business, personal or gift purposes will have different service quality requirements.

Variation in behaviour according to whether purchasers are for business or personal usage are well established in both traditional marketing literature (Lancaster et al. 2005, Palmer 2000, Kotler et al. 1999, Jobber 2004), and those newer research issues, such as new marketing (Baker 2003). The only variation found in this sample was that those purchasing for business reasons placed less importance on the ability to contact the company via traditional means and to make contact. Those business purchases expressed lower importance on contact than for personal purchasers, suggesting business users are less concerned about the ability to complete purchases and resolve problems, as the purchase is not for their own use but for a commercial entity (where problem resolution may be others' responsibility or they do not care as much about this, as they are not spending their own money). The failure of this measure to suggest major variations across the service factors, as suggested by the literature, may be attributable to the nature of the business concerned. The sale of DVD products is predominantly made to the consumer marketplace, with those few purchasing for business reasons are acting as a consumer would. The purchase of a consumer product type is unlike the purchase of large capital items, or formal purchasing ordering through the internet, which likely lead to far greater variation in service demands than has been seen in this sample.

P5. Familiarity ('techno-readiness') influences online service quality demands.

Techno-readiness (TR), described by Parasuraman and Colby (2001), was a multi-item measure of customer propensity to embrace and use new technology, with a range from high to low. It reports beliefs and feelings about technology (for instance, the highly techno-ready were very positive about these issues, whereas the low were negative about the uses of technology). As online shopping is a technology-mediated exchange it is reasonable to assume that techno-readiness will influence customers' feelings and sentiments towards both the internet as a shopping medium, but also various aspects of the shopping experience. Overall, as techno-readiness increased, the importance of website, trust and no adverts factors increased, while contactability importance decreased. As highly technologically adept, it is unsurprising that these customers placed lower value on traditional contact means. Increased importance of no adverts suggests the higher technology use groups, bombarded with adverts in general internet use, place great emphasis on avoiding this when purchasing. As technology-orientation increases, it is also unsurprising that they place greater value on website efficiency. The finding of increased importance on trust reflects the fact that it is not just those new to

the internet, or anti-technology customers, who place importance on being able to trust an online company. No impact was found across different TR groups for issues such as customer service, information provision or product range, suggesting these are cross-group issues of importance to all customers, and must be provided for all levels of technological adeptness.

P6. Familiarity (online experience) influences online service quality demands.

Three separate familiarity issues were addressed – familiarity with the internet as a purchase medium (itself measured with three separate items), familiarity with the company purchased from and with the general product class. Across all these issues a common theme was investigated – that the level of customer experience (and therefore associated familiarity, knowledge, ability and trust) would impact customer service requirements.

Level of usage has been found to alter behaviour and customer value (McDonald 1993, Lancaster et al. 2004, Palmer 2000, Zeithaml 2000), with calls that extra effort be made to keep high-value, high-usage customers satisfied (Kotler et al. 1999). As experience increases, so too does familiarity and knowledge of the purchase experience. As the customer learns more about what they will receive, it alters their expectations, as was identified in the final SEM in Chapter seven, and has been a consistent theme in the literature (Woodruff et al. 1983, Jaworski and Jocs 2002, Felcher et al. 2001, Parasuraman and Grewal 2000, Flint et al. 1997, Wilcox 2000). First time users' expectations will not be well-formed or informed (Carman 1990). Those with no experience of the product class or company may have different expectations again (Cadotte et al. 1987). While the trend of expectation change over time has been identified, the nature of these changes and impact on service requirements has not been established.

Past experience online (be it purchasing or more general usage) is likely to have a major impact on behaviour. Familiarity and past experience are found to reduce perceived purchase risk (Park and Stoel 2005, Cardozo 1980). Those familiar with the internet have been established as more likely to adopt online shopping (Karjaluoto et al. 2002, Kwak et al. 2001, Bellman et al. 1999, Koyuncu and Lien 2003, Dickerson and Gentry 1983, Yoh et al. 2003, O'Cass and Fenech 2003, Bhatnager and Ghose 2004). There has been far less research on how on how experience alters expectations on trust, or more generally. Greater experience has been shown to increase the associated trustworthiness of the purchase medium used (George 2002, Gefen 2000, Ha 2004). Wolfenbarger and Gilly (2003) note website design is the most important factor in predicting quality for frequent purchasers, and ZPM (2000) note the role

of experience in the desire for different aspects of service. Detailed consideration of the impact of experience on behaviour has now been conducted.

Considering the impact of internet familiarity, three issues were investigated: online history (comprising: a measure of length of time purchased online, frequency and amount spent); the number of online activities a person had conducted; and finally, the number of products purchased online. The online history produced disappointing results, with the only significant link found to reduce the importance of personalisation (perhaps a reflection that higher users of the internet do not feel the need for the personal or customised service that other users like). Those having purchased a higher number of products online stated increased importance of contactability and decreased importance of product range, reflections of the generally poor service received online, leading those purchasing more products to have an increased chance of receiving poor service and problems with contacting companies, so they now place greater importance on this issue. Further, as they purchase many products online, they are familiar with many websites, which would decrease the importance of product range of any one website as they know of alternate sources.

The measure of the number of online activities conducted provided the largest influence across service issues. As activities increased, customers placed less importance on website, trust, customer service and greater emphasis on personalisation. Such findings would represent those conducting many online activities being adept at using the online interface to achieve their tasks. They may prefer to customise or personalise the website and place less importance on the raw design of the website. Similarly, as those who have chosen to do a lot online, it is unsurprising they place little value on the issue of customer service. Those conducting fewer online activities, with little experience or knowledge of what to expect, as the literature suggests, value broad issues such as customer service, trust in the company and the website interface, not really appreciating or understanding the issue of personalisation. Such findings would broadly support the propositions in the literature regards experience and trust and customer learning, noted above.

P7. Familiarity (company experience) influences online service quality demands.

Considering specifically the issue of company experience (length of time purchasing with the company, amount spent and frequency of purchase), only three impacts were seen. Firstly, the higher usage customers placed less importance on contactability (as would be expected as new customers require the reassurance of contactability, in the absence of knowledge that service will be delivered as expected and wanting a back-up to correct service deficiencies). As

company usage increased there was increased importance of personalisation and product range, suggesting as customers use the company more, they become more demanding and seek to make the purchase experience more efficient – customising the website to improve transaction speed and requiring a greater product range in exchange for not shopping elsewhere. Thus, company experience can be confirmed as altering customer service demands on a factor-by-factor level, in addition to the moderating role that experience was found to have in the final SEM model in Chapter seven.

P8. Familiarity (of product type purchase) will influence online service quality demands.

In considering the final SEM model in Chapter seven, product class usage was found to have a weaker effect overall, than did company usage, on service importance. At the factor-by-factor level, however, product class has a slightly greater impact on service demands (as would be expected, as these customers may have less knowledge than those using the company for the first time, who may have previously shopped for the product type elsewhere). Product class purchase frequency was found to increase the importance of trust, customer service, personalisation and product range. In common with company experience, it would seem that product type experience leads to a search for greater efficiency (through website customisation and the desire for more products from a single site), whereas those with no experience are unsure of how these issues may be applicable in a new purchase environment. Similarly, the fact those purchasing the product type more often place greater importance on trust and customer service would suggest those new to purchase the product type are unsure of the level of service available on these issues in the new product marketplace, and undervalue their importance, relative to those with more experience. Such effects support the proposition that product type purchase frequency influences service quality demands.

As with all measures of familiarity, product type purchase frequency did not impact a wide range of service factors, suggesting that experience-based norms (Woodruff et al. 1983) do exist but that they are not universal across the purchase experience. Customers learn and alter behaviour as experience increases for some issues, but remain constant on others.

P9. Online ability (connection speed) influences online service quality demands

While connection speed is conceptually related to the issues of internet experience and activities (as this affects the customers physical ability to conduct these activities), it is a broader measure than familiarity, seeking to determine how those with different abilities to connect to the internet will alter their service requirements accordingly. In the final analysis,

connection speed was found to relate to information and product range factors. Those with slower connections placed greater importance on these issues than those with faster connections. Such a finding is logical, as those with faster internet connections are able to use many more websites as sources of information or purchase, and can search far more quickly for information or products, meaning they are less dependent on the one purchase company to provide these issues. Slower connections limit the ability of customers to search out new information or products. It is surprising that those with slower connections did not place greater importance on the no adverts factor or contactability factor, as these would be conceptually related to a slower internet connection (not having bandwidth to spare for adverts and wanting a reliable non-internet means of contacting the company). However, it appears these issues are of the same (high) importance to customers regardless of connection speed.

P10. Retail dependent customers will exhibit different service quality requirements to those who do not.

Different customer types have been shown to have preferences for types of different types of shopping activity (Stone 1954, Williams et al. 1978, Bellenger and Korgaonkar 1980, Korgaonkar 1981). Evidence that different customer types do have different online shopping requirements (Girard et al. 2003, Keen et al. 2004). Retail dependence signifies a customer's preference for retail shopping. This includes both the preference for using established high street retail companies when shopping online and the choice to shop from a company that is only reachable via the internet (that is, no telephone or postal address is provided). Retail channel presence can create brand familiarity and trust in the company when shopping online (Stewart 2003, Park and Stoel 2005). This is an important issue with many customers still mistrusting the internet and in need of such reassurance (Reardon and McCorkle 2002, Bhatnager and Ghose 2004, Mols 2000, Karjaluo et al. 2002).

As preference for high street names increased, so too did the importance of two factors – personalisation and company image. As a measure of brand utilisation, it is appealing that those with greater dependence on offline brands placed greater value on the online company's image, while the increased importance of personalisation to retail-dependent customers would suggest this is seen as a surrogate for the personal service available in retail stores.

Those customers stating increased likelihood of shopping from an online-only company (the opposite of the previous retail-dependence measure), placed reduced emphasis on company image, contactability and website. The link between the website, as a representation of the company's credibility, and the direct company image, are of less importance to those

customers who are least, or not retail dependent, as they do not require this reassurance. As a measure of shopping from a company only reachable online, the decreased importance of contactability (which measures contact ability through telephone support) is conceptually appealing and supports the measure.

From these two issues we can conclude that retail-dependence does alter customers service requirements. Increased retail-dependence leads to increased importance of personal service, company image, and decreased importance of website, contact and image as retail dependence abates. The role of assurance-generating factors (like image and website) for retail-dependent customers supports the literature assertions regards the role of assurance in online shopping (Stewart 2003, Park and Stoel 2005, Reardon and McCorkle 2002, Bhatnager and Ghose 2004, Mols 2000, Karjaluo et al. 2002). It also supports the preference of customers with certain shopping styles (a retail-dependent style) for certain behaviours (preference for personal service) (Stone 1954, Williams et al. 1978, Bellenger and Korgaonkar 1980, Korgaonkar 1981, Girard et al. 2003, Keen et al. 2004).

Whether the customer had returned products to the company was also proposed as important. The easier transaction of returning products to an offline retailer than online company suggested that those who had experienced the online returns process may have been reassured about the robustness of the companies service proposition and ability to deliver, and thus adjust their expectations. In practice however, no significant impact was found in service requirements between those customers who had returned, and those who had not returned products to the company, suggesting this is a tertiary issue rather than a core factor that influences service demands.

P11. Impulse purchasers and planned purchasers will have different online service quality demands.

The differing ability of internet and retail channels to prompt impulse buys through technological manipulation versus product placement have been noted (Girard et al. 2003, Strategic Direction 2000). Alteration in shopping behaviour based on an impulse versus planned buy has been suggested (Smith and Sivakumar 2004, Cotte et al. 2000). Differences in behaviour emergent in goal-directed and non-goal directed buyers have been noted (Hoffman and Yang 2000). The suggestion is that online shoppers are goal-directed (Wolfenbarger and Gilly 2001). The service quality requirements of an impulse buyer versus planned purchaser have not been considered at all. However, differences in buyer direction would suggest some influence on the service demands such customers make on the company.

In the research, only one difference emerged related to the level of spontaneity or planning involved – as planning increases, so too does the importance of the ability to contact the company. This suggests impulse buyers are more interested in actually receiving the product, than thinking through all possible options of query or problem rectification that contactability would support. The findings verify that impulse versus planned buyers show some minor difference in service requirements, but only on one of nine factors, suggesting this as a minor situational influence.

P12. The level and nature of loyalty (behavioural versus attitudinal) will influence online service quality demands.

Longstanding research has highlighted the importance of customer loyalty for organisational success, profitability and marketing understanding and emphasises the complex nature of the loyalty issue (Lim and Razzaque 1997, Stern and Hammond 2004, Lancaster et al. 2004, Kotler et al. 1999, Zeithaml 2000, Storbacka and Luukinen 1996, Ha 1998). Divergent definitions of loyalty appear in the literature. Some emphasise loyalty in terms of behavioural measure of use frequency (Budman 2005, Ha 1998, Lim and Razzaque 1997, Dick and Basu 1994, Baldinger and Rubinson 1996), and others focus on a positive commitment or attitude towards the company as a true measure of cognitive, compelling loyalty (Ha 1998, Zeithaml 2000, Baldinger and Rubinson 1996, Day 1969, Jacoby and Chestnut 1978).

While behavioural loyalty measures whether the customer keeps coming back to the company, it fails to identify whether this is because the customer is satisfied and pleased with the company's offering or simply because there are no substitutes or alternatives. If such substitutes emerge, then behaviourally loyal customers will transfer their business to the substitutes (Day 1969, Neal 2000, Budman 2005, Ha 1998). Customers of different loyalty may act in different ways (Martilla and James 1977, Reicheld 1993). Behaviourally loyal and attitudinally loyal customers operate different standards (Smith and Swinyard 1983, Baldinger and Rubinson 1996, Lim and Razzaque 1997). This reflects their different reactions to satisfaction/dissatisfaction from the same service delivery, and thus they may have different service quality requirements. This issue has not previously been thoroughly examined online or offline.

Three loyalty measures were taken in this research – a measure of the number of different companies used by the customer, a measure of behavioural loyalty (shopping with the company as no alternatives exist), and a measure of attitudinal loyalty (shopping with the company as their needs are best met by them). As the number of companies purchased from decreased, then customers placed greater importance on website, contact, personalisation and

image factors. This suggests that these issues are important to those who frequently use the company, whereas attitudinally loyal expressed greater importance on all factors except contact, personalisation and company image. This highlights a clear divergence between those shopping with a fewer number of companies (which would typically define traditional loyalty) and those identifying the company as best meeting their needs. Those customers increasingly behaviourally loyal expressed greater importance on personalisation and company image, suggesting that these factors are required for getting customers to come back to the company. The attitudinally loyal did not place such great importance on them. These results clearly highlight the difference in behaviours by attitude and behavioural loyalty, and suggest that identification of such customers can serve as a valuable tool for understanding the marketplace.

P13. High and low involvement customers will have different online service quality demands

The impact of a customer's involvement level in terms of perceived personal relevance or purchase importance, as an influence on behaviour, is well established (Homburg 2001z, Greenwald and Leavitt 1984, Hsu and Lee 2003, Teichert and Rost 2003, Laurent and Kapferer 1985, 1986, Mittal 1995). Similarly, the importance of involvement for marketing and customer understanding is noted (Chebat and Picard 1985, Williams et al. 1978).

Several common trends are identifiable – increased involvement leads to an increased desire to engage in relationships with companies (Varki and Wong 2003). It increases time spent on shopping and the number of alternatives considered (Karaatli 2002), and also increases search and information requirements (Beatty and Smith 1987, Beatty et al. 1988, Slama and Tashcian 1985). One of the few studies to link involvement to specific service quality issues found some increased involvement leading to increased desire for fair treatment and problem resolution seeking (Varki and Wong 2003). It is unclear what impact purchase involvement has on online service requirements. Two measures of purchase involvement were taken – a simple measure of whether the customer had researched the product prior to purchase, and a computed multi-item measure from validated scale items.

The simple measure of pre-purchase research was found to have no impact on any service requirements, suggesting this measure may have been over-simplistic and not adequate to construct a reliable measure of purchase involvement. The computed, multi-item purchase involvement measure exerted some of the greatest influences on behaviour, with increased purchase involvement increasing the importance of all items except trust and no adverts. Given the wealth of previous research linking greater purchase involvement to information

search, processing and general expectations in the company (Varki and Wong 2003, Karaatli 2002), Beatty and Smith 1987, Beatty et al. 1988, Slama and Tashcian 1985, Varki and Wong 2003, Homburg 2001z, Greenwald and Leavitt 1984, Hsu and Lee 2003, Teichert and Rost 2003, Laurent and Kapferer 1985, 1986, Mittal 1995), it is unsurprising that purchase involvement online increased demands for almost all service factors. Considering the two factors that did not show impact by increased purchase involvement - trust and no adverts - these were both factors highly important to the customers overall and issues that would conceptually be required for even low involvement purchases (a desire to have a trustworthy company and not be troubled with adverts). Such a proposal is supported by Mital and Lee (1988), who noted that there may common ground on some issues across involvement levels, while extreme deviation may occur on other issues. Teichert and Rost (2003) who highlight the multi-faceted and complex nature of involvement. Overall, the findings clearly indicated that purchase involvement is a very important impact on online customer service requirements.

P14. Customers paying different prices will exhibit different online service quality demands.

Price is acknowledged as a highly important and complex marketing variable (Lichtenstein et al. 1993, Byoungcho et al. 2003, Willenborg and Pitts 1977). Several pricing issues are of concern here. Price and quality have been linked with higher price signifying higher quality (Ong 1994, Janiszewski and Lichtenstein 1999, Chandrashekar and Harsharanjeet 1995, Erickson and Johansson 1985, de Chernatony et al. 1992, Biswas 1992, Zeithaml 1988, Lichtenstein et al. 1993). Some researchers have looked at price in simple terms, comparing customer expectations of the company's price to competitors, to identify how behaviour varies by price levels and perceptions of fairness (Woodside 1971, Israel et al. 1991, Boyd and Bhat 1998, Ranaweera and Neely 2003, Jensen et al. 2003, Lichtenstein et al. 1993). Others have identified familiarity, shopping and search motivations as all altering with price perceptions (Suri et al. 2003a, Rajneesh et al. 2003).

Online customers are demanding and receive lower prices than in the offline channel (Jensen et al. 2003, Brynjolfsson and Smith 2000). Some speculate that price plays a different role online (Jensen et al. 2003, Xia and Monroe 2004). Others have suggested the price-quality link still applies in the internet environment (Jiang 2003). A continued lack of detailed research on price perceptions in the online marketplace (Jiang and Rosenblum 2005), requires consideration be given to pricing issues as a potential source of situational influence. Five separate pricing issues have been considered within this thesis: (i) a basic measurement of purchase value has been taken; (ii) customers stated importance of low price; (iii) customers

stated importance of high quality service; (iv) a measure of the positive role of price (as a quality indicator); and, (v) the negative role of price (as searching for lower prices as not being worth the time and effort).

Addressing the specific proposition above, concerning the actual amount paid by the customers, no impact was found on any service factor. Considering the sample, the majority of customers were paying relatively small amounts (under £50), due to the nature of the product (DVDs). However, some were spending more (over £200), but surprisingly no alteration in behaviour was being seen. It appears, therefore, that given the sample and product type used here, purchase value does not actually impact behaviour. If there were major differences in amount spent (£20 versus £1000), then it is possible that differences would appear, and that the range of prices spent by customers here is too narrow to show differences in behaviour.

P15. Customers exhibiting different levels of each price orientation will exhibit different online service quality demands.

Considering the more complex issues regarding price orientations, differences did emerge in service requirements. Those customers placing increased importance on low price showed increased service demands for website, trust and no adverts factors with no reduced importance shown on any factors. This would suggest even those placing low price as very important are unwilling to sacrifice any service standards, and actually expect more on certain issues. This firmly emphasises that low price in the online environment is simply not enough, and that customer service quality must be delivered to keep customers (PZM 2005).

The related issue of the importance of high quality service was positively linked to the issue of customer service, a conceptually-linked measure. However, surprisingly no other differences were seen with any factor, suggesting that even those for whom high quality service is not of increased importance, service issues in general are still important. This underlines the point made above that online businesses must offer service quality to all customers, and that no trade-off is made, such that support on one issue (such as low price or convenience) allows for reduced service delivery (PZM 2005).

The role of price as a quality indicator (the positive role of price) can be seen as a simplifying behaviour, in much the same way as brand dependence. Rather than logically deduce an outcome from information search and evaluation, price is seen as a direct signal of quality that allows the customer to quickly decide on the quality of an item or company. Those stating increased importance of price as a quality indicator, showed increased importance on

personalisation and company image. As a brand reassurance, company image is conceptually related to the simplifying measure of price as a quality signal so it is unsurprising that those using one simplifying measure express greater importance for a related measure. The increased importance placed on personalisation would suggest that the ability of the company to suggest products and customise the website may provide a simplified means of product search and purchase that customers value, in addition to image or price-quality signals.

The negative role of price where customers view the search for low prices as not worth the effort was found to reduce the importance of website, trust, customer service and information factors. More plainly customers who think it is worthwhile searching for low prices place greater emphasis on website, trust, customer service and information factors. Two possibilities arise – that such customers expect these issues to be present in higher levels for them to remain with the company (and not invest time in searching for lower prices elsewhere), or that when searching for low prices, low price alone is not enough and that these service issues must be present. The search for low price is supported by a search for information both directly, through the website and customer service, while even where a low price is available the company must still be trustworthy.

Overall these results reflect the complex nature of price (Lichtenstein et al. 1993, Byoungho et al. 2003, Willenborg and Pitts 1977). They support the proposition of behaviour altering under different positive and negative stances on price (Ong 1994, Janiszewski and Lichtenstein 1999, Chandrashekar and Harsharanjeet 1995, Erickson and Johansson 1985, de Chernatony et al. 1992, Biswas 1992, Zeithaml 1988, Lichtenstein et al. 1993, Woodside 1971, Israel et al. 1991, Boyd and Bhat 1998, Ranaweera and Neely 2003, Jensen et al. 2003, Lichtenstein et al. 1993).

P16. Customers with different amounts of time available to shop will exhibit different online service quality demands.

Customers with different pressures on their time have been noted as enacting different shopping behaviour (Lazer and Smallwood 1972, Lee and Ferber 1977, Schaninger and Allen 1981, Cotte et al. 2004). Researchers have noted increasingly hectic consumer lifestyles describing a 'time poverty' (Michman 1984, Blackwell and Talarzyk 1983, Gofton 1995), with a major reason for online shopping the desire to shop faster, more conveniently and efficiently (Bellman et al. 1999, Reardon and McCorkle 2002, Karjaluo et al. 2002, Isaac 2003, Stark 2000, Samji and Gray 2002). Research has noted greater search effort as free time increases (Beatty and Smith 1987), as well as differences in information processing (Lehmann and

Moore 1983). Previous research has not however considered in detail how different time lifestyles impact shopping behaviours.

Time capacity was found to be one of the top influences on service demands in this research. Increasingly hectic consumers report greater importance on customer service, information, contactability, no adverts, personalisation and product range factors. Considering these issues, a lack of time is conceptually related to several factors: less time would mean a preference for a company that carried a full product range with all information required about the products so time does not need to be expended searching for the products, or information elsewhere. This supports the findings on search process of Beatty and Smith (1987) and Lehmann and Moore (1983). Personalisation can improve the efficiency of the website, making purchasing more efficient. With less time available to shop, the distraction of advertisements would be unwelcome, while a lack of time to rectify any problems would place increased importance on customer service, and the ability to contact the company in the event of problems. Thus, it is possible to conclude that time capacity is a major influence on customer service demands.

P17. Demographics will have less of an impact on customers online service quality requirements than situational / contextual variables.

Despite several decades of research on ServQual, the impact of demographic or other influences on service-quality demands has been a starkly under-research area. There has been little investigation of how such issues might alter customer demands, despite the clear potential and likelihood of such impact (PZB 1985, Buttle 1996, ZPM 2002b, ZBP 1993). Those who have investigated demographic influences on ServQual have found mixed results with little clear, or concise, conceptually appealing or logical pattern emergent (Webster 1989, Gagliano and Hathcote 1994). Such a finding indicates the need for investigating impacts on service quality, and also the need for a better means of analysis than simple demographics, the limits of which have been acknowledged for some time (Day 1969, Dickerson and Gentry 1983, Bucklin et al. 1995, Rossi et al. 1996, Palmer 2000, Fennell et al. 2002). Despite such acknowledgements and investigations into related market fragmentation, disintegration and dis-aggregation, such historical reviews (Sheth et al. 2000, 2001, Kotler 2001), or new propositions such as postmodern or 'new' marketing (Brown 2001, 2003, 2005; McDonald and Wilson 2002), have failed to provide a workable replacement tool for demographics.

A review of the literature on the potential impacts on online and offline customer demands produced a wide range of situational influences, that have been investigated for their impact on the verified online service quality structure identified here (the details of which are discussed below). From this analysis, structural equation modelling verified which situations

and demographics played a significant role in altering customers' stated service importance on a factor-by-factor basis, allowing a comparison of situational and demographic influence (shown in Table 9.36).

Table 9.36 Demographic and Situational Effects on Factor Importance

	Demographics Total Effect	Situational Total Effect
Website	0.100	0.566
Trust	0.036	0.286
Customer Service	0.045	0.371
Information	0.217	0.297
Contactability	0.111	0.741
No Adverts	0.072	0.140
Personalisation	0.234	1.112
Company Image	0.320	0.732
Product Range	0.352	1.082
Total Effect	1.487	5.327

Across the model as a whole, the overall impact of both situations and demographics varied by factor. For instance, the trust factor, which should be important to a broad section of marketplace, showed less overall influence than an issue such as product range, which would be of more or less importance depending on the person or situation. Considering this variation as a natural artefact of the service factor described, a direct comparison of impact on a factor-by-factor basis can be conducted. It is clear that on all service issues, situations cause greater shifts in customers stated importance than demographics alone, supporting the earlier findings from regression, that demonstrated the same finding.

Thus, it is possible to clearly and concisely conclude that situations play a far greater role in altering customer expectations than simple demographics. This supports those who have highlighted the failures of demographics (Day 1969, Dickerson and Gentry 1983, Bucklin et al. 1995, Rossi et al. 1996, Palmer 2000, Fennell et al. 2002, Brown 2001, 2003, 2005; McDonald and Wilson 2002, Sheth et al. 2000, 2001, Kotler 2001). This produces a simple and workable, quantitative tool that is easily replicable, to describe a superior alternative to demographic segmentation.

9.7 Conclusion

An extensive literature search has been conducted (shown in Chapter four), to generate a potential source list of situations which may impact customer behaviour, both in general and

to a greater extent than traditional demographic measures. This chapter has reported on investigation to assess the usefulness of each situation, and then situations as a whole as a basis of market segmentation. In previous results chapters, a new model of online service quality has been developed, and the organisational issues in service delivery considered. The model forms the basis of investigations conducted in this chapter to address the final research question: "*What is the impact of purchase situations on customer service quality demands online ?*"

Within this question, a series of propositions were developed for each situation/demographic influence. The first proposition within this question regarded the impact on demands by product type. Each of the four companies, whose customers were surveyed, operates in a different product market and offers principally only one class of product. It was possible, therefore, to compare the profile of the customer base of each company which verified significant differences between each company. As a result of this finding, to 'control out' potential variance in customer responses by product type, the overall sample was broken down into four sections (one for each company), which were then assessed independently in this chapter, to address the issues of whether situational variables or demographics accounted for more difference in customer stated service requirements.

To analyse the impact of situations and demographics on customer service demands, a multi-stage, iterative process was used, to investigate and verify the impact of the wide range of situational and demographic variables suggested in the literature review. The first stage used univariate correlation and multi-variate regressions for each company, on each service quality factor. This suggested that in the majority of situations and demographics did impact on customer behaviour, while comparison of regression results suggested demographics accounted for far less variation in stated service importance in all four companies, than the situations described (shown in Table 9.7).

These initial results also provided a finding that only one company (EntzCo) was reporting a large variety of influences on service importance. This company had a sample three to four times larger than the other three companies, suggesting that a very large sample is required to detect variances in the large number of demographics and situations and considered. Confirmatory investigation into situational/demographic influence therefore focused solely on the results of EntzCo. Through an iterative, factor-by-factor analysis, the significance of situations and demographics was verified until final models were generated, which included only those situations and demographics that had a statistically significant effect on the stated

importance of each factor. A list of the situations and demographics which influenced each factor was compiled (shown in Table 9.35). While some situational influences can clearly be dismissed as having no impact, the process verified the proposed situation and demographic constructs as exerting influence on various aspects of service demands. The overall impact of each situational and demographic influence on these factors was discussed and referred back to the literature. While some situational influences were dismissed as having no impact, and several demographic and situations showed only minimal impact, the findings as a whole verified the proposed situation and demographic constructs as exerting influence on various aspects of service demands.

The final stage of research comprised a comparison of the direct effects of situations versus demographics on each service importance factor. For each factor, the findings clearly indicated that the measured effect of situations on service importance was far greater than that of demographic measures, supporting the belief that demographics no longer provide the best means of market analysis or segmentation, and supporting those who have highlighted the failures of demographics (Day 1969, Dickerson and Gentry 1983, Bucklin et al. 1995, Rossi et al. 1996, Palmer 2000, Fennell et al. 2002, Brown 2001, 2003, 2005; McDonald and Wilson 2002, Sheth et al. 2000, 2001, Kotler 2001). This analysis has provided for the first time a simple and workable, quantitative tool that is easily replicable, to describe a superior alternative to demographic segmentation.

This thesis has, as a whole, sought to investigate the impact of different issues on customers in online retailing. An extensive literature suggested a framework for analysing customer service demands (ServQual), raised questions as to traditional demographic tools for segmenting markets, and suggested situations as potentially superior. The study also extended these issues into the inner workings of the supplying organisation. An holistic approach to research has sought to address the multiple issues of market analysis, market segmentation and market service. The last three chapters have reported on the construction of a new model of online customer service demands, which is more comprehensive and validated than previous models. The work has looked at the ways in which this model can be applied operationally to market segmentation. The study produces, for the first time, a quantifiable, verified model of post-demographic market analysis. The work has broken from traditional marketing research, and taken an holistic approach. It examines not just the customer market, but also how organisations serve it, finding suggestive findings on marketing-operations relationships that warrant further investigation. The final chapter brings together these issues, and addresses the implications and limitations of the work reported.

Chapter 10. Conclusions, Implications, Limitations and Future Research Directions

10.1 Introduction

The importance of delivering high quality services is of paramount importance to the firm in an era of value demanding customers and intense competition (Fornell 1995, Berry Zeithaml and Parasuraman 1990, Babakus and Boller 1992, Parasuraman and Grewel 2000, Zeithaml 2000). A fundamental tenet in such delivery is the first step of generation and utilisation of customer intelligence (Keener 1960, Kotler 1972, Greyser 1998, Kotler 1999, Slater and Narver 2000, Genestre and Herbig 1996, Cronin and Taylor 1992, Oliver et al. 1997). Nowhere is this more true than in the hyper-competitive internet marketplace (Parasuraman et al. 2005, Zeithaml et al. 2000, Wolfenbarger and Gilly 2003, Porter 2001), where research to date has been extremely limited and has failed to yet produce a comprehensive model of online service quality (Wolfenbarger and Gilly 2002, 2003, Yang and Jun 2002, Loiacono et al. 2002, ZPM 2002b, PZM 2005, Chen and Wells 1999, Busch 1999). The inseparable organisational side of service delivery remains considered in isolation to customer analysis in the vast majority of works studying both online and offline consumption (Heskett et al. 1994, Chenet et al. 1999, Bitner 1990, Brown and Swartz 1989, Peiro et al. 2005).

The disintegration and fragmentation increasingly noted in the contemporary marketplace (Sheth et al. 2001, Tedlow 1990, McDonald and Wilson 2002, Brown 1993a, 1993b, 2001, 2003, 2005; Baker 2003) has also provided a confounding influence, with customers unwilling to fit established marketing patterns and to segment according to standard demographic forces (Rossi et al. 1996, Homburg 2001z, Fennell et al. 2002, Bellman et al. 1999, Karjalutot et al. 2002, Modahl 2000, Bellman et al. 1999, Bhatnager and Ghose 2004, Beal et al. 2002, Smith and Sivakumar 2004). Proposals for alternate methods of segmentation are long-standing, but, no verified and validated tool for comprehensively analysing the online customer has yet been established (Day 1969, Engel et al. 1969, Ward and Robinson 1973, Belk 1975, Silpakit and Fisk 1985, Bucklin et al. 1985, Dickerson and Gentry 1983 Kay 1993 Gehrt and Pinto 1990, 1993).

This thesis sets out to address, in an holistic manner, the issue of online service quality in the contemporary marketplace. This holism refers to the analysis of customer service requirements and managerial understanding within a single body of work, as well as the issue of how to divide the final marketplace with methods superior to standard demographic tools. Three distinct issues are thus addressed: (i) the identification of customer demands online; (ii) the determination of what impacts on these demands, and may therefore be considered a useful base for segmenting this marketplace; and finally, (iii) the organisational issues involved in meeting these variable demands – how managers in the value-creating areas of the company understand and service the marketplace.

10.2 Literature Review to Generate Research Questions

In seeking to determine what customers demand from online service, a validated, verified and reliable tool was needed as the basis of such an undertaking. The tool identified was the service quality tool, ServQual (PZB 1988, ZBP 1990), as ‘the most popular measure of service quality’ and ‘perhaps the most standardized questionnaire to measure service quality’ (Asubonteng et al. 1996). ServQual has been adopted, applied and verified in a wide range of industries and sectors (Caruana et al. 2000, Brown et al. 1993, Asubonteng 1996, Carman 1990, PZB 1994, 1994a, Buttle 1996, Babakus and Mangold 1992). It was deemed suitably robust in itself, and due to the wide ranging adaptations made, suitably critiqued to allow the identification of short-comings and modifications required.

From an analysis of ServQual (in Chapter two), several issues emerged: the need for considerable adaptation for the electronic marketplace in terms of specific service criteria (ZPM 2000, PZM 2005); uncertainty regarding the of use gap-scores in service research (Van Dyke et al. 1997, Babakus and Boller 1992, Caruana et al. 2000, Cronin and Taylor 1992, Carman 1990, Prakash 1984, Peter et al. 1993, Brown et al. 1993); and, confusion over the nature and value of the expectations component (Teas 1993a, 1993b, Tse and Wilton 1988, Boulding et al. 1993, Woodruff et al. 1983, Carman 1999, Buttle 1996). Following a detailed review of the literature, it was decided that the value of including both performance and prior customer requirements in a single analysis, such as the richer diagnostic information, managerial relevance and ability to generalise findings beyond the specific purchase situation (PBZ 1993, Buttle 1996), required some form of requirements measurement.

Due to the problems of the expectations component of ServQual, the approach has been modified to focus on item importance rather than expectations, mirroring the Importance-Performance Analysis approach (Martilla and James 1977, O’Neill et al 2001, Lovelock et al.

1998, Ford et al. 1999, Hudson et al. 2003, Hawes and Rao 1985). The use of importance instead of expectations is supported in application of ServQual surveys (Cravens et al. 1985), and conceptually due to confusion over whether customers interpret expectations as importance anyway (Teas 1993b) and has been suggested in the literature and practice as a superior model (Hemassi and Strong 1994, Ford et al. 1999, Hudson et al. 2004).

In developing the ServQual instrument, PBZ (1988) always noted that it formed a basic skeleton, with additions and removals possible dependent on context. Thus, it is within the scope of ServQual to apply such modification for the internet environment. The process of this adaptation required a detailed review of pre-existing works on online or electronic service quality, conducted within Chapter three. With varied validity and rigour in the development of academic and industrial scales, the majority of works on online service quality do not provide a clear or consistent picture of customers' demands in internet shopping (ZPM 2000, Chen and Wells 1999, Busch 1999, Wolfinbarger and Gilly 2002, 2003, Yang and Jun 2002). While PZB (2005) have attempted to generate a new electronic service quality model to replace ServQual online, there is yet to be any investigation of the validity of this model, and many have already criticised both construction and content, most notably the strange separation of customer service and recovery that may misdiagnose customer service (Collier and Bienstock 2003, Wolfinbarger and Gilly 2003).

A broad review of studies into online service quality, produced three clearly emergent themes vital to customer service: (i) website design (Chen and Wells 1999, Lang 2001, Barnes and Vidgen 2002, Centre for International Economics 2001, Wyner 2001, De Chernatony and McDonald 1998, Bertagnoli 2001, Donovan et al. 1994, Maklan et al. 2002, Resource Marketing 2000, Dodson 2001); (ii) trust and security in the company (eMarketer 2003, American Bankers Association 2004, Horrigan 2000, Harrison 2000a, Harrison 2000b, Pickering 2000, Dunnhumby 2001, Wyner 2001, Ratchford et al. 2001, Maklan et al. 2002, Harris and Goode 2004, McKinnon and Tallam 2002); and, (iii) the importance of fulfilment and delivery, which emphasised the need for organisational alignment and service delivery to the market (Porter 2001, Jones and Simons 2000, Cooke 2000, Saenz 2001, Hogan 2001, Browne and Jackson 2001, Parker and Gulliford 1996, Chen and Leteney 2000, McKinnon and Tallam 2002, Lewis 2001, Collinge 2000, Watson 2005, Bromage 2001). The clear emergence of this latter theme strongly supports the need to unify customer and organisational analysis in a single body of work. This review identified these broad themes, however, the noted lack of validated and replicated research into online service quality

required further investigation into the metrics of online service quality, and identified the first research question regarding the determination of online customer service quality:

What are customers service quality demands online?

The impacts upon these service demands was the next concern addressed – specifically what issues may alter the online service requirements of customers. A review of approaches to market segmentation, conducted in Chapter four, highlighted that traditional models of segmentation have been based on demographic or psychographic variables, but that researchers as far back as the 1960s have identified severe shortcomings in demographic segmentation (Day 1969, Rossi et al. 1996, Bucklin et al. 1985, Dickerson and Gentry 1983, Homburg 2001z, Fennell et al. 2002).

In the online marketplace there is increasing consensus that, just as offline, demographics provide rough guides about product-class usage but little information about brand usage or behaviour (Bellman et al. 1999, Karjalutot et al. 2002, Modahl, 2000, Bellman et al. 1999, Bhatnager and Ghose 2004). Several contemporary research trends have also emphasised the increasing fragmentation of the marketplace and customer behaviour (McDonald and Wilson 2002, Brown 1993a, 1993b, 2001, 2003, 2005; Baker 2003). Several have suggested that purchase situations may form a more useful basis of market segmentation (Engel et al. 1969, Ward and Robinson 1973, Belk 1975, Silpakit and Fisk 1985, Beal et al. 2002, Gehrt and Pinto 1990, 1993). Potential applications are both online and other technology-related areas (Smith and Sivakumar 2004, Kay 1993). A broad review of the literature revealed a wide range of potential sources of variation in purchase situations, but also highlighted a lack of any holistic consideration bringing together all these different issues either online or in the offline marketplace. Thus, the second research question here concerns how different situations, revealed through the literature review, may impact on customer requirements:

What is the impact of purchase situations on customer service quality demands online?

Within this general question, several specific propositions were developed based on the purchase cues and situations that the literature suggested as sources of influence on customer behaviour. These are discussed at length in Chapter four and summarised below:

- 1. Product type will impact customer service quality requirements online.*
- 2. Demographics will have an impact on customers online service quality requirements.*
- 3. Information overload or brand dependence will impact customer service quality requirements online.*
- 4. People buying for business, personal or gift purposes will have different service quality requirements.*
- 5. Familiarity ('techno-readiness') influences online service quality demands.*

6. *Familiarity (online experience) influences online service quality demands.*
7. *Familiarity (company experience) influences online service quality demands.*
8. *Familiarity (of product type purchase) will influence online service quality demands.*
9. *Online ability (connection speed) influences online service quality demands*
10. *Customers who prefer shopping online from high street retail names will exhibit different service quality requirements to those who do not.*
11. *Impulse purchasers and planned purchasers will have different online service quality demands.*
12. *The level and nature of loyalty (behavioural versus attitudinal) will influence online service quality demands.*
13. *High and low involvement customers will have different online service quality demands*
14. *Customers paying different prices will exhibit different online service quality demands.*
15. *Customers exhibiting different levels of each price orientation will exhibit different online service quality demands.*
16. *Customers with different amounts of time available to shop will exhibit different online service quality demands.*
17. *Demographics will have less of an impact on customers online service quality requirements than situational / contextual variables.*

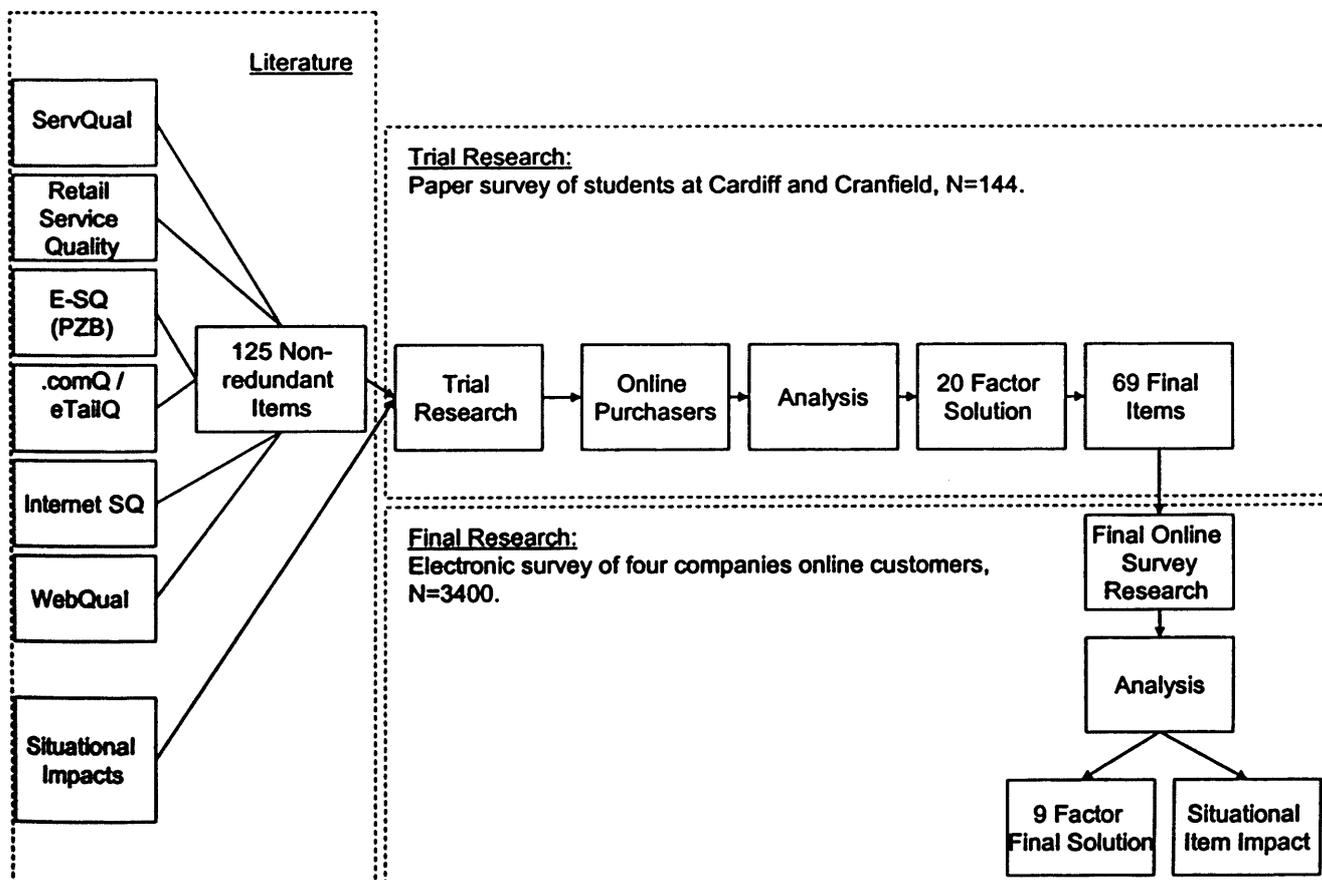
The third research theme concerns the extension of customer service quality research into the organisation providing the service. This extension is based on a desire to present an holistic analysis that considers the organisational processes that deliver service quality, rather than simply analysing customers' requirements in isolation. Such a desire echoes the original work in ServQual (PZB 1984, ZBP 1990), although almost all replications of ServQual have focused solely on customer analysis. The literature highlighted several key trends: (i) the importance and need to move beyond simple measures of customer requirements and performance to analyse the sources of the organisational systems that fulfil these requirements (Chenet et al. 1999, Heskett et al. 1994, Schlesinger and Heskett 1991, Bitner 1990); (ii) discrepancies between customer reports and managerial understanding (Deshpande et al. 1993, 1997); (iii) the cross-functional nature of service delivery as beyond the role of any single organisational function (Hausman et al. 2002, Fitzsimmons et al. 1991, Davenport 1993, Deshpande 1999, Min and Mentzer 2000, Christopher 1991, Ellinger 2000, Ruekert and Walker 1987, Chopra et al. 2004); (iv) the role of the marketing and operations areas as the two principal 'value creating' functions in this cross-functional delivery (Porter 1985); and, (v) a problematic relationship between these functions in practice (Shapiro 1977, Berry et al. 1991a, Berry et al. 1995, Hausman et al. 2002). From this review, it was apparent that there was a need to determine the level of customer understanding and orientation in both marketing and operations departments and how this impacted upon service delivery in practice, stated thus:

What differences exist in the marketing versus operations views and orientation towards customer priorities?

10.3 Research Methodology Employed

Due to the wide range of issues generated from the literature review leading to these three research questions, and the desire for rigorous validation and reliability analysis of findings, a quantitative approach was employed. The first stage of this process concerned the compilation of a survey to address the issues in the customer marketplace. The literature review produced a significant number of themes and validated items, so it was not felt necessary to revert to primary focus group or interview research to compile the survey instruments. The principal sources used to compile the service analysis section of the survey comprised major works on online and offline service quality. Those works on online service included: E-ServQual (Zeithaml et al. 2000, Parasuraman et al. 2005); .comQ/eTailQ (Wolfenbarger and Gilly 2002); Internet Service Quality (Yang and Jun 2002); and, WebQual (Loiacono et al. 2002). The works reviewed that looked at the offline marketplace were: Retail Service Quality (Dabholkar et al. 1996); and, the original ServQual measure (Zeithaml et al. 1990). The wide-ranging literature review also provided a wide range of potential purchase situations that were compiled into survey statements for the customer survey. These issues were synthesised and analysed using the process highlighted in Figure 10.1.

Figure 10.1 Customer Research Process



To verify the content of the customer research instrument, and to reduce the list of service items compiled (n=125) to a shorter and more practical list for final research, this survey was first focus group tested on university students (which suggested layout revisions), and then put out to formal test (n=144), which led to several wording adjustments and the reduction of service items through factor analysis to a shorter list (n=69). This initial research also served to verify the belief that purchase situations did indeed impact on online service requirements. To conduct the formal research application, four companies in different marketplaces were recruited. Two were online only 'pure plays', while two were established retail companies who also operated an internet sales channels. An electronic survey of their customers provided a large sample (n=3403) for final analysis, to address the stated research questions, which provided a new model of online service requirements and the impacts upon them. This process is highlighted in Figure 10.1.

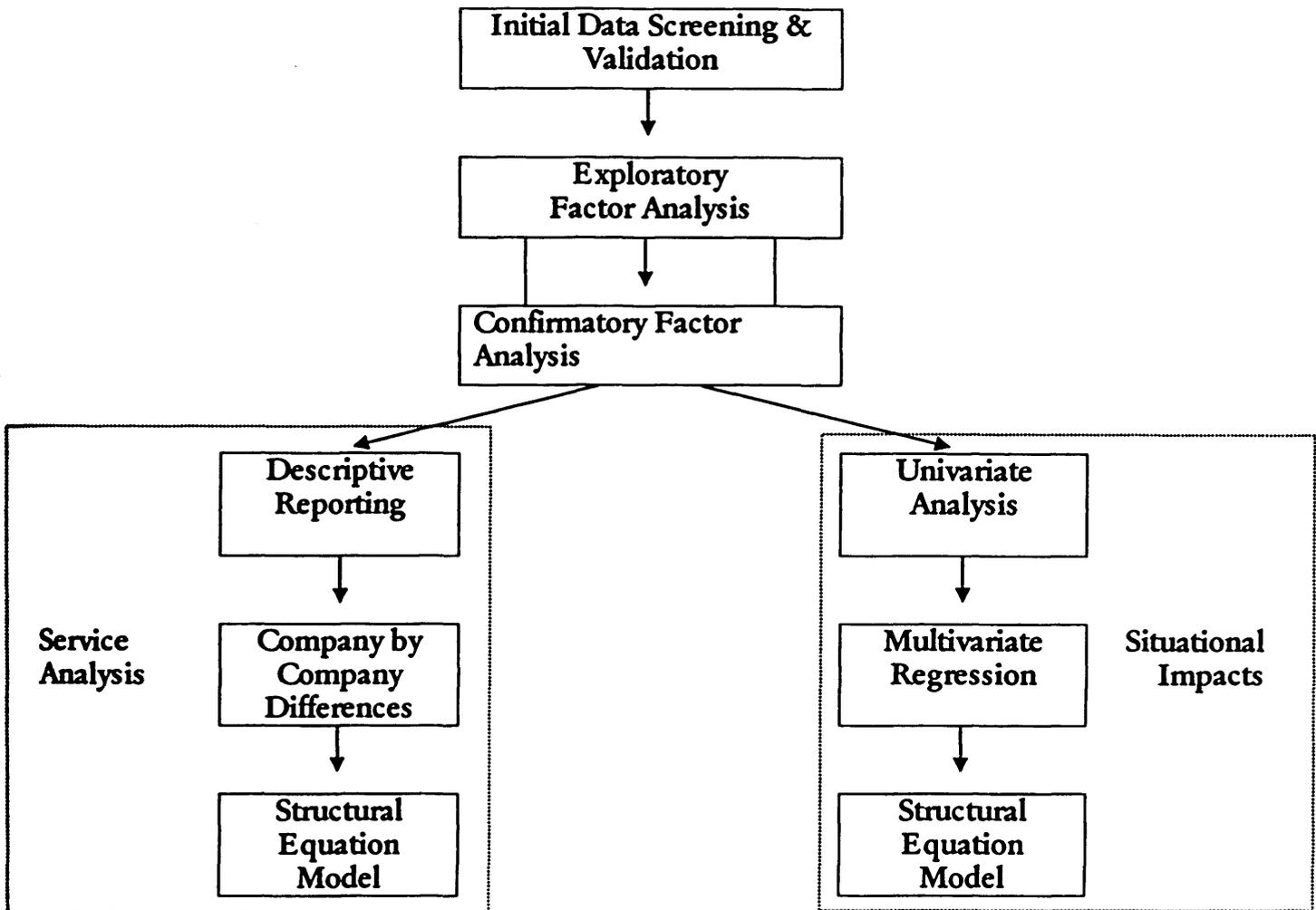
The organisational section of research, while deemed vital to fully address the issue of online service, was a far smaller portion of the research conducted. It comprised a survey sample of the managers of the four companies who allowed access to their companies. While only a small sample, this presented a unique opportunity to use real customer reports in comparison to managerial opinion. From the literature review, a survey was constructed to measure the orientation and relationships of managers in the two functions, as well as to assess how accurately each function reported real customers' stated importance and experience of fulfilment on key service issues.

10.4 Research Findings

The principal research activities concern the analysis of collected customer data (n=3403), through initial screening and refinement, descriptive analysis, exploratory and confirmatory validation procedures. This procedural process of statistical refinement and analysis was been followed (shown in Figure 10.2).

This structure provides a staged process of escalating validity from initial descriptive analysis, to identify key trends, through to structural equation modelling to confirm trends impact. This allows triangulation of findings through increasingly vigorous statistical analysis, and falls in line with established procedures for the analysis of self-reported respondent survey data (Pallant 2003, Byrne 2001, Field 2005). It also echoes the procedures used in the analysis of ServQual data by Parasuraman et al. (1988), and later electronic service models (Parasuraman et al. 2005).

Figure 10.2 Research Analysis Strategy



Addressing the first research question:

What are customers service quality demands online?

The results from the customer online survey (n=3403) were subjected to data screening procedures and submitted to exploratory analysis (reported in Chapter seven). A series of rotated component matrixes were compiled using different methods and rotations for importance, performance and gap scores. A review of these findings clearly indicated the importance scores as generating the most conceptually appealing set of dimensions. A confirmatory factor analysis procedure was then applied to generate a final online service importance model, comprised nine factors totalling twenty eight items (from the original pool put to final research of sixty nine items). Model fit statistics, checks of convergent and discriminant validity, construction of a second-order factor model and re-analysis of the original survey data with exploratory factor analysis of only those final items, all supported the validity of the nine factor solution as a reliable depiction of online customer service demands. The nine factors that emerged can be described:

- **Website** – issues relating to the functional design of the website and ability of customers to navigate said website
- **Trust** – issues relating to customers trust in the company to protect their personal and financial details
- **Customer Service** – issues relating to pre-sale purchase facilitation, product delivery and after sales service
- **Information** – issues relating to the provision of key information to the customer, such as product research, availability information and the ability to track products through shipping to delivery
- **Ease of Contact** – the ability of customers to contact human staff of an online retailer
- **No Advertisements** – freedom from pop-up adverts while shopping and unsolicited emails following purchase
- **Personalisation** – concerning both the reactive ability of a website to be customised by a customer and the proactive features of the website that can suggest products for purchase based on past behaviour
- **Company Image** – both the possession of a ‘well known name’ and a website that is of a quality consistent with that created image
- **Product Range** – The provision of depth of product range that customers cannot easily find in other purchase channels or companies.

Before analysing the levels of service provided (as the above were based only on importance reports), performance and gap scores were investigated for validity, when organised in the same factor pattern as the importance scores, with the result of confirmation of that structure allowing for importance-performance comparisons to be made. The results were analysed to determine company performance and highlighted the companies surveyed as performing best on items of least importance to customers (image, personalisation product range availability), and far worse on critical service issues (such as trust and customer service), supporting the belief in the poor understanding and operationalisation of customer service demands in online trading companies.

An interesting finding was the impact of company use on the role of importance and performance. The literature noted a continuing stream of arguments in service quality literature, regarding the appropriateness of including any expectation measure in measuring service quality, with many suggesting the direct measurement of performance alone was a superior alternative (Caruana et al. 2000, Carman 1990, Babakus and Boller 1991, Cronin and Taylor 1992, Brown et al. 1993, Peter et al. 1993, Van Dyke et al. 1997). To research this issue, a structural equation model was constructed to investigate the direct impact of performance on satisfaction and the indirect effect when accounting for stated importance. Due to the potential differential effects of service importance and performance across different product categories (as demonstrated in Chapter eight), only one company was examined. EntzCo was

selected as it had the largest sample size (n=1850). Analysis of this sample as a whole produced a very weak role for importance. However, noting the ServQual and CS/D literatures, the issue of previous usage altering expectations or experience-based norms was deemed worth of investigation (Woodruff et al. 1983, Cravens et al. 1985, Buttle 1996). The research suggested that customers who have purchased with the company previously or who have purchased within the general product class may moderate what they expect or is important to them. Four further models were run comparing independently the effects of importance for those shopping the company for the first time and those not shopping with the company for the first time, for those purchasing the product type for the first time and for those not purchasing the product type for the first time. These results highlighted a substantial role for first time customers and product users with little for more experienced customers, supporting with data for the first time the propositions of experience-based norms in the online environment.

The second customer research question addressed broader impacts on customer demands:

What is the impact of purchase situations on customer service quality demands online ?

The first stage (and proposition) within this question regarded the impact on demands by product type. With each of the four companies represented in this research operating in different product markets, and offering principally only one class of product, a comparison of the service importance and reported levels of situation for each company was undertaken (reported in Chapter eight). Due to findings of non-normality of research constructs (anticipated due to the skewed nature of customer service self reports (Peterson and Wilson 1992), non-parametric statistics were used. Spearman's Rho correlation and a Mann-Whitney tests provide significant differences existed between each company in terms of levels of service importance and reported purchased situations. As a result of this finding, the overall sample was broken down into four sections (one for each company), which were then assessed independently for each of the remaining propositions regards situational and demographic influence.

Despite this finding, when considering service issues, a pattern was observed regarding the order of importance of issues (from least important to most important). The most important service issue (trust) and least important service issues reported (personalisation and company image) were consistent across all companies (even though the actual reported service importance levels were different). Such a finding supports previous findings of consistency at the extreme levels of service importance found by PZB (1988), ZBP (1990), Mersha and

Adlakha (1990) and Cravens et al. (1985). This suggests that despite differences in service levels by product category at the extreme, there are general constants, specifically in the online environment, that customers value trust above all other service factors and value personalisation the least.

To analyse the impact of situations and demographics on stated service demands (reported in Chapter nine), a multi-stage, iterative process was used to investigate and verify the impact of the wide range of situational and demographic variables suggested in the literature review. Initially, univariate correlation and multi-variate regressions were used on a company-by-company and factor-by-factor level, finding that the majority of situations and demographics did impact on customer behaviour. Comparison of regression results suggested demographics as accounting for far less variation in stated service importance in all four companies than the situations described, supporting the proposal that situations form a better segmentation base than raw demographics.

From this exploratory investigation, structural equation models were compiled for each service factor and refined, for the company with the largest single sample size (EntzCo). Through a factor-by-factor analysis, the significance of situations and demographics was verified until final models of the impact of each situation and demographic on the stated importance of each factor could be demonstrated. A list of total situational and demographic influence was then compiled (shown in Table 10.1). Some situational influences can clearly be dismissed as having no impact, however, the process verified many of the proposed situational and demographic constructs as exerting a significant influence on various aspects of customer service demands.

The final stage of research comprised a comparison of the direct effects of situations versus demographics on each service importance factor (compiled through structural equation models). Despite several decades of research on ServQual, the impact of demographic or other influences on service-quality demands has been a starkly under-researched area, with little investigation into how such issues might alter customer demands, despite the clear potential and likelihood of such impact (PZB 1985, Buttle 1996, ZPM 2002b, ZBP 1993). Those who have investigated demographic influences on ServQual have found mixed results with little clear, concise, logical or conceptually pattern emergent (Webster 1989, Gagliano and Hathcote 1994). On a factor-by-factor level, the findings clearly indicated that for every service factor, the effect of situations on variance in service importance was far greater than that of demographic measures. This supports the belief that demographics no longer provide

the best means of market analysis or segmentation, and supporting those who have highlighting the failures of demographics (Day 1969, Dickerson and Gentry 1983, Bucklin et al. 1995, Rossi et al. 1996, Palmer 2000, Fennell et al. 2002, Brown 2001, 2003, 2005; McDonald and Wilson 2002, Sheth et al. 2000, 2001, Kotler 2001). This study identified for the first time producing a simple and workable, quantitative tool, that is easily replicable to describe a superior alternative to demographic segmentation.

Table 10.1 Overall Situational Impact Findings

	Website	Trust	Customer Service	Information	Contactability	No Adverts	Personalisation	Company Image	Product Range	Impacts
S07 Purchase Involvement	+		+	+	+		+	+	+	7
D5 Income	-			-	-	-	-	-	-	7
S23 Time Capacity			+	+	+	+	+		+	6
S18 Attitudinal Loyalty	+	+	+	+		+			+	6
D2 Age group:		+	+	+		+		+		5
S25 Online Activities	-	-	-				+			4
S22 Technoreadiness	+	+			-	+				4
S15 Number Companies Purchase From	-				-		-	-		4
S08 Negative Role of Price	-	-	-	-						4
S05 Frequency Product Type Purchase		+	+				+		+	4
S21 Purchase online only company	-				-			-		3
S14 Company History					-		+		+	3
S11 Importance of low price	+	+				+				3
S10 Brand Dependence	+	+						+		3
D4 Education					-		-	-		3
D1 Gender	+			+					+	3
S26 Connection speed				-					-	2
S24 Products Purchased Online					+				-	2
S20 Prefer High St names online							+	+		2
S17 Behavioural Loyalty							+		+	2
S09 Positive Role of Price							+	+		2
S13 Online History							-			1
S12 Importance of high quality service			+							1
S04 Spontaneity					-					1
S03 Personalisation					-					1
D3 Class				+						1
S16 Returns										0
S06 Pre-purchase Research										0
S02 Spend										0

+ / - signifies positive / negative effect

Considering the organisational side of service quality and associated research question:

What differences exist in the marketing versus operations views and orientation towards customer priorities?

To address this issue, managers in each of the four companies were provided a questionnaire survey. This process resulted in a relatively small sample (n=27), but one which due to the relatively small size of the marketing and operations groups in all four companies provides a very good response rate and useful insight into the practices of those companies.

Across all four companies the measures of market orientation (customer focus and understanding) reported that the operations managers displayed higher levels of market orientation, than their marketing counterparts (who would be expected to report higher levels as market specialists). Despite the continuation of marketing as the customer gate-keeper and holder of this information, the power of marketing in all the product organisations studied is less than that of the operations functions. This supports the increasing role of operations within the corporation, at a time when marketing power is increasingly challenged (Skinner 1969, Hayes and Wheelwright 1984, Webster 1998, Dennison and McDonald 2003, Day 2003). The relationships and levels of cross-functional working reported between the functions at the companies is marginal, although predominantly positive relations are being observed. There is support for the movement towards cross-functional organisational structures and greater co-operation between the functions that has been called for in the literature, yet not generally realised in practice (Shapiro 1977, Berry et al. 1991a, Berry et al. 1995, Hausman et al. 2002).

Addressing the issue of customer understanding, managers' understanding of customers was generally good (the impact of which is seen in the relatively high satisfaction scores for all four companies). Across all companies a trend can be seen that marketers remain most adept at understanding what customers require, despite reporting lower levels of marketing orientation than their operations colleagues. This would suggest that despite the increased role of operations in terms of power and impact in the organisation, marketing still plays a vital role in customer sensing and analysis. The general discrepancies between what is actually performed and what managers believe to be performed, are of roughly equal levels in both marketing and operations functions – while operations knows what is actually happening in the company, they often do not know how customers experience this, as customer research is still done by marketers (who, while they are aware of what customers report, do not seem to be adept at pairing this back to what is actually happening in the organisation). The fact that

operations reported higher market orientation, yet still seemed removed from customer understanding, may reflect the measure of market orientation as an index of the spirit and mindset of focus rather than an actual reality of customer focus. Managers may report activities and issues that identify them as market orientated, however, what is possible in the organisation and across the organisation may be removed from this. From the above analysis it has been shown that despite increased market orientation of operations managers (actually over and above that displayed by marketers themselves), operations' understanding of the customer marketplace is, in reality, still inferior to that displayed by marketing, who deal with the reality of customer sensing and understanding, rather than the more abstract issues of customer focus and activities described by market orientation.

10.5 Implications and Contributions

The research findings above constitute new and often novel findings with regards the issue of online service quality. The principal implications and contributions can be analysed in terms of each of the three research questions and issues addressed: customers' online service demands, the impact on these demands, and the organisational side of service quality.

10.5.1 Online Service Quality

Despite several attempts to describe and define online service quality since the general rise of the internet in the late 1990s, findings to date have been limited in terms of both scope of issues addressed and depth of analysis. While several major bodies of work have recently emerged (PZM 2005, Wolfenbarger and Gilly 2003), the validity of these measures has not been verified or thoroughly explored.

For the practicing manager, the value of this work is in the delivery and verification of a comprehensive tool for the analysis of online customers. Internet firms, dependent on customer intelligence for competitive survival, have suffered limited and deficient scales to date that do not provide a guarantee of any usefulness. The final service importance metric developed here provides an easily applicable tool to measure what customers are demanding across a range of issues and has been thoroughly statistically validated (in contrast the weaker assurances provided by industrial measures). It has been compiled from a range of issues that extend from the front end customer experience with the website, to the entire service experience (compared to the more limited studies common in industrial practice). The inclusion of both importance and performance provides a double range of intelligence about what online customers are demanding rather than simply how companies perform. The

finding of the same issues as most and least important to customers across the four different companies validates the belief that there is a universal aspect of service preference at the extreme ends of the scale. Such a belief would suggest that the findings here provide managers with clear priorities for service improvement focus, as well as areas in which to reduce expenditure and investment.

For the academic community, several issues are apparent beyond the general provision of a new, more comprehensive model of online service demands and quality. The generally acknowledged problems of the expectations component in service quality have failed to provide a large sample verified alternative to the should/would/predict common standards, despite assertions as to the appropriateness of an importance measure (Teas 1993b). The statistical validity found in this study, which utilised an importance measurement, provides evidence for a better replacement for this expectations standard. Secondly, while the issue of experience-based norms has been discussed (Woodruff et al. 1983), to date the existence of such norms has failed to be clearly empirically quantified. The finding through a rigorous statistical technique - structural equation modelling on a large sample - of a difference in item importance impact on performance-satisfaction based on experience is a major finding for consumer behaviouralists, both in general where the issue has not been verified, and when considering the online marketplace, where the issue has not been considered.

10.5.2 Situational Impacts on Service Quality

The findings generated here are a major contribution towards market segmentation and analysis. Academic acknowledgement of the limitations of demographic measures as a meaningful and useful way to analysing variance in customer behaviour and segmenting the marketplace has generated discussion of postmodern marketing, and new marketing as well as broader awareness of the limitations of traditional approaches. For the practicing manager these discussions have provided nothing of any value –managers are concerned with the limits of demographic influence but no other useful approach has been proposed - the highly qualitative, psychological and, often intrusive, methods of investigation, are impractical for large scale market research. For organisations this has resulted in problems in customer service, even when thorough and valid intelligence on customer requirements has been gathered (which as noted above is rare). These results have been of limited use due to the inability to meaningfully group the trends and groups exhibiting the same behaviour within the sample.

An extensive literature search has been conducted to generate a potential source list of situations that may impact customer behaviour, both in general and to a greater extent than traditional demographic measures. Such a composition is a move beyond the current marketing literature in its own right, but was only the first step in a process of evaluation and confirmation. A very large sample provided the testing ground for these situations and a rigorous, iterative statistical analysis procedure was followed to analysis how situations and demographics affect the online customer's service requirements. In service quality research such an analysis has never been undertaken, and indeed even analysis of demographic impacts on service quality is incredibly limited.

Two principal outputs emerged from this research: firstly, the finding that situations do account for more variance in customer demands, and are therefore a better segmenting tool, than traditional demographic measures. Such a finding confirms thirty years of marketing speculation on situational impacts that has failed to provide a comprehensive and validated model (with any more than two or three situations considered), and provides a replicable base of operational situational measures that managers can use to analyse their marketplace, and the academic community can address in terms of wider replication and validation.

The second finding concerned the specific impact of situations on specific service demands, addressing in detail exactly how situations and demographics interact with different service demands. This analysis provides great depth of analysis for managers to utilise in assessing the state of their own customer base and segmentation strategy, as well as building on the academic body of knowledge with regards to online customer behaviour and marketing segmentation in general. As such, the findings here represent a key contribution towards the supplementation, or even replacement, of demographics as a sole basis of market segmentation.

10.5.3 The Managerial Side of Service Quality

The major contributions identified above are supplemented by the holistic approach taken within this thesis. For the first time since the original ServQual work (PZB 1988, ZBP 1990), expectation (importance) and performance-based service analysis has been extended backwards into the organisations that support this service delivery. In addition to this general extension, the specific consideration of the value-creating areas of marketing or operations has been utilised rather, than the usual approach of sampling one function independently (be it marketing for customer awareness and operations for process efficiency). Such approaches

preclude a true analysis of how both service analysis and service operationalisation in the organisation are enacted and how varying levels of this are measured.

This portion of research is purely exploratory and does not offer the same rigour or firm contribution of the customer research activities. The contribution of this research beyond the nature of the holistic approach is suggestive and provocative. The finding that marketing managers exhibiting less market orientation than their operations counterparts is a major potential trigger for greater academic research in the area of market orientation. This has been largely overlooked for the last decade and only ever focused on marketing in application. The finding that marketing managers still show greater measured awareness of customer stated demands, despite expressing lower market orientation is also a potential source of reassurance of the value of marketing managers in industry, but also a point that emphasises the potential limitations of the market orientation measure as it fails to capture true measure market awareness. The composition studies that delivered the original market orientation work predominantly did not include actual customer reports, instead utilising manager reports of their customer service relative to the competition and links to financial measures. The finding in this study using use real customer reports - that market orientation is not related to the accuracy of management market perception, suggests additional research is needed into marketing orientation measurement techniques.

For thirty years operations literature (Skinner 1969, Hayes and Wheelwright 1984, Slack et al. 2004) has called for a greater role of operations, that generally has not materialised. In the companies surveyed in this sample, the finding that operations exerts greater power and is ranked by both marketing and operational managers as having greater influence is a major finding, that stands apart from previous works identifying operations as still less powerful. While such a finding may be a peculiar artefact of the four companies studied (and not an actual representation of the marketplace), the consistent finding across all four companies as well as the distance by which operations was outstripping marketing highlights a contribution to continued academic debate regards functional power.

10.6 Research Limitations

As with all bodies of research, this one, of course, has a number of limitations. The purpose of this section is to both acknowledge those inherent limitations in the work and highlight what counter-measures have been taken in places to minimise their impact.

This body of work is principally quantitative in stance and method. Much marketing research begins with a qualitative enquiry through focus group or interview research to create initial awareness of the situation being investigated (Kotler et al. 1999). In this piece of research no such qualitative research has been conducted. The principal reason for this was the wide availability of ready validated scale items (over eight hundred from the six focal service studies). This led to a belief that no further investigation into collecting more customer-reported items was necessary. More broadly, in terms of the validity of such investigations, focus group or interview research is not necessarily a true report of behaviour and therefore the depth it provides is offset. Specifically, when considering online purchasers, focus groups or interviews are removed from the purchase experience and setting (the home) which could not feasibly be observed. Concerning the managerial research, prior to applying the survey instrument, in-depth discussion with representative managers of marketing and operations functions were conducted. These produced a general finding that marketing and operations functions are often at odds and do not collaborate well. However, it failed to produce the comparable data and specific reports of customer service understanding required. Thus, the lack of extensive qualitative organisational investigation is offset with this first investigation and also justified by the need for more quantitative comparisons. Therefore while a lack of qualitative research is acknowledged as a limitation, the reasons for the omission are felt to provide justification for a quantitative only approach.

The need to gain a representative sample from quantitative research is noted (Pallant 2003). The online survey conducted here provided a lower response rate than would be expected from traditional survey research, challenging validity. However, a generally good response rate was observed for an online survey and a very large sample size provided, which would in general offset a low response rate. Furthermore, at this stage it is unclear what an acceptable online response rate is, and how it differs to traditional retail sampling. The principal research outputs regarding online service quality omit to report response rates, stating only sample size. It is likely that such an omission is based on their low response rates. Therefore, while a lower response rate than traditionally seen offline is received, the large sample size counteracts these shortcomings. It is impossible to truly determine the level of impact of response rate levels online due to the lack of comparable data.

Considering the issue of non-response bias, it is possible that service reports were biased towards those with positive service experiences, painting an inaccurate picture of the service being delivered. To assess the level of non-response rate, standard checks based on comparing the last and first respondents were employed on the belief that late responders were closest in

opinion to non-responders (Babakus and Boller 1992, Ellinger 2000). Analysis based on these comparisons indicated a general lack of non-response bias. However, conceptually it is impossible to determine the true nature of non-response bias so this issue must be considered a limitation in the analysis of the work.

Considering the responses that were actually gained, the tools used in the analysis of such statistics are predominantly based on the source data following the normal distribution (Pallant 2003, Field 2005). The response data gained however was generally not normal, displaying a negative skew of the distribution. This finding was, however, entirely anticipated and the finding of such a skew in customer self-reports across a wide range of surveys has been noted (Peterson and Wilson 1992). To overcome the impacts of this finding, where possible in exploratory investigations non-parametric statistics that do not require normality were employed, while for regression analysis converted (reflected and logged) reports were used. While it is a stated limitation of customer self-reports that they are commonly non-normal (Peterson and Wilson 1992), such a finding here is also noted as a limitation.

Turning to the nature of the wider sample – the companies who agreed to allow their customers and managers to be surveyed – several limitations must be acknowledged. Firstly, the size of the sample of only four companies may limit generalisability. The original work on ServQual (PZB 1985, 1988) used samples of this size. However, for later electronic service research (PZM 2005, Wolfenbarger and Gilly 2003), a different approach has been used by other researchers – sampling a broad base of the marketplace (for instance through use of customer databases at commercial listing organisations or internet service providers). This provides a wide range of different companies and sectors in the sample. The approach here has been to mirror that of the original ServQual instrument, due to the belief (validated in research) that each company and product group will comprise people with fundamentally different service requirements and situational influences, and these should be analysed separately, rather than as a whole. Where researchers have used broad samples (such as PZM 2005, Wolfenbarger and Gilly 2003) comparisons on a product-by-product basis have not been possible as no single group has provided an adequate sub-sample size. In terms of representation of the marketplace a broader approach is clearly superior, representing many different views, but in terms of the comparisons required for this research it was not deemed to be feasible. To overcome this effect, one company chosen, EntzCo, represents one of the principal sources of internet commerce (DVD and video), while the others are all from different sectors, helping to broaden the sample. However, the limited nature of customer reports as a basis for a general model of online service must be acknowledged. Considering

further the nature of the companies in the sample, all are relatively small (that is, there are no global corporations such as amazon.com or dell.com). Therefore, both the possibility that customers are acting and expecting different things of smaller companies, compared to global organisations, must be acknowledged.

Addressing the same issues in the organisational side of the research conducted provides many of the same limitations. The views of managers at only four companies cannot be considered representative of the trends in marketing-operations relationships as a whole. The fact that these were relatively small companies might alter responses versus large corporations, with different procedures and structures. While these are, of course, acknowledged limitations, when considering the organisational research the intent was not to generate a general model (as with customer research), but to investigate understanding and relationships in these few companies, so that the holistic nature of service could be considered. Such limitations, while acknowledged, are therefore not debilitating to this body of research.

The depth available in qualitative research has often sought to be emulated in quantitative research, through the use of detailed, multi-item measurements of phenomena. Such phenomena include both situations in customer research and also relational measures in management study. However, due to the wide range of issues being considered within this thesis, it was not possible to use such multi-item measurements. The length of such a survey would generate severe difficulty in gaining respondents. Multi-item measures of service importance were constructed and used, however, simpler single item measures of situation and management behaviour were used. While these do provide a good picture of a wide range of issues as was intended here, they must be acknowledged as potentially not providing a complete picture of the phenomena considered.

The final limitation concerns the nature of the research and its timing, that is, a cross-sectional picture of behaviour at one point in time rather than a longitudinal study of how issues (such as purchase situations or management interaction) change and alter over time. The finding of experience playing a moderating role of service importance on performance links to satisfaction underscores the fact that change over time does occur. The cross-sectional approach was employed here for many of the practicalities that all cross-sectional research addresses – principally time and access limitations. These issues were especially pressing here, due to the already wide breadth and amount of working being conducted. Service quality analysis has almost always followed the cross-sectional approach, but it must be acknowledged that customer situations and demographics will change over time as will management

relationships. The extent of purchase situation measures used here have sought to counter this. While only one picture of a point in time is presented, it is composed of those at many different stages of evolution in their relationship with the company, so rather than tracking a single customer's change over time, it is possible to compare different customers at different points in relative time (for instance, purchasing with the company or internet experience) in a single snapshot.

10.7 Research Directions

The research conducted here is extensive and, as with many activities of research, has generated many issues for greater research. The first future research direction concerns the need to validate and verify the research conducted here. The original ServQual tool (PZB 1988) has been investigated and examined by many different researchers to verify the structure, composition, nature and accuracy of the tool developed. To ensure validity beyond any single piece of research such replication is, of course, necessary. A tool has been developed here for both the measurement of service requirements and also the incorporation of purchase situations into this analysis. The generation of a service measurement tool in its own right would signal the need for verification in other markets. A guiding principle in generating a situational model of service demands, is that people act differently in different situations. Therefore, verification of this tool requires testing and application in many more situations to analyse how issues alter customer demands at different times in different places. For instance, in the sample here business versus personal purchasers express very little difference. However, large industrial purchasers may express totally different requirements to the consumer-business purchases used here.

Typical alternative arenas for sampling concern a wider range of products types than the four considered here, application in many different service industries and sectors. The finding of significant variation in customer demands and situations by product/company suggests that greater investigation should be conducted of the service and situational measures here across a far broader product range. Also, with the internet a global phenomena, application in many different countries would further validate both the situations at work in the internet marketplace, and service requirements reported.

Many of the future research directions concern addressing the acknowledged limitations. Specifically, while this body of research was quantitative, future research may seek to fully conceptualise situations beyond the single item measures here, with either multi-item

measurements or through detailed qualitative research to describe and conceptualise each situation in greater detail. Similarly, greater research of any type may well generate even more purchase situations of validity in the internet marketplace.

Beyond this, the finding here of situations as a superior means segmentation to demographic deserves greater investigation beyond the internet arena. While research and the literature review highlight the limitations of demographics as a whole, the findings here relate only to internet purchases and need exploration and validation across the broader marketplace as a whole.

The research here also followed the cross-sectional approach standard in customer service analysis. Should time and money allow, it would be interesting to take a longitudinal approach, taking a series of measurements of demands and situations over time to investigate both changes in behaviour and how the inevitable variations in sample composition alter findings.

The managerial portion of this thesis as exploratory provides a wealth of future research directions, specifically: the power of marketing and operational managers in a broader sample of companies; how customer understanding varies by functional department and how this and market orientation (which itself requires further validation) interact to alter management orientation, customer understanding and customer service.

10.8 Concluding Note

While all research is limited and the emergent need for greater research apparent, overall, this body of work stands apart from many others in terms of holism of analysis (customer service quality, segmentation and organisational understanding), depth of analysis (extensive literature review and generation), depth of research (sample size of $n=3403$), and rigour of analysis (iterative statistical process) making contributions to the academic body of knowledge and nature of managerial practice.

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the 1990s, the number of people in the world who are under 15 years of age is expected to increase from 1.1 billion to 1.5 billion.

As a result of the demographic changes, the number of people in the world who are 65 years of age and older is expected to increase from 250 million in 1990 to 600 million in 2025.

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**Online Retail:
Service Quality Derivation, Market Segmentation and
Organisational Analysis**

Niall C Piercy

**PhD Thesis
Volume II: Appendices**

Cardiff Business School

University of Wales

September 2006

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APPENDIX 1

Statistical Checks in SQ Development Source: Developed from PZB 1988 and PBZ 1991.

Stage	Sample	Analysis / Validity
Stage 1 Instrument Refinement from focus group data which had given 97 items, 10 dimensions	Total of 200 customers of five firms	Co-efficient alphas of gap scores across 10 dimensions calculated and low item-to-total correlation items removed (correlation between the score on the item and the sum of scores on all other items making up the relevant dimension) in iterative sequence of removal / recalculation / removal until 54 items remain with co-efficient alphas .72 to .83
		Dimensionality of 54 item scale examined by factor analysis. A priori 10 dimension solution gives no clear patten so oblique rotation conducted. Items highly correlated to multiple factors removed, some items reassigned. Alphas and item-to-total correlations recalculated in iterative process until 34 items across 7 factors remain. Average pair wise correlation among seven factors .27, "relatively high" factor loadings (.35 to .8), reliability coefficient alphas of factors .72 to .85, reliability of linear combination (total scale reliability) .94; 61.7% of variance accounted for.
Instrument refinement from 34 items	200 customers of each of four firms	Each firm results analysed independently. Item to total correlations and alphas lower than first stage and factor loading matrices showed dimension overlap (leading to reduction from 7 to 5 factors) and low-item-to-total items deleted (leading to a reduction from 35 to 22 items).
	200 customers of each of four firms	Distinctiveness of five dimensions supported by low intercorrelations among the five factors – average pairwise correlations from oblique rotation .21 to .26 across four companies, factor loadings .28 to .92, alphas .52 to .87, reliability of linear combination .87 to .90, 56 to 61.6% total variance accounted for
	Re-analysis of 200 customers from five firms.	Validity of final solution checked by reanalysing data from stage one solely with 22 final items: average pairwise correlation among five factors .35, factor loadings .38 to .86; alphas .72 to .86, reliability of linear combination .92, 63.2% variance accounted for
PBZ 1991	Refinement and reassessment - two replacement items and wording changes. Five firms.	New dimension factor structure. Gap (final five companies): pairwise factor correlations .35 to .39; factor loadings (all companies) .36 to .91; alphas (across final 5 companies) .80 to .93; 66.9% to 71.6% variance accounted for. Expectation & Perceptions analysis: E .51, P .35 pariwise correlation among factors; E .28 to .94, P. .24 to 93 factor loadings E 64.6%, P 72.5% variance accounted for

APPENDIX 1.1

Validity Checks in SQ Development Constructed from PBZ 1991.

Validity Construct	Evidence of SQ Validity
<p>Face validity “a subjective criterion reflecting the extent to which scale items are meaningful and appear to represent the construct being measure” (p439)</p>	<p>PBZ and Babakus and Boller (1991) – executive feedback; Carman (1990) own review to minor item or wording or changes. Bresinger and Labert (1990) and Finn and Lamb (1991) don't explicitly consider but use of 22 SQ “implies meaningfulness” (PBZ 1991 p439) “SQ items appear to be appropriate for assessing service quality in a variety of settings” (PBZ 1991 p439)</p>
<p>Convergent validity “pertains to the extent to which scale items assumed to represent a construct do in fact do ‘converge’ one the same construct... whether scale items expected to load together in factor analysis actually do so” (p439)</p>	<p><u>Indirect Evidence:</u> Relatively high coefficient alpha on all studies reflects cohesiveness of scale items and an indirect indicator <u>Direct Evidence:</u> Factor loading patterns of PBZ (1991), Bresinger and Lambert (1990) generally fit original five dimensions, Babakus and Boller (1991) and Carman (1990) weaker support due to low loadings on dimensions</p>
<p>Discriminant validity “the extent to which SERVQUAL has five distinct dimensions” (p440)</p>	<p>“Replication studies differ the most from the original study with respect to SERVQUAL's discriminant validity... the number of distinct dimensions based solely on the factor analysis results is not the same across studies.” (p440), possibly due to data collection differences or “across-dimension similarities and/or within-dimension differences in customers' evaluations of a <i>specific</i> company involved in each setting. At a <i>general</i> level, the five dimensional structure... may still serve as a meaningful framework” (p440)</p>
<p>Predictive or Concurrent Validity “extent to which SERVQUAL scores are associated as hypothesised with other conceptually related measures.” (p440/1)</p>	<p>Bresinger and Lambert (1991) find low correlation between SQ and market share (possibly attributable to other issues of share). Babakus and Boller (1991) find perception scores have stronger correlations with measures such as overall quality than gap scores. Regression of PBZ (1991) perception scores finds stronger R² values with perceptions (.72 to .81) than gap-scores (.57 to .71) “These results call into question the empirical usefulness of the expectations data.” (PBZ 1991 p441), also identified by Carman (1990) and Babakus and Boller (1991)</p>

PZB (1988) state that “While high reliabilities and internal consistencies are necessary conditions for a scales construct validity – the extent to which a scale fully and unambiguously captures the underlying, unobservable construct is intended to measure – they are not sufficient. The scale must satisfy certain other conceptual and empirical criteria to be considered as having good construct validity.” (p28). PZB (1988) propose the principle conceptual criterion pertaining to construct validity as content validity (that the scale measures what it is supposed to and captures facets of unobservable construct being measure)

and describe this as a qualitative process involving “the thoroughness with which the construct to be scaled and its domain were explicated and... the extent to which the scale items represent the construct’s domain” (p28) concluding “the procedures used in developing ServQual satisfied both these evaluative requirements” (p28), therefore any scale developing mirroring the ServQual development process can also be considered valid based on this analysis. PZB (1988) conduct empirical assessment of scale validity through assessment of convergent reliability, defined as the association between the ServQual scores and a separate question asking customers to rate overall quality and two further “conceptually related variables” (PZB 1988 p 30) (measured as: whether a customer they would recommend the firm and if they have ever reported a problem with the firm). One-way ANOVA found a significant relationship between overall quality and service-quality scores by dimension and overall (based on the combined SQ score of customers in each of the overall quality categories (poor/fair, good and excellent) as well as consistent support for related recommendation and problem-encounter variables.

PBZ (1991) conducting refinement and reassessment of the 1998 SQ instrument perform minor wording changes / clarification of two item statements and conduct validity checks consistent with those previously outlined in PBZ (1988). PBZ (1991) use a measure of overall service quality (measured on a 10 point scale), regressing this on SQ gap scores, with R^2 scores in the five companies ranging from .57 to .71, all higher than the 1988 survey (which found a largest value of .52). They determine: “the high degree of convergence between the revised SQ scale and a separate measure of service quality support the scale’s construct validity” (p433). Further analysis of likelihood of recommending a company and problem encounter/resolution against gap scores also supported the construct (for example, those having a problem reported a more negative overall weighted SQ gap scores than those who do not).

Responding to various replication studies and criticisms, PZB (1991) re-investigate their own findings and those of other researchers. They determine: “several different forms of validity can serve as criteria for assessing the psychometric soundness of a scale: face validity, convergent validity and discriminant validity.” (p439) and analyse their own and replicate studies by Babakus and Boller (1991), Brensinger and Labert (1990), Carman (1990) and Finn and Lamb (1991), PBZ (1991) regarding validity of the SQ scale. Specific findings of PBZ (1991) are summarised in table 7 below for review purposes. PBZ (1991) conclude (using the information summarised here in table 7) that despite mixed convergent validity, poor discriminant validity and the ‘unresolved’ issue of gap scores versus perception only scores: “the collective findings of various replications by and large provide consistent support for the reliability, face validity and predictive/concurrent validity for the SERVQUAL scores on the five dimensions” (p441)

APPENDIX 1.2 ITEMS IN SQ INSTRUMENT
(Source: ZBP 1990)

			Strongly Disagree				Strongly Agree		
TNAGIBLES	1	Excellent _ companies will have modern looking equipment.	1	2	3	4	5	6	7
	2	The physical facilities at excellent _ companies will be visually appealing.	1	2	3	4	5	6	7
	3	Employees at excellent _ companies will be neat-appearing.	1	2	3	4	5	6	7
	4	Materials associated with the service (such as pamphlets or statements) will be visually appealing in an excellent _ company.	1	2	3	4	5	6	7
RELIABILITY	5	When excellent _ companies promise to do something by a certain time, they will do so.	1	2	3	4	5	6	7
	6	When a customer has a problem, excellent companies _ companies will show a sincere interest in solving it.	1	2	3	4	5	6	7
	7	Excellent _ companies will perform the service right the first time.	1	2	3	4	5	6	7
	8	Excellent _ companies will provide their services at the time they promise to do so.	1	2	3	4	5	6	7
	9	Excellent _ companies will insist on error-free records.	1	2	3	4	5	6	7
RESPONSIVENES	10	Employees in excellent _ companies will tell customers exactly when services will be performed.	1	2	3	4	5	6	7
	11	Employees in excellent _ companies will give prompt service to customers.	1	2	3	4	5	6	7
	12	Employees in excellent companies will always be willing to help customers.	1	2	3	4	5	6	7
	13	Employees in excellent _ companies will never be too busy to respond to customers' requests.	1	2	3	4	5	6	7
ASSURANCE	14	The behaviour of employees in excellent _ companies will instil confidence in customers.	1	2	3	4	5	6	7
	15	Customers of excellent _ companies will feel safe in their transactions.	1	2	3	4	5	6	7
	16	Employees in excellent _ companies will be consistently courteous with customers.	1	2	3	4	5	6	7
	17	Employees in excellent _ companies will have the knowledge to answer customers questions.	1	2	3	4	5	6	7
EMPATY	18	Excellent _ companies will give their customers individual attention.	1	2	3	4	5	6	7
	19	Excellent _ companies will have operating hours convenient to all their customers.	1	2	3	4	5	6	7
	20	Excellent _ companies will have employees who give their customers personal attention.	1	2	3	4	5	6	7
	21	Excellent _ companies will have the customer's best interests at heart.	1	2	3	4	5	6	7
	22	The employees of excellent _ companies will understand the specific needs of their customers.	1	2	3	4	5	6	7

APPENDIX 2

Traditional Demographic Segmentation

Kotler et al (1999) highlight geographic segmentation as the division of markets based on geographic units (nations, states, regions, counties, cities, neighbourhoods), localising products, adverts, promotions, and sales efforts to fit needs of individual locations; for instance, in Japan, small and cramped kitchens meant Philips had to make smaller coffee makers or in Spain, large 2 litre Coke bottles didn't fit in their small fridges.

Kotler et al (1999) highlight GeoDemographics as an increasingly used segmentation tool, which studies the relationship between geographical location and demographics. Originally developed by ACORN based on census variables to group residential areas in US, this links neighbourhood groups to demographics and buyer behaviour gives ability to target specific households. Despite the danger of variability within neighbourhoods, geodemographics has been increasingly used in big economies where detailed databases are available.

Many have noted the continuing impact of demographics, finding for instance: on gender - women are more involved in purchasing activities (Slama and Tashlina 1985), women's behaviour is strongly influenced by their evaluation of personal interaction processes (Homburg 2001z), women pay more attention to sales personnel (Gilbert and Warren 1995), Garbarino and Strahilevitz (2002) investigated how men and women differed in perception of risk in shopping online and the impact of a recommendation from a friend; on age - finding different ages have different information processing abilities for product evaluation (Moscovitch 1982, Smith and Baltes 1990, Walsh 1982), with information declining with age (Gilly and Zeithaml 1985); on education and income - finding people with higher incomes tend to have higher levels of education (Farley 1964), also notes the use of education for segmentation, noting the impact on behaviour of educational have better jobs, be of higher social groupings and with more income (Lancaster 2004), tend to engage in more information processing before making a decision (Schaninger and Sciglimpaglia 1964) while low income groups are less likely to use high end restaurants than middle income range groups (Israel et al 1991).

Kotler et al (1999) describe psychographic segmentation as another development, partially based on demographic data which divides buyers into groups based on social class (for instance, positioning different products or brands to appeal to different classes such as Butlins holiday versus a Center Parc holiday), personality (attributing personalities to brands to appeal to segments in advertising, such as cosmetics or alcohol) or lifestyle analysis. Kotler et al (1999) highlight the increasing usage of lifestyle segmentation in the consumer marketing industry, with many companies using 'off the shelf' tools such as Young and Rubican's characterisation tools that described different segments of society for targeting, including: 'the constrained' - those whose income limits expenditure such as the resigned poor who accept their place as well as the more ambitious struggling poor; 'the succeeders' - the middle majority of successful people who like to feel in control, the mainstreams in need of security and who fear change and the aspirers; 'the innovators' including those in transitional stages and highly education reformers at the forefront of new trends. Lancaster (2004) notes social class as possibly the single most used variable for research purposes, using the National Readership Survey class division ranks:

Table 2.1: Class Division Ranks
Source: Lancaster (2004).

Class	Description
A	Upper middle class (higher managerial, administrative or professional) which comprises about 3 per cent of the population
B	Middle class (intermediate managerial, administrative or professional) which comprises approximately 10 per cent of the population
C1	Lower middle class (supervisory, clerical, junior administrative or professional) containing around 25 per cent of the population
C2	Skilled working class (skilled manual workers) who comprise around 30 per cent of the population.
D	Working class (semi- and unskilled manual workers) or around 27 per cent of the population
E	Lowest levels of subsistence (state pensioners with no other income, widows, casual and lowest grade earners) who form the remaining 5 per cent, or thereabouts, of the population.

Kolter et al (1999) highlight how life cycle stage serves as an evolution of standard age analysis, taking into account the needs and characteristics of different age-groups, for instance in recreation markets, 18-30 holidays, family based destinations or Saga holidays for the old. Lancaster (2004) also emphasise how the role of family life cycle as impacting on the products purchased – for instance, an unmarried person living at home would probably have very different purchasing patterns from someone of the same age who has left home and is recently married. Wells and Gubar have put forward what is now an internationally recognized classification system in relation to life cycle and these stages: Bachelor stage - young single people not living with parents (which gave rise to the category of 'YUPPIES' or 'young, upwardly-mobile persons'), Newly married - no children (sometimes referred to as 'DINKIES' meaning 'double income - no kids'), Full nest I - with the youngest child being under six years of age (sometimes referred to as 'ORCHIDS' meaning 'one recent child, heavily in debt), Full nest II - is where the youngest child is six or over, Full nest III - is an older married couple with dependent children living at home, Empty nest I - with no children living at home, but the family head is in work (sometimes referred to as 'WOOPIES' meaning 'well off older persons'), Empty nest II - where the family head is retired, Solitary survivor in work, Solitary survivor retired (unkindly referred to as 'COCOON' meaning 'cheap old child-minder, operating on nothing').

Mud Valley (2004) marketing consultants highlight four progressive types of segmentation: from demographics (which tell you a lot about people, but are much less helpful in identifying motivations, for instance , people in a certain income bracket do not all behave the same way'), to behavioural segmentation (which tell you how and how and were to find people, but not what to say to them when you do'), to needs and values based segmentation (which answers why customers behave as they do, and therefore indicate how to position a brand) to situational segmentation which recognises that the same people behave differently in different situations. They give the example of a Japanese food retailer who recognised people had different needs at different times of day and changed layout and pricing several times to reflect different requirements and opportunities.

Personal Value Systems (Excluded Items)

One area of potential impact upon shopping behaviour concerns individual values or personal attitudes. While there is limited evidence that these impact offline shopping behaviour, the nature of identification and measurement of personal attitudes or values is a complex procedure, requiring significant time and measurement effort. To allow consideration of a wide range of situational influences within this thesis, most issues have been reduced to one to three item measures in a questionnaire survey. These space requirements do not provide for the consideration of values while the complex nature of value systems lends itself more to in-depth, qualitative psychological research, rather than marketing or customer research. The issue of value is implicitly considered within this thesis as a driving force for behaviour in different situations – here, it is that behaviour which is measured, rather than the more complex antecedent attitudes and values that lead to it. For purposes of completeness some illustrative work on values and their shopping impact is provided in this section.

Prakash and Munson (1985) empirically investigated the impact of customer personal values (PV) on customer satisfaction (CS) and the mediating effect of the macro-marketing system (MSx) and product performance expectations (Pn) (represented in equation 1 below). This research was conducted to redress the lack of values work in marketing: “The notion that values play a pivotal role in determining human behaviour has been widely accepted... however, the fields of marketing and consumer behaviour have been slow to embrace values research.” (p279), however, “one overriding and recurring notion emerges among marketers: Values *should* influence consumer decision making.” (p280). Data was gathered from 106 whites and 98 blacks in Miami using measures of values with the 36-item Rokeach Value Survey to measure values (“the most commonly used taxonomy in marketing and consumer behaviour studies” (p282)); 14-likert-items on normative expectations of the marketing system; and assessment of product expectations for satisfaction with 11-items (automobiles), 9 item (clothing) and 7 items (television sets). Factors scores were computed for each ethnic group and contrasted using one way analysis of co-variance (ANOVA) with demographic variables of income/education as covariants and regression conducted for each ethnic group (personal values on market system expectations, product expectations on personal values and market system expectations).

Equation 2.1

Source: Prakash and Munson, 1985, p281.

$$\text{Antecedents} \rightarrow \text{PV} \rightarrow \text{MSx} \rightarrow \text{Pn} \rightarrow \text{CS}$$

Prakash and Munson (1985) find: marketing system expectations are significantly related to product expectations; different ethnicities have different values related to different product expectations; personal values dimensions (factors) were found to relate to marketing system expectations significantly, which in turn related to product expectations significantly; product expectations and the importance of specific value dimensions varied significantly by ethnicity and that different value dimensions were important in different product classes (multiple values played a role in automobile evaluation whereas only a few impacted on clothing). They conclude:

“Collectively, the results from the White and Black ethnic groups indicate that consumer satisfaction may not solely be dependent upon such prior cognitive elements as product-related beliefs, attitudes or behaviours. Rather, personal values may also play a role in determining satisfaction via their effects on both normative Marketing System and Product expectations.” (Prakash and Munson 1985 p293)

Despite this finding, Rokeach (1973) found value differences between ethnic groups were due to socioeconomic differences whilst Ness and Stith (1984) proposed when whites and blacks matched on income level, "what emerges is basically middle class values" (Prakash and Munson 1985 p283)

Within the service setting, Prakash and Munson 1985 comment: "One might expect that the relationship between Personal Values, System Expectations and Product Expectations would be even stronger for many *non-product* related situations or issues." (p294) however, within this thesis there is no focus on ethnic values or value importance across product classes as this is a non-core issue and measurement would be prohibitively long (36 values, 11 marketing system plus product/service expectations), however, indirectly consideration of this issue must be accounted as values will impact on the items of importance to various customers in addition to the purchase situation. In this work, rather than identify personal values as a background source of variation in expectations, the variation itself becomes the focus of examination and proposed reduction or segmentation.

Winsted (1997) highlights the differences in customer requirements by country, highlighting significant cross-cultural differences even where the same service constructs were identified in both countries they resulted in different behaviours. Grove and Fisk (1997) investigating the situational role of 'other customers' on service encounters, highlighting that where purchase situations occur in the presence of others, this impacts on a persons behaviour, highlighting how anti-social behaviour (for instance, shoving or loud conversations), the location of service (with customers being less inhibited in non-familiar surroundings filled with strangers), the subjective evaluation of others behaviour and nationality of other customers (with foreigners often criticised for holding up service) all impact on customer behaviour in the store setting. Jayawardhena (2003) investigated the role of personal values on attitudes to e-commerce. He finds customers placing stronger emphasis on self-direction, self-achievement and enjoyment values are most likely to have a favourable attitude to electronic shopping. Specifically, information provision plays to self-direction values which have a positive impact on e-shopping; enjoyment values are important in predicting favourable attitudes towards e-shopping; and self-achievement values (including sense of accomplishment, security and respect) are also related to e-shopping attitude. Forman and Sriram (1991) noted that mechanization in retail store environments was facilitating a depersonalisation of service that left the 'lonely' who depended on contact with store personnel for social interaction isolated from the purchase experience.

APPENDIX 3.1. Alignment of Service Quality Items by e-SQ Headings

All Service Quality Studies Combined by e-ServQual Heading	
ESQ (FACTOR SORT BY)	
B1 RELIABILITY Site is up ad running	B1 Available for business B1 Site does not crash B1 Pages don't freeze after you have put in all your information B1 Site is working correctly C4 *The site always works correctly (EASE OF USE) C4 The website functions as it should (EASE OF USE) A4 Excellent _ companies will have operating hours convenient to all their customers. (EMP)
B2 RELIABILITY Accuracy	B2 Received the item ordered C1 **You get what you ordered from this site C1 *This website gets the order correct C1 *Transactions at this website are error free A1 Excellent _ companies will perform the service right the first time. (REL) D1 The quantity and quality of the product/service I received was exactly the same as I ordered (REL). B2 Pages confirm exactly what was ordered. C1 The on-line receipt informs me of the total charges that will be debited against my credit card B2 Billing is accurate(product and shipping costs) D1 The billing process was accurately handled and its records were kept accurately (REL) B2 Information is accurate - make accurate promises - accurate description of products (pictures, description) C1 **The product that came was accurately represented by the website C6 You know exactly what you're buying at this website (SELECTION) A1 Excellent _ companies will insist on error-free records (REL) A1 When excellent _ companies promise to do something by a certain time, they will do so. (REL) C5 INFORMATIVENESS (USABILITY) C5 *At this site, I have the full information at hand C5 **The website provides in-depth information C5 *The site gives me enough information so that I can identify the item to the same degree as if I am in the store C5 The website has comprehensive information C5 The website is a very good source of information C5 *The site helps me research products E3 USEFULNESS -Informational Fit to Task 3 E3 The information on the Web site is pretty much what I need to carry out my tasks 3 E3 The website adequately meets my information needs 3 E3 The information on the Web site is effective 3
B3 RELIABILITY Items are In Stock	B3 Items are available B3 items are available in my size B3 Know that items are in stock B3 Items are available in suitable time frame. C1 Products on the site are almost always in stock -- all the items I wanted were in stock F1 This store has merchandise available when the customer wants it (REL) C6 SELECTION (USABILITY FACTORS) – SEP SUB SECTION?? C6 The website lets me know about product availability during search (SELEC) C6 **The website has good selection (SELEC) C6 *This site has a variety of products that interest me (SELEC) C6 *The website has products I can't find in stores (SELEC) C6 *The website is updated often with new products (SELEC) C6 *There are hard to find products on this site (SELEC) C6 I can find items that are unique or different on this site (SELEC)

<p>B4 ASSURANCE TRUST Well known site</p>	<p>B4 reputation of site B4 advertises on other media so that name is well known B4 well known name (NP- comes to trust through repeated positive experiences) C9 The company is well established (security factor) C9 *The company behind the site is reputable (sec fact) C9 The website instills confidence in customers (sec factor) D6 The web site showed how long the internet retailer has been in this online business (CREDIB) D6 I received special rewards and discounts from doing businesses with the Internet retailer (CREDIB) E10 COMPLEMENTARY RELATIONSHIP - Consistent Image E10 The website projects an image consistent with the company's image E10 The website fits with my image of the company E10 The website's image matches that of the company -- in orig focus groups, professional look and feel to sit important to determine security, functionality, company reputation</p>
<p>B5 ASSURANCE TRUST Sells known brand names</p>	<p>B5 provides clear information about the products B5 - more description along with pictures B5 - objective information B5 - being able to see the products clearly F2 This store offers high quality merchandise (POL)</p>
<p>B6 ASSURANCE TRUST Offers a guarantee</p>	
<p>B7 ASSURANCE TRUST Ratings provided by other customers</p>	<p>D4 The web site had a message area for customer questions and comments (PERS)</p>
	<p>TRUST (added) ASSURANCE A2 The behaviour of employees in excellent _ companies will instil confidence in customers. (ASS) A2 Employees in excellent _ companies will be consistently courteous with customers. (ASS) F4 Personal Interaction F4 Employees in this store treat customers courteously on the telephone (PERS INF)</p>
<p>B8 RESPONSIVENESS Confirmation of Order</p>	<p>B8 received a confirmation of item ordered B8 quick confirmation B8 received and email when order was sent B8 received information about when the order was coming B8 response time should be fast 'time is money' A3 Employees in excellent _ companies will tell customers exactly when services will be performed. (RESP) D4 I received a personal 'thank you' note via email or other media after I placed an order (PERS)</p>
<p>B9 RESPONSIVENESS Help available if there was a problem</p>	<p>B9 message about what to do if your order doesn't go through (eg Please submit again) B9. Compensation for problems they create B9 taking care of me after the purchase B9 emailing or otherwise following up the purchase and asking how satisfied I am B9 taking care of problems quickly B9 refund shipping charges when product doesn't arrive in time B9 fast response to email queries C2 *Customer service personnel are always willing to help you C2 *+When you have a problem, this website shows a sincere interest in solving it --quality of phone support (eg first person I spoke to could solve my problem/ delivery staff (as only human interface with cust --want to include answer phone in reasonable time, respond to email, the first person I speak to can solve my problem without referring up A1 When a customer has a problem, excellent companies _ companies will show a sincere interest in solving it. (REL) F3 Employees in this store are able to handle customer complaints directly and immediately (PROB) F3 Problem Solving F3 This store willingly handles returns and exchanges (PROB)</p>
<p>B10 RESPONSIVENESS Speed of placing an order</p>	<p>B10 speed of execution</p>
<p>B11 RESPONSIVENESS Ability to get answers quickly</p>	<p>[phone contact not just email ??] C2 *+The company is ready and willing to respond to customer needs A2 Employees in excellent _ companies will have the knowledge to answer customers questions. (ASS) D1 When the Internet retailers promised to email or call me by a certain time, it did so. (REL)</p>
<p>B12 RESPONSIVENESS Quick delivery</p>	<p>C1 The website provides shipping options C1 *+The product is delivered by the time promised by the company C1 My order is delivered by date promised C1 You get you merchandise quickly when you order it C1 The items sent by the site are well packaged -- able to offer 24 hr / 48 hr del on all products AND on 'most' products -- able to offer customisable delivery options A3 Excellent _ companies will provide their services at the time they promise to do so (REL) D1 The product/service I ordered was delivered to me within the time promised by the Internet retailer (REL)</p>
<p>B13 RESPONSIVENESS</p>	<p>C1 It's easy to track the shipping and delivery items of items purchased on this website</p>

Updates on status of order	
B14 ACCESS To the site	B14 being able to get on the site quickly C4 *Download at this website is quick (EASE OF USE) B14 loads fast (not too many extraneous pictures) B14 site should be easy to find USEFULNESS E2 Response Time 2 E2 When I use the Web site there is very little waiting times between my actions and the E2 Web sites response 2 E2 The website loads quickly 2 E2 The web sites takes long to load 2
B15 ACCESS To the company	B15 contains a telephone number to reach the company D2 The Web site showed its street and email addresses, and phone and fax numbers (ACC) B15 ability to talk to a 'live' person using a telephone number D2 If I want to, I could easily contact a customer service representative over the phone. (ACC) D2 The internet retailer offered multiple ordering options such as phone and mail options (ACC) B15. ability to talk to the person who processes the order B15. has online customer service reps D2 For more information, I could turn to the Internet retailer's chat rooms, bulletin boards or others(ACC) C2 *+Inquiries are answered promptly C2 After sale support at this site is excellent A3 Employees in excellent _ companies will give prompt service to customers. (RESP) A3 Employees in excellent companies will always be willing to help customers. (RESP) A3 Employees in excellent _ companies will never be too busy to respond to customers' requests. (RESP) F2 This store provides plenty of convenient parking for customers (POL)
B16 FLEXIBILITY Choice of ways to pay	B16. would like to pay my way using cheques F2 This store accepts most major credit cards (POL) F2 This store offers its own credit card (POL)
B17 FLEX Choice of way to ship	B17 ability to use different billing and shipping addresses B17 ability to get the package without having to sign for it.
B18 FLEX Choice of way to return the item	B18 having a brick and mortar option to return items B18 being able to return the items to a store C1 *Returning items is relatively straightforward¹ C1 The returns policy at this site is reasonable²
B19 FLEX Choice of way to buy the item	E11 COMPLEMENTARY RELATIONSHIP - On-line Completeness E11 The website allows transactions online E12 All my business with the company can be completed via the website E13 Most all business processes can be completed via the website E14 COMPLEMENTARY RELATIONSHIP - Better than Alternative Channels E14 It is easier to use the website to complete my business with the company than it is to telephone, fax, or mail a representative E14 The website is easier to use than calling an organisational representative agent on the phone E14 The website is an alternative to calling customer sales or sales
B20 FLEX Options for the ways you can search	B20 - by price/section or colour/size etc, search way you want to
B21 FLEX Full information about choices	B21. options to be on an email list buy not receive junk mail
B22 EASE OF NAVIGATION Easy to find what I need (split or combine with simple to use / aesthetics ???)	D3 The cyberspace address was easy to remember(EASE) B22. easy to get anywhere on the website (not go round in circles) D3 The organisation and structure of online catalogs was logical and easy to follow (EASE) B22. shouldn't get you lost B22 contains a site map with links to everything on the site C4 The organisation and layout of the website facilitate searching for products C4 It's easy to get around and find what you want at this site (easy trans to cat) C4 *+This site doesn't waste my time C4 The site has well arranged categories C4 The website is laid out in a logical fashion C4 I can go to exactly what I want quickly C4 *+It is quick and easy to complete a transaction at this website C4 You can find what you want with a minimum number of clicks C4 I know what all my options are when I shop at this website C4 The layout of the site is clean and simple C4 The site is organised in a way that is intuitive, like your thinking C4 Every process at this site moves like a well oiled machine E4 USEFULNESS - Interactivity 4 E4 The web site allows me to interact with it to receive tailored information 4 E4 The website has interactive features which help me accomplish my task 4 E4 I can interact with the Web site in order to get information tailored to my specific needs 4 E6 EASE OF USE - Intuitive Operations 6 B6 Learning to operate the Web site is easy for me 6

	E6 If would be easy for me to become skilful at using the Website 6
B23 EASE OF NAVIGATION Has a search engine	C4 *The search function at this website is helpful
B24 EASE OF NAVIGATION Ability to manoeuvre through the site	B24. good user interface B24 ability to find a page previously viewed B24 being able to go back when you make a mistake
B25 EASE OF NAVIGATION Speed of manoeuvring through the site	B25 not too many web pages B25 not too many graphics that take up time to download
B26 EASE OF NAVIGATION Speed of checkout	
B27 EFFICIENCY Simple to use	B27 site that contains just the basics
B28 EFFICIENCY Doesn't require me to input a lot of information	(to find product want)
B29 EFFICIENCY Structured properly	B29 gives information in reasonable chunks B29 gives information on command rather than all at once B29 no scrolling from side to side B29 no fine print that is difficult to read and hard to find
B30 efficiency Speed of manoeuvring through the site	B30 not too many webpages B30 not too many graphics that take time to download
B31 PRICE KNOWLEDGE Ability to compare prices (with other sites)	B31 a site that brings you all the bids/prices from other sites
B32 PRICE KNOWLEDGE Knowledge of shipping prices	B32 want to know up-front what shipping charges are (can determine if purchase or go elsewhere) C1 *The website has reasonable shipping and handling costs
B33 PRICE KNOWLEDGE Knowledge of what I am spending as I go	B33 running total of purchases as order progresses B33 running total of purchases and shipping costs B33 prices shown with the items on the screen B33 up-front pricing D3 All the terms and conditions (eg payment, warranty and return policies) were easy to read / understand (EASE)
B34 PRICE KNOWLEDGE Knowledge that the site has low prices	B34 incentives to shop B34 knowing that shipping is free B34 knowing that a discount coupon is available C7 *The site has competitive prices C7 *You get good value for the money spent at this website
B35 SITE AESTHETICS Good pictures of items on sale	B35. colour of items same as it was on the screen C4 *The website has good pictures of the product (EASE OF USE) C3 The website has useful interactive features (for instance, being able to look at the product from all angles, building the product I want, or trying on the items virtually) (exp/atmos) ***** TANGIBLES A5 Excellent _ companies will have modern looking equipment. (TANG) A5 The physical facilities at excellent _ companies will be visually appealing. (TANG) A5 Employees at excellent _ companies will be neat-appearing. (TANG) A5 Materials associated with the service (such as pamphlets or statements) will be visually appealing in an excellent _ company. (TANG) F5 Physical Aspects F5 This store has clean, attractive, and convenient public areas (restrooms, fitting rooms) (PHYS) F5 The store layout at this store makes it easy for customers to find what they want (PHYS) F5 The store layout at this store makes it easy for customers to move around in the store (PHYS)
B36 SITE AESTHETICS Eye catching	B36 colour is intriguing B36 brighter rather than darker background
B37 SITE AESTHETICS Simple	B37 free of distraction B37. uncluttered B37clean, not too busy B37. no flashing things going across the screen B37. not too much movement B37 no or few advertisements. D3 The contents in the Web site were concise and easy to understand (EASE) E5 EASE OF USE - Ease of Understanding 5 E5 The display pages within the Web site are easy to read 5 E5 The text on the website is easy to read 5 E5 The web site labels are easy to understand 5

	<p>E7 ENTERTAINMENT - Visual Appeal 7 E7 The website is visually pleasing 7 E7 The website displays visually pleasing design 7 E7 The website is visually appealing 7</p>
<p>B38 CUSTOMISATION/ PERSONALISATION Site that helps me find exactly what I want</p>	<p>B38. site that makes recommendations about what I might like B38. site is targeted at me B38. has a wish list capability that allows me to save items I might want to buy [capability to store freq purc items]</p> <p>C8 This site does a pretty good job guessing what kinds of things I might want and making suggestions C8 This website stores all my preferences and offers me extra services or information based on my preferences C8 *This site has features that are personalised for me C8 *The website understands my specific needs C8 **The level of personalisation at this site is about right, not too much, not too little. C8 This website gives you personal attention</p> <p>D4 The internet retailer gave me a personalised or individualised attention (PERS)</p> <p>EMPATHY A4 The employees of excellent _ companies will understand the specific needs of their customers. (EMP) A4 Excellent _ companies will have employees who give their customers personal attention. (EMP) A4 Excellent _ companies will give their customers individual attention. (EMP)</p>
<p>B39 CUSTOMISATION/ PERSONALISATION Gives many options for merchandise</p>	<p>B39. wide selection</p>
<p>B40 CUSTOMISATION/ PERSONALISATION Easy to customise</p>	
<p>B41 CUSTOMISATION/ PERSONALISATION Stores customer information to facilitate future transactions</p>	<p>(don't have to register and fill in form every time use site)</p>
<p>B42 SECURITY / PRIVACY Secure Site</p>	<p>B42. symbols and messages that signal the site is secure B42. verification from third parties</p> <p>C9 **This website has adequate security features (security) D5 I felt secure in providing sensitive information (eg credit card number) for online purchase (SEC) D5 I felt the risk associated with online purchase was low (SEC)</p> <p>A2 Customers of excellent _ companies will feel safe in their transactions. (ASS)</p> <p>SECURITY --- most important factors for trust/security – brand, offline presence, have pure before and prods always turned up when promised as expected --- giving details /trust applies to all co's – interesting to see importance HS to EC ---importance of having a phone contact point (for security)</p> <p>TRUST (title added)</p> <p>C9 I feel secure giving out credit card information to this site (sec) C9 *+I feel safe in my transactions in this site C9 *+I feel like my privacy is protected at this site C9 *I feel I can trust this website C9 I trust that this site will not give my information to other sites without my permission</p> <p>E1 I feel safe in my transactions on the Web site 1 E1 I trust the Web site to keep my personal information safe 1 E1 I trust the Web site administrators will not misuse my personal information 1</p>
<p>B43 SECURITY Shows care in how it collects my credit card information</p>	<p>B43. not having to give my credit card information until right at the end B43. doesn't keep my credit information on file</p> <p>C9 I am worried about this site knowing everything about me (sec)</p>
<p>B44 SECURITY Does not share private information</p>	<p>B44. personal information should not be compromised B44. doesn't give other sites or companies access to my information B44. doesn't use banner ads with cookies to collect information on me</p>

	<p>B44. doesn't give my information away to other companies.</p> <p>C9 I trust this site will not mis-use my personal information (sec)</p>
C EXPERIENTIAL / ATMOSPHERIC	<p>EXPERIENTIAL / ATMOSPHERIC</p> <p>C3 *The site almost says 'come in and shop'</p> <p>C3 The website has good surprises</p> <p>C3 *It's really fun to shop at this website</p> <p>C3 There are features at this site that are entertaining to use</p> <p>C3 *Buying at this website is exciting</p> <p>C3 *The site's appearance is professional</p> <p>C3 *The website is visually appealing</p> <p>C3 The website appears to use the best technology</p> <p>C3 The website has innovative features</p> <p>E9 ENTERTAINMENT - Flow – Emotional Appeal</p> <p>E9 I feel happy when I use the Website 9</p> <p>E9 I feel cheerful when I use the website 9</p> <p>E9 I feel sociable when I use the website 9</p> <p>E8 ENTERTAINMENT -Innovativeness 8</p> <p>E8 The website is innovative 8</p> <p>E8 The website design is innovative 8</p> <p>E8 The website is creative 8</p> <p>C3 The home page provides a link to order status</p> <p>C2 This website has customers best interests at heart (CS)</p> <p>C2 I feel like the company wants to provide me with a good buying experience (CS)</p> <p>C2 The website appreciates my business (CS)</p> <p>A4 Excellent _ companies will have the customer's best interests at heart. (EMP)</p> <p>-- entertainment vs dissonance reduction factors (fast and quick, or provides entertainment)</p>
Promotional Impacts	<p>Banner ads etc</p> <p>-- effect of banner ads – purchase based on, purchase recommendations, purchase when only looking for info but tempted by ad or price</p> <p>-- link to retail store environment – effect of promotions and suggests at checkout</p> <p>C7 *I like the special promotions and deals on this website</p> <p>C7 This site has great specials</p> <p>C7 *The promotions for this site seem to beckon me</p>

KEY:

- A – SQ – SERVQUAL - Ziethaml, Parasuraman and Berry, 1990
- B – eSQ – e-Service Quality - Ziethaml, Parasuraman and Malhotra, 2000
- C - .comQ - Wolfinbarger and Gilly, 2002
- D - Internet Service Quality - Yang, 2002
- E – WebQual - Loiacono, Watson and Goodhue, 2002
- F – Retail Service Quality - Dabholkar, Thorpe and Rentz, 1996

3.1.1 Multiple Service Quality Questions into Single Items

E-Service Quality Heading	Source Items	Final Item
RELIABILITY Site is up and running	B Pages don't freeze after you have put in all your information B Site does not crash	Site does not crash
	B Site is working correctly C The site always works correctly C The website functions as it should	Site is working correctly and functions as it should
	B Available for business A Excellent _ companies will have operating hours convenient to all their customers.	Site is always available for business
RELIABILITY Accuracy	Receiving B Received the item ordered C You get what you ordered from this site	
	Service Delivery D The quantity and quality of the product/service I received was exactly the same as I ordered	The quantity and quality of the product/service was exactly as I ordered
	A Excellent _ companies will perform the service right the first time. C This website gets the order correct	The product /service is delivered right the first time
	Product Representation C The product that came was accurately represented by the website	The product that came was accurately represented by the website
	B Information is accurate (make accurate promises, accurate description of products) B provides clear information about the products B more description along with pictures	
	B objective information C You know exactly what you're buying at this website	Product information is objective You know exactly what you're buying from this website
	Billing / Lack of Errors B Pages confirm exactly what was ordered. C The on-line receipt informs me of the total charges that will be debited against my credit card	The site confirms exactly what is ordered The on-line receipt informs me of the total charges that will be debited against my credit card
	D The billing process was accurately handled and its records were kept accurately B Billing is accurate(product and shipping costs) A Excellent _ companies will insist on error-free records (REL)	The billing process was accurately handled and its records kept accurately
	C Transactions at this website are error free	Transactions are error-free
RELIABILITY Items are In Stock	Product Availability C Products on the site are almost always in stock	Products on the site are almost always in stock
	B Items are available B items are available in my size F This store has merchandise available when the customer wants it	All the items I want are in stock
	B Items are available in suitable time frame	If products are not in stock they are available in a suitable time frame
	C The website lets me know about product availability during search	The website lets me know about product availability during search
	B Know that items are in stock	The website lets me know about product availability before placing an order
	Product Depth C The website has good selection C This site has a variety of products that interest me C The website has products I can't find in store C The website is updated often with new products C There are hard to find products on this site C I can find items that are unique or different on this site	The website has good selection The website has products I can't find in stores The website is updated often with new products There are hard to find products on this site
ASSURANCE TRUST Well known site / Credibility	B reputation of site C The company behind the site is reputable	The company behind the site is reputable
	B well known name C The company is well established	The company has a well known name The company is well established
	D The web site showed how long the internet retailer has been in this online business B advertises on other media so that name is well known	The website showed how long the company had been in business The company advertises on other media
	E The website projects an image consistent with the company's image E The website fits with my image of the company E The websites image matches that of the company	The website fits with my image of the company
	C The website instils confidence in customers A The behaviour of employees in excellent _ companies will instil confidence in customers.	The website instils confidence in customers
ASSURANCE TRUST Sells known brand names	F This store offers high quality merchandise	The website sells well known brand names The website offers high quality merchandise

ASSURANCE TRUST Offers a guarantee		The website offers a product guarantee
ASSURANCE TRUST Ratings provided by other customers	D The web site had a message area for customer questions and comments	The website had a message area for customer comments
RESPONSIVENESS Confirmation of Order	B received a confirmation of item ordered B quick confirmation D I received a personal 'thank you' note via email or other media after I placed an order B response time should be fast 'time is money'	A confirmation of order is received by email A confirmation of order is received by post
	B received and email when order was sent	I receive an email when the product is despatched
	B received information about when the order was coming A Employees in excellent _ companies will tell customers exactly when services will be performed.	I receive an email when the product will be delivered
RESPONSIVENESS Help available if there was a problem	B message about what to do if your order doesn't go through (eg Please submit again)	The website provides information about what to do if there is a problem
	B. Compensation for problems they create	The company offers compensation for problems they create
	F This store willingly handles returns and exchanges	The company willingly handles returns and exchanges
	B refund shipping charges when product doesn't arrive in time	The company refunds shipping charges when the product doesn't arrive in time
	C When you have a problem, this website shows a sincere interest in solving it A When a customer has a problem, excellent companies _ companies will show a sincere interest in solving it.	When you have a problem, the company shows a sincere interest in solving it
	C Customer service personnel are always willing to help you	Customer service personnel are always willing to help you
	A Employees in excellent companies will always be willing to help customers. F Employees in this store are able to handle customer complaints directly and immediately B taking care of problems quickly	Employees are able to resolve complaints directly and quickly
	B taking care of me after the purchase B emailing or otherwise following up the purchase and asking how satisfied I am	The company asks how satisfied I am after purchase
	C After sale support at this site is excellent	After sale support at the site is excellent
RESPONSIVENESS Speed of placing an order	B speed of execution C It is quick and easy to complete a transaction at this website	It is quick and easy to compete a transaction at this website
RESPONSIVENESS Quick delivery	C The website provides shipping options	I can customise my delivery options
	C The product is delivered by the time promised by the company C My order is delivered by date promised A Excellent _ companies will provide their services at the time they promise to do so A When excellent _ companies promise to do something by a certain time, they will do so. D The product/service I ordered was delivered to me within the time promised by the Internet retailer	The products were delivered by the time promised
	C You get you merchandise quickly when you order it	Most products are delivered within 48 hours
	C The items sent by the site are well packaged B knowing that shipping is free	Products are well packaged The company offers free delivery for orders over a certain value
RESPONSIVENESS Updates on status of order	C It's easy to track the shipping and delivery items of items purchased on this website	It's easy to track the shipping and delivery items of items purchased on this website I can check the status of the product by telephone
	C The home page provides a link to order status	The home page provides a link to order status
	C Download at this website is quick B not too many webpages	The website loads quickly
	B loads fast (not too many extraneous pictures) B not too many graphics that take up time to download E The website loads quickly E The web sites takes long to load B being able to get on the site quickly B not too many graphics that take time to download	There are not too many graphics that take too long to load
	B site should be easy to find D The cyberspace address was easy to remember	The internet address was easy to remember
	E When I use the Web site there is very little waiting times between my actions and the websites response	When I use the website there is very little waiting times between my actions and the websites responses
	Contact Options	
ACCESS To the company	B contains a telephone number to reach the company B ability to talk to a 'live' person using a telephone number D If I want to, I could easily contact a customer service representative over the phone. B. ability to talk to the person who processes the order	A contact telephone number is displayed on the site so that I can talk to a 'live' person
	C Inquiries are answered promptly A Employees in excellent _ companies will give prompt service to	Telephone calls are answered promptly

	customers. A Employees in excellent _ companies will never be too busy to respond to customers' requests.	
	D The Web site showed its street and email addresses, and phone and fax numbers	A contact address is shown on the website
	D The internet retailer offered multiple ordering options such as phone and mail options	The company offered multiple ordering options such as telephone and mail
	B fast response to email queries A Employees in excellent _ companies will have the knowledge to answer customers questions. D When the Internet retailers promised to email or call me by a certain time, it did so.	When the company promises to email or call by a certain time it does so
	B has online customer service reps	The company has online customer service representatives
	D For more information, I could turn to the Internet retailer's chat rooms, bulletin boards or others	The company has bulletin boards and chat rooms for customers to seek support
	Contact Quality	
	F Employees in this store treat customers courteously on the telephone A Employees in excellent _ companies will be consistently courteous with customers	Employees treat customers courteously on the telephone
	C The company is ready and willing to respond to customer needs	The company is ready and willing to respond to customer needs
FLEXIBILITY Choice of ways to pay	B. would like to pay my way using cheques	I have the option to pay by cheque by post
		I can set up an account with the company to be billed monthly
FLEXIBILITY Choice of way to ship	B ability to use different billing and shipping addresses	I can have products delivered to different billing and shipping addresses
	B ability to get the package without having to sign for it.	I do not personally have to sign for a package ordered in my name
		The company can deliver to secure storage boxes or third party collection points
FLEXIBILITY Choice of way to return the item	B having a brick and mortar option to return items B being able to return the items to a store	I can return items ordered online, to the companies retail stores
	C Returning items is relatively straightforward	Returning items is relatively straightforward
	C The returns policy at this site is reasonable	The returns policy is reasonable
FLEXIBILITY Choice of way to buy the item	E The website allows transactions online	
	E All my business with the company can be completed via the website E Most all business processes can be completed via the website	All my business with the company can be completed online
	E It is easier to use the website to complete my business with the company than it is to telephone, fax, or mail a representative E The website is easier to use than calling an organisational representative agent on the phone E The website is an alternative to calling customer sales or sales	
FLEXIBILITY Full information about choices	B options to be on an email list buy not receive junk mail	I do not receive junk mail from being on their mailing list
EASE OF NAVIGATION Easy to find what I need	B shouldn't get you lost B contains a site map with links to everything on the site B easy to get anywhere on the website (not go round in circles) C You can find what you want with a minimum number of clicks	
	C It's easy to get around and find what you want at this site (easy trans to cat)	It's easy to get around and find what you want at this site
	C I can go to exactly what I want quickly	I can quickly go to exactly what I want
	C The organisation and layout of the website facilitate searching for products F The store layout at this store makes it easy for customers to find what they want F The store layout at this store makes it easy for customers to move around in the store	The organisation and layout of the website facilitate easy searching for products
EASE OF NAVIGATION Has a search engine	C The search function at this website is helpful B by price/section or colour/size etc, search way you want to	The website has a useful search function
	B. good user interface B ability to find a page previously viewed B being able to go back when you make a mistake	The website has a good user interface
	C The layout of the site is clean and simple B site that contains just the basics B not too many web pages B no scrolling from side to side	The layout of the site is clean and simple
	C The site is organised in a way that is intuitive, like your thinking E Learning to operate the Web site is easy for me 6 E If would be easy for me to become skilful at using the Website	The website is organised in an intuitive way that is easy for me to use
	C The site has well arranged categories	The site has well arranged categories

	D The organisation and structure of online catalogues was logical and easy to follow C The website is laid out in a logical fashion	The website is laid out in a logical fashion
	B no fine print that is difficult to read and hard to find C I know what all my options are when I shop at this website	I know what all my options are when I shop at this website
	C Every process at this site moves like a well oiled machine C This site doesn't waste my time	This site doesn't waste my time
USABILITY: INFORMATION (.comQ TITLE)	B gives information in reasonable chunks B gives information on command rather than all at once	The level of information on the website is not overwhelming
	C At this site, I have the full information at hand C The website provides in-depth information C The website has comprehensive information	The website provides in-depth information
	C The site gives me enough information so that I can identify the item to the same degree as if I am in the store E The website adequately meets my information needs E The information on the Web site is effective	The site gives me enough information so that I can identify the item to the same degree as if I am in the store
	C The website is a very good source of information C The site helps me research products E The information on the Web site is pretty much what I need to carry out my tasks	The site helps me research products
PRICE KNOWLEDGE Knowledge of shipping prices	B want to know up-front what shipping charges are (can determine if purchase or go elsewhere)	The website lets me know up-front what shipping charges are
	C The website has reasonable shipping and handling costs	The website has reasonable shipping and handling costs
PRICE KNOWLEDGE Knowledge of what I am spending as I go	B running total of purchases as order progresses B running total of purchases and shipping costs B prices shown with the items on the screen B up-front pricing D All the terms and conditions (eg payment, warranty and return policies) were easy to read / understand (EASE)	Pricing is clear and easy to understand
PRICE KNOWLEDGE Knowledge that the site has low prices	C The site has competitive prices	The site has competitive prices
	C You get good value for the money spent at this website	You good value for money at this website
SITE AESTHETICS Good pictures of items on sale	B. colour of items same as it was on the screen	The colour of items is accurately represented on screen
	C The website has good pictures of the product B being able to see the products clearly	The website has good pictures of the products
	C The website has useful interactive features (for instance, being able to look a the product from all angles, building the product I want, or trying on the items virtually)	You can zoom in and rotate pictures so you can see the items from all angles
SITE AESTHETICS Simple	B no or few advertisements	There are no advertisements on the website
	D The contents in the Web site were concise and easy to understand	The contents of the website were concise and easy to understand
	E The display pages within the Web site are easy to read E The text on the website is easy to read E The web site labels are easy to understand	
	A The physical facilities at excellent _ companies will be visually appealing. A Materials associated with the service (such as pamphlets or statements) will be visually appealing in an excellent _ company. E The website is visually pleasing E The website displays visually pleasing design E The website is visually appealing C The website is visually appealing C The site's appearance is professional B free of distraction B uncluttered B clean, not too busy B no flashing things going across the screen B not too much movement	The website is visually appealing
CUSTOMISATION/ PERSONALISATION	C This site does a pretty good job guessing what kinds of things I might want and making suggestions A The employees of excellent _ companies will understand the specific needs of their customers.	The website does a good job of guessing what kind of things I might want
	B. site that makes recommendations about what I might like C This website stores all my preferences and offers me extra services or information based on my preferences	
	B. has a wish list capability that allows me to save items I might want to buy	The website has a 'wish list' capability that allows me to save items I might want to buy
	C The website understands my specific needs B site is targeted at me D The internet retailer gave me a personalised or individualised attention	

	<p>C This site has features that are personalised for me</p> <p>C This website gives you personal attention</p> <p>A Excellent _ companies will have employees who give their customers personal attention.</p> <p>A Excellent _ companies will give their customers individual attention.</p>	
	<p>C The level of personalisation at this site is about right, not too much, not too little.</p>	The level of personalisation at this site is about right, not too much, not too little
	<p>E The web site allows me to interact with it to receive tailored information</p> <p>E The website has interactive features which help me accomplish my task</p> <p>E I can interact with the Web site in order to get information tailored to my specific needs</p>	The website has interactive features which help me accomplish my task
CUSTOMISATION/ PERSONALISATION Easy to customise		The website is easy to customise
CUSTOMISATION/ PERSONALISATION Stores customer information to facilitate future transactions		The website stores my information to facilitate future transactions
SECURITY / PRIVACY Secure Site	<p>C This website has adequate security features</p> <p>B symbols and messages that signal the site is secure</p> <p>B verification from third parties</p>	This website has adequate security features
	<p>D I felt secure in providing sensitive information (eg credit card number) for online purchase</p> <p>C I feel secure giving out credit card information to this site</p>	I felt secure giving out credit card information to this site
	<p>C I feel safe in my transactions in this site</p> <p>E I feel safe in my transactions on the Web site</p> <p>D I felt the risk associated with online purchase was low</p> <p>A Customers of excellent _ companies will feel safe in their transactions.</p>	I feel safe in my transactions in this site
SECURITY Does not share private information	<p>C I feel I can trust this website</p> <p>B not having to give my credit card information until right at the end</p> <p>B. doesn't keep my credit information on file</p> <p>C I am worried about this site knowing everything about me</p> <p>B. personal information should not be compromised</p> <p>B. doesn't give other sites or companies access to my information</p> <p>B. doesn't use banner ads with cookies to collect information on me</p> <p>B. doesn't give my information away to other companies.</p> <p>C I trust this site will not mis-use my personal information</p> <p>C I feel like my privacy is protected at this site</p> <p>C I trust that this site will not give my information to other sites without my permission</p> <p>E I trust the Web site to keep my personal information safe</p> <p>E I trust the Web site administrators will not misuse my personal information</p>	<p>I feel I can trust the website</p> <p>I feel like my privacy and personal information is protected at this site</p>
EXPERIENTIAL / ATMOSPHERIC	<p>C The site almost says 'come in and shop'</p> <p>C The website has good surprises</p> <p>C There are features at this site that are entertaining to use</p> <p>C Buying at this website is exciting</p> <p>C It's really fun to shop at this website</p> <p>E I feel happy when I use the Website</p> <p>E I feel cheerful when I use the website</p> <p>E I feel sociable when I use the website</p>	<p>It's fun to shop at this website</p> <p>There are features at this site that are entertaining to use</p>
	<p>E The website is innovative</p> <p>E The website design is innovative</p> <p>E The website is creative</p> <p>C The website appears to use the best technology</p> <p>C The website has innovative features</p>	The website appears to use the best technology
	<p>C This website has customers best interests at heart</p> <p>A Excellent _ companies will have the customer's best interests at heart.</p>	The website has the customers best interests at heart
Promotional Impacts (added)	<p>C I feel like the company wants to provide me with a good buying experience</p> <p>C The website appreciates my business</p>	<p>I feel like the company wants to provide me with a good buying experience</p> <p>There are no pop-up advertisements</p>
	<p>D I received special rewards and discounts from doing businesses with the Internet retailer</p>	I receive special rewards and discounts from doing business with this website
	<p>C I like the special promotions and deals on this website</p> <p>C This site has great specials</p> <p>C The promotions for this site seem to beckon me</p> <p>B incentives to shop</p> <p>B knowing that a discount coupon is available</p>	The website has special promotions and deals available
		123 online service quality items.

APPENDIX 3.2 Customer Surveys

3.2.1. Original Combined Survey

We are conducting a survey of online and catalogue home shopping customer attitudes and beliefs. This questionnaire is an initial trial to allow refinement and reduction. This questionnaire is intended to only be completed by those who have purchased online or from a home shopping catalogue.

We would appreciate your help in both answering the questions below and highlighting any area which you feel is unclear or confusing.

Thank you for your help.

SECTION 1: THE PRODUCT BOUGHT

Please answer all questions in relation to a recent online or home shopping catalogue **product purchase** you have made in the UK.

1. What product will you be answering this questionnaire in relation to: _____ Value: £ _____

2. What company was the purchase made from: _____ Date of purchase: _____

3. Are the product(s) (please circle): For Personal Use For Business Use

4. How often do you purchase this type of product? (please circle) This is the first time Once or more a fortnight Once or more a month Less than once a month

Please indicate the extent to which you agree or disagree with each statement by circling the appropriate number:

	Strongly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Strongly Agree
5. When buying this type of product I choose very carefully	1	2	3	4	5
6. Consumer reports are relevant to me	1	2	3	4	5
7. It is important to me to be aware of all the alternatives before I buy an expensive item	1	2	3	4	5
8. The money saved by finding lower prices is usually not worth the time and effort	1	2	3	4	5
9. The price of a product is a good indicator of its quality	1	2	3	4	5
10. I do not have time to fully research products so rely on names I trust	1	2	3	4	5

SECTION 2: THE COMPANY YOU USED

1. What is the main reason you purchased this product from this company? _____

2. How often do you purchase from this company? This is the first time Once or more a fortnight Once or more a month Less than once a month

3. Approximately how many products in total have you bought from this company over the last year? 1-3 4-6 7-10 Over 10

4. Over the last year, what is the total value of your purchases from this company? Upto £20 £21 - £50 £51-£75 Over £75

5. How many companies do you purchase this type of product from? Always the same company 1 or 2 companies I buy from over and over 3-5 main companies I change companies I buy from regularly

SECTION 3: DELIVERY OF THE PRODUCT

1. What is your preferred delivery time(s)? (Circle as many times as preferred) No Preference Before 8am 8am-12pm 12-4pm 4-8pm After 8pm By arrangement only

2. What is your preferred delivery day(s)? Weekdays Saturdays Sundays

3. How do you spend the majority of time freed up by shopping from home? At home doing other activities Away from the home

Please indicate the extent to which you agree or disagree with each statement by circling the appropriate number:

	Strongly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Strongly Agree
4. I would shop more from home if I could specify the delivery time	1	2	3	4	5
5. I would shop more from home if there was the option to have products delivered to the house without my needing to be there	1	2	3	4	5
6. I would shop more from home if there was the option to have products delivered to other destinations (eg workplace or other collection point).	1	2	3	4	5

SECTION 4: MAKING THE PURCHASE

1. How often do you purchase online? Never This is the first time Up to once a week Up to once a month Less than once a month
If never go to Question 7

2. When did you make your first online purchase? Within last month 1-6 months ago 7-12 months ago 1-2 years ago Over two years ago

3. What is the total value of your online purchases over the last year? Upto £10 £11-25 £26-50 £51-75 ~~Ac~~ £75

Please indicate the extent to which you agree or disagree with each statement by circling the appropriate number:

	Strongly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Strongly Agree
4. I prefer to purchase from internet companies that I know from the high street	1	2	3	4	5
5. If I received poor service from an online purchase, I would not buy from that company through any means again	1	2	3	4	5
6. Would you purchase from a company that is only reachable via the internet?		YES	NO		
7. How often do you purchase from a home shopping catalogue? <i>I never go to Question 13.</i>	Never	This is the first time	Up to once a week	Up to once a month	Less than once a month
8. When did you make your first catalogue purchase?	Within last month	1-6 months ago	7-12 months ago	1-2 years ago	Over two years ago
9. What is the total value of your catalogue purchases over the last year?	Upto £10	£11-25	£26-50	£51-75	Over £75

Please indicate the extent to which you agree or disagree with each statement by circling the appropriate number:

	Strongly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Strongly Agree
10. I prefer to purchase from catalogue companies that I know from the high street	1	2	3	4	5
11. If I received poor service from a catalogue company I would not buy from that company through any channel again	1	2	3	4	5
12. Would you purchase from a company that is only reachable via the internet?		YES	NO		
13. Was this purchase made from:	The Internet	Digital TV	Catalogue	Retail Store	
14. Which channels have you used to purchase from this company?	The Internet	Digital TV	Catalogue	Retail Store	

Please indicate which of these products you have purchased or researched online or offline:

	Purchased ONLINE	Researched ONLINE, purchased OFFLINE	Researched OFFLINE, purchased ONLINE	Purchased OFFLINE	Not Purchased
15. Books	1	2	3	4	5
16. Compact Discs	1	2	3	4	5
17. DVDs or Videos	1	2	3	4	5
18. Computer Software	1	2	3	4	5
19. DIY and Building Equipment	1	2	3	4	5
20. Clothing	1	2	3	4	5
21. Electrical Goods	1	2	3	4	5
22. Computing Hardware	1	2	3	4	5
23. Financial, Banking and Insurance Services or Travel Services	1	2	3	4	5

24. What other online activities, if any, have you undertaken in the last three months?	Searching the web	Getting news	Getting sports scores	Online chatting	Playing online games	Tracking stocks	Email
25. What type of internet connection, if any, do you have?	No Connection	Modem	ISDN	Cable or ADSL	T1 / T3	Through television	Not Sure
26. Do you access the internet:	At Home		At work		Not at all		

SECTION 5: ATTITUDES

	Strongly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Strongly Agree
1. Most companies are more interested in profits than serving customers	1	2	3	4	5
2. What is seen on the outside of a package is often not what you get on the inside	1	2	3	4	5
3. The main reason a company is socially responsible is to make more sales	1	2	3	4	5
4. Companies that make products don't care enough about how well they perform	1	2	3	4	5
5. In general, I am satisfied with the quality of most products today	1	2	3	4	5
6. Products today last longer than they used to	1	2	3	4	5
7. Product advertising is believable	1	2	3	4	5

The next part of the questionnaire is divided into two sections:

Section 6 – For those who purchased the product **ONLINE**

Section 7 – For those who purchased the product **OFFLINE**

Please only answer the section which is relevant to you.

SECTION 6: ONLINE PURCHASERS ONLY

How important are the following factors in your decision to buy this type of product online?

	Very Unimportant	Unimportant	Neutral	Important	Very Important
1. I am not restricted to store opening hours	1	2	3	4	5
2. The search facility makes it easier to find the product	1	2	3	4	5
3. General convenience of online purchase	1	2	3	4	5
4. It's quicker than purchasing offline	1	2	3	4	5
5. Shopping from the comfort of the home	1	2	3	4	5
6. Greater product range available online	1	2	3	4	5
7. Not available from nearby retail stores	1	2	3	4	5
8. No suitable catalogue available	1	2	3	4	5
9. Getting the products delivered so don't have to carry them home	1	2	3	4	5
10. Website provides an entertainment source	1	2	3	4	5
11. Not being hassled by sales people	1	2	3	4	5
12. Don't have the time to go to the shops	1	2	3	4	5
13. Can track product through delivery process	1	2	3	4	5
14. Company offered an incentive for purchasing online	1	2	3	4	5
15. Prefer purchasing online to offline	1	2	3	4	5

16. What was your main reason for purchasing this product online:

Please indicate by circling the corresponding number, how important each of these factors is to you when purchasing online:

	Very Unimportant	Neutral	Very Important
1. The website does not crash	1	2	3
2. The website is working correctly and functions as it should	1	2	3
3. The website is always available for business	1	2	3
4. The quantity and quality of the product/service was exactly as ordered	1	2	3
5. The product /service is delivered right the first time	1	2	3
6. The product that came was accurately represented by pictures and descriptions on the website	1	2	3
7. Product information is objective	1	2	3
8. You know exactly what you're buying from the website	1	2	3
9. The site confirms exactly what is ordered	1	2	3
10. The on-line receipt informs of the total charges that will be debited against my credit card	1	2	3
11. The billing process was accurately handled and its records kept accurately	1	2	3
12. Transactions are error-free	1	2	3
13. Products on the site are almost always in stock	1	2	3
14. All the items I want are in stock	1	2	3
15. If products are not in stock they are available in a suitable time frame	1	2	3
16. The website lets me know about product availability during search	1	2	3
17. The website lets me know about product availability before placing an order	1	2	3
18. The website has a good selection	1	2	3
19. The website has products I can't find in stores	1	2	3
20. There are hard to find products on this site	1	2	3
21. The website is updated often with new products	1	2	3
22. The company behind the site is reputable	1	2	3
23. The company has a well known name	1	2	3
24. The company is well established	1	2	3
25. The website shows how long the company had been in business	1	2	3
26. The company advertises on other media	1	2	3
27. The website fits with my image of the company	1	2	3
28. The website instils confidence among its customers	1	2	3
29. The website sells well known brand names	1	2	3
30. The website offers high quality merchandise	1	2	3
31. The website offers a product guarantee	1	2	3
32. The website had a message area for customer comments	1	2	3
33. A confirmation of order is received by email	1	2	3
34. A confirmation of order is received by post	1	2	3
35. I receive an email when the product is despatched	1	2	3
36. I receive an email when the product will be delivered	1	2	3
37. The website provides information about what to do if there is a problem	1	2	3
38. The company offers compensation for problems they create	1	2	3
39. The company willingly handles returns and exchanges	1	2	3
40. The company refunds shipping charges when the product doesn't arrive in time	1	2	3
41. When you have a problem, the company shows a sincere interest in solving it	1	2	3
42. Customer service personnel are always willing to help you	1	2	3
43. Employees are able to resolve complaints directly and quickly	1	2	3
44. The company asks how satisfied I am after purchase	1	2	3
45. After sale support at the site is excellent	1	2	3
46. It is quick and easy to complete a transaction at this website	1	2	3
47. I can customise my delivery options	1	2	3
48. The products were delivered by the time promised	1	2	3
49. Most products are available for delivery within 48 hours	1	2	3
50. Products are well packaged	1	2	3
51. The company offers free delivery for orders over a certain value	1	2	3
52. It's easy to track the shipping and delivery items of items purchased on this website	1	2	3
53. I can check the status of the product by telephone	1	2	3
54. The home page provides a link to order status	1	2	3

	Very Unimportant			Neutral			Very Important
55. The website loads quickly	1	2	3	4	5	6	7
56. There are not too many graphics that take too long to load	1	2	3	4	5	6	7
57. The internet address was easy to remember	1	2	3	4	5	6	7
58. When I use the website there is very little waiting times between my actions and the websites responses	1	2	3	4	5	6	7
59. A contact telephone number is displayed on the site so that I can talk to a 'live' person	1	2	3	4	5	6	7
60. Telephone calls are answered promptly	1	2	3	4	5	6	7
61. A contact address is shown on the website	1	2	3	4	5	6	7
62. The company offered multiple ordering options such as telephone and mail	1	2	3	4	5	6	7
63. When the company promises to email or call by a certain time it does so	1	2	3	4	5	6	7
64. The company has online customer service representatives	1	2	3	4	5	6	7
65. The company has bulletin boards and chat rooms for customers to seek support	1	2	3	4	5	6	7
66. Employees treat customers courteously on the telephone	1	2	3	4	5	6	7
67. The company is ready and willing to respond to customer needs	1	2	3	4	5	6	7
68. I have the option to pay by cheque by post	1	2	3	4	5	6	7
69. I can set up an account with the company to be billed monthly	1	2	3	4	5	6	7
70. I can have products delivered to different billing and shipping addresses	1	2	3	4	5	6	7
71. I do not personally have to sign for a package ordered in my name	1	2	3	4	5	6	7
72. The company can deliver to secure storage boxes or third party collection points	1	2	3	4	5	6	7
73. I can return items ordered online, to the company's retail stores	1	2	3	4	5	6	7
74. Returning items is relatively straightforward	1	2	3	4	5	6	7
75. The returns policy is reasonable	1	2	3	4	5	6	7
76. All my business with the company can be completed online	1	2	3	4	5	6	7
77. I do not receive junk mail from being on their mailing list	1	2	3	4	5	6	7
78. It's easy to get around and find what you want at this site	1	2	3	4	5	6	7
79. I can quickly go to exactly what I want	1	2	3	4	5	6	7
80. The organisation and layout of the website facilitate easy searching for products	1	2	3	4	5	6	7
81. The website has a useful search function	1	2	3	4	5	6	7
82. The website has a good user interface	1	2	3	4	5	6	7
83. The layout of the site is clean and simple	1	2	3	4	5	6	7
84. The website is organised in an intuitive way that is easy for me to use	1	2	3	4	5	6	7
85. The site has well arranged categories	1	2	3	4	5	6	7
86. The website is laid out in a logical fashion	1	2	3	4	5	6	7
87. I know what all my options are when I shop at this website	1	2	3	4	5	6	7
88. This site doesn't waste my time	1	2	3	4	5	6	7
89. The level of information on the website is not overwhelming	1	2	3	4	5	6	7
90. The website provides in-depth information	1	2	3	4	5	6	7
91. The site gives me enough information so that I can identify the item to the same degree as if I am in the store	1	2	3	4	5	6	7
92. The site helps me research products	1	2	3	4	5	6	7
93. The website lets me know up-front what shipping charges are	1	2	3	4	5	6	7
94. The website has reasonable shipping and handling costs	1	2	3	4	5	6	7
95. Pricing is clear and easy to understand	1	2	3	4	5	6	7
96. The site has competitive prices	1	2	3	4	5	6	7
97. You good value for money at this website	1	2	3	4	5	6	7
98. The colour of items is accurately represented on screen	1	2	3	4	5	6	7
99. The website has good pictures of the products	1	2	3	4	5	6	7
100. You can zoom in and rotate pictures so you can see the items from all angles	1	2	3	4	5	6	7
101. There are no advertisements on the website	1	2	3	4	5	6	7
102. The contents of the website are concise and easy to understand	1	2	3	4	5	6	7
103. The website is visually appealing	1	2	3	4	5	6	7
104. The website does a good job of guessing what kind of things I might want	1	2	3	4	5	6	7
105. The website has a 'wish list' capability that allows me to save items I might want to buy	1	2	3	4	5	6	7
106. The level of personalisation at this site is about right, not too much, not too little	1	2	3	4	5	6	7
107. The website has interactive features which help me accomplish my task	1	2	3	4	5	6	7
108. The website is easy to customise	1	2	3	4	5	6	7
109. The website stores my information to facilitate future transactions	1	2	3	4	5	6	7
110. The website has adequate security features	1	2	3	4	5	6	7
111. I feel secure giving out credit card information to this site	1	2	3	4	5	6	7
112. I feel safe in my transactions in this site	1	2	3	4	5	6	7
113. I feel I can trust the website	1	2	3	4	5	6	7
114. I feel like my privacy and personal information is protected at this site	1	2	3	4	5	6	7
115. It's fun to shop at the website	1	2	3	4	5	6	7
116. There are features at the site that are entertaining to use	1	2	3	4	5	6	7
117. The website appears to use the best technology	1	2	3	4	5	6	7
118. The website has the customers best interests at heart	1	2	3	4	5	6	7
119. I feel like the company wants to provide me with a good buying experience	1	2	3	4	5	6	7
120. There are no pop-up advertisements	1	2	3	4	5	6	7
121. I receive special rewards and discounts from doing business with this website	1	2	3	4	5	6	7
122. The website has special promotions and deals available	1	2	3	4	5	6	7

124. If you have to choose between lower prices or higher quality service, where would you put yourself on the following scale:

Low price matters much more Low price matters more They matter the same Service matters more Service matters much more

Please read the following ten statements relating to the service provided by the company. We would like to know how important each of these features is to you when you evaluate the company's quality of service. Please allocate a total of 100 points among the ten features according to how important each factor is to you – the more important the factor, the more points you should allocate.

1. The website is well designed and easy to use _____ points
 2. The products are accurately depicted on the website _____ points
 3. All the items I want are in stock and available _____ points
 4. The company has low prices _____ points
 5. The company can be contacted by telephone as well as via the internet _____ points
 6. The products can be delivered with 48 hours _____ points
 7. It is easy to return a product I do not want _____ points
 8. I can customise my interaction with the website _____ points
 9. I feel safe giving out credit card and personal details to the company _____ points
 10. The website provides a sense of entertainment, not just a purchase transaction. _____ points
- =====
- 100 points**

DETAILS ABOUT YOU

Please complete this section about yourself: 1. Gender: Male Female

2. Which of the following titles best describes your occupation:

	Higher managerial, admin or professional	Intermediate managerial, admin or professional	Supervisory, clerical, junior administrative or professional		Skilled manual worker			
	Semi and unskilled manual worker	Casual work	State pensioner		Student			
3. What is your age?		Under 18	18-24	25-34	35-44	45-54	55-65	Over 65
4. What is the highest educational qualification you hold?		None	GCSE or 'O' Level	Vocational Qualification	'A' Level	Under-graduate Degree	Post-graduate degree	
5. What is your household income?		Under £15,000	£15,001-£20,000	£20,000-£30,000	£30,001-£40,000	£40,001-£100,000	Over £100,000	
6. What type of area do you live in?			Town or City Centre	Urban	Suburban	Semi-rural	Rural	Don't know
7. What type of property is the delivery address?			Business	Home-Detached	Home-Semi-Detached	Home-Terraced	Home-Flat	Collection Point

Please indicate the extent to which you agree or disagree with each statement by circling the appropriate number:

	Strongly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Strongly Agree
8. I have a very hectic life	1	2	3	4	5
9. I do not seem to have enough time to do all the activities I would to each day	1	2	3	4	5
10. I am always rushing around	1	2	3	4	5

11. Political orientation: Left Wing Left of Centre Liberal Right of Centre Right Wing Don't Know

Please indicate whether you 'strongly agree', 'somewhat agree' are 'neutral', 'somewhat disagree' or 'strongly disagree' with the following statements:

	Strongly Agree	Somewhat agree	Neutral	Somewhat disagree	Strongly Disagree
I can usually figure out new hi-tech products and services without help from others	5	4	3	2	1
New technology is often too complicated to be useful	5	4	3	2	1
I like the idea of doing business via computers because you are not limited to regular business hours	5	4	3	2	1
When I get technical support from a provider of a high tech product or service, I sometimes feel as if I'm being taken advantage of by someone who knows more than I do	5	4	3	2	1
Technology gives people more control over their daily lives	5	4	3	2	1
I do not consider it wise giving out a credit card number over a computer	5	4	3	2	1
In general, I am among the first in my circle of friends to acquire new technology when it appears	5	4	3	2	1
I do not feel confident doing business with a place that can only be reached online.	5	4	3	2	1
Technology makes me more efficient in my occupation	5	4	3	2	1
If you provide information to a machine or over the internet, you can never be sure if it really gets to the right place.	5	4	3	2	1

SECTION 7: CATALOGUE PURCHASERS ONLY

How important are the following factors in your decision to buy this type of product from a catalogue?

	Very Unimportant	Unimportant	Neutral	Important	Very Important
1. I am not restricted to store opening hours	1	2	3	4	5
2. General convenience of catalogue purchase	1	2	3	4	5
3. Shopping from the comfort of the home	1	2	3	4	5
4. Greater product range available than in stores	1	2	3	4	5
5. Getting the products delivered so don't have to carry them home	1	2	3	4	5
6. Not being hassled by sales people	1	2	3	4	5
7. Don't have the time to go to the shops	1	2	3	4	5
8. Company offered an incentive for purchasing online	1	2	3	4	5
9. Prefer purchasing online to offline	1	2	3	4	5
10. Being able to pay off the purchase over a period of time not all at once	1	2	3	4	5

11. What was your main reason for purchasing this product from a catalogue:

If you do not currently PURCHASE online, which of these reasons applies:

1. I don't have access to the internet	YES	NO
2. I don't have a credit or debit card	YES	NO
3. I don't know how to access internet	YES	NO
4. I don't trust the internet as purchase medium	YES	NO
5. I want to see and touch product before buying	YES	NO
6. I want product immediately	YES	NO
7. I do not want to disclose credit or personal details to an online company	YES	NO
8. I am not confident the product would arrive when promised	YES	NO
9. I do not see any benefit in purchasing online as opposed to offline	YES	NO
10. I don't want to pay delivery charges	YES	NO
11. I am not at home enough to receive deliveries	YES	NO
12. I am worried about receiving SPAM / unsolicited mail	YES	NO
13. I previously purchased online and the product did not arrive as expected	YES	NO
14. Other reason(s):		

Please indicate by circling the corresponding number, how important each of these factors is to you when purchasing from a catalogue:

	Very Unimportant	Neutral	Very Important
1. The quantity and quality of the product/service was exactly as ordered	1 2 3 4 5 6 7		
2. The product /service is delivered right the first time	1 2 3 4 5 6 7		
3. The product that came was accurately represented by pictures and descriptions in the catalogue	1 2 3 4 5 6 7		
4. Product information is objective	1 2 3 4 5 6 7		
5. You know exactly what you're buying from the catalogue	1 2 3 4 5 6 7		
6. The company confirms exactly what is ordered	1 2 3 4 5 6 7		
7. The billing process was accurately handled and its records kept accurately	1 2 3 4 5 6 7		
8. Transactions are error-free	1 2 3 4 5 6 7		
9. Products in the catalogue are almost always in stock	1 2 3 4 5 6 7		
10. All the items I want are in stock	1 2 3 4 5 6 7		
11. If products are not in stock they are available in a suitable time frame	1 2 3 4 5 6 7		
12. The company lets me know about product availability before placing an order	1 2 3 4 5 6 7		
13. The catalogue has a good selection	1 2 3 4 5 6 7		
14. The catalogue has products I can't find in stores	1 2 3 4 5 6 7		
15. There are hard to find products in the catalogue	1 2 3 4 5 6 7		
16. The catalogue is updated often with new products	1 2 3 4 5 6 7		
17. The company behind the catalogue is reputable	1 2 3 4 5 6 7		
18. The company has a well known name	1 2 3 4 5 6 7		
19. The company is well established	1 2 3 4 5 6 7		
20. The catalogue shows how long the company had been in business	1 2 3 4 5 6 7		
21. The catalogue fits with my image of the company	1 2 3 4 5 6 7		
22. The catalogue instils confidence in customers	1 2 3 4 5 6 7		
23. The catalogue sells well known brand names	1 2 3 4 5 6 7		
24. The catalogue offers high quality merchandise	1 2 3 4 5 6 7		
25. The catalogue offers a product guarantee	1 2 3 4 5 6 7		
26. A confirmation of order is received by post	1 2 3 4 5 6 7		
27. I receive an email when the product is dispatched	1 2 3 4 5 6 7		
28. I receive an email when the product will be delivered	1 2 3 4 5 6 7		
29. The catalogue provides information about what to do if there is a problem	1 2 3 4 5 6 7		
30. The company offers compensation for problems they create	1 2 3 4 5 6 7		
31. The company willingly handles returns and exchanges	1 2 3 4 5 6 7		
32. The company refunds shipping charges when the product doesn't arrive in time	1 2 3 4 5 6 7		
33. When you have a problem, the company shows a sincere interest in solving it	1 2 3 4 5 6 7		
34. Customer service personnel are always willing to help you	1 2 3 4 5 6 7		
35. Employees are able to resolve complaints directly and quickly	1 2 3 4 5 6 7		
36. The company asks how satisfied I am after purchase	1 2 3 4 5 6 7		
37. After sale support is excellent	1 2 3 4 5 6 7		
38. It is quick and easy to complete a transaction with the company	1 2 3 4 5 6 7		
39. I can customise delivery options	1 2 3 4 5 6 7		
40. The products are delivered by the time promised	1 2 3 4 5 6 7		

	Very Unimportant	1	2	3	4	5	6	7	Very Important
41. Most products are available for delivery within 48 hours	1	2	3	4	5	6	7		
42. Products are well packaged	1	2	3	4	5	6	7		
43. The company offers free delivery for orders over a certain value	1	2	3	4	5	6	7		
44. It's easy to track the shipping and delivery of items	1	2	3	4	5	6	7		
45. I can check the status of the product by telephone	1	2	3	4	5	6	7		
46. Telephone calls are answered promptly	1	2	3	4	5	6	7		
47. A contact address is shown in the catalogue	1	2	3	4	5	6	7		
48. The company offered multiple ordering options such as telephone and mail	1	2	3	4	5	6	7		
49. When the company promises to call by a certain time it does so	1	2	3	4	5	6	7		
50. Employees treat customers courteously on the telephone	1	2	3	4	5	6	7		
51. The company is ready and willing to respond to customer needs	1	2	3	4	5	6	7		
52. I have the option to pay by cheque by post	1	2	3	4	5	6	7		
53. I can set up an account with the company to be billed monthly	1	2	3	4	5	6	7		
54. I can have products delivered to different billing and shipping addresses	1	2	3	4	5	6	7		
55. I do not personally have to sign for a package ordered in my name	1	2	3	4	5	6	7		
56. The company can deliver to secure storage boxes or third party collection points	1	2	3	4	5	6	7		
57. I can return items ordered through the catalogue, to the company's retail stores	1	2	3	4	5	6	7		
58. Returning items is relatively straightforward	1	2	3	4	5	6	7		
59. The returns policy is reasonable	1	2	3	4	5	6	7		
60. I do not receive junk mail from being on their mailing list	1	2	3	4	5	6	7		
61. It's easy to get around and find what you want in the catalogue	1	2	3	4	5	6	7		
62. The organisation and layout of the catalogue facilitate easy searching for products	1	2	3	4	5	6	7		
63. The layout of the catalogue is clean and simple	1	2	3	4	5	6	7		
64. The catalogue has well arranged categories	1	2	3	4	5	6	7		
65. The catalogue is laid out in a logical fashion	1	2	3	4	5	6	7		
66. The level of information in the catalogue is not overwhelming	1	2	3	4	5	6	7		
67. The catalogue provides in-depth information	1	2	3	4	5	6	7		
68. The catalogue gives me enough information so that I can identify the item to the same degree as if I am in the store	1	2	3	4	5	6	7		
69. The catalogue helps me research products	1	2	3	4	5	6	7		
70. The catalogue lets me know up-front what shipping charges are	1	2	3	4	5	6	7		
71. The catalogue has reasonable shipping and handling costs	1	2	3	4	5	6	7		
72. Pricing is clear and easy to understand	1	2	3	4	5	6	7		
73. The catalogue has competitive prices	1	2	3	4	5	6	7		
74. You good value for money with this catalogue	1	2	3	4	5	6	7		
75. The colour of items is accurately represented on the page	1	2	3	4	5	6	7		
76. The catalogue has good pictures of the products	1	2	3	4	5	6	7		
77. The contents of the catalogue were concise and easy to understand	1	2	3	4	5	6	7		
78. The catalogue is visually appealing	1	2	3	4	5	6	7		
79. I feel secure giving out credit card information to this company	1	2	3	4	5	6	7		
80. I feel safe in my transactions at this company	1	2	3	4	5	6	7		
81. I feel like my privacy and personal information is protected at this company	1	2	3	4	5	6	7		
82. The company has the customers best interests at heart	1	2	3	4	5	6	7		
83. I receive special rewards and discounts from doing business with this catalogue	1	2	3	4	5	6	7		
84. The catalogue has special promotions and deals available	1	2	3	4	5	6	7		

85. If you have to choose between lower prices or higher quality service, where would you put yourself on the following scale:

Low price matters much more Low price matters more They matter the same Service matters more Service matters much more

Please read the following ten statements relating to the service provided by the company. We would like to know how important each of these features is to you when you evaluate the company's quality of service. Please allocate a total of 80 points among the ten features according to how important each factor is to you – the more important the factor, the more points you should allocate.

1. The catalogue is well designed and easy to use _____ points
2. The products are accurately depicted in the catalogue _____ points
3. All the items I want are in stock and available _____ points
4. The company has low prices _____ points
5. The company can be contacted by telephone as well as via post _____ points
6. The company provides multiple delivery options _____ points
7. It is easy to return a product I do not want _____ points
8. I feel safe giving out credit card and personal details to the company _____ points

=====
80 points

DETAILS ABOUT YOU

Please complete this section about yourself:

1. Gender: Male Female

2. Which of the following titles best describes your occupation:

Higher managerial, admin or professional	Intermediate managerial, admin or professional	Supervisory, clerical, junior administrative or professional	Skilled manual worker				
Semi and unskilled manual worker	Casual work	State pensioner			Student		
3. What is your age?	Under 18	18-24	25-34	35-44	45-54	55-65	Over 65
4. What is the highest educational qualification you hold?	None	GCSE or 'O' Level	Vocational Qualification	'A' Level	Under-graduate Degree	Post-graduate degree	
5. What is your household income?	Under £15,000	£15,001-£20,000	£20,000-£30,000	£30,001-£40,000	£40,001-£100,000	Over £100,000	
6. What type of area do you live in?	Town or City Centre	Urban	Suburban	Semi-rural	Rural	Don't know	
7. What type of property is the delivery address?	Business	Home-Detached	Home-Semi-Detached	Home-Terraced	Home-Flat	Collection Point	

Please indicate the extent to which you agree or disagree with each statement by circling the appropriate number:

	Strongly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Strongly Agree
8. I have a very hectic life	1	2	3	4	5
9. I do not seem to have enough time to do all the activities I would like to do each day	1	2	3	4	5
10. I am always rushing around	1	2	3	4	5

11. Political orientation: Left Wing Left of Centre Liberal Right of Centre Right Wing Don't Know

Please indicate whether you 'strongly agree', 'somewhat agree' are 'neutral', 'somewhat disagree' or 'strongly disagree' with the following statements:

	Strongly Agree	Somewhat agree	Neutral	Somewhat disagree	Strongly Disagree
12. I can usually figure out new hi-tech products and services without help from others	5	4	3	2	1
13. New technology is often too complicated to be useful	5	4	3	2	1
14. I like the idea of doing business via computers because you are not limited to regular business hours	5	4	3	2	1
15. When I get technical support from a provider of a high tech product or service, I sometimes feel as if I'm being taken advantage of by someone who knows more than I do	5	4	3	2	1
16. Technology gives people more control over their daily lives	5	4	3	2	1
17. I do not consider it wise giving out a credit card number over a computer	5	4	3	2	1
18. In general, I am among the first in my circle of friends to acquire new technology when it appears	5	4	3	2	1
19. I do not feel confident doing business with a place that can only be reached online	5	4	3	2	1
20. Technology makes me more efficient in my occupation	5	4	3	2	1
21. When you provide information to a machine or over the internet, you can never be sure if it really gets to the right place.	5	4	3	2	1

3.2.2 Student Trial Questionnaire

(Separate format for online and offline purchase)



HOME SHOPPING CUSTOMER QUESTIONNAIRE

We are conducting a survey of online and catalogue home shopping customer attitudes and beliefs. This questionnaire is an initial trial to allow refinement and reduction. This questionnaire is intended **to only be completed by those who have purchased online.**

We would appreciate your help in both answering the questions and highlighting any area which you feel is unclear or confusing.

Thank you for your help.

SECTION 1: THE PRODUCT BOUGHT

Please answer all questions in relation to a recent **online product purchase** you have made in the UK.

1. What product will you be answering this questionnaire in relation to: _____ Value: £ _____

2. What company was the purchase made from: _____ Date of purchase: _____

3. Are the product(s) (please circle): For Personal Use For Business Use

4. How often do you purchase this type of product? (please circle) This is the first time Once or more a fortnight Once or more a month Less than once a month

Please indicate the extent to which you agree or disagree with each statement by circling the appropriate number:

	Strongly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Strongly Agree
5. When buying this type of product I choose very carefully	1	2	3	4	5
6. Consumer reports are relevant to me	1	2	3	4	5
7. It is important to me to be aware of all the alternatives before I buy an expensive item	1	2	3	4	5
8. The money saved by finding lower prices is usually not worth the time and effort	1	2	3	4	5
9. The price of a product is a good indicator of its quality	1	2	3	4	5
10. I do not have time to fully research products so rely on names I trust	1	2	3	4	5

SECTION 2: THE COMPANY YOU USED

1. What is the main reason you purchased this product from this company? _____

2. How often do you purchase from this company? This is the first time Once or more a fortnight Once or more a month Less than once a month

3. Approximately how many products in total have you bought from this company over the last year? 1-3 4-6 7-10 Over 10

4. Over the last year, what is the total value of your purchases from this company? Upto £20 £21 - £50 £51-£75 Over £75

5. How many companies do you purchase this type of product from? Always the same company 1 or 2 companies I buy from over and over 3-5 main companies I change companies I buy from regularly

SECTION 3: DELIVERY OF THE PRODUCT

1. What is your preferred weekday delivery time(s) for this type of product? (Circle as many times as preferred) No Preference Before 8am 8am-12pm 12-4pm 4-8pm After 8pm By arrangement only

2. What is your preferred delivery day for this type of product? Weekdays Saturdays Sundays

3. How do you spend the majority of time freed up by shopping from home? At home doing other activities Away from the home

Please indicate the extent to which you agree or disagree with each statement by circling the appropriate number:

	Strongly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Strongly Agree
4. I would shop more from home if I could specify the delivery time	1	2	3	4	5
5. I would shop more from home if there was the option to have products delivered to the house without my needing to be there	1	2	3	4	5
6. I would shop more from home if there was the option to have products delivered to other destinations (eg workplace or other collection point).	1	2	3	4	5

SECTION 4: MAKING THE PURCHASE

1. How often do you purchase online? Never This is the first time Up to once a week Up to once a month Less than once a month
If never go to Question 7

2. When did you make your first online purchase? Within last month 1-6 months ago 7-12 months ago 1-2 years ago Over two years ago

3. What is the total value of your online purchases over the last year? Upto £10 £11-25 £26-50 £51-75 Over £75

Please indicate the extent to which you agree or disagree with each statement by circling the appropriate number:

	Strongly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Strongly Agree
4. I prefer to purchase from internet companies that I know from the high street	1	2	3	4	5
5. If I received poor service from an online purchase, I would not buy from that company through any means again	1	2	3	4	5

SECTION 4: MAKING THE PURCHASE (Cont...)

6. Would you purchase from a company that is only reachable via the internet? YES NO
7. How often do you **purchase** from a home shopping catalogue? Never This is the first time Up to once a week Up to once a month Less than once a month
- If never go to Question 13.*
8. When did you make your first catalogue purchase? Within last month 1-6 months ago 7-12 months ago 1-2 years ago Over two years ago
9. What is the total value of your catalogue purchases over the last year? Upto £10 £11-25 £26-50 £51-75 Over £75

Please indicate the extent to which you agree or disagree with each statement by circling the appropriate number:

	Strongly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Strongly Agree
10. I prefer to purchase from catalogue companies that I know from the high street	1	2	3	4	5
11. If I received poor service from a catalogue company I would not buy from that company through any channel again	1	2	3	4	5

12. Would you purchase from a company that is only reachable via the internet? YES NO
13. Was this purchase made from: The Internet Digital TV Catalogue Retail Store
14. Which method(s) have you used to purchase from this company? The Internet Digital TV Catalogue Retail Store

Please indicate which of these products you have purchased or researched online or offline:

	Purchased ONLINE	Researched ONLINE, purchased OFFLINE	Researched OFFLINE, purchased ONLINE	Purchased OFFLINE	Not Purchased
15. Books	1	2	3	4	5
16. Compact Discs	1	2	3	4	5
17. DVDs or Videos	1	2	3	4	5
18. Computer Software	1	2	3	4	5
19. DIY and Building Equipment	1	2	3	4	5
20. Clothing	1	2	3	4	5
21. Electrical Goods	1	2	3	4	5
22. Computing Hardware	1	2	3	4	5
23. Financial, Banking and Insurance Services or Travel Services	1	2	3	4	5

24. What other online activities, if any, have you undertaken in the last three months? Searching the web Getting news Getting sports scores Online chatting Playing online games Tracking stocks Email
25. What type of internet connection, if any, do you have? No Connection Modem ISDN Cable or ADSL T1 / T3 Through television Not Sure
26. Do you access the internet: At Home At work Not at all

SECTION 5: ATTITUDES

Please indicate the extent to which you agree or disagree with each statement by circling the appropriate number:

	Strongly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Strongly Agree
1. Most companies are more interested in profits than serving customers	1	2	3	4	5
2. What is seen on the outside of a package is often not what you get on the inside	1	2	3	4	5
3. The main reason a company is socially responsible is to make more sales	1	2	3	4	5
4. Companies that make products don't care enough about how well they perform	1	2	3	4	5
5. In general, I am satisfied with the quality of most products today	1	2	3	4	5
6. Products today last longer than they used to	1	2	3	4	5
7. Product advertising is believable	1	2	3	4	5

SECTION 6: REASONS FOR ONLINE SHOPPING

How important are the following factors in your decision to buy this type of product online?

	Very Unimportant	Unimportant	Neutral	Important	Very Important
1. I am not restricted to store opening hours	1	2	3	4	5
2. The search facility makes it easier to find the product	1	2	3	4	5
3. General convenience of online purchase	1	2	3	4	5
4. It's quicker than purchasing offline	1	2	3	4	5
5. Shopping from the comfort of the home	1	2	3	4	5
6. Greater product range available online	1	2	3	4	5
7. Not available from nearby retail stores	1	2	3	4	5
8. No suitable catalogue available	1	2	3	4	5
9. Getting the products delivered so don't have to carry them home	1	2	3	4	5
10. Website provides an entertainment source	1	2	3	4	5
11. Not being hassled by sales people	1	2	3	4	5
12. Don't have the time to go to the shops	1	2	3	4	5
13. Can track product through delivery process	1	2	3	4	5
14. Company offered an incentive for purchasing online	1	2	3	4	5
15. Prefer purchasing online to offline	1	2	3	4	5

16. What was your main reason for purchasing this product online:

SECTION 7: SERVICE EXPECTATIONS AND ACTUAL DELIVERY

Please read the list of factors and indicate your opinion by circling the appropriate number:

1. In the **first column** – please indicate **how important this factor is to you** when purchasing online

2. In the **second column** – please indicate **how the company you purchased from performed on this factor** by your agreement/disagreement with the statements.

	Importance when purchasing online							How this company performed						
	Very Unimportant			Very Important				Strongly Disagree			Strongly Agree			
1. The website does not crash	1	2	3	4	5	6	7	1	2	3	4	5	6	7
2. The website is working correctly and functions as it should	1	2	3	4	5	6	7	1	2	3	4	5	6	7
3. The website is always available for business	1	2	3	4	5	6	7	1	2	3	4	5	6	7
4. The quantity and quality of the product was exactly as ordered	1	2	3	4	5	6	7	1	2	3	4	5	6	7
5. The product is delivered right the first time	1	2	3	4	5	6	7	1	2	3	4	5	6	7
6. The product that came was accurately represented by pictures and descriptions on the website	1	2	3	4	5	6	7	1	2	3	4	5	6	7
7. Product information is objective	1	2	3	4	5	6	7	1	2	3	4	5	6	7
8. You know exactly what you're buying from the website	1	2	3	4	5	6	7	1	2	3	4	5	6	7
9. The site confirms exactly what is ordered	1	2	3	4	5	6	7	1	2	3	4	5	6	7
10. The on-line receipt informs of the total charges that will be debited against my credit card	1	2	3	4	5	6	7	1	2	3	4	5	6	7
11. The billing process was accurately handled and its records kept accurately	1	2	3	4	5	6	7	1	2	3	4	5	6	7
12. Transactions are error-free	1	2	3	4	5	6	7	1	2	3	4	5	6	7
13. Products on the site are almost always in stock	1	2	3	4	5	6	7	1	2	3	4	5	6	7
14. All the items I want are in stock	1	2	3	4	5	6	7	1	2	3	4	5	6	7
15. If products are not in stock they are available in a suitable time frame	1	2	3	4	5	6	7	1	2	3	4	5	6	7
16. The website lets me know about product availability during search	1	2	3	4	5	6	7	1	2	3	4	5	6	7
17. The website lets me know about product availability before placing an order	1	2	3	4	5	6	7	1	2	3	4	5	6	7
18. The website has a good selection	1	2	3	4	5	6	7	1	2	3	4	5	6	7
19. The website has products I can't find in stores	1	2	3	4	5	6	7	1	2	3	4	5	6	7
20. There are hard to find products on this site	1	2	3	4	5	6	7	1	2	3	4	5	6	7
21. The website is updated often with new products	1	2	3	4	5	6	7	1	2	3	4	5	6	7

	Importance when purchasing online							How this company performed						
	Very Unimportant			Very Important				Strongly Disagree			Strongly Agree			
22. The company behind the site is reputable	1	2	3	4	5	6	7	1	2	3	4	5	6	7
23. The company has a well known name	1	2	3	4	5	6	7	1	2	3	4	5	6	7
24. The company is well established	1	2	3	4	5	6	7	1	2	3	4	5	6	7
25. The website shows how long the company had been in business	1	2	3	4	5	6	7	1	2	3	4	5	6	7
26. The company advertises on other media	1	2	3	4	5	6	7	1	2	3	4	5	6	7
27. The website fits with my image of the company	1	2	3	4	5	6	7	1	2	3	4	5	6	7
28. The website instils confidence among its customers	1	2	3	4	5	6	7	1	2	3	4	5	6	7
29. The website sells well known brand names	1	2	3	4	5	6	7	1	2	3	4	5	6	7
30. The website offers high quality merchandise	1	2	3	4	5	6	7	1	2	3	4	5	6	7
31. The website offers a product guarantee	1	2	3	4	5	6	7	1	2	3	4	5	6	7
32. The website had a message area for customer comments	1	2	3	4	5	6	7	1	2	3	4	5	6	7
33. A confirmation of order is received by email	1	2	3	4	5	6	7	1	2	3	4	5	6	7
34. A confirmation of order is received by post	1	2	3	4	5	6	7	1	2	3	4	5	6	7
35. I receive an email when the product is despatched	1	2	3	4	5	6	7	1	2	3	4	5	6	7
36. I receive an email when the product will be delivered	1	2	3	4	5	6	7	1	2	3	4	5	6	7
37. The website provides information about what to do if there is a problem	1	2	3	4	5	6	7	1	2	3	4	5	6	7
38. The company offers compensation for problems they create	1	2	3	4	5	6	7	1	2	3	4	5	6	7
39. The company willingly handles returns and exchanges	1	2	3	4	5	6	7	1	2	3	4	5	6	7
40. The company refunds shipping charges when the product doesn't arrive in time	1	2	3	4	5	6	7	1	2	3	4	5	6	7
41. When you have a problem, the company shows a sincere interest in solving it	1	2	3	4	5	6	7	1	2	3	4	5	6	7
42. Customer service personnel are always willing to help you	1	2	3	4	5	6	7	1	2	3	4	5	6	7
43. Employees are able to resolve complaints directly and quickly	1	2	3	4	5	6	7	1	2	3	4	5	6	7
44. The company asks how satisfied I am after purchase	1	2	3	4	5	6	7	1	2	3	4	5	6	7
45. After sale support at the site is excellent	1	2	3	4	5	6	7	1	2	3	4	5	6	7
46. It is quick and easy to complete a transaction at this website	1	2	3	4	5	6	7	1	2	3	4	5	6	7
47. I can customise my delivery options	1	2	3	4	5	6	7	1	2	3	4	5	6	7
48. The products were delivered by the time promised	1	2	3	4	5	6	7	1	2	3	4	5	6	7
49. Most products are available for delivery within 48 hours	1	2	3	4	5	6	7	1	2	3	4	5	6	7
50. Products are well packaged	1	2	3	4	5	6	7	1	2	3	4	5	6	7
51. The company offers free delivery for orders over a certain value	1	2	3	4	5	6	7	1	2	3	4	5	6	7
52. It's easy to track the shipping and delivery items of items purchased on this website	1	2	3	4	5	6	7	1	2	3	4	5	6	7
53. I can check the status of the order by telephone	1	2	3	4	5	6	7	1	2	3	4	5	6	7
54. The home page provides a link to order status	1	2	3	4	5	6	7	1	2	3	4	5	6	7
55. The website loads quickly	1	2	3	4	5	6	7	1	2	3	4	5	6	7
56. There are not too many graphics that take too long to load	1	2	3	4	5	6	7	1	2	3	4	5	6	7
57. The internet address was easy to remember	1	2	3	4	5	6	7	1	2	3	4	5	6	7
58. When I use the website there is very little waiting times between my actions and the websites responses	1	2	3	4	5	6	7	1	2	3	4	5	6	7
59. A contact telephone number is displayed on the site so that I can talk to a 'live' person	1	2	3	4	5	6	7	1	2	3	4	5	6	7
60. Telephone calls are answered promptly	1	2	3	4	5	6	7	1	2	3	4	5	6	7
61. A contact address is shown on the website	1	2	3	4	5	6	7	1	2	3	4	5	6	7
62. The company offered multiple ordering options such as telephone and mail	1	2	3	4	5	6	7	1	2	3	4	5	6	7
63. When the company promises to email or call by a certain time it does so	1	2	3	4	5	6	7	1	2	3	4	5	6	7
64. The company has online customer service representatives	1	2	3	4	5	6	7	1	2	3	4	5	6	7
65. The company has bulletin boards and chat rooms for customers to seek support	1	2	3	4	5	6	7	1	2	3	4	5	6	7
66. Employees treat customers courteously on the telephone	1	2	3	4	5	6	7	1	2	3	4	5	6	7
67. The company is ready and willing to respond to customer needs	1	2	3	4	5	6	7	1	2	3	4	5	6	7

	Importance when purchasing online							How this company performed							
	Very Unimportant			Very Important				Strongly Disagree			Strongly Agree				
68.	I have the option to pay by cheque by post	1	2	3	4	5	6	7	1	2	3	4	5	6	7
69.	I can set up an account with the company to be billed monthly	1	2	3	4	5	6	7	1	2	3	4	5	6	7
70.	I can have products delivered to different billing and shipping addresses	1	2	3	4	5	6	7	1	2	3	4	5	6	7
71.	I do not personally have to sign for a package ordered in my name	1	2	3	4	5	6	7	1	2	3	4	5	6	7
72.	The company can deliver to secure storage boxes or third party collection points	1	2	3	4	5	6	7	1	2	3	4	5	6	7
73.	I can return items ordered online, to the company's retail stores	1	2	3	4	5	6	7	1	2	3	4	5	6	7
74.	Returning items is relatively straightforward	1	2	3	4	5	6	7	1	2	3	4	5	6	7
75.	The returns policy is reasonable	1	2	3	4	5	6	7	1	2	3	4	5	6	7
76.	All my business with the company can be completed online	1	2	3	4	5	6	7	1	2	3	4	5	6	7
77.	I do not receive junk mail from being on their mailing list	1	2	3	4	5	6	7	1	2	3	4	5	6	7
78.	It's easy to get around and find what you want at this site	1	2	3	4	5	6	7	1	2	3	4	5	6	7
79.	I can quickly go to exactly what I want	1	2	3	4	5	6	7	1	2	3	4	5	6	7
80.	The organisation and layout of the website facilitate easy searching for products	1	2	3	4	5	6	7	1	2	3	4	5	6	7
81.	The website has a useful search function	1	2	3	4	5	6	7	1	2	3	4	5	6	7
82.	The website has a good user interface	1	2	3	4	5	6	7	1	2	3	4	5	6	7
83.	The layout of the site is clean and simple	1	2	3	4	5	6	7	1	2	3	4	5	6	7
84.	The website is organised in an intuitive way that is easy for me to use	1	2	3	4	5	6	7	1	2	3	4	5	6	7
85.	The site has well arranged categories	1	2	3	4	5	6	7	1	2	3	4	5	6	7
86.	The website is laid out in a logical fashion	1	2	3	4	5	6	7	1	2	3	4	5	6	7
87.	I know what all my options are when I shop at this website	1	2	3	4	5	6	7	1	2	3	4	5	6	7
88.	This site doesn't waste my time	1	2	3	4	5	6	7	1	2	3	4	5	6	7
89.	The level of information on the website is not overwhelming	1	2	3	4	5	6	7	1	2	3	4	5	6	7
90.	The website provides in-depth information	1	2	3	4	5	6	7	1	2	3	4	5	6	7
91.	The site gives me enough information so that I can identify the item to the same degree as if I am in the store	1	2	3	4	5	6	7	1	2	3	4	5	6	7
92.	The site helps me research products	1	2	3	4	5	6	7	1	2	3	4	5	6	7
93.	The website lets me know up-front what shipping charges are	1	2	3	4	5	6	7	1	2	3	4	5	6	7
94.	The website has reasonable shipping and handling costs	1	2	3	4	5	6	7	1	2	3	4	5	6	7
95.	Pricing is clear and easy to understand	1	2	3	4	5	6	7	1	2	3	4	5	6	7
96.	The site has competitive prices	1	2	3	4	5	6	7	1	2	3	4	5	6	7
97.	You good value for money at this website	1	2	3	4	5	6	7	1	2	3	4	5	6	7
98.	The colour of items is accurately represented on screen	1	2	3	4	5	6	7	1	2	3	4	5	6	7
99.	The website has good pictures of the products	1	2	3	4	5	6	7	1	2	3	4	5	6	7
101.	You can zoom in and rotate pictures so you can see the items from all angles	1	2	3	4	5	6	7	1	2	3	4	5	6	7
102.	There are no advertisements on the website	1	2	3	4	5	6	7	1	2	3	4	5	6	7
103.	The contents of the website are concise and easy to understand	1	2	3	4	5	6	7	1	2	3	4	5	6	7
104.	The website is visually appealing	1	2	3	4	5	6	7	1	2	3	4	5	6	7
105.	The website does a good job of guessing what kind of things I might want	1	2	3	4	5	6	7	1	2	3	4	5	6	7
106.	The website has a 'wish list' capability that allows me to save items I might want to buy	1	2	3	4	5	6	7	1	2	3	4	5	6	7
107.	The level of personalisation at this site is about right, not too much, not too little	1	2	3	4	5	6	7	1	2	3	4	5	6	7
108.	The website has interactive features which help me accomplish my task	1	2	3	4	5	6	7	1	2	3	4	5	6	7
109.	The website is easy to customise	1	2	3	4	5	6	7	1	2	3	4	5	6	7
110.	The website stores my information to facilitate future transactions	1	2	3	4	5	6	7	1	2	3	4	5	6	7
111.	The website has adequate security features	1	2	3	4	5	6	7	1	2	3	4	5	6	7
112.	I feel secure giving out credit card information to this site	1	2	3	4	5	6	7	1	2	3	4	5	6	7

	Importance when purchasing online							How this company performed						
	Very Unimportant			Very Important				Strongly Disagree			Strongly Agree			
113. I feel safe in my transactions in this site	1	2	3	4	5	6	7	1	2	3	4	5	6	7
114. I feel I can trust the website	1	2	3	4	5	6	7	1	2	3	4	5	6	7
115. I feel like my privacy and personal information is protected at this site	1	2	3	4	5	6	7	1	2	3	4	5	6	7
116. It's fun to shop at the website	1	2	3	4	5	6	7	1	2	3	4	5	6	7
117. There are features at the site that are entertaining to use	1	2	3	4	5	6	7	1	2	3	4	5	6	7
118. The website appears to use the best technology	1	2	3	4	5	6	7	1	2	3	4	5	6	7
119. The website has the customers best interests at heart	1	2	3	4	5	6	7	1	2	3	4	5	6	7
120. I feel like the company wants to provide me with a good buying experience	1	2	3	4	5	6	7	1	2	3	4	5	6	7
121. There are no pop-up advertisements	1	2	3	4	5	6	7	1	2	3	4	5	6	7
121. I receive special rewards and discounts from doing business with this website	1	2	3	4	5	6	7	1	2	3	4	5	6	7
123. The website has special promotions and deals available	1	2	3	4	5	6	7	1	2	3	4	5	6	7

124. If you have to choose between lower prices or higher quality service, where would you put yourself on the following scale:

Low price matters much more Low price matters more They matter the same Service matters more Service matters much more

SECTION 8: IMPORTANCE OF DIFFERENT FEATURES

Please read the following ten statements. We would like to know how important each of these factors is to you when you evaluate a company's quality of service. Please allocate a total of 100 points among the ten features according to how important each factor is to you – the more important the factor, the more points you should allocate.

- 1. The website is well designed and easy to use _____ points
- 2. The products are accurately depicted on the website _____ points
- 3. All the items I want are in stock and available _____ points
- 4. The company has low prices _____ points
- 5. The company can be contacted by telephone as well as via the internet _____ points
- 6. The products can be delivered with 48 hours _____ points
- 7. It is easy to return a product I do not want _____ points
- 8. I can customise my interaction with the website _____ points
- 9. I feel safe giving out credit card and personal details to the company _____ points
- 10. The website provides a sense of entertainment, not just a purchase transaction. _____ points

=====
100 points

Please turn over and complete the details about yourself

SECTION 9: DETAILS ABOUT YOU

Please complete this section about yourself:

1. Gender: Male Female

2. Which of the following titles best describes your occupation:

Higher managerial, admin or professional	Intermediate managerial, admin or professional	Supervisory, clerical, junior administrative or professional	Skilled manual worker				
Semi and unskilled manual worker	Casual work	State pensioner	Student				
3. What is your age?	Under 18	18-24	25-34	35-44	45-54	55-65	Over 65
4. What is the highest educational qualification you hold?	None	GCSE or 'O' Level	Vocational Qualification	'A' Level	Under-graduate Degree	Post-graduate degree	
5. What is your household income?	Under £15,000	£15,001-£20,000	£20,000-£30,000	£30,001-£40,000	£40,001-£100,000	Over £100,000	
6. What type of area do you live in?	Town or City Centre	Urban	Suburban	Semi-rural	Rural	Don't know	
7. What type of property is the delivery address?	Business	Home-Detached	Home-Semi-Detached	Home-Terraced	Home-Flat	Collection Point	
8. Which best describes your political orientation:	Left Wing	Left of Centre	Liberal	Right of Centre	Right Wing	Don't Know	

Please indicate the extent to which you agree or disagree with each statement by circling the appropriate number:

	Strongly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Strongly Agree
9. I have a very hectic life	1	2	3	4	5
10. I do not seem to have enough time to do all the activities I would to each day	1	2	3	4	5
11. I am always rushing around	1	2	3	4	5

Please indicate whether you 'strongly agree', 'somewhat agree' are 'neutral', 'somewhat disagree' or 'strongly disagree' with the following statements:

	Strongly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Strongly Agree
12. I can usually figure out new hi-tech products and services without help from others	1	2	3	4	5
13. New technology is often too complicated to be useful	1	2	3	4	5
14. I like the idea of doing business via computers because you are not limited to regular business hours	1	2	3	4	5
15. When I get technical support from a provider of a high tech product or service, I sometimes feel as if I'm being taken advantage of by someone who knows more than I do	1	2	3	4	5
16. Technology gives people more control over their daily lives	1	2	3	4	5
17. I do not consider it wise giving out a credit card number over a computer	1	2	3	4	5
18. In general, I am among the first in my circle of friends to acquire new technology when it appears	1	2	3	4	5
19. I do not feel confident doing business with a place that can only be reached online.	1	2	3	4	5
20. Technology makes me more efficient in my occupation	1	2	3	4	5
21. If you provide information to a machine or over the internet, you can never be sure if it really gets to the right place.	1	2	3	4	5

Thank you for your help in completing this questionnaire.

3.2.3 Alterations of Online and Catalogue Questions in Trial Research

1.	The website does not crash	X X X	
2.	The website is working correctly and functions as it should	X X X	
3.	The website is always available for business	X X X	
4.	The quantity and quality of the product was exactly as ordered	1.	The quantity and quality of the product/service was exactly as ordered
5.	The product is delivered right the first time	2.	The product /service is delivered right the first time
6.	The product that came was accurately represented by pictures and descriptions on the website	3.	The product that came was accurately represented by pictures and descriptions in the catalogue
7.	Product information is objective	4.	Product information is objective
8.	You know exactly what you're buying from the website	5.	You know exactly what you're buying from the catalogue
9.	The site confirms exactly what is ordered	6.	The company confirms exactly what is ordered
10.	The on-line receipt informs of the total charges that will be debited against my credit card	X X X	
11.	The billing process was accurately handled and its records kept accurately	7.	The billing process was accurately handled and its records kept accurately
12.	Transactions are error-free	8.	Transactions are error-free
13.	Products on the site are almost always in stock	9.	Products in the catalogue are almost always in stock
14.	All the items I want are in stock	10.	All the items I want are in stock
15.	If products are not in stock they are available in a suitable time frame	11.	If products are not in stock they are available in a suitable time frame
16.	The website lets me know about product availability during search	12.	The company lets me know about product availability before placing an order
17.	The website lets me know about product availability before placing an order	X X X	
18.	The website has a good selection	13.	The catalogue has a good selection
19.	The website has products I can't find in stores	14.	The catalogue has products I can't find in stores
20.	There are hard to find products on this site	15.	There are hard to find products in the catalogue
21.	The website is updated often with new products	16.	The catalogue is updated often with new products
22.	The company behind the site is reputable	17.	The company behind the catalogue is reputable
23.	The company has a well known name	18.	The company has a well known name
24.	The company is well established	19.	The company is well established
25.	The website shows how long the company had been in business	20.	The catalogue shows how long the company had been in business
26.	The company advertises on other media	X X X	
27.	The website fits with my image of the company	21.	The catalogue fits with my image of the company
28.	The website instils confidence among its customers	22.	The catalogue instils confidence in customers
29.	The website sells well known brand names	23.	The catalogue sells well known brand names
30.	The website offers high quality merchandise	24.	The catalogue offers high quality merchandise
31.	The website offers a product guarantee	25.	The catalogue offers a product guarantee
32.	The website had a message area for customer comments	X X X	
33.	A confirmation of order is received by email	X X X	
34.	A confirmation of order is received by post	26.	A confirmation of order is received by post
35.	I receive an email when the product is despatched	27.	I receive an email when the product is despatched
36.	I receive an email when the product will be delivered	28.	I receive an email when the product will be delivered
37.	The website provides information about what to do if there is a problem	29.	The catalogue provides information about what to do if there is a problem
38.	The company offers compensation for problems they create	30.	The company offers compensation for problems they create
39.	The company willingly handles returns and exchanges	31.	The company willingly handles returns and exchanges
40.	The company refunds shipping charges when the product doesn't arrive in time	32.	The company refunds shipping charges when the product doesn't arrive in time
41.	When you have a problem, the company shows a sincere interest in solving it	33.	When you have a problem, the company shows a sincere interest in solving it
42.	Customer service personnel are always willing to help you	34.	Customer service personnel are always willing to help you
43.	Employees are able to resolve complaints directly and quickly	35.	Employees are able to resolve complaints directly and quickly
44.	The company asks how satisfied I am after purchase	36.	The company asks how satisfied I am after purchase
45.	After sale support at the site is excellent	37.	After sale support is excellent
46.	It is quick and easy to complete a transaction at this website	38.	It is quick and easy to complete a transaction with the company
47.	I can customise my delivery options	39.	I can customise delivery options

48.	The products were delivered by the time promised	40.	The products are delivered by the time promised
49.	Most products are available for delivery within 48 hours	41.	Most products are available for delivery within 48 hours
50.	Products are well packaged	42.	Products are well packaged
51.	The company offers free delivery for orders over a certain value	43.	The company offers free delivery for orders over a certain value
52.	It's easy to track the shipping and delivery items of items purchased on this website	44.	It's easy to track the shipping and delivery of items
53.	I can check the status of the order by telephone	45.	I can check the status of the product by telephone
54.	The home page provides a link to order status	X X X	
55.	The website loads quickly	X X X	
56.	There are not too many graphics that take too long to load	X X X	
57.	The internet address was easy to remember	X X X	
58.	When I use the website there is very little waiting times between my actions and the websites responses	X X X	
59.	A contact telephone number is displayed on the site so that I can talk to a 'live' person	X X X	
60.	Telephone calls are answered promptly	46.	Telephone calls are answered promptly
61.	A contact address is shown on the website	47.	A contact address is shown in the catalogue
62.	The company offered multiple ordering options such as telephone and mail	48.	The company offered multiple ordering options such as telephone and mail
63.	When the company promises to email or call by a certain time it does so	49.	When the company promises to call by a certain time it does
64.	The company has online customer service representatives	X X X	
65.	The company has bulletin boards and chat rooms for customers to seek support	X X X	
66.	Employees treat customers courteously on the telephone	50.	Employees treat customers courteously on the telephone
67.	The company is ready and willing to respond to customer needs	51.	The company is ready and willing to respond to customer needs
68.	I have the option to pay by cheque by post	52.	I have the option to pay by cheque by post
69.	I can set up an account with the company to be billed monthly	53.	I can set up an account with the company to be billed monthly
70.	I can have products delivered to different billing and shipping addresses	54.	I can have products delivered to different billing and shipping addresses
71.	I do not personally have to sign for a package ordered in my name	55.	I do not personally have to sign for a package ordered in my name
72.	The company can deliver to secure storage boxes or third party collection points	56.	The company can deliver to secure storage boxes or third party collection points
73.	I can return items ordered online, to the company's retail stores	57.	I can return items ordered through the catalogue, to the company's retail stores
74.	Returning items is relatively straightforward	58.	Returning items is relatively straightforward
75.	The returns policy is reasonable	59.	The returns policy is reasonable
76.	All my business with the company can be completed online	X X X	
77.	I do not receive junk mail from being on their mailing list	60.	I do not receive junk mail from being on their mailing list
78.	It's easy to get around and find what you want at this site	61.	It's easy to get around and find what you want in the catalogue
79.	I can quickly go to exactly what I want	X X X	
80.	The organisation and layout of the website facilitate easy searching for products	62.	The organisation and layout of the catalogue facilitate easy searching for products
81.	The website has a useful search function	X X X	
82.	The website has a good user interface	X X X	
83.	The layout of the site is clean and simple	63.	The layout of the catalogue is clean and simple
84.	The website is organised in an intuitive way that is easy for me to use	X X X	
85.	The site has well arranged categories	64.	The catalogue has well arranged categories
86.	The website is laid out in a logical fashion	65.	The catalogue is laid out in a logical fashion
87.	I know what all my options are when I shop at this website	X X X	
88.	This site doesn't waste my time	X X X	
89.	The level of information on the website is not overwhelming	66.	The level of information in the catalogue is not overwhelming
90.	The website provides in-depth information	67.	The catalogue provides in-depth information
91.	The site gives me enough information so that I can identify the item to the same degree as if I am in the store	68.	The catalogue gives me enough information so that I can identify the item to the same degree as if I am in the store
92.	The site helps me research products	69.	The catalogue helps me research products
93.	The website lets me know up-front what shipping charges are	70.	The catalogue lets me know up-front what shipping charges are

94.	The website has reasonable shipping and handling costs	71.	The <u>catalogue</u> has reasonable shipping and handling costs
95.	Pricing is clear and easy to understand	72.	Pricing is clear and easy to understand
96.	The site has competitive prices	73.	The <u>catalogue</u> has competitive prices
97.	You good value for money at this website	74.	You good value for money with this <u>catalogue</u>
98.	The colour of items is accurately represented on screen	75.	The colour of items is accurately represented on the <u>page</u>
99.	The website has good pictures of the products	76.	The <u>catalogue</u> has good pictures of the products
101.	You can zoom in and rotate pictures so you can see the items from all angles	X X X	
102.	There are no advertisements on the website	X X X	
103.	The contents of the website are concise and easy to understand	77.	The contents of the <u>catalogue</u> were concise and easy to understand
104.	The website is visually appealing	78.	The <u>catalogue</u> is visually appealing
105.	The website does a good job of guessing what kind of things I might want	X X X	
106.	The website has a 'wish list' capability that allows me to save items I might want to buy	X X X	
107.	The level of personalisation at this site is about right, not too much, not too little	X X X	
108.	The website has interactive features which help me accomplish my task	X X X	
109.	The website is easy to customise	X X X	
110.	The website stores my information to facilitate future transactions	X X X	
111.	The website has adequate security features	X X X	
112.	I feel secure giving out credit card information to this site	79.	I feel secure giving out credit card information to this <u>company</u>
113.	I feel safe in my transactions in this site	80.	I feel safe in my transactions at this <u>company</u>
114.	I feel I can trust the website		
115.	I feel like my privacy and personal information is protected at this site	81.	I feel like my privacy and personal information is protected at this <u>company</u>
116.	It's fun to shop at the website	X X X	
117.	There are features at the site that are entertaining to use	X X X	
118.	The website appears to use the best technology	X X X	
119.	The website has the customers best interests at heart	82.	The <u>company</u> has the customers best interests at heart
120.	I feel like the company wants to provide me with a good buying experience	X X X	
121.	There are no pop-up advertisements	X X X	
121.	I receive special rewards and discounts from doing business with this website	83.	I receive special rewards and discounts from doing business with this <u>catalogue</u>
123.	The website has special promotions and deals available	84.	The <u>catalogue</u> has special promotions and deals available

3.2.4 Final Survey

(Layout is indicative only as actual survey was conducted online)

INTERNET PURCHASER RESEARCH PROJECT

PRODUCT BASED QUESTIONNAIRE DRAFT

WWW.HOMESHOPPINGRESEARCH.COM

WWW.USERSURVEY.CO.UK

**NIALL C PIERCY
LECTURER IN MANAGEMENT
SCHOOL OF MANAGEMENT
UNIVERSITY OF BATH
CLAVERTON DOWN
BATH CA2 7AY**

**TEL: 01225 383 149/492
EMAIL: N.C.PIERCY@BATH.AC.UK**

SECTION 1: THE PRODUCT BOUGHT

1. What product(s) have you purchased? If products are branded, please state brand name and type (eg Ralph Lauren – shirt)

2. What was the total amount spent? £ _____ 3. Are the product(s) for (please circle): Personal Use Business Use A gift

4. Was this purchase (please circle): Planned Impulse Prompted by an Advert or Promotion while Online

5. How often do you purchase this type of product? (please circle) This is the first time Once or more a fortnight Once or more a month Less than once a month

6. Before purchasing, did you research the product: (please circle) Not at All Online In a Catalogue In a Retail Store

Please indicate the extent to which you agree or disagree with each statement by circling the appropriate number:

	Strongly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Strongly Agree
7. When buying this type of product I choose very carefully	1	2	3	4	5
8. Consumer reports are relevant to me when purchasing this type of product	1	2	3	4	5
9. It is important to me to be aware of all the alternatives before I buy this type of product	1	2	3	4	5
10. The money saved by finding lower prices is usually not worth the time and effort when purchasing this type of product	1	2	3	4	5
11. The price of this type of product is a good indicator of its quality	1	2	3	4	5
12. I don't have time to fully research this product type so rely on names I trust	1	2	3	4	5

In relation to the type of product you have purchased, please indicate the importance of each of factor:

	Very Unimportant	Unimportant	Neutral	Important	Very Important
13. Low Price	1	2	3	4	5
14. High Quality Service	1	2	3	4	5

SECTION 2: THE COMPANY YOU USED

1. What is the main reason you purchased this product from this company?

2. How often do you purchase from this company? This is the first time Less than once a month Once or more a month Once or more a fortnight

3. How long have you been purchasing from this company? This is the first time Up to 6 months 6-12 months 1-2 years Over 2 years

4. Over the last year, what is the total value of your purchases from this company? Up to £20 £21 - £50 £51-£100 £101-£200 Over £201

5. Which methods have you used to purchase from this company? Internet Catalogue Retail Store Digital TV

6. How many companies do you purchase this type of product from? Always the same company 1 or 2 main companies 3 to 5 main companies Many different companies

Please indicate the extent to which you agree or disagree with each statement by circling the appropriate number:

	Strongly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Strongly Agree
7. I shop with the company because there are no alternatives for the products I require	1	2	3	4	5
8. I shop with this company out of choice because their offering best matches my needs	1	2	3	4	5
9. I would recommend this company to others	1	2	3	4	5
10. I am likely to shop with this company again	1	2	3	4	5

SECTION 3: MAKING THE PURCHASE

1. How often do you purchase online? Never This is the first time Less than once a month Once or more a month Once or more a fortnight

2. When did you make your first online purchase? Within last month 1-6 months ago 7-12 months ago 1-2 years ago Over two years ago

3. What is the total value of your online purchases over the last year? Up to £20 £21-£50 £51-£100 £101-£200 Over £201

SECTION 3: MAKING THE PURCHASE (cont)

When purchasing this type of product, please indicate the extent to which you agree or disagree with each statement by circling the appropriate number:

	Strongly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Strongly Agree
4. I prefer to purchase from internet companies that I know from the high street	1	2	3	4	5
5. If I received poor service from an online purchase, I would not buy from that company through any means again	1	2	3	4	5
6. I would purchase from a company that is only reachable via the internet or email.	1	2	3	4	5

7. What was your main reason for purchasing this product online:

SECTION 7: SERVICE EXPECTATIONS AND ACTUAL DELIVERY

In the next eight sections we would like you to indicate how important each of the factors listed is to you and how well the company has performed on this factor. Please read the list of factors and indicate your opinion by circling the appropriate number on the scale:

1. In the **first column** – please indicate **how important this factor is to you** when purchasing this type of product online, where 1 = very unimportant and 7 = very important.

2. In the **second column** – please indicate **how the company performed** on this factor, where 1 = company performs very badly and 7 = company performs very well.

If you have no experience of the feature or attribute mentioned, please leave that question unanswered.

1. Product Identification and Availability

	How important each factor is to you							How the company performed						
	Very Unimportant			Very Important				Performs Very Badly			Performs Very Well			
1. The website has a useful search function	1	2	3	4	5	6	7	1	2	3	4	5	6	7
2. It's easy to get around and find what you want at this site	1	2	3	4	5	6	7	1	2	3	4	5	6	7
3. The website is laid out in a logical fashion	1	2	3	4	5	6	7	1	2	3	4	5	6	7
4. The layout of the site is clean and simple	1	2	3	4	5	6	7	1	2	3	4	5	6	7
5. The website has a good user interface	1	2	3	4	5	6	7	1	2	3	4	5	6	7
6. Pricing is clear and easy to understand	1	2	3	4	5	6	7	1	2	3	4	5	6	7
7. I know what all my options are when I shop at this website	1	2	3	4	5	6	7	1	2	3	4	5	6	7
8. The website lets me know delivery charges up-front	1	2	3	4	5	6	7	1	2	3	4	5	6	7
9. This site doesn't waste my time	1	2	3	4	5	6	7	1	2	3	4	5	6	7
10. The website has products I can't find in stores	1	2	3	4	5	6	7	1	2	3	4	5	6	7
11. There are hard to find products on this site	1	2	3	4	5	6	7	1	2	3	4	5	6	7
12. All the items I want are in stock	1	2	3	4	5	6	7	1	2	3	4	5	6	7
13. The website has a good selection	1	2	3	4	5	6	7	1	2	3	4	5	6	7
14. The contents of the website are concise and easy to understand	1	2	3	4	5	6	7	1	2	3	4	5	6	7
15. The site gives me enough information so that I can identify the item as well as if I am in a store	1	2	3	4	5	6	7	1	2	3	4	5	6	7

2. Company Image

	How important each factor is to you							How the company performed						
	Very Unimportant			Very Important				Performs Very Badly			Performs Very Well			
1. The company has a well known name	1	2	3	4	5	6	7	1	2	3	4	5	6	7
2. The website fits with my image of the company	1	2	3	4	5	6	7	1	2	3	4	5	6	7
3. The company advertises on other media	1	2	3	4	5	6	7	1	2	3	4	5	6	7
4. The company behind the site is reputable	1	2	3	4	5	6	7	1	2	3	4	5	6	7
5. The website instils confidence among its customers	1	2	3	4	5	6	7	1	2	3	4	5	6	7
6. The website offers high quality merchandise	1	2	3	4	5	6	7	1	2	3	4	5	6	7
7. I receive special rewards and discounts from doing business with this website	1	2	3	4	5	6	7	1	2	3	4	5	6	7

3. The Website

	How important each factor is to you							How the company performed						
	Very Unimportant			Very Important				Performs Very Badly			Performs Very Well			
1. The website is easy to customise	1	2	3	4	5	6	7	1	2	3	4	5	6	7
2. It's fun to shop at the website	1	2	3	4	5	6	7	1	2	3	4	5	6	7
3. There are features at the site that are entertaining to use	1	2	3	4	5	6	7	1	2	3	4	5	6	7
4. The website does a good job of guessing what kind of things I might want	1	2	3	4	5	6	7	1	2	3	4	5	6	7
5. The website has a 'wish list' capability that allows me to save items I might want to buy	1	2	3	4	5	6	7	1	2	3	4	5	6	7
6. The level of personalisation at this site is about right, not too much, not too little	1	2	3	4	5	6	7	1	2	3	4	5	6	7
7. The website stores my information to facilitate future transactions	1	2	3	4	5	6	7	1	2	3	4	5	6	7

4. Contacting the Company

	How important each factor is to you							How the company performed						
	Very Unimportant			Very Important				Performs Very Badly			Performs Very Well			
1. Telephone calls are answered promptly	1	2	3	4	5	6	7	1	2	3	4	5	6	7
2. A contact address is shown on the website	1	2	3	4	5	6	7	1	2	3	4	5	6	7
3. When the company promises to email or call by a certain time it does so	1	2	3	4	5	6	7	1	2	3	4	5	6	7
4. A contact telephone number is displayed on the site so that I can talk to a 'live' person	1	2	3	4	5	6	7	1	2	3	4	5	6	7

5. Customer Service

	How important each factor is to you							How the company performed						
	Very Unimportant			Very Important				Performs Very Badly			Performs Very Well			
1. The website is always available for business	1	2	3	4	5	6	7	1	2	3	4	5	6	7
2. The website is working correctly and functions as it should	1	2	3	4	5	6	7	1	2	3	4	5	6	7
3. You get good value for money at this website	1	2	3	4	5	6	7	1	2	3	4	5	6	7
4. The site has competitive prices	1	2	3	4	5	6	7	1	2	3	4	5	6	7
5. The website has good pictures of the products	1	2	3	4	5	6	7	1	2	3	4	5	6	7
6. It is quick and easy to complete a transaction at this website	1	2	3	4	5	6	7	1	2	3	4	5	6	7
7. After sale support at the site is excellent	1	2	3	4	5	6	7	1	2	3	4	5	6	7
8. The products were delivered by the time promised	1	2	3	4	5	6	7	1	2	3	4	5	6	7
9. The company willingly handles returns and exchanges	1	2	3	4	5	6	7	1	2	3	4	5	6	7
10. Customer service personnel are always willing to help you	1	2	3	4	5	6	7	1	2	3	4	5	6	7
11. When you have a problem, the company shows a sincere interest in solving it	1	2	3	4	5	6	7	1	2	3	4	5	6	7
12. I can return items ordered online, to the company's retail stores	1	2	3	4	5	6	7	1	2	3	4	5	6	7
13. The company refunds shipping charges when the product doesn't arrive in time	1	2	3	4	5	6	7	1	2	3	4	5	6	7
14. I feel like the company wants to provide me with a good buying experience	1	2	3	4	5	6	7	1	2	3	4	5	6	7
15. The company offers free delivery for orders over a certain value	1	2	3	4	5	6	7	1	2	3	4	5	6	7

6. Trust in the Company

	How important each factor is to you							How the company performed						
	Very Unimportant			Very Important				Performs Very Badly			Performs Very Well			
1. The website has adequate security features	1	2	3	4	5	6	7	1	2	3	4	5	6	7
2. I feel secure giving out credit card information to this site	1	2	3	4	5	6	7	1	2	3	4	5	6	7
3. I feel safe in my transactions at this site	1	2	3	4	5	6	7	1	2	3	4	5	6	7
4. You know exactly what you're buying from the website	1	2	3	4	5	6	7	1	2	3	4	5	6	7
5. I feel like my privacy and personal information is protected at this site	1	2	3	4	5	6	7	1	2	3	4	5	6	7

7. Information

	How important each factor is to you							How the company performed								
	Very Unimportant							Very Important			Performs Very Badly			Performs Very Well		
1. I receive notification when the product will be delivered	1	2	3	4	5	6	7	1	2	3	4	5	6	7		
2. Most products are available for delivery within 48 hours	1	2	3	4	5	6	7	1	2	3	4	5	6	7		
3. The website provides in-depth information	1	2	3	4	5	6	7	1	2	3	4	5	6	7		
4. The site helps me research products	1	2	3	4	5	6	7	1	2	3	4	5	6	7		
5. It's easy to track the shipping and delivery items of purchased on this website	1	2	3	4	5	6	7	1	2	3	4	5	6	7		
6. The website lets me know about product availability during search	1	2	3	4	5	6	7	1	2	3	4	5	6	7		

I. Administrative Efficiency

	How important each factor is to you							How the company performed								
	Very Unimportant							Very Important			Performs Very Badly			Performs Very Well		
1. There are no pop-up advertisements	1	2	3	4	5	6	7	1	2	3	4	5	6	7		
2. There are no advertisements on the website	1	2	3	4	5	6	7	1	2	3	4	5	6	7		
3. The site confirms exactly what is ordered	1	2	3	4	5	6	7	1	2	3	4	5	6	7		
4. The quantity and quality of the product was exactly as ordered	1	2	3	4	5	6	7	1	2	3	4	5	6	7		
5. I can set up an account with the company to be billed monthly	1	2	3	4	5	6	7	1	2	3	4	5	6	7		
6. I have the option to pay by cheque by post	1	2	3	4	5	6	7	1	2	3	4	5	6	7		
7. I do not receive junk mail from being on their mailing list	1	2	3	4	5	6	7	1	2	3	4	5	6	7		
8. The product that came was accurately represented by pictures and descriptions on the website	1	2	3	4	5	6	7	1	2	3	4	5	6	7		
9. The billing process was accurately handled and its records kept accurately	1	2	3	4	5	6	7	1	2	3	4	5	6	7		
10. The company has bulletin boards and chat rooms for customers to seek support	1	2	3	4	5	6	7	1	2	3	4	5	6	7		

SECTION 9: LIFESTYLE

Please indicate whether you 'strongly agree', 'somewhat agree' are 'neutral', 'somewhat disagree' or 'strongly disagree' with the following statements:

	Strongly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Strongly Agree
1. Usually, I can figure out new high-tech products without help	1	2	3	4	5
2. New technology is often too complicated.	1	2	3	4	5
3. I like the idea of buying over the internet as I am not limited to normal hours of business.	1	2	3	4	5
4. When getting technical support I sometimes feel as if I'm being taken advantage of by someone who knows more than I do	1	2	3	4	5
5. Technology gives people more control over their daily lives	1	2	3	4	5
6. I don't think it's a good idea giving a credit card number over the internet	1	2	3	4	5
7. Generally, I'm among the first of my group of friends to acquire new technology	1	2	3	4	5
8. I do not feel confident doing business with a place that can only be reached online.	1	2	3	4	5
9. Technology makes me more efficient in my job	1	2	3	4	5
10. If you provide information to a machine or over the internet, you can never be sure if it really gets to the right place.	1	2	3	4	5

Please indicate the extent to which you agree or disagree with each statement by circling the appropriate number:

	Strongly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Strongly Agree
11. I have a very hectic life	1	2	3	4	5
12. I don't seem to have enough time to do all the activities I would like each day	1	2	3	4	5
13. I am always rushing around	1	2	3	4	5

SECTION 9: LIFESTYLE (cont)

14. Which of the following items do you currently purchase online. (please circle)	Books	CDs	DVDs/ Videos	Clothing	Computing Products	Groceries	
	Electrical Equipment	DIY / Tools / Hardware	Beauty / Healthcare	Sports/ Hobby Equipment	Travel or Financial Services		
15. What other online activities, if any, have you undertaken in the last three months?	Searching the web	Getting news	Getting sports scores	Online chatting	Playing online games	Tracking stocks	Email
16. What type of internet connection do you use?		Modem	ISDN	Cable or ADSL	Work Network	Through television	Not Sure
17. Do you purchase through the internet:		At Home		At work			

SECTION 10: DETAILS ABOUT YOU

Please complete this section about yourself:

1. Gender:	Male	Female					
3. What is your age?	Under 18	18-24	25-34	35-44	45-54	55-65	Over 65
2. Which of the following titles best describes your occupation:	Higher managerial, admin or professional	Intermediate managerial, admin or professional	Supervisory, clerical, junior administrative or professional	Skilled manual worker			
	Semi and unskilled manual worker	Casual work	State pensioner	Student			
4. What is the highest educational qualification you hold?		None	GCSE or 'O' Level	Vocational Qualification	'A' Level	Under-graduate Degree	Post-graduate degree
5. What is your household income?		Under £15,000	£15,001-£20,000	£20,001-£30,000	£30,001-£40,000	£40,001-£100,000	Over £100,000

If this was a business purchase, what is the principal activity of your business (eg. plumbers)?

If this was a business purchase, approximately what is the annual turnover of the company?

3.2.5 Alterations in Service Questionnaire

General Questions

- Q103. – spend on this – changed Over 201 to 201-500, over 501
- Q106. purchase frequency – added annually (eg car insurance renewal)
- Q301201 – added annual to purchase frequency

Service Quality

Product Availability

- Change - 8 know del charges upfront to charges for any extras
- 10 items can find in store to services can't find on the high st
- 11 hard to find services on website
- 12 all items in stock – services available immediately
- 15. item to service and 'I am in store' to to 'if talking to someone'

Image

- Ch – 6 - merchandise to service

Customer Service

- Ch – 5 – 'of the products' removed
- Ch 8 – del when promised to fulfilled when promised
- Ch 9 willingly handles returns and exchanges to cancellations and exchanges
- Ch 14 – delete buying
- 12, 13 and 15 DELETED

Information and Delivery

- 1 – receive notification when prod will be delivered to receive notification when payment taken confirming services fulfilment
- 2 – DELETE 48 hr delivery
- 4 – ch product to service
- 5 – DELETE track prods
- 6 – service availability

Administrative Efficiency

- 4 – quant and qual of prod to service
- 8 prod to service

APPENDIX 3.3 Organisational Questionnaires

3.3.1 ORGANISATIONAL PERFORMANCE DATA

To help us set in context the results of the managerial customer surveys completed by your organisation, please complete the details below and send an organisation chart on the reverse of this sheet.

What year was your company founded? _____

Approximately, what percentage of your company's total sales / turnover comes from:

Consumer Sales _____% Business Sales _____%
(Private individuals)

Approximately, what percentage of your business comes from sales made to:

Male Customers _____% Female Customers _____%

Approximately, what is the average total spend per transaction in your company (please state a figure or approximate range) £ _____

Please approximate the number of full time employees in the following departments?

Information Technology / E-Commerce _____
Marketing _____
Sales _____
Human Resources _____
Accounting/Finance _____
Operations _____

Please approximate what percent of your company sales have come from each of the following channels in each of the past three years.

	Year Ending 1 April 2004	Year Ending 1 April 2003	Year Ending 1 April 2002
Retail Store Sales	_____ %	_____ %	_____ %
Catalogue Sales	_____ %	_____ %	_____ %
Internet Sales	_____ %	_____ %	_____ %
Digital TV Sales	_____ %	_____ %	_____ %
Other:	_____ %	_____ %	_____ %
	=====	=====	=====
	100%	100%	100%

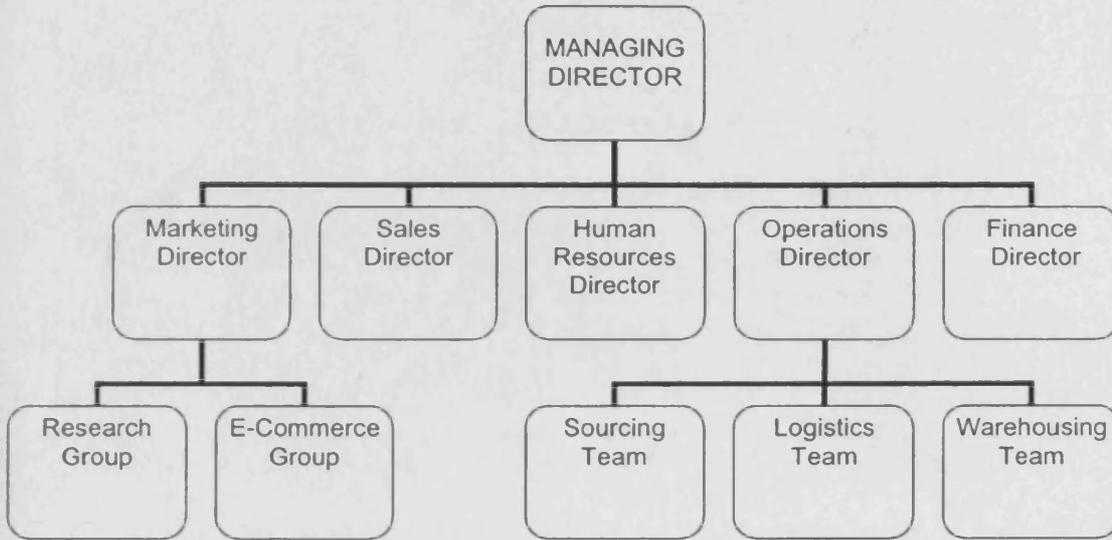
Please approximate figures for the following items:

If you would prefer not to give exact figures, please provide a range (eg. £10-25million)

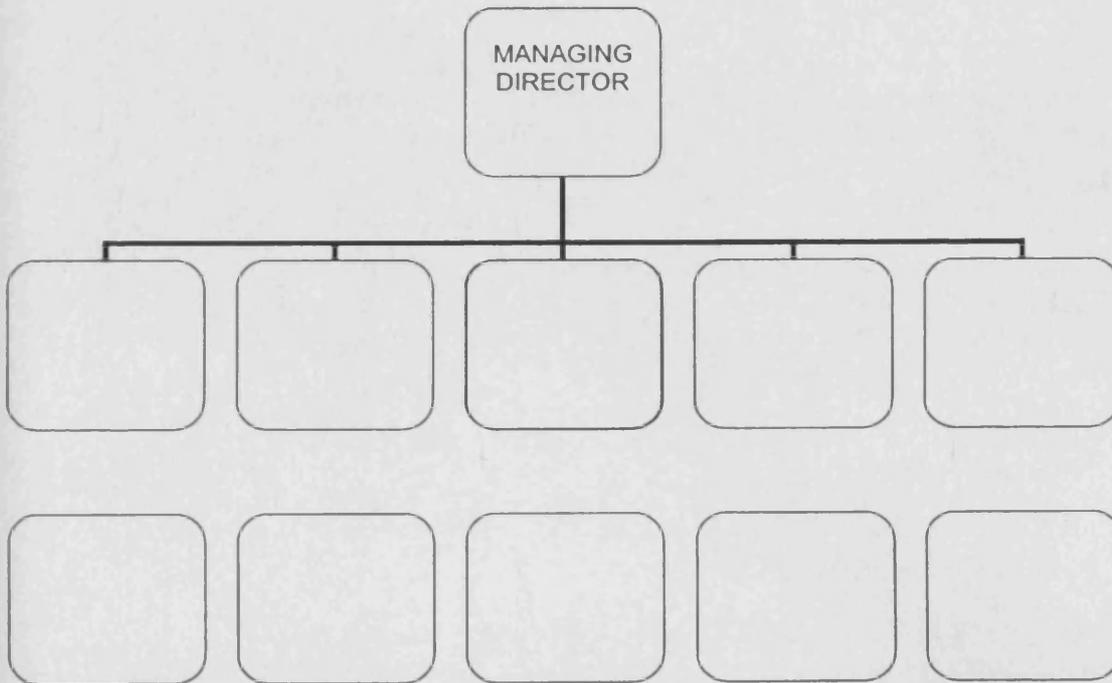
	Year Ending 1 April 2004	Year Ending 1 April 2003	Year Ending 1 April 2002
Total Sales	£ _____	£ _____	£ _____
Pre-Tax Profit	£ _____	£ _____	£ _____
Market Share	_____ %	_____ %	_____ %
Total Number of Full Time Employees	_____	_____	_____

Please complete the organisational diagram at the bottom of the page identifying marketing, sales, operations (logistics / sourcing / warehousing / distribution etc) and any other departments with board level directors (for example finance or information technology).

Example of Organisational Structure



Your Organisational Structure



What is the functional background of your CEO? (eg. marketing / sales / accounting etc)



MARKETING PERSONNEL SURVEY

This questionnaire is intended for anyone working in the areas of: marketing, sales, advertising, e-commerce, market research, business development or general management that deals with customer support on a regular basis.

As part of an ongoing research project between your company and the University of Bath School of Management, we are seeking to gather the opinions of various people working in your company.

We have already conducted a customer survey and are now investigating market effectiveness and the relationship between the marketing areas and operations areas in the business (for the purpose of this survey 'operations' covers: logistics, distribution, warehousing, purchasing/sourcing, supply management, transport and other related processes).

Please answer each question honestly - there are no right or wrong answers, all surveys are anonymous and results will be reported in an aggregate form that does not identify individual responses. Most questions are answered by ticking a box or circling an answer that best represents your opinion on the question.

This questionnaire should only take ten minutes to complete and will contribute towards a better understanding of the processes involved in customer service and fulfilment that contribute to organisational success.

When you have completed the survey please return it in the attached envelope.

Thank you for your assistance.

Niall Piercy
University of Bath
Email: N.C.Piercy@bath.ac.uk

QUESTIONNAIRE FOR MARKETING PERSONNEL

Section A - Customer Focus

Customer Priorities - Please indicate in the first column how important you think each of the below features is to your customers and in the second column how well you think your company performs.	How important this is to our customers							How well our company performs								
	Very Unimportant							Very Important			Perform Very Badly			Performs Very Well		
	1	2	3	4	5	6	7	1	2	3	4	5	6	7		
1. Website Design																
2. Trust in the Company																
3. Customer Service																
4. Information Provision About Product on Website																
5. Ease of Contacting the Company																
6. No Advertisements / Spam																
7. Website Customisation and Personalisation																
8. Product Range and Availability																
9. Company Image																
10. Special Features (eg. ability to have monthly accounts / bulletin boards)																

Marketing Orientation - Please state your agreement or disagreement with the following statements by ticking a box.	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. Our business objectives are driven primarily by customer satisfaction					
2. We constantly monitor our level of commitment and orientation to serving customer needs					
3. We freely communicate information about our successful and unsuccessful customer experiences across all business functions					
4. Our strategy for competitive advantage is based on our understanding of customer needs					
5. We measure customer satisfaction systematically and frequently					
6. We have routine or regular measures of customer service					
7. We are more customer focused than our competitors					
8. I believe this business exists primarily to service customers					
9. We poll end users at least once a year to assess the quality of our products and services					
10. Data on customer satisfaction are disseminated at all levels in this business unit on a regular basis.					
11. High-quality customers service is of similarly high importance to us as the quality of our products					
12. In our business we expect that customer requests are answered at once					
13. The managers in our company regularly interact with customers					
14. Customer complaints are used to improve customer service					
15. Outstanding performance in customer service is highly appreciated by the company					
16. Employees with a distinctive service orientation have very good opportunities for career development					
17. Outstanding performance in customer service is rewarded in the context of compensation, for example through bonuses					
18. The company supports customer focus by telling stories of people providing exemplary customer service					

Expectations Management - On the following items, please rate the expectations marketing creates in customers compared to company ability to fulfil those expectations:	Expectations are:				
	Far Too High	Too High	Correct	Too Low	Far Too Low
1. Product Quality					
2. Depth of Product Range					
3. Product Delivery Lead Time					

Section B - Working Relationships

Functional Integration - Please state your agreement or disagreement with the following statements in the relationship between your department and the operations department by ticking a box.	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. There is high level, effective integration and control of the marketing and operations functions					
2. Cross functional teamwork is the common way of working between marketing and operations					
3. In this business marketing and operations get along well with each other					
4. Marketing and operations work well together in this company					
5. There is little or no interdepartmental conflict between marketing and operations					

Section C – Organisational Power

	None	Small Impact	Moderate Impact	Large Impact
1. What impact do you feel the marketing function has on the business?				
2. What impact do you feel the operations function has on the business?				

Departments or groups in firms are likely to have different degrees of power within the firm. How would you rank the power of the following departments/groups in your firm at the moment? Please rank 1st, 2nd, 3rd etc

Operations/ Logistics/ Distribution	Finance/ Accounting	Marketing	Human Resource Management	Sales	E-Commerce
--	------------------------	-----------	------------------------------	-------	------------

Section D - About You

1. What is your current job-title? _____

2. What department / group do you currently work in? _____

3. Years in Position _____ 4. Gender: Male / Female

5. Please indicate how many (if any) years experience you have in each of these areas:

Marketing / Sales	Operations / Logistics / Distribution
_____ years	_____ years

6. Approximately what percent (if any) of your salary comes from performance measures related to:

Individual Performance Related	_____ %
Based on The Performance of Your Team	_____ %
Based on The Performance of the Company As A Whole	_____ %

Thank you for taking the time to complete this survey.



OPERATIONS PERSONNEL SURVEY

This questionnaire is intended for anyone working in the areas of: operations, logistics, distribution, warehousing, purchasing/sourcing, supply management, transport and other related processes.

As part of an ongoing research project between your company and the University of Bath School of Management, we are seeking to gather the opinions of various people working in your company.

We have already conducted a customer survey and are now investigating market effectiveness and the relationship between the marketing areas and operations areas in the business (for the purpose of this survey 'marketing' covers: marketing, sales, advertising, e-commerce, market research / business development).

Please answer each question honestly - there are no right or wrong answers, all surveys are anonymous and results will be reported in an aggregate form that does not identify individual responses. Most questions are answered by ticking a box or circling an answer that best represents your opinion on the question.

This questionnaire should only take ten minutes to complete and will contribute towards a better understanding of the processes involved in customer service and fulfilment that contribute to organisational success.

When you have completed the survey please return it in the attached envelope.

Thank you for your assistance.

Niall Piercy
University of Bath
Email: N.C.Piercy@bath.ac.uk

Alternative Wording for Marketing versus Operations Surveys

Functional Integration - Please state your agreement or disagreement with the following statements in the relationship between your department and the <u>operations</u> department by ticking a box.	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. There is high level, effective integration and control of the <u>marketing</u> and <u>operations</u> functions					
2. Cross functional teamwork is the common way of working between <u>marketing</u> and <u>operations</u>					
3. In this business <u>marketing</u> and <u>operations</u> get along well with each other					
4. <u>Marketing</u> and <u>operations</u> work well together in this company					
5. There is little or no interdepartmental conflict between marketing and <u>operations</u>					

APPENDIX 4. Trial Research

4.1 Introduction

This chapter reports on the refinement of the original customer survey instrument developed from literature. This chapter is split into two sections – the first describing the reduction of the 123 service quality items to 69 items and the second reporting on the testing of the impact of the situational impacts to validate the proposition that situations do indeed alter service requirements.

4.2 Research Process

From the literature review and as described in the previous chapter on research methods, six pre-existing studies on service quality were combined into a new pool of service quality items. These pool was screened for duplicate themes and items, with the result of 123 service quality items being combined with a series of situational and demographic measures. (see chapter 7 and appendix 3). These items were combined into a questionnaire format for trial research with the intention of reducing this list further before moving on to a final research application, as well as to screen for any grammatical, spelling errors or phrasing problems that led to respondent difficulty.

Trial research was conducted on undergraduate and postgraduate students at Cardiff and Cranfield University in the Spring of 2003.

4.2.1 First Research Application

The first research application concerned the testing of an initial survey instrument on a postgraduate class of thirty research students at Cardiff University. The purpose of this exercise was to conduct an initial screening of the questionnaire layout, design and content before moving to secondary application (initial instrument is shown in appendix 3).

An initial intention of this research was to compare the shopping behaviours of online and catalogue home shoppers. To that end, from the literature previously reviewed, a combined paper survey for both of these groups was designed with each group being instructed to complete or skip the appropriate sections for their purchase choice.

The overwhelming feedback from this exercise was that this means of surveying was simply untenable in practice. The combined research instrument appeared too long and the process of jumping from section to section as dictated by purchase was too complicated in practice. In addition to this finding, several issues of spelling and phrasing were identified as needing amendment.

4.2.2 Second Research Application

After this exercise, two new separate questionnaires were developed and redesigned into a more attractive format, with better usage of space being used to create the illusion of a shorter instrument and hence improve response rates. Due to the different focus of online and offline service quality, several service quality items were excluded from the catalogue survey (for instance, “the website does not crash”) as there was no non-internet or offline equivalent item. The majority of the exclusions related to technological issues. In addition several questions had to be rephrased for a non-technology mediated exchange (for instance “You know exactly what you’re buying from this website” became “You know exactly what you’re buying from this catalogue”). A full list of the alterations is shown in appendix 3.2. In total 84 catalogue service items were used compared to 123 online service quality items.

To test this instrument, a campus-wide email distribution was conducted at Cardiff University. Students who had purchased online or from a catalogue in the last six months and who were interested in completing a survey were told to email a contact address back to the sender and a survey would be posted to them. A freepost return envelope was included with the survey for students to return the survey. As an incentive for students to complete the surveys a prize draw of £100 was conducted. To validate this sample, postgraduate students from Cranfield University were recruited in class with the incentive of free textbooks to complete and return the survey. The second research application gained a total sample of 144 usable responses with a forty percent response rate.

Table 4.1 Trial Response Rates

	Despatched			Received			Response Rate
	Cardiff U/G	Cardiff P/G	Cranfield	Cardiff U/G	Cardiff P/G	Cranfield	
Online	132	78	40	71	41	13	50%
Catalogue	38	28	40	9	5	5	18%
Total	356			144			40%

From this sample a wide range of companies were represented, with sixty seven companies in total and only nine companies generating three or more responses. From this pool, sixteen different product groups were reported, with typical online product categories generating the most responses (CD, books, computing, DVDs) and clothing being almost exclusively purchased by catalogue shoppers.

Table 4.2 Product Categories

Product	Frequency	Percent
CD	27	18.8
Clothing	21	14.6
Books	19	13.2
Computer	19	13.2
DVD	16	11.1
Groceries	9	6.3
Home Electrical Equipment	8	5.6
Service - Travel	7	4.9
Sports Equipment & Memorabilia	6	4.2
2nd Hand Goods	3	2.1
Furniture	3	2.1
Beauty Equipment	1	.7
Flowers	1	.7
Vinyl Records	1	.7
Mobile Phones	1	.7
Tobacco & Lighters	1	.7
Total	143	99.3
Missing	1	.7
Total	144	100

4.3 Service Quality

4.3.1 Service Quality Item Refinement

The results from the completed surveys were tabulated in SPSS 11 and submitted to analysis. In this chapter, the focus is on the service quality issues of this trial. Those issues related to the impact of various situational forces will be covered in the next chapter which addresses this theme.

The literature review on ServQual highlighted confusing notions of expectations, that lead to the rephrasing of 'expectation' to 'importance' in this study, echoing the work on Importance Performance Analysis (Martilla and James 1977). A second result from the ServQual literature review was continuing questions regarding the use of gap scores for factor analysis and service quality analysis as well as the possibility that performance only measurement may provide superior results. Due to the unresolved nature of these issues, three sets of factor analysis were conducted – one on importance scores, one on performance scores and one on computed gap scores. All utilised Principal Components Analysis however, due to the relatively small sample size compared to the number of service quality items considered, two rotations were utilised in the factor analysis process for comparison.

Table 4.3 Rotation from Factor Analysis

Factor Analysis	Factors Produced	Validity
Importance Items (Varimax Rotation)	27	85.643 variance accounted for. Rotation converges in 163 iterations. KMO/Bartlets unavailable ¹ .
Importance Items (Equamax Rotation)	-	Fails to converge in 200 iterations.
Performance Items (Varimax Rotation)	-	Fails to converge in 200 iterations.
Performance Items (Equamax Rotation)	30	90.975% variance accounted for. Rotation converges in 192 iterations. KMO/Bartlets unavailable ¹ .
Gap Scores (Varimax Rotation)	28	89.939% variance accounted for. Rotation converges in 39 iterations. KMO/Bartlets unavailable ¹ .
Gap Scores (Equamax Rotation)	28	89.839 variance accounted for. Rotation converges in 155 iterations. KMO/Bartlets unavailable ¹ .

¹ Unavailable as 'matrix is not positive definite'

The four rotated component matrixes produced were examined for conceptual or validity based on their ability to link conceptually related variables in identifiable and logical groups. Varimax rotation of importance items produced 27 factors, however, examination revealed seven single item or non-viable factors produced which were discounted resulting in 20 usable factors that were conceptually linked and identifiable with an appropriate number of items per factors. This solution provided clearly identifiable factors that were conceptually appealing.

The Equamax rotation of performance items produced a 30 factor solution. The large number of factors produced was in part resultant from many similar issues being broken into identifiable sub-factors (for instance, the theme of website design was represented by five different factors; product related issues were split across three different factors). In addition this rotation produced eight factors where no clear conceptual theme was apparent. Due to these interpretation issues the rotation of performance items was not deemed appropriate as a base for further analysis and item reduction. In addition, sixty seven different companies were reported from 144 respondents, with only nine companies having 3 or more responses, the large variance in actual performance from such a wide range of companies makes it difficult to generalise from the sample obtained.

The Varimax rotation of gap scores produced a 28 factor solution, thirteen of which were single or two item factors. Twelve factors produced were conceptually appealing, however, the first (website design) had thirty five items and the matrix as a whole had a very high rate of items loading on multiple factors. The Equamax rotation of gap scores produced a 28 factor solution, with eighteen broadly identifiable factors apparent, however, several of these were indistinct with odd-items associated. The remainder of factors were indistinct with no clear conceptual link between grouped items.

A side-by-side comparison of the multiple rotations produced clearly demonstrated the factor analysis of importance items as produced the most conceptually appealing solution. This finding supports the propositions made earlier in this thesis regarding the problems of utilising gap scores in factor analysis and issues of data bounding by context involved in considering performance items (that is, they are only of use in providing how a company performed at one given point in time). This finding of the importance rotation as most conceptually appealing further supports the general aim of this thesis in generating a new model of online service quality based on analysis of items of importance to the customer. The arrange from the final importance rotation is provided in table 4.4 below.

The importance matrix was subjected to further conceptual examination resulting the movement of certain items based on conceptual appeal and good factor loadings (for instance, "I can check the status of the order by telephone" was moved from 'Customer Service' to 'Contactability'), while two factors were divided into two to better provide a useful structure ('Special Features' was separated from 'Customisation' and 'No Adverts' was separated from 'Product Availability'). Two factors were combined to form a single delivery factor. A total of eight factors were discarded from the original rotation with some items re-attributed to the first twenty factors (for instance, 'The level of information is not overwhelming' was moved from a separate factor to 'Product Identification'). Five items were discarded as having no relation to any factor. The final factor solution based on this minor re-ordering is shown below. To assess the validity of this solution, and to verify the various items movements, bivariate correlations and coefficient alpha scores were computed which highlighted generally good but not excellent correlations. The coefficient alpha scores support the factor structure generated and are also shown in the table below.

Table 4.4 Twenty Factor Solution: Importance Scores with Varimax Rotation

Factor and Co-efficient Alpha	Items	Loading
1.PRODUCT IDENTIFICATION Alpha .9402	The website has a useful search function	0.81
	It's easy to get around and find what you want at this site	0.78
	The website is laid out in a logical fashion	0.76
	The layout of the site is clean and simple	0.75
	The website has a good user interface	0.74
	Pricing is clear and easy to understand	0.70
	I know what all my options are when I shop at this website	0.67
	The contents of the website are concise and easy to understand	0.59
	The site gives me enough information so that I can identify the item to the same degree as if I am in the store	0.56
	The website lets me know up-front what shipping charges are	0.45
	This site doesn't waste my time	0.46
	* The site has well arranged categories	0.74
	* I can quickly go to exactly what I want	0.73
	* The organisation and layout of the website facilitate easy searching for products	0.69
	* The website is organised in an intuitive way that is easy for me to use	0.57
	* The website has reasonable shipping and handling costs	0.60
	* The level of information on the website is not overwhelming	0.28
	* The internet address was easy to remember	0.42
	* Products are well packaged	0.34
2.COMPANY IMAGE Alpha .8926	The company has a well known name	0.85
	The website fits with my image of the company	0.73
	The company advertises on other media	0.72
	The company behind the site is reputable	0.54
	The website instils confidence among its customers	0.49
	The website offers high quality merchandise	0.32
	I receive special rewards and discounts from doing business with this website	0.40
	* The company is well established	0.84
	* The website shows how long the company had been in business	0.65
	* The company asks how satisfied I am after purchase	0.55
	* The website sells well known brand names	0.48
3.CUSTOMER SERVICE Alpha .9209	When you have a problem, the company shows a sincere interest in solving it	0.74
	The company willingly handles returns and exchanges	0.67
	Customer service personnel are always willing to help you	0.64
	I can return items ordered online, to the company's retail stores	0.53
	After sale support at the site is excellent	0.53
	The products were delivered by the time promised	0.45
	The company refunds shipping charges when the product doesn't arrive in time	0.39
	I feel like the company wants to provide me with a good buying experience	0.37
	The website has good pictures of the products	0.30
	It is quick and easy to complete a transaction at this website	0.30
	* Returning items is relatively straightforward	0.65
	* The company is ready and willing to respond to customer needs	0.64
	* Employees are able to resolve complaints directly and quickly	0.62
	* The returns policy is reasonable	0.59
* The website loads quickly	0.57	

3.CUSTOMER SERVICE (cont)	* When I use the website there is very little waiting times between my actions and the websites responses	0.43	
	* Employees treat customers courteously on the telephone	0.42	
	* The website offers a product guarantee	0.37	
4.CONTACTABILITY	A contact telephone number is displayed on the site so that I can talk to a 'live' person	0.78	
Alpha .8436	Telephone calls are answered promptly	0.73	
	A contact address is shown on the website	0.69	
	When the company promises to email or call by a certain time it does so	0.46	
	* The website had a message area for customer comments	0.46	
	* The website provides information about what to do if there is a problem	0.41	
	* The company offered multiple ordering options such as telephone and mail	0.41	
	* I can check the status of the order by telephone	0.33	
5.TRUST	I feel secure giving out credit card information to this site	0.77	
Alpha .8216	I feel safe in my transactions in this site	0.74	
	I feel like my privacy and personal information is protected at this site	0.62	
	You know exactly what you're buying from the website	0.61	
	The website has adequate security features	0.24	
	* I feel I can trust the website	0.68	
	* The product is delivered right the first time	0.43	
6.ADMINISTRATIVE EFFICIENCY	The site confirms exactly what is ordered	0.81	
Alpha .7919	The quantity and quality of the product was exactly as ordered	0.70	
	The billing process was accurately handled and its records kept accurately	0.69	
	The product that came was accurately represented by pictures and descriptions on the website	0.62	
	* The on-line receipt informs of the total charges that will be debited against my credit card	0.82	
	* Product information is objective	0.32	
	* Transactions are error-free	0.36	
7.SPECIAL FEATUERS	I can set up an account with the company to be billed monthly	0.71	
Alpha .7365	The company has bulletin boards and chat rooms for customers to seek support	0.57	
	I have the option to pay by cheque by post	0.53	
	* The company can deliver to secure storage boxes or third party collection points	0.69	
8.CUSTOMISATION	The website is easy to customise	0.50	
Alpha .8015	The website does a good job of guessing what kind of things I might want	0.38	
	* You can zoom in and rotate pictures so you can see the items from all angles	0.37	
	* The colour of items is accurately represented on screen	0.36	
9.STATUS INFORMATION	I receive an email when the product will be delivered	0.68	
Alpha .8332	It's easy to track the shipping and delivery items of items purchased on this website	0.41	
	* The home page provides a link to order status	0.45	
	* I receive an email when the product is despatched	0.74	
10.WEBSITE IS WORKING	The website is always available for business	0.84	
Alpha .8286	The website is working correctly and functions as it should	0.72	
	* The website does not crash	0.69	

11.PRODUCT AVAILABILITY INFORMATION	The website lets me know about product availability during search	0.69
	* The website lets me know about product availability before placing an order	0.67
Alpha .7336	Most products are available for delivery within 48 hours	0.40
	* If products are not in stock they are available in a suitable time frame	0.38
12.NO ADVERTISEMENTS	There are no pop-up advertisements	0.53
	There are no advertisements on the website	0.51
Alpha .6272		
13.ATMOSPHERIC	It's fun to shop at the website	0.80
	There are features at the site that are entertaining to use	0.66
Alpha .8703	* The website has interactive features which help me accomplish my task	0.48
	* The website appears to use the best technology	0.44
	* The website is visually appealing	0.39
14.HARD TO FIND PRODUCTS	The website has products I can't find in stores	0.85
	There are hard to find products on this site	0.82
Alpha .8315	* The website is updated often with new products	0.46
15.PRODUCT INSTANT AVAILABILITY	All the items I want are in stock	0.82
	The website has a good selection	0.34
Alpha .7809	* Products on the site are almost always in stock	0.84
16.PERSONALISATION	The website has a 'wish list' capability that allows me to save items I might want to buy	0.72
Alpha .7809	The level of personalisation at this site is about right, not too much, not too little	0.54
	The website stores my information to facilitate future transactions	0.54
	* The website has special promotions and deals available	0.36
	* There are not too many graphics that take too long to load	
17.DELIVERY OPTIONS	The company offers free delivery for orders over a certain value	0.59
	* I do not personally have to sign for a package ordered in my name	0.40
Alpha .7405	* I can have products delivered to different billing and shipping addresses	0.76
	* The website has the customers best interests at heart	0.42
18.INFORMATION	The website provides in-depth information	0.72
Alpha .7508	The site helps me research products	0.68
19.VALUE FOR MONEY	You good value for money at this website	0.71
Alpha .7519	The site has competitive prices	0.56
20.NO JUNK MAIL	I do not receive junk mail from being on their mailing list	0.77
UNCORRELATED ITEMS	* I can customise my delivery options	
	* The company has online customer service representatives	
	* All my business with the company can be completed online	
	* A confirmation of order is received by email	
	* A confirmation of order is received by post	

* indicates an item deleted due to being a duplicate item or low correlation.
Coefficient alpha scores computed with all items shown.

While these coefficient alpha scores provide reassurance as to the validity of the solution, they provide less guidance on scale reduction. To this end, the rotation matrix was used in conjunction with the correlation tables to identify items for removal. Items with low factor loadings were examined with a view to their removal while items that were conceptually similar and had loaded within the same factors were all checked for redundancy. Specifically, items within factors that were highly correlated to conceptually related variables were reduced from multiple to single items. For instance, in 'Customer Service', item 'The site has well arranged categories' has its highest correlation (0.73) with item 'The website is laid out in a logical fashion', as this latter item had a higher factor component correlation the wording of this item was used as a single statement to encompass both themes. This process was conducted across the questionnaire and resulted in several items being aligned with higher ranked, conceptually related and empirically correlated items. At the same time, several items that had no strong correlation to any factor or theme were removed (for instance, 'Products are well packaged' loaded onto several factors, the highest loading being only 0.34). These techniques were used to reduce the 123 original service quality items to 69 items for final testing. Those items deleted are indicated in the full list of items in the twenty factor solution shown in table 4.4 above (deletions noted with an asterix).

With a significant reduction in the number of items it was also necessary to combine certain factors so that a more concise questionnaire layout could be employed. Specifically:

- 'Hard to Find Products' and 'Product Instant Availability' placed under 'Product Identification'
- 'Delivery Items', 'Value for Money' and 'Website is Working' were grouped under 'Customer Service';
- 'Special Features' was placed under 'Administrative Efficiency';
- 'Personalisation' and 'Atmospheric' and 'Customisation' placed together under the new heading of 'Website'
- 'Status Information' and 'Product Availability Information' were placed under 'Information';
- 'No Junk Mail' and 'No Advertisements' were grouped together and placed under 'Administrative Efficiency'

This resulted in a list of eight related groups comprising sixty-nine items, derived from conceptual and empirical investigation. To determine the validity of the factor grouping, coefficient alpha scores were derived for each of the new arrangements (shown in table 4.5 below) which support the arrangements and alterations made. A final list of items sorted into the new factors structure is shown in table 4.6 below.

Table 4.5 Reduced Factor Composition

Final Factor	Number of Items	Coefficient Alpha
Product Identification	15	Alpha = .8983 Standardized item alpha = .9175
Company Image	7	Alpha = .8051 Standardized item alpha = .8089
Customer Service	15	Alpha = .8605 Standardized item alpha = .8737
Contacting the Company	4	Alpha = .8374 Standardized item alpha = .8383
Trust in the Company	5	Alpha = .7992 Standardized item alpha = .8339
Administrative Efficiency	10	Alpha = .6257 Standardized item alpha = .7019
Website	7	Alpha = .8796 Standardized item alpha = .8824

Table 4.6. Final Items Used for Research

	Notation
1.PRODUCT IDENTIFICATION	
The website has a useful search function	O81CX_E
It's easy to get around and find what you want at this site	O78C61_E
The website is laid out in a logical fashion	O86C65_E
The layout of the site is clean and simple	O83C63_E
The website has a good user interface	O82CX_E
Pricing is clear and easy to understand	O95C72_E
I know what all my options are when I shop at this website	O87CX_E
The contents of the website are concise and easy to understand	O103C77E
The site gives me enough information so that I can identify the item to the same degree as if I am in the store	O91C68_E
The website lets me know up-front what shipping charges are	O93C70_E
This site doesn't waste my time	O88CX_E
HARD TO FIND PRODUCTS	
The website has products I can't find in stores	O19C14_E
There are hard to find products on this site	O20C15_E
PRODUCT INSTANT AVAILABILITY	
All the items I want are in stock	O14C10_E
The website has a good selection	O18C13_E
2.COMPANY IMAGE	
The company has a well known name	O23C18_E
The website fits with my image of the company	O27C21_E
The company advertises on other media	O26CX_E
The company behind the site is reputable	O22C17_E
The website instils confidence among its customers	O28C22_E
The website offers high quality merchandise	O30C24_E
I receive special rewards and discounts from doing business with this website	O122C83E
3.CUSTOMER SERVICE	
When you have a problem, the company shows a sincere interest in solving it	O41C33_E
The company willingly handles returns and exchanges	O39C31_E
Customer service personnel are always willing to help you	O42C34_E
I can return items ordered online, to the company's retail stores	O73C57_E
After sale support at the site is excellent	O45C37_E
The products were delivered by the time promised	O48C40_E
The company refunds shipping charges when the product doesn't arrive in time	O40C32_E
I feel like the company wants to provide me with a good buying experience	O120CX_E
The website has good pictures of the products	O99C76_E
It is quick and easy to complete a transaction at this website	O46C38_E

DELIVERY OPTIONS

The company offers free delivery for orders over a certain value O51C43_E

VALUE FOR MONEY

You good value for money at this website O97C74_E

The site has competitive prices O96C73_E

WEBSITE IS WORKING

The website is always available for business O3CX_E

The website is working correctly and functions as it should O2CX_E

4. CONTACTING THE COMPANY

A contact telephone number is displayed on the site so that I can talk to a 'live' person O59CX_E

Telephone calls are answered promptly O60C46_E

A contact address is shown on the website O61C47_E

When the company promises to email or call by a certain time it does so O63C49_E

5. TRUST IN THE COMPANY

I feel secure giving out credit card information to this site O112C79E

I feel safe in my transactions in this site O113C80E

I feel like my privacy and personal information is protected at this site O115C81E

You know exactly what you're buying from the website O8C5_E

The website has adequate security features O111CX_E

6. ADMINISTRATIVE EFFICIENCY

The site confirms exactly what is ordered O9C6_E

The quantity and quality of the product was exactly as ordered O4C1_E

The billing process was accurately handled and its records kept accurately O11C7_E

The product that came was accurately represented by pictures and descriptions on the website O6C3_E

SPECIAL FEATUERS

I can set up an account with the company to be billed monthly O69C53_E

The company has bulletin boards and chat rooms for customers to seek support O65CX_E

I have the option to pay by cheque by post O68C52_E

NO ADVERTISEMENTS

There are no pop-up advertisements O121CX_E

There are no advertisements on the website O102CX_E

NO JUNK MAIL

I do not receive junk mail from being on their mailing list O77C60_E

7. WEBSITE**CUSTOMISATION**

The website is easy to customise O109CX_E

The website does a good job of guessing what kind of things I might want O105CX_E

PERSONALISATION

The website has a 'wish list' capability that allows me to save items I might want to buy O106CX_E

The level of personalisation at this site is about right, not too much, not too little O107CX_E

The website stores my information to facilitate future transactions O110CX_E

.ATMOSPHERIC

It's fun to shop at the website O116CX_E

There are features at the site that are entertaining to use O117CX_E

8. INFORMATION**STATUS INFORMATION**

I receive an email when the product will be delivered O36C28_E

It's easy to track the shipping and delivery items of items purchased on this website O52C44_E

PRODUCT AVAILABILITY INFORMATION

The website lets me know about product availability during search O16C12_E

Most products are available for delivery within 48 hours O49C41_E

INFORMATION

The website provides in-depth information O90C67_E

The site helps me research products O92C69_E

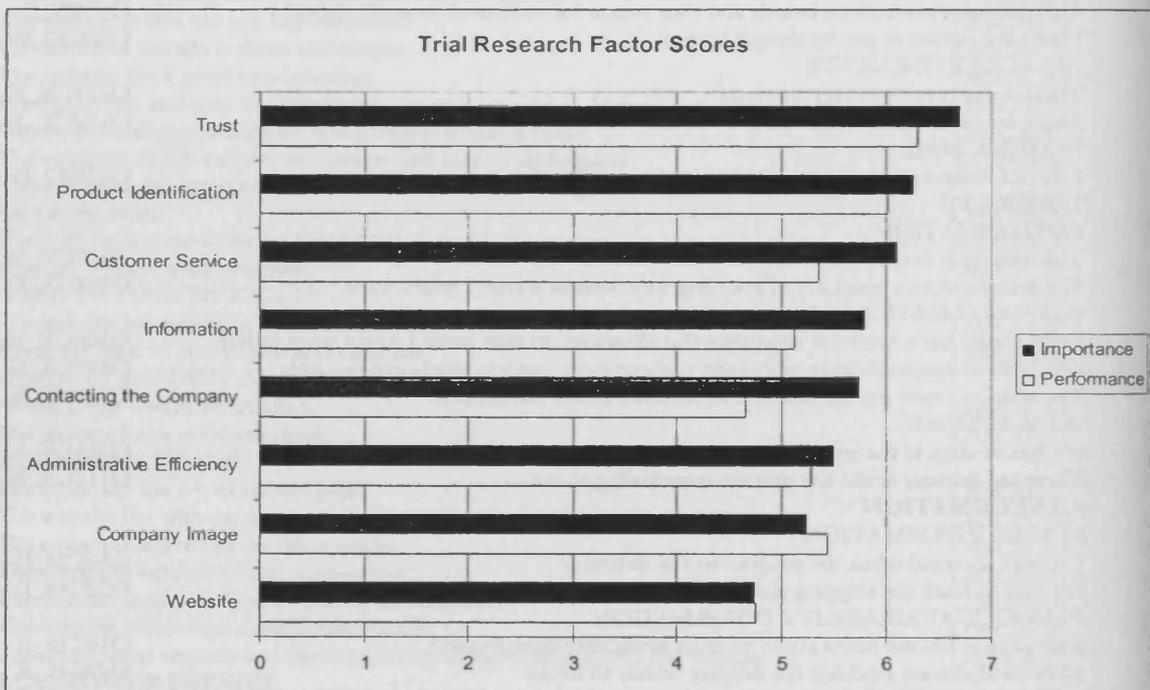
4.3.2 Service Quality Results

Using the reduced eight factor solution described above, scores for importance and performance items were calculated to investigate the general service provided by the sample. All importance and performance items were measured on a seven-item scale, for importance, very unimportant to very important, for performance, respondents were asked to indicate how well or how badly a company performed. Results are shown in table 4.7 and figure 4.1 below.

Table 4.7 Service Quality Results

Factor	Performance	Importance
Website	4.76	4.75
Company Image	5.43	5.23
Administrative Efficiency	5.28	5.50
Contacting the Company	4.65	5.73
Information	5.12	5.80
Customer Service	5.35	6.10
Product Identification	6.01	6.26
Trust	6.30	6.69

Figure 4.1 Service Quality Results



These results indicate some interesting points of note: firstly, the performance of companies on all but the least two important items falls short of how customers rated the importance of the item, emphasising the need for greater research into online service quality to improve this standard. Secondly, the emergence of website issues as least important and the closest match of importance to performance suggests that companies are now broadly offering well designed websites, however, they have yet to master the more important service issues related to customer service, information, contactability and administrative efficiency – that is, the

actual delivery of products and services to the customer. The results also show that company image performance now exceeds the importance customers place on this item. However, trust, the most important issue as well as other customer service issues still fall short of customers importance, suggesting that image alone is not enough to ensure customer trust in the company but service delivery has a broader role to play. The synthesis of these findings all support and validate the need for greater research in this area, the driving force behind this thesis.

4.4 Situational Impacts on Service Quality

From the literature review described in chapter four, a wide range of context or situation dependent issues were proposed as potentially impacting on customer service quality, listed below.

- 1. Product type will impact customer service quality requirements online.*
- 2. Demographics will have an impact on customers online service quality requirements.*
- 3. Information overload or brand dependence will impact customer service quality requirements online.*
- 4. People buying for business, personal or gift purposes will have different service quality requirements.*
- 5. Familiarity ('techno-readiness') influences online service quality demands.*
- 6. Familiarity (online experience) influences online service quality demands.*
- 7. Familiarity (company experience) influences online service quality demands.*
- 8. Familiarity (of product type purchase) will influence online service quality demands.*
- 9. Online ability (connection speed) influences online service quality demands*
- 10. Retail dependent customers will exhibit different service quality requirements to those who do not.*
- 11. Impulse purchasers and planned purchasers will have different online service quality demands.*
- 12. The level and nature of loyalty (behavioural versus attitudinal) will influences online service quality demands.*
- 13. High and low involvement customers will have different online service quality demands*
- 14. Customers paying different prices will exhibit different online service quality demands.*
- 15. Customers exhibiting different levels of each price orientation will exhibit different online service quality demands.*
- 16. Customers with different amounts of time available to shop will exhibit different online service quality demands.*
- 17. Demographics will have less of an impact on customers online service quality requirements than situational / contextual variables.*

To assess the prima face validity of these propositions, a simplified (univariate descriptive) analysis of the impact of a wide range of issues were considered with the trial research stage. This process served to validate the overall proposition that variation was present by situation and that this was a valid issue to continue in to full research. As noted in chapter seven, trial research was conducted on undergraduate and postgraduate students at Cardiff and Cranfield University in the Spring of 2003, generating a total response of 144 questionnaires.

With regards the situational impacts on service quality, this trial research had several aims: to provide evidence of the general validity of situational or contextual influences on service quality; to validate the single or multi-item combinations that describe the various intended situations; and, to allow the reduction or removal of certain items as deemed appropriate. To investigate the impact of situations on service quality, factor scores were computed for the eight final factors developed from the trial research (as described in the previous chapter). The key situations developed for investigation were assessed for the level of response at each level (for instance, percentage highly involved versus not involved) with analysis of variance (ANOVA) using independent sample t-tests (missing values excluded listwise) conducted to compare different levels of each situational variable where there were sufficient responses for meaningful enquiry.

Overall, the evidence produced from the trial research supported the proposition that purchase situation or context does indeed impact on service quality demands. The sample size in the trial was too small to provide confirmatory evidence to this end or to consider in detail the impact of different situations, however, the findings outlined below demonstrate the need for greater research in this area as well as supporting the choice to move to an online only sample to improve the sample size.

4.4.1 Validity of Situational Measures

The following section describes the results gained for each situational variable constructed within the survey. As noted above, the relatively small sample size (n=144) is only suitable for exploratory analysis. Therefore, analysis is limited to independent sample t-tests for all situational variables considered whereas in final analysis full regression and construction of related path diagrams is possible.

1. Product type will impact customer service quality requirements online.

The principle products represented were compact discs (19%), books (13%), DVD's (11%) and grocery (6%). As commodity products, few differences were expected between the first three items, although some were noted on performance issues (attributable to different companies): CD buyers reported better performance on company image than book buyers, DVD buyers reported better performance on company image and website than CD and better performance on information than CD and book purchasers. No difference on importance or performance issues were found between grocery purchasers and those of books or CDs. The fact that variation in performance and not importance is being seen validates the construction of expectation as importance and highlights that customers can differentiate between a specific instance of performance and their broader importance on an issue.

2. Demographics will have an impact on customers online service quality requirements.

Men rated the importance of trust lower than women and men rated the importance and performance of website design lower than women. As the sample was drawn from students, it was not possible to investigate job-based differences. Similarly, 63% were 18-24 and 28% 25-34 so this was the only age group that could be compared although no difference was found on any factor. Half the sample had incomes of under £15,000, however, some higher groups were present (12% in each of £30-40,000 and £40-50,000 groups). There was no difference in stated importance between the under £15,000 and the higher income groups, however, the £40-50,000 groups stated higher performance for company image, customer service, administrative efficiency and website design. Such performance differences may be

explainable by the different companies used by different respondents. As students, respondents were well qualified – the largest groups were those who were qualified up to ‘A’ level standard (40%) and to postgraduate standard (33%) between whom there was no difference on any factor. Politically, 24% identified themselves as left of centre, 27% identified themselves as liberal and 13% identified themselves as right of centre. There was no difference between left of centre and liberals, however, left wing people and liberals both placed greater importance on product identification and than right wing people, left wing people also placed more importance on trust and liberals more importance on information than right wing people. While these findings are interesting they are probably artefacts of wider customer characteristics represented by the political orientation, which most companies do not and could not for reasons of privacy measure in their customers.

3. Information overload or brand dependence will impact customer service quality requirements online.

A measure of customers reliance on names that they trust due to inadequate time to full research products was taken as a measure of brand dependence in online shopping with 42% supporting the statement, 18% neutral and 32% disagreeing. No statistical differences were found on item importance or performance between these three groups of purchasers.

4. People buying for business, personal or gift purposes will have different service quality requirements.

It was not possible to investigate this issue as only a single respondent reported a business purchase.

5. Familiarity (‘techno-readiness’) influences online service quality demands.

The reduced, ten item ‘techno-readiness’ scale of Parasuraman and Colby (2001) was measured and used to compute a ‘techno-readiness index’ of those highly (49%) and somewhat techno-ready (34%), average (15%) and somewhat resistant (3%).

The clearest differences emerged between the highly techno-ready and the somewhat resistance with the resistance placing greater importance on contactability and administrative efficiency while the techno-ready reported better performance on customer service and far better performance on contactability. The highly and somewhat techno-ready showed no difference in item importance, although the highly ready reported better performance on product identification and information. Similarly, the highly techno-ready had the same importance levels as average customers but reported better performance on trust. No differences were found between the somewhat ready and average groups or average and resistance groups. These findings would tend to suggest that highly-techno-ready are less concerned about company image or contactability and more adept at utilising technology thus able to maximise end service delivery. The variances uncovered also validate the inclusion of this measure in the final study.

6. Familiarity (online experience) influences online service quality demands.

Three separate measures of online shopping usage were taken (frequency of purchase, number of products and total value of purchases over the previous year). The majority of shoppers had been purchasing for over two years online with most purchasing up to once a month and having spent over £75 in total the past year. When compared these three measures were found

to be highly correlated and were therefore summed into a new measure. In examining the frequency of this measure, a distinct pattern of three separate groups could be seen which were labelled low (10%), medium (33%) and high (57%) online shopping usage. Comparing these groups no difference was found between low and medium or low and high purchasers although medium purchasers did state greater importance on administrative efficiency than high purchasers. No difference was found in the demands of first time versus the most frequent purchase group. However, while no statistical difference was found, there were many borderline differences within this group (ie. almost statistically significant), for instance, low purchasers placed greater importance on all factors compared to high shoppers. This suggests that greater research with a larger sample size is required to validate difference or similarity based on online shopping usage.

7. Familiarity (company experience) influences online service quality demands.

Three separate measures of company usage were taken (frequency of purchase, number of products and total value of purchases over the previous year). When compared these three measures were found to be highly related and were therefore added together to form a new single total measure of company usage. In examining the frequency of this measure, a distinct pattern of four groups emerged in frequencies of this measure, which were labelled low, medium, high and very high company usage, representing 24%, 44%, 27% and 4% of the sample respectively. Low user (versus high user) group placed greater importance on company contactability and administrative efficiency. Low users and medium users showed no difference on any factor while medium users (versus high users) placed greater importance on company image, contactability and administrative efficiency. These results suggest lower user groups placing greater importance on service quality features for companies, with decreasing importance as experience increases.

8. Familiarity (of product type purchase) will influence online service quality demands.

A quarter of purchasers were purchasing the product type for the first time while 49% purchased less than once a month and 23% purchase once or more a month. First time purchasers placed less emphasis on trust than more frequent users while more frequent purchasers reported higher performance on product identification, customer service, trust, website and information issues. Such differences may be an artefact of first time users being unsure of what to expect from an online company and therefore how to report performance. First time buyers placed greater importance on administrative efficiency and customer service than those shoppers purchasing less than once a month while those purchasing once or more a month placed greater importance on trust and information than less frequent purchasers. These findings suggest that learning and experience do play a role on the shaping of both customer expectation and perception of performance.

9. Online ability (connection speed) influences online service quality demands

This issue was not addressed in the trial research as the item was developed after the exploratory research was conducted.

10. Retail dependent customers will exhibit different service quality requirements to those who do not.

Two measures of retail dependence were taken, the first, asking for level of agreement with a preference for shopping from internet companies recognised from the high street, with 34%

disagreeing (no preference for online names from the highstreet), 23% neutral and 43% agreeing. While no difference existed between those somewhat and strongly agreeing or those somewhat and strongly disagreeing, comparing the two extremes produced significant differences. Comparing those at either extreme (strongly agree/disagree), those preferring high street names placed greater importance on company image, contactability and administrative efficiency while those moderately preferring high street names also placed greater importance on company image, administrative efficiency and information than those moderately not preferring high street names. These results indicate that the level of dependence on retail names does have a significant impact on service quality demands. The second measure, asked customers if they would purchase from a company only reachable via the internet, validated this finding, reporting those who would not purchase from a company only reachable online, placing greater importance on company image, contactability and administrative efficiency.

11. Impulse purchasers and planned purchasers will have different online service quality demands.

This issue was not addressed in the trial research as the item was developed after the exploratory research was conducted.

12. The level and nature of loyalty (behavioural versus attitudinal) will influence online service quality demands.

Only the level of loyalty was investigated in the trial research. The issue of behaviour and attitude were developed and added to provide a better investigation of the issue of loyalty after the trial results. Within the trial research, to take a general measure of loyalty to the organisation, a measure was taken of how many different companies people used to purchase the product type identified - always the same (25%), one or two main companies (36%), three to five main companies (23%) or many different companies (16%). The expected result that those customers using more companies would report lower service quality, was not found, indeed, very few differences were found at all between groups. There was no difference between those always using the same company and those who used one or two companies or more surprisingly those who changed regularly. Those always using the same placed less importance on information than those using three to five companies; those only using one or two companies stated higher performance on company image than those using three to five companies and better information performance than those changing company regularly. These results rather than disproving the existence of differences between these groups suggest further research with a larger sample and control for other extenuating circumstances should be conducted.

13. High and low involvement customers will have different online service quality demands

Three separate items on purchase involvement were measured (choose carefully when buying, relevance of consumer reports and importance of being aware of all alternatives before purchased). Bi-variate analysis showed these three items as significantly correlated (.01 level 2-tailed) so the three measures were summed then divided by three, giving 53% reporting high levels of purchase involvement, 28% very high while 18% were neutral. The most involved group reported significantly higher levels of importance on all factors (as well as higher performance on contact and administrative efficiency). Less striking differences were found between the high and very highly involved groups with the most involved placing

greater importance on customer service, administrative efficiency and information (as well as better performance on image, administrative efficiency and information). Between the high and neutral groups, the highly involved placed greater importance on product identification and website issues. These findings conceptually support the proposition that more involved customers place greater importance on issues related to the purchase, validate the three measures concerned as well as highlighting that differential importance of features as importance increases.

14. Customers paying different prices will exhibit different online service quality demands.

Due to the dominance of the above listed product types, almost half respondents were for purchases under £20 with 22% spending £21-40 and 11% spending £41-60. No difference was found between the under £20 versus £21-40 or £41-60 groups on any factor. Over £60 purchasers were grouped together to total 22% of the sample with the only difference noted that higher value spenders placed greater importance on company image. As people spend more it is possible they place greater importance on the issue of a company's image as a source of reassurance.

15. Customers exhibiting different levels of each price orientation will exhibit different online service quality demands.

Two measures of customer price perception were taken – one of the positive role and one of the negative role. Money saved by finding lower prices as worth the effort represented the negative role of price, with 35% strongly supporting the statement while 45% somewhat supported it, 10% were neutral and 10% disagreed. Those strongly agreeing (versus somewhat agreeing) placed lower importance on company image, company contactability, administrative efficiency and information while there was no difference on reported performance. Those strongly agreeing (versus being neutral) placed lower importance on customer service, company contactability and administrative efficiency with no difference on reported performance. No difference was found between those somewhat supporting the statement and those being neutral. Price as a good indicator of quality represented the positive role of price, with 40% agreeing, 33% neutral while 15% disagreeing. Those somewhat agreeing (versus somewhat disagreeing and versus neutrals) placed greater importance on all items (with no difference in performance) highlighting those taking a positive view of price as a quality indicator rating all service issues are more important, justifying the need for further study of price perceptions and service quality.

Respondents were also issued a forced choice question, asking to declare whether low price or service mattered more or less to them, where 49% reported both mattered the same, while 29% stated low price mattered more and 15% stated service matter more. Comparing the two extremes and each extreme compared to the neutral option, no significant differences were found in factor importance or perceived performance. Due to concerns that a forced choice question may have failed to completely capture the issue concerned, this measure was modified into two separate items gauging the importance of low price and high quality service in the final study.

16. Customers with different amounts of time available to shop will exhibit different online service quality demands.

Three separate measures of respondents time lifestyle were taken, seeking to measure how hectic their lives were. These three measures were found to be highly correlated and were

summed into a new measure. While 27% reported neutral responses, 48% indicated a hectic lifestyle while 18% a very hectic lifestyle. Comparing those with neutral responses to hectic and very hectic respondents as well as comparing hectic and very hectic responses themselves, no significant differences were found on any service factor. Due to the homogeneity of the sample, there were not enough respondents indicated they did not have a hectic lifestyle to compare this issue which is where differences were anticipated to exist. It was concluded that greater research on this issue was necessary with a larger sample.

17. Demographics will have less of an impact on customers online service quality requirements than situational / contextual variables.

Due to the small sample size in trial research, it was not possible to examine this issue with any level of reliability so it was only considered in terms of whether both situations and demographics items did impact service quality, thus justify the validity of comparing which level is higher. As has been reported above, both situations and demographics did impact on service quality requirements.

4.4.2 Situational Measures Assessment

Due to the exploratory nature of the trial research, verifying the existence of variance in service quality demands based on situational influences was the principle aim of this period of research. As such, it was not deemed theoretically necessary to 'drill down' and investigate the sources of this variance (as will be done in the final research) while practically the sample size was not large enough for such detailed investigation into the sub-sections of groups existing within different levels of situational effect.

For many of the situations listed above, while only a few factors reported statistically significant results, the pattern of increased/decreased scores by variables was seen across all factors but was not statistically significant (for example, company usage, purchase involvement, online shopping usage) highlighting the need for a larger sample for such research in general but more specifically validating the proposition that situation does lead to variance in service quality demands on the internet.

4.4.3 Removals and Additions Based on Impact Assessment and Practicality

Several areas included in the initial research were not included in the final study. These reductions were predominantly for reasons of practicality – seeking to limit the scope of research to the most important situational variables so that the final survey length could be minimised. These reductions included:

- Removal of the seven item section on anti-consumeristic tendencies due to this construct being beyond the scope of the research and more of a value based issue than contextual or situational variable
- Removal of the section on political tendency due to the low response rate for this section due to consumer motivation to maintain secrecy in this area
- Removal of the section investigating delivery preference as beyond the scope of this research
- Reduction of the section which asked for channel purchasing behaviour for a range of products to shorter section asking if the items had been purchased online as catalogue behaviour was not a final concern of the research

- Reduction of the fifteen item section on motivations for shopping online to a single open-ended question for reasons of gaining a better depth of response whilst also reducing the overall length of the survey instrument
- Removal of the section asking customer to allocate 100 points across service quality factors due to several responses not adding up to 100, the final factor structure being unclear meaning a list of themes could not be constructed and the direct measurement of importance superseding the need for this traditional SQ activity

Several items were added based on an on-going literature review that helped to clarify several previously unclear research propositions, specifically:

- Based on the literature, the addition of two items, one measuring behavioural loyalty and one measuring situational loyalty
- Based on literature, the addition of two items measuring overall satisfaction to validate the service quality model derived (likelihood of recommending a company and likelihood of re-using a company).
- The clarification of the forced choice question asking customers to pick low price versus high service into two separate items measuring extent of importance of each issue

4.5 Research Focus: Home Shopping to Online Only

An early aim of this research was to compare how online and offline shoppers varied in their behaviour. Several operational and conceptual reasons led to the decision to focus exclusively on online research. Firstly, the trial research produced a disappointingly small response from catalogue shoppers and it was unclear if this would be improved on in final research. Secondly, while several catalogue companies had expressed interest in participating in this research, during the period of research a period of merger and acquisition in the catalogue industries resulted in a turbulent marketplace without a clearly defined customer base as well as practical problems as organisations changed research priorities and withdrew support for research as they sought to move all research in-house for reasons of confidentiality.

Due to the length of the final research instrument a large response would be needed to compare the different situational factors as well more generally to produce a new service model. It was decided that the use of online survey software provided the best chances of gaining the response rate necessary. An email distribution to customers would allow far more to be contacted than would be practical via traditional post while mounting the survey online reduced dependency on respondents to return questionnaires and negated the need to manually enter large amounts of numerical data. Thus, following trial research, the focus was moved exclusively to online shoppers.

4.6 Final Research

The initial trial stage provided the necessary validation of two key concepts – confirming the appropriateness of the service quality items developed from the literature and confirming the impact of situational variables on such service quality items. More practically this research stage also allowed for the reduction of service quality items and questionnaire length, necessary to ensure a valid response rate in the final stage of research. The following chapters report on the development of a final model of online service quality and then investigate what impact various situations have upon this model.

Appendix 5.
Source: Peterson and Wilson 1992. p63

Example Distributions of Customer Satisfaction Self-Reports

Source	Topic	Sample Characteristics		Satisfaction Distribution	
		Description	Size	Scale	Percent
Campbell (1981)	Marriage	Adults	3,700	1 (Completely satisfied)	54
				2	27
				3	9
				4	5
				5	2
				6	2
				7 (Completely dissatisfied)	1
Lebow (1982)	Mental health centers	Users	26*	Satisfaction percentage	Percent
				91-100	12
				81-90	38
				71-80	31
				61-70	15
51-60	4				
Proprietary	Brand X automated payroll system	Small business owners	500+	Scale	Percent
				Very satisfied	76
				Somewhat satisfied	18
				Somewhat dissatisfied	3
				Very dissatisfied	2
Uncertain	1				
Proprietary	Brand Y personal computers	Owners	4,500+	Scale	Percent
				Very satisfied	64
				Somewhat satisfied	28
				Unsatisfied	6
Very unsatisfied	2				
Proprietary	Automobiles	Owners	38,000+	Scale	Percent
				Completely satisfied	33
				Very satisfied	44
				Fairly satisfied	18
				Somewhat dissatisfied	4
Very dissatisfied	1				
SIP Servizio Opinioni (1989)	Cellular telephone service	Users	6,553	Scale	Percent
				Very satisfied	70
				Quite satisfied	20
				Not very satisfied	7
Not at all satisfied	3				
Weinstein (1989)	Banks	Adult consumers	1,000+	Scale	Percent
				Very satisfied	60
				Somewhat satisfied	36
Completely unsatisfied	4				

* Lebow performed a meta-analysis of 26 satisfaction studies. The data read: 12 percent of the studies reported a user satisfaction percentage between 91 and 100 percent.

APPENDIX 6.1

Missing Values

Item	Importance %	Performance %
The website has a useful search function	2	4
It's easy to get around and find what you want at this site	2	4
The website is laid out in a logical fashion	3	5
The layout of the site is clean and simple	3	5
The website has a good user interface	4	6
Pricing is clear and easy to understand	3	6
I know what all my options are when I shop at this website	3	6
The website lets me know delivery charges up-front	4	6
The site doesn't waste my time	3	6
The website has products I can't find in stores	4	8
There are hard to find products on this website	6	10
All the items I want are in stock	4	7
The website has a good selection	4	6
The contents of the website are concise and easy to understand	4	6
The site gives me enough information so that I can identify the item as if I am in a store	4	6
The company has a well known name	2	5
The website fits with my image of the company	4	7
The company advertises on other media	6	12
The company behind the site is reputable	5	8
The website instils confidence among its customers	4	7
The website offers high quality merchandise	3	6
I receive special rewards and discounts from doing business with this web	5	9
The website is easy to customize	8	14
It's fun to shop at the website	7	11
There are features at the site that are entertaining to use	9	14
The website does a good job of guessing what kind of things I might like	8	14
The website has the capability to save a list of items I might want to buy later	7	13
The level of personalization at this site is about right, not too much, not too little	8	13
The website stores my information to facilitate future transactions	7	12
Telephone calls are answered promptly	8	19
A contact address is shown on the website	5	13
When the company promises to email or call by a certain time it does so	6	13
A contact telephone number is displayed on the site so that I can talk to	7	16
The website is always available for business	5	9
The website is working correctly and functions as it should	5	8
You get good value for money at this website	6	9
The site has competitive prices	6	9
The website has good pictures of the products	6	9
It is quick and easy to complete a transaction at this website	6	9
After sale support at this site is excellent	8	14
The products were delivered by the time promised	6	10
The company willingly handles returns and exchanges	9	18
Customer service personnel are always willing to help you	8	17
When you have a problem, the company shows a sincere interest in solving	9	18
I can return items ordered online to the company's retail stores ¹	24	35
The company refunds shipping charges when the product doesnt arrive in time ¹	24	36
I feel like the company wants to provide me with a good buying experience	7	12
The company offers free delivery for orders over a certain value ¹	21	27

The website has adequate security features	5	10
I feel secure giving out credit information to this site	6	10
I feel safe in my transactions with this site	6	10
You know exactly what you're buying from the website	6	10
I feel like my privacy and personal information is protected at this site	6	10
I receive notification when the product will be delivered	6	10
Most products are available for delivery within 48 hours ¹	18	22
The website provides in-depth information	7	10
The site helps me research products	7	12
It's easy to track the shipping and delivery of items purchased on this website ¹	20	23
The website lets me know about product availability during search	7	12
There are no pop-up advertisements	6	11
There are no advertisements on the website	7	13
The site confirms exactly what is ordered	7	11
The quantity and quality of the product was exactly as ordered	7	11
I can set up an account with the company to be billed monthly	13	27
I have the option to pay by cheque by post	13	27
I do not receive junk mail from being on their mailing list	7	13
The product that came was accurately represented by pictures and descriptions on the website	7	11
The billing process was accurately handled and its records kept accurately	7	12
The company has bulletin boards and chat rooms for customers to seek support	13	28

¹Excluded from service company questionnaire.

APPENDIX 6.2
Response Rate Bias: First Three Quarters vs Last Quarter
(independent samples t-test, missing cases excluded listwise)

		Levene's Test for Equality of Variances		t-test for Equality of Means			Mean Diff	Std. Error Diff	95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)			Lower	Upper
IMP [1/1 Pr Id Av] The website has a useful search function	Equal variances assumed	0.04	0.84	1.91	1185.00	0.06	0.14	0.07	0.00	0.23
	Equal variances not assumed			1.83	439.06	0.07	0.14	0.08	-0.01	0.23
IMP [2/1 Pr Id Av] It's easy to get around and find what you want at this site	Equal variances assumed	0.01	0.91	1.84	1185.00	0.07	0.12	0.07	-0.01	0.23
	Equal variances not assumed			1.78	444.24	0.08	0.12	0.07	-0.01	0.23
IMP [3/1 Pr Id Av] The website is laid out in a logical fashion	Equal variances assumed	0.16	0.69	1.91	1185.00	0.06	0.14	0.07	0.00	0.23
	Equal variances not assumed			1.80	428.56	0.07	0.14	0.08	-0.01	0.23
IMP [4/1 Pr Id Av] The layout of the site is clean and simple	Equal variances assumed	1.67	0.20	1.81	1185.00	0.07	0.14	0.08	-0.01	0.23
	Equal variances not assumed			1.83	475.53	0.07	0.14	0.08	-0.01	0.23
IMP [5/1 Pr Id Av] The website has a good user interface	Equal variances assumed	4.85	0.03	1.16	1185.00	0.24	0.09	0.08	-0.06	0.23
	Equal variances not assumed			1.21	502.36	0.23	0.09	0.07	-0.05	0.23
IMP [6/1 Pr Id Av] Pricing is clear and easy to understand	Equal variances assumed	0.00	0.99	0.13	1185.00	0.90	0.01	0.07	-0.12	0.23
	Equal variances not assumed			0.12	455.93	0.90	0.01	0.07	-0.12	0.23
IMP [7/1 Pr Id Av] I know what all my options are when I shop at this website	Equal variances assumed	2.11	0.15	0.55	1185.00	0.58	0.04	0.07	-0.10	0.23
	Equal variances not assumed			0.56	480.42	0.58	0.04	0.07	-0.10	0.23
IMP [8/1 Pr Id Av] The website lets me know delivery charges up-front	Equal variances assumed	0.00	0.99	0.39	1185.00	0.69	0.03	0.07	-0.11	0.23
	Equal variances not assumed			0.38	450.17	0.70	0.03	0.07	-0.11	0.23
IMP [9/1 Pr Id Av] The site doesn't waste my time	Equal variances assumed	0.23	0.63	0.86	1185.00	0.39	0.06	0.07	-0.08	0.23
	Equal variances not assumed			0.83	446.86	0.41	0.06	0.07	-0.08	0.23
IMP [10/1 Pr Id Av] The website has products I can't find in stores	Equal variances assumed	0.61	0.43	0.24	1185.00	0.81	0.03	0.11	-0.19	0.23
	Equal variances not assumed			0.24	482.67	0.81	0.03	0.11	-0.19	0.23
IMP [11/1 Pr Id Av] There are hard to find products on this website	Equal variances assumed	0.67	0.41	1.08	1185.00	0.28	0.12	0.11	-0.10	0.23
	Equal variances not assumed			1.06	454.47	0.29	0.12	0.11	-0.10	0.23
IMP [12/1 Pr Id Av] All the items I want are in stock	Equal variances assumed	0.05	0.83	-0.34	1185.00	0.73	-0.03	0.08	-0.20	0.23
	Equal variances not assumed			-0.33	451.55	0.74	-0.03	0.09	-0.20	0.23
IMP [13/1 Pr Id Av] The website has a good selection	Equal variances assumed	0.19	0.67	1.13	1185.00	0.26	0.08	0.07	-0.06	0.23
	Equal variances not assumed			1.09	443.84	0.28	0.08	0.07	-0.06	0.23
IMP [14/1 Pr Id Av] The contents of the website are concise and easy to understand	Equal variances assumed	0.01	0.92	-0.31	1185.00	0.76	-0.02	0.07	-0.16	0.23
	Equal variances not assumed			-0.30	451.35	0.76	-0.02	0.07	-0.16	0.23
IMP [15/1 Pr Id Av] The site gives me enough information so that I can identify the item as if I am in a store	Equal variances assumed	0.65	0.42	0.27	1185.00	0.78	0.02	0.08	-0.13	0.23
	Equal variances not assumed			0.28	471.02	0.78	0.02	0.08	-0.13	0.23
PERF [1/1 Pr Id Av] The website has a useful search function	Equal variances assumed	4.37	0.04	-0.40	1185.00	0.69	-0.03	0.08	-0.18	0.23
	Equal variances not assumed			-0.42	511.76	0.67	-0.03	0.07	-0.17	0.23
PERF [2/1 Pr Id Av] It's easy to get around and find what you want at this site	Equal variances assumed	6.95	0.01	-0.26	1185.00	0.80	-0.02	0.08	-0.17	0.23
	Equal variances not assumed			-0.27	514.17	0.79	-0.02	0.07	-0.16	0.23
PERF [3/1 Pr Id Av] The website is laid out in a logical fashion	Equal variances assumed	0.71	0.40	0.37	1185.00	0.71	0.03	0.08	-0.12	0.23
	Equal variances not assumed			0.37	477.46	0.71	0.03	0.07	-0.12	0.23
PERF [4/1 Pr Id Av] The layout of the site is clean and simple	Equal variances assumed	0.13	0.72	1.00	1185.00	0.32	0.08	0.08	-0.07	0.23
	Equal variances not assumed			1.01	476.84	0.31	0.08	0.07	-0.07	0.23
PERF [5/1 Pr Id Av] The website has a good user interface	Equal variances assumed	1.03	0.31	1.20	1185.00	0.23	0.09	0.07	-0.06	0.23
	Equal variances not assumed			1.23	486.24	0.22	0.09	0.07	-0.05	0.23
PERF [6/1 Pr Id Av] Pricing is clear and easy to understand	Equal variances assumed	3.71	0.05	0.26	1185.00	0.80	0.02	0.08	-0.13	0.23
	Equal variances not assumed			0.27	524.23	0.78	0.02	0.07	-0.12	0.23
PERF [7/1 Pr Id Av] I know	Equal variances assumed	4.20	0.04	0.37	1185.00	0.71	0.03	0.08	-0.13	0.23

what all my options are when I shop at this website	Equal variances not assumed			0.39	509.71	0.70	0.03	0.08	-0.12	0.18		
PERF [8/1 Pr Id Av] The website lets me know delivery charges up-front	Equal variances assumed			1.18	0.28	0.39	1185.00	0.69	0.03	0.09	-0.13	0.20
	Equal variances not assumed			0.41	505.72	0.68	0.03	0.08	-0.13	0.19		
PERF [9/1 Pr Id Av] The site doesn't waste my time	Equal variances assumed			2.90	0.09	-0.16	1185.00	0.88	-0.01	0.08	-0.16	0.14
	Equal variances not assumed			-0.16	507.98	0.87	-0.01	0.07	-0.16	0.13		
PERF [10/1 Pr Id Av] The website has products I can't find in stores	Equal variances assumed			1.88	0.17	-0.43	1185.00	0.67	-0.04	0.10	-0.23	0.15
	Equal variances not assumed			-0.44	492.82	0.66	-0.04	0.09	-0.22	0.14		
PERF [11/1 Pr Id Av] There are hard to find products on this website	Equal variances assumed			0.88	0.35	1.25	1185.00	0.21	0.12	0.10	-0.07	0.32
	Equal variances not assumed			1.27	484.17	0.20	0.12	0.10	-0.07	0.32		
PERF [12/1 Pr Id Av] All the items I want are in stock	Equal variances assumed			0.36	0.55	-1.56	1185.00	0.12	-0.14	0.09	-0.33	0.04
	Equal variances not assumed			-1.57	475.37	0.12	-0.14	0.09	-0.33	0.04		
PERF [13/1 Pr Id Av] The website has a good selection	Equal variances assumed			0.30	0.58	0.88	1185.00	0.38	0.06	0.07	-0.08	0.20
	Equal variances not assumed			0.87	466.12	0.38	0.06	0.07	-0.08	0.20		
PERF [14/1 Pr Id Av] The contents of the website are concise and easy to understand	Equal variances assumed			0.70	0.40	0.66	1185.00	0.51	0.05	0.07	-0.09	0.19
	Equal variances not assumed			0.67	480.24	0.50	0.05	0.07	-0.09	0.18		
PERF [15/1 Pr Id Av] The site gives me enough information so that I can identify the item as well as if I am in a store	Equal variances assumed			2.48	0.12	-0.49	1185.00	0.62	-0.04	0.08	-0.20	0.12
	Equal variances not assumed			-0.50	487.29	0.61	-0.04	0.08	-0.20	0.12		
IMP [1/2 Co Im] The company has a well known name	Equal variances assumed			0.34	0.56	0.65	1185.00	0.51	0.07	0.11	-0.14	0.29
	Equal variances not assumed			0.65	461.13	0.52	0.07	0.11	-0.15	0.29		
IMP [2/2 Co Im] The website fits with my image of the company	Equal variances assumed			0.02	0.89	0.07	1185.00	0.94	0.01	0.11	-0.22	0.23
	Equal variances not assumed			0.08	473.88	0.94	0.01	0.11	-0.22	0.23		
IMP [3/2 Co Im] The company advertises on other media	Equal variances assumed			2.12	0.15	-1.72	1185.00	0.09	-0.21	0.12	-0.45	0.03
	Equal variances not assumed			-1.75	480.30	0.08	-0.21	0.12	-0.45	0.03		
IMP [4/2 Co Im] The company behind the site is reputable	Equal variances assumed			0.20	0.65	-0.36	1185.00	0.72	-0.03	0.09	-0.20	0.14
	Equal variances not assumed			-0.36	480.94	0.72	-0.03	0.09	-0.20	0.14		
IMP [5/2 Co Im] The website instils confidence among its customers	Equal variances assumed			0.02	0.89	-0.14	1185.00	0.89	-0.01	0.07	-0.15	0.13
	Equal variances not assumed			-0.14	464.27	0.89	-0.01	0.07	-0.15	0.13		
IMP [6/2 Co Im] The website offers high quality merchandise	Equal variances assumed			1.87	0.17	1.38	1185.00	0.17	0.09	0.07	-0.04	0.22
	Equal variances not assumed			1.30	425.97	0.20	0.09	0.07	-0.05	0.23		
IMP [7/2 Co Im] I receive special rewards and discounts from doing business with this web	Equal variances assumed			0.00	0.97	0.09	1185.00	0.93	0.01	0.11	-0.20	0.22
	Equal variances not assumed			0.09	467.41	0.93	0.01	0.11	-0.20	0.22		
PERF [1/2 Co Im] The company has a well known name	Equal variances assumed			0.30	0.58	0.23	1185.00	0.82	0.02	0.09	-0.16	0.20
	Equal variances not assumed			0.23	468.07	0.82	0.02	0.09	-0.16	0.20		
PERF [2/2 Co Im] The website fits with my image of the company	Equal variances assumed			0.21	0.65	-0.43	1185.00	0.67	-0.04	0.08	-0.20	0.13
	Equal variances not assumed			-0.43	467.61	0.67	-0.04	0.08	-0.20	0.13		
PERF [3/2 Co Im] The company advertises on other media	Equal variances assumed			0.03	0.86	-0.29	1185.00	0.77	-0.03	0.10	-0.23	0.17
	Equal variances not assumed			-0.29	475.83	0.77	-0.03	0.10	-0.23	0.17		
PERF [4/2 Co Im] The company behind the site is reputable	Equal variances assumed			5.61	0.02	2.35	1185.00	0.02	0.18	0.08	0.03	0.33
	Equal variances not assumed			2.26	442.59	0.02	0.18	0.08	0.02	0.34		
PERF [5/2 Co Im] The website instils confidence among its customers	Equal variances assumed			0.44	0.51	0.38	1185.00	0.70	0.03	0.07	-0.11	0.17
	Equal variances not assumed			0.38	464.89	0.71	0.03	0.07	-0.11	0.17		
PERF [6/2 Co Im] The website offers high quality merchandise	Equal variances assumed			0.05	0.82	0.31	1185.00	0.76	0.02	0.06	-0.11	0.14
	Equal variances not assumed			0.31	487.74	0.75	0.02	0.06	-0.10	0.14		
PERF [7/2 Co Im] I receive special rewards and discounts from doing business with this website	Equal variances assumed			0.28	0.60	-2.25	1185.00	0.02	-0.27	0.12	-0.50	-0.03
	Equal variances not assumed			-2.30	485.78	0.02	-0.27	0.12	-0.50	-0.04		
IMP [1/3 Wbst] The website is easy to customize	Equal variances assumed			3.70	0.05	0.60	1185.00	0.55	0.08	0.13	-0.17	0.33
	Equal variances not assumed			0.63	496.47	0.53	0.08	0.12	-0.16	0.32		
IMP [2/3 Wbst] It's fun to shop at the website	Equal variances assumed			1.80	0.18	-0.24	1185.00	0.81	-0.03	0.12	-0.26	0.20
	Equal variances not assumed			-0.25	493.38	0.81	-0.03	0.11	-0.25	0.20		
IMP [3/3 Wbst] There are features at the site that are entertaining to use	Equal variances assumed			2.33	0.13	-0.54	1185.00	0.59	-0.06	0.12	-0.30	0.17
	Equal variances not assumed			-0.56	495.71	0.58	-0.06	0.12	-0.29	0.16		
IMP [4/3 Wbst] The website	Equal variances assumed			0.55	0.46	0.10	1185.00	0.92	0.01	0.12	-0.23	0.25

does a good job of guessing what kind of things I might like	Equal variances not assumed		0.10	483.73	0.92	0.01	0.12	-0.23	0.25		
IMP [5/3 Wbst] The website has the capability to save a list of items I might want to buy later	Equal variances assumed		0.00	1.00	2.81	1185.00	0.01	0.33	0.12	0.10	0.65
	Equal variances not assumed				2.82	471.54	0.01	0.33	0.12	0.10	0.55
IMP [6/3 Wbst] The level of personalization at this site is about right, not too much, not too little	Equal variances assumed		1.03	0.31	1.78	1185.00	0.07	0.19	0.11	-0.02	0.28
	Equal variances not assumed				1.85	497.64	0.07	0.19	0.10	-0.01	0.23
IMP [7/3 Wbst] The website stores my information to facilitate future transactions	Equal variances assumed		0.06	0.81	2.52	1185.00	0.01	0.28	0.11	0.06	0.49
	Equal variances not assumed				2.48	457.26	0.01	0.28	0.11	0.06	0.49
PERF [1/3 Wbst] The website is easy to customize	Equal variances assumed		4.98	0.03	0.24	1185.00	0.81	0.02	0.10	-0.17	0.22
	Equal variances not assumed				0.25	508.80	0.80	0.02	0.09	-0.16	0.22
PERF [2/3 Wbst] It's fun to shop at the website	Equal variances assumed		6.86	0.01	0.07	1185.00	0.94	0.01	0.09	-0.17	0.20
	Equal variances not assumed				0.07	509.19	0.94	0.01	0.09	-0.17	0.20
PERF [3/3 Wbst] There are features at the site that are entertaining to use	Equal variances assumed		1.40	0.24	-0.93	1185.00	0.35	-0.09	0.10	-0.28	0.28
	Equal variances not assumed				-0.97	505.51	0.33	-0.09	0.09	-0.27	0.28
PERF [4/3 Wbst] The website does a good job of guessing what kind of things I might like	Equal variances assumed		1.35	0.25	-0.57	1185.00	0.57	-0.06	0.10	-0.26	0.21
	Equal variances not assumed				-0.59	495.05	0.56	-0.06	0.10	-0.26	0.21
PERF [5/3 Wbst] The website has the capability to save a list of items I might want to buy later	Equal variances assumed		5.98	0.01	1.24	1185.00	0.21	0.13	0.11	-0.08	0.25
	Equal variances not assumed				1.31	514.21	0.19	0.13	0.10	-0.07	0.25
PERF [6/3 Wbst] The level of personalization at this site is about right, not too much, not too little	Equal variances assumed		5.44	0.02	0.86	1185.00	0.39	0.08	0.09	-0.10	0.27
	Equal variances not assumed				0.89	495.65	0.37	0.08	0.09	-0.10	0.23
PERF [7/3 Wbst] The website stores my information to facilitate future transactions	Equal variances assumed		4.94	0.03	1.92	1185.00	0.06	0.19	0.10	0.00	0.23
	Equal variances not assumed				2.02	509.71	0.04	0.19	0.09	0.00	0.23
IMP [1/4 Cont] Telephone calls are answered promptly	Equal variances assumed		2.92	0.09	-1.15	1185.00	0.25	-0.13	0.11	-0.34	0.28
	Equal variances not assumed				-1.17	480.07	0.24	-0.13	0.11	-0.34	0.28
IMP [2/4 Cont] A contact address is shown on the website	Equal variances assumed		0.07	0.79	0.01	1185.00	0.99	0.00	0.08	-0.16	0.26
	Equal variances not assumed				0.01	463.07	0.99	0.00	0.08	-0.16	0.26
IMP [3/4 Cont] When the company promises to email or call by a certain time it does so	Equal variances assumed		2.63	0.10	1.26	1185.00	0.21	0.09	0.07	-0.05	0.22
	Equal variances not assumed				1.17	419.78	0.24	0.09	0.08	-0.06	0.23
IMP [4/4 Cont] A contact telephone number is displayed on the site so that I can talk to	Equal variances assumed		5.20	0.02	-2.17	1185.00	0.03	-0.22	0.10	-0.42	0.28
	Equal variances not assumed				-2.23	489.59	0.03	-0.22	0.10	-0.41	0.28
PERF [1/4 Cont] Telephone calls are answered promptly	Equal variances assumed		1.60	0.21	-0.15	1185.00	0.88	-0.01	0.10	-0.20	0.22
	Equal variances not assumed				-0.15	496.56	0.88	-0.01	0.09	-0.20	0.22
PERF [2/4 Cont] A contact address is shown on the website	Equal variances assumed		1.92	0.17	0.83	1185.00	0.41	0.07	0.09	-0.10	0.23
	Equal variances not assumed				0.86	507.26	0.39	0.07	0.08	-0.09	0.23
PERF [3/4 Cont] When the company promises to email or call by a certain time it does so	Equal variances assumed		5.23	0.02	0.68	1185.00	0.50	0.06	0.09	-0.12	0.25
	Equal variances not assumed				0.73	529.29	0.46	0.06	0.09	-0.11	0.23
PERF [4/4 Cont] A contact telephone number is displayed on the site so that I can talk to a 'live'	Equal variances assumed		4.41	0.04	0.16	1185.00	0.87	0.02	0.10	-0.18	0.22
	Equal variances not assumed				0.17	500.65	0.87	0.02	0.09	-0.17	0.23
IMP [1/5 Cust Srv] The website is always available for business	Equal variances assumed		0.14	0.71	0.38	1185.00	0.71	0.03	0.07	-0.11	0.21
	Equal variances not assumed				0.37	454.16	0.71	0.03	0.07	-0.11	0.21
IMP [2/5 Cust Srv] The website is working correctly and functions as it should	Equal variances assumed		0.59	0.44	0.95	1185.00	0.34	0.06	0.06	-0.06	0.20
	Equal variances not assumed				0.92	446.31	0.36	0.06	0.06	-0.07	0.20
IMP [3/5 Cust Srv] You get good value for money at this website	Equal variances assumed		0.07	0.79	-0.17	1185.00	0.86	-0.01	0.06	-0.13	0.21
	Equal variances not assumed				-0.17	446.90	0.87	-0.01	0.06	-0.13	0.21
IMP [4/5 Cust Srv] The site has competitive prices	Equal variances assumed		0.21	0.64	-0.54	1185.00	0.59	-0.03	0.06	-0.15	0.20
	Equal variances not assumed				-0.53	456.86	0.60	-0.03	0.06	-0.16	0.20
IMP [5/5 Cust Srv] The website has good pictures of the products	Equal variances assumed		1.18	0.28	-0.72	1185.00	0.47	-0.05	0.07	-0.19	0.20
	Equal variances not assumed				-0.74	487.81	0.46	-0.05	0.07	-0.19	0.20
IMP [6/5 Cust Srv] It is quick	Equal variances assumed		0.37	0.54	0.64	1185.00	0.52	0.04	0.06	-0.08	0.21

and easy to complete a transaction at this website	Equal variances not assumed			0.64	466.24	0.52	0.04	0.06	-0.08	0.15		
IMP [7/5 Cust Srv] After sale support at this site is excellent	Equal variances assumed			0.32	0.57	1.49	1185.00	0.14	0.10	0.07	-0.03	0.24
	Equal variances not assumed					1.44	444.82	0.15	0.10	0.07	-0.04	0.24
IMP [8/5 Cust Srv] The products were delivered by the time promised	Equal variances assumed			0.24	0.62	0.30	1185.00	0.76	0.02	0.06	-0.10	0.14
	Equal variances not assumed					0.29	446.25	0.77	0.02	0.06	-0.11	0.14
IMP [9/5 Cust Srv] The company willingly handles returns and exchanges	Equal variances assumed			0.12	0.73	-0.08	1185.00	0.94	-0.01	0.07	-0.13	0.12
	Equal variances not assumed					-0.08	453.90	0.94	-0.01	0.07	-0.14	0.13
IMP [10/5 Cust Srv] Customer service personnel are always willing to help you	Equal variances assumed			0.32	0.57	1.07	1185.00	0.29	0.07	0.07	-0.06	0.20
	Equal variances not assumed					1.01	433.02	0.31	0.07	0.07	-0.07	0.21
IMP [11/5 Cust Srv] When you have a problem, the company shows a sincere interest in solving	Equal variances assumed			0.43	0.51	0.81	1185.00	0.42	0.05	0.06	-0.07	0.18
	Equal variances not assumed					0.77	437.10	0.44	0.05	0.07	-0.08	0.18
IMP [12/5 Cust Srv] I can return items ordered online to the company's retail stores	Equal variances assumed			11.18	0.00	-2.05	1185.00	0.04	-0.24	0.12	-0.48	-0.01
	Equal variances not assumed					-2.17	518.69	0.03	-0.24	0.11	-0.47	-0.02
IMP [13/5 Cust Srv] The company refunds shipping charges when the product doesn't arrive in time	Equal variances assumed			11.35	0.00	-2.03	1185.00	0.04	-0.20	0.10	-0.39	-0.01
	Equal variances not assumed					-2.18	530.41	0.03	-0.20	0.09	-0.37	-0.02
IMP [14/5 Cust Srv] I feel like the company wants to provide me with a good buying experience	Equal variances assumed			0.16	0.69	-0.59	1185.00	0.55	-0.04	0.07	-0.19	0.10
	Equal variances not assumed					-0.59	468.21	0.55	-0.04	0.07	-0.19	0.10
IMP [15/5 Cust Srv] The company offers free delivery for orders over a certain value	Equal variances assumed			2.06	0.15	-0.99	1185.00	0.32	-0.08	0.08	-0.24	0.08
	Equal variances not assumed					-1.00	481.10	0.32	-0.08	0.08	-0.24	0.08
PERF [1/5 Cust Srv] The website is always available for business	Equal variances assumed			0.38	0.54	1.09	1185.00	0.28	0.07	0.06	-0.06	0.20
	Equal variances not assumed					1.06	446.94	0.29	0.07	0.07	-0.06	0.20
PERF [2/5 Cust Srv] The website is working correctly and functions as it should	Equal variances assumed			0.03	0.87	1.14	1185.00	0.26	0.07	0.06	-0.05	0.20
	Equal variances not assumed					1.12	460.61	0.26	0.07	0.07	-0.06	0.20
PERF [3/5 Cust Srv] You get good value for money at this website	Equal variances assumed			1.30	0.25	-1.24	1185.00	0.21	-0.10	0.08	-0.25	0.05
	Equal variances not assumed					-1.29	494.72	0.20	-0.10	0.07	-0.24	0.05
PERF [4/5 Cust Srv] The site has competitive prices	Equal variances assumed			6.01	0.01	-1.54	1185.00	0.12	-0.12	0.08	-0.28	0.03
	Equal variances not assumed					-1.59	497.45	0.11	-0.12	0.08	-0.28	0.03
PERF [5/5 Cust Srv] The website has good pictures of the products	Equal variances assumed			2.74	0.10	-1.47	1185.00	0.14	-0.11	0.08	-0.26	0.04
	Equal variances not assumed					-1.55	511.61	0.12	-0.11	0.07	-0.26	0.03
PERF [6/5 Cust Srv] It is quick and easy to complete a transaction at this website	Equal variances assumed			0.01	0.91	0.61	1185.00	0.54	0.04	0.07	-0.10	0.18
	Equal variances not assumed					0.61	464.49	0.54	0.04	0.07	-0.10	0.18
PERF [7/5 Cust Srv] After sale support at this site is excellent	Equal variances assumed			1.39	0.24	1.23	1185.00	0.22	0.11	0.09	-0.07	0.28
	Equal variances not assumed					1.28	501.60	0.20	0.11	0.09	-0.06	0.28
PERF [8/5 Cust Srv] The products were delivered by the time promised	Equal variances assumed			12.36	0.00	-2.62	1185.00	0.01	-0.25	0.10	-0.44	-0.06
	Equal variances not assumed					-2.90	563.17	0.00	-0.25	0.09	-0.42	-0.08
PERF [9/5 Cust Srv] The company willingly handles returns and exchanges	Equal variances assumed			0.03	0.85	1.62	1185.00	0.11	0.14	0.09	-0.03	0.32
	Equal variances not assumed					1.65	482.46	0.10	0.14	0.09	-0.03	0.31
PERF [10/5 Cust Srv] Customer service personnel are always willing to help you	Equal variances assumed			0.06	0.81	2.12	1185.00	0.03	0.19	0.09	0.01	0.36
	Equal variances not assumed					2.16	485.79	0.03	0.19	0.09	0.02	0.36
PERF [11/5 Cust Srv] When you have a problem, the company shows a sincere interest in solving it	Equal variances assumed			1.12	0.29	0.90	1185.00	0.37	0.08	0.09	-0.10	0.26
	Equal variances not assumed					0.94	505.57	0.35	0.08	0.09	-0.09	0.26
PERF [12/5 Cust Srv] I can return items ordered online to the company's retail stores	Equal variances assumed			4.39	0.04	-0.94	1185.00	0.35	-0.11	0.12	-0.34	0.12
	Equal variances not assumed					-0.98	501.47	0.33	-0.11	0.11	-0.34	0.11
PERF [13/5 Cust Srv] The company refunds shipping charges when the product doesn't arrive in time	Equal variances assumed			2.91	0.09	-1.52	1185.00	0.13	-0.17	0.11	-0.38	0.05
	Equal variances not assumed					-1.60	516.56	0.11	-0.17	0.10	-0.37	0.04

PERF [14/5 Cust Srv] I feel like the company wants to provide me with a good buying experience	Equal variances assumed	10.15	0.00	-0.96	1185.00	0.34	-0.08	0.08	-0.25	0.08
	Equal variances not assumed			-1.03	533.16	0.30	-0.08	0.08	-0.24	0.07
PERF [15/5 Cust Srv] The company offers free delivery for orders over a certain value	Equal variances assumed	8.62	0.00	-1.97	1185.00	0.05	-0.24	0.12	-0.49	0.00
	Equal variances not assumed			-2.08	514.93	0.04	-0.24	0.12	-0.47	-0.01
IMP [1/6 Trst] The website has adequate security features	Equal variances assumed	4.92	0.03	1.32	1185.00	0.19	0.08	0.06	-0.04	0.19
	Equal variances not assumed			1.24	427.50	0.22	0.08	0.06	-0.05	0.20
IMP [2/6 Trst] I feel secure giving out credit information to this site	Equal variances assumed	2.46	0.12	0.91	1185.00	0.37	0.05	0.06	-0.06	0.16
	Equal variances not assumed			0.86	431.95	0.39	0.05	0.06	-0.07	0.17
IMP [3/6 Trst] I feel safe in my transactions with this site	Equal variances assumed	2.66	0.10	0.92	1185.00	0.36	0.05	0.06	-0.06	0.16
	Equal variances not assumed			0.86	429.58	0.39	0.05	0.06	-0.07	0.17
IMP [4/6 Trst] You know exactly what you're buying from the website	Equal variances assumed	0.70	0.40	0.40	1185.00	0.69	0.02	0.05	-0.09	0.13
	Equal variances not assumed			0.38	435.03	0.71	0.02	0.06	-0.09	0.13
IMP [5/6 Trst] I feel like my privacy and personal information is protected at this site	Equal variances assumed	3.68	0.06	1.19	1185.00	0.23	0.07	0.06	-0.04	0.18
	Equal variances not assumed			1.12	428.37	0.26	0.07	0.06	-0.05	0.18
PERF [1/6 Trst] The website has adequate security features	Equal variances assumed	0.42	0.52	1.07	1185.00	0.28	0.07	0.06	-0.06	0.19
	Equal variances not assumed			1.06	460.50	0.29	0.07	0.06	-0.06	0.19
PERF [2/6 Trst] I feel secure giving out credit information to this site	Equal variances assumed	0.59	0.44	0.97	1185.00	0.33	0.06	0.07	-0.07	0.19
	Equal variances not assumed			0.94	447.95	0.35	0.06	0.07	-0.07	0.20
PERF [3/6 Trst] I feel safe in my transactions with this site	Equal variances assumed	0.01	0.93	0.49	1185.00	0.62	0.03	0.07	-0.10	0.16
	Equal variances not assumed			0.49	464.35	0.63	0.03	0.07	-0.10	0.16
PERF [4/6 Trst] You know exactly what you're buying from the website	Equal variances assumed	3.27	0.07	-0.89	1185.00	0.37	-0.06	0.07	-0.19	0.07
	Equal variances not assumed			-0.95	525.94	0.34	-0.06	0.06	-0.18	0.06
PERF [5/6 Trst] I feel like my privacy and personal information is protected at this site	Equal variances assumed	0.15	0.70	0.79	1185.00	0.43	0.06	0.07	-0.08	0.19
	Equal variances not assumed			0.79	464.83	0.43	0.06	0.07	-0.08	0.19
IMP [1/7 Inf] I receive notification when the product will be delivered	Equal variances assumed	0.14	0.71	-0.20	1185.00	0.84	-0.01	0.07	-0.14	0.12
	Equal variances not assumed			-0.20	470.22	0.84	-0.01	0.07	-0.14	0.12
IMP [2/7 Inf] Most products are available for delivery within 48 hours	Equal variances assumed	2.95	0.09	-1.66	1185.00	0.10	-0.13	0.08	-0.28	0.02
	Equal variances not assumed			-1.72	497.67	0.09	-0.13	0.08	-0.28	0.02
IMP [3/7 Inf] The website provides in-depth information	Equal variances assumed	1.44	0.23	-0.09	1185.00	0.93	-0.01	0.07	-0.15	0.13
	Equal variances not assumed			-0.10	495.60	0.92	-0.01	0.07	-0.14	0.13
IMP [4/7 Inf] The site helps me research products	Equal variances assumed	0.02	0.90	0.35	1185.00	0.73	0.03	0.08	-0.13	0.19
	Equal variances not assumed			0.35	469.09	0.73	0.03	0.08	-0.13	0.19
IMP [5/7 Inf] It's easy to track the shipping and delivery of items purchased on this website	Equal variances assumed	0.08	0.77	0.51	1185.00	0.61	0.04	0.07	-0.11	0.18
	Equal variances not assumed			0.50	463.20	0.61	0.04	0.07	-0.11	0.18
IMP [6/7 Inf] The website lets me know about product availability during search	Equal variances assumed	0.01	0.90	0.62	1185.00	0.53	0.04	0.06	-0.08	0.16
	Equal variances not assumed			0.61	458.16	0.54	0.04	0.06	-0.09	0.16
PERF [1/7 Inf] I receive notification when the product will be delivered	Equal variances assumed	5.07	0.02	-0.86	1185.00	0.39	-0.08	0.09	-0.26	0.10
	Equal variances not assumed			-0.93	540.59	0.35	-0.08	0.08	-0.25	0.09
PERF [2/7 Inf] Most products are available for delivery within 48 hours	Equal variances assumed	6.55	0.01	-1.19	1185.00	0.23	-0.11	0.09	-0.30	0.07
	Equal variances not assumed			-1.23	493.59	0.22	-0.11	0.09	-0.29	0.07
PERF [3/7 Inf] The website provides in-depth information	Equal variances assumed	15.59	0.00	-1.34	1185.00	0.18	-0.12	0.09	-0.29	0.05
	Equal variances not assumed			-1.47	548.71	0.14	-0.12	0.08	-0.28	0.04
PERF [4/7 Inf] The site helps me research products	Equal variances assumed	4.62	0.03	0.11	1185.00	0.91	0.01	0.09	-0.17	0.19
	Equal variances not assumed			0.11	505.15	0.91	0.01	0.09	-0.16	0.18
PERF [5/7 Inf] It's easy to track the shipping and delivery of items purchased on this website	Equal variances assumed	14.61	0.00	-1.66	1185.00	0.10	-0.18	0.11	-0.38	0.03
	Equal variances not assumed			-1.81	551.44	0.07	-0.18	0.10	-0.37	0.01
PERF [6/7 Inf] The website lets me know about product availability during search	Equal variances assumed	11.82	0.00	-0.83	1185.00	0.40	-0.09	0.11	-0.30	0.12
	Equal variances not assumed			-0.89	521.60	0.38	-0.09	0.10	-0.28	0.11
IMP [1/8 Adm Eff] There are no pop-up advertisements	Equal variances assumed	0.07	0.80	0.27	1185.00	0.79	0.02	0.08	-0.13	0.17
	Equal variances not assumed			0.28	498.31	0.78	0.02	0.07	-0.13	0.17

IMP [2/8 Adm Eff] There are no advertisements on the website	Equal variances assumed	1.98	0.16	-0.66	1185.00	0.51	-0.07	0.11	-0.28	0.14
	Equal variances not assumed			-0.68	491.64	0.50	-0.07	0.10	-0.27	0.13
IMP [3/8 Adm Eff] The site confirms exactly what is ordered	Equal variances assumed	0.78	0.38	0.90	1185.00	0.37	0.05	0.06	-0.06	0.16
	Equal variances not assumed			0.88	452.44	0.38	0.05	0.06	-0.06	0.17
IMP [4/8 Adm Eff] The quantity and quality of the product was exactly as ordered	Equal variances assumed	1.50	0.22	1.25	1185.00	0.21	0.07	0.06	-0.04	0.18
	Equal variances not assumed			1.24	465.35	0.21	0.07	0.06	-0.04	0.19
IMP [5/8 Adm Eff] I can set up an account with the company to be billed monthly	Equal variances assumed	3.38	0.07	-2.23	1185.00	0.03	-0.31	0.14	-0.58	-0.04
	Equal variances not assumed			-2.30	492.98	0.02	-0.31	0.13	-0.57	-0.04
IMP [6/8 Adm Eff] I have the option to pay by cheque by post	Equal variances assumed	3.78	0.05	-2.56	1185.00	0.01	-0.37	0.15	-0.66	-0.09
	Equal variances not assumed			-2.66	498.15	0.01	-0.37	0.14	-0.65	-0.10
IMP [7/8 Adm Eff] I do not receive junk mail from being on their mailing list	Equal variances assumed	0.69	0.41	0.87	1185.00	0.38	0.07	0.08	-0.09	0.23
	Equal variances not assumed			0.86	460.46	0.39	0.07	0.08	-0.09	0.24
IMP [8/8 Adm Eff] The product that came was accurately represented by pictures and descriptions on the website	Equal variances assumed	0.09	0.76	0.76	1185.00	0.45	0.05	0.06	-0.07	0.16
	Equal variances not assumed			0.76	468.12	0.45	0.05	0.06	-0.07	0.16
IMP [9/8 Adm Eff] The billing process was accurately handled and its records kept accurately	Equal variances assumed	2.13	0.14	1.11	1185.00	0.27	0.06	0.06	-0.05	0.18
	Equal variances not assumed			1.06	440.03	0.29	0.06	0.06	-0.05	0.18
IMP [10/8 Adm Eff] The company has bulletin boards and chat rooms for customers to seek support	Equal variances assumed	2.27	0.13	-2.39	1185.00	0.02	-0.33	0.14	-0.60	-0.06
	Equal variances not assumed			-2.41	476.10	0.02	-0.33	0.14	-0.60	-0.06
PERF [1/8 Adm Eff] There are no pop-up advertisements	Equal variances assumed	0.16	0.69	1.44	1185.00	0.15	0.11	0.08	-0.04	0.26
	Equal variances not assumed			1.44	465.49	0.15	0.11	0.08	-0.04	0.26
PERF [2/8 Adm Eff] There are no advertisements on the website	Equal variances assumed	0.77	0.38	0.11	1185.00	0.91	0.01	0.09	-0.16	0.18
	Equal variances not assumed			0.11	483.72	0.91	0.01	0.08	-0.16	0.17
PERF [3/8 Adm Eff] The site confirms exactly what is ordered	Equal variances assumed	3.31	0.07	-0.69	1185.00	0.49	-0.04	0.06	-0.17	0.08
	Equal variances not assumed			-0.76	551.39	0.45	-0.04	0.06	-0.16	0.07
PERF [4/8 Adm Eff] The quantity and quality of the product was exactly as ordered	Equal variances assumed	1.15	0.28	-0.49	1185.00	0.63	-0.03	0.07	-0.17	0.10
	Equal variances not assumed			-0.51	498.42	0.61	-0.03	0.07	-0.17	0.10
PERF [5/8 Adm Eff] I can set up an account with the company to be billed monthly	Equal variances assumed	0.41	0.52	-2.71	1185.00	0.01	-0.31	0.11	-0.53	-0.09
	Equal variances not assumed			-2.89	521.52	0.00	-0.31	0.11	-0.52	-0.10
PERF [6/8 Adm Eff] I have the option to pay by cheque by post	Equal variances assumed	3.86	0.05	-0.95	1185.00	0.34	-0.11	0.11	-0.32	0.11
	Equal variances not assumed			-1.00	510.98	0.32	-0.11	0.11	-0.31	0.10
PERF [7/8 Adm Eff] I do not receive junk mail from being on their mailing list	Equal variances assumed	2.55	0.11	0.52	1185.00	0.60	0.04	0.09	-0.12	0.21
	Equal variances not assumed			0.53	490.49	0.59	0.04	0.08	-0.12	0.21
PERF [8/8 Adm Eff] The product that came was accurately represented by pictures and descriptions on the website	Equal variances assumed	3.00	0.08	-1.13	1185.00	0.26	-0.08	0.07	-0.21	0.06
	Equal variances not assumed			-1.21	531.44	0.23	-0.08	0.06	-0.20	0.05
PERF [9/8 Adm Eff] The billing process was accurately handled and its records kept accurately	Equal variances assumed	3.36	0.07	-0.61	1185.00	0.54	-0.05	0.07	-0.19	0.10
	Equal variances not assumed			-0.66	531.79	0.51	-0.05	0.07	-0.18	0.09
PERF [10/8 Adm Eff] The company has bulletin boards and chat rooms for customers to seek support	Equal variances assumed	0.33	0.57	-3.45	1185.00	0.00	-0.38	0.11	-0.60	-0.17
	Equal variances not assumed			-3.67	521.74	0.00	-0.38	0.10	-0.59	-0.18
yellow - high missing values over 10%	Red - sig difs with high missing values					green other sig difs				

APPENDIX 6.3

Outliers

	mean	trimme d mean	difference
IMP [1/1 Pr Id Av] The website has a useful search function	6.221555	6.360436	-0.13888
IMP [2/1 Pr Id Av] It's easy to get around and find what you want at this site	6.309129	6.442235	-0.13311
IMP [3/1 Pr Id Av] The website is laid out in a logical fashion	6.163697	6.283751	-0.12005
IMP [4/1 Pr Id Av] The layout of the site is clean and simple	6.056415	6.176878	-0.12046
IMP [5/1 Pr Id Av] The website has a good user interface	6.086983	6.209716	-0.12273
IMP [6/1 Pr Id Av] Pricing is clear and easy to understand	6.430695	6.575607	-0.14491
IMP [7/1 Pr Id Av] I know what all my options are when I shop at this website	6.121773	6.247883	-0.12611
IMP [8/1 Pr Id Av] The website lets me know delivery charges up-front	6.396704	6.55364	-0.15694
IMP [9/1 Pr Id Av] The site doesn't waste my time	6.358554	6.504929	-0.14638
IMP [10/1 Pr Id Av] The website has products I can't find in stores	5.371385	5.514359	-0.14297
IMP [11/1 Pr Id Av] There are hard to find products on this website	5.335108	5.476963	-0.14186
IMP [12/1 Pr Id Av] All the items I want are in stock	5.973918	6.112492	-0.13857
IMP [13/1 Pr Id Av] The website has a good selection	6.278221	6.416155	-0.13793
IMP [14/1 Pr Id Av] The contents of the website are concise and easy to understand	6.237107	6.36546	-0.12835
IMP [15/1 Pr Id Av] The site gives me enough information so that I can identify the item as if I am in a store	6.210591	6.357906	-0.14731
PERF [1/1 Pr Id Av] The website has a useful search function	5.894785	5.98364	-0.08885
PERF [2/1 Pr Id Av] It's easy to get around and find what you want at this site	5.885881	5.978998	-0.09312
PERF [3/1 Pr Id Av] The website is laid out in a logical fashion	5.850185	5.934306	-0.08412
PERF [4/1 Pr Id Av] The layout of the site is clean and simple	5.83808	5.92	-0.08192
PERF [5/1 Pr Id Av] The website has a good user interface	5.843426	5.918889	-0.07546
PERF [6/1 Pr Id Av] Pricing is clear and easy to understand	6.142146	6.275704	-0.13356
PERF [7/1 Pr Id Av] I know what all my options are when I shop at this website	5.846202	5.94486	-0.09866
PERF [8/1 Pr Id Av] The website lets me know delivery charges up-front	6.021317	6.169105	-0.14779
PERF [9/1 Pr Id Av] The site doesn't waste my time	6.026505	6.15118	-0.12468
PERF [10/1 Pr Id Av] The website has products I can't find in stores	5.55488	5.655289	-0.10041
PERF [11/1 Pr Id Av] There are hard to find products on this website	5.329324	5.4266	-0.09728
PERF [12/1 Pr Id Av] All the items I want are in stock	5.398617	5.499843	-0.10123
PERF [13/1 Pr Id Av] The website has a good selection	6.052433	6.148003	-0.09557
PERF [14/1 Pr Id Av] The contents of the website are concise and easy to understand	6.024329	6.120711	-0.09638
PERF [15/1 Pr Id Av] The site gives me enough information so that I can identify the item as well as if I am in a store	5.920913	6.034368	-0.11346
IMP [1/2 Co Im] The company has a well known name	4.612007	4.680008	-0.068
IMP [2/2 Co Im] The website fits with my image of the company	4.698525	4.776139	-0.07761
IMP [3/2 Co Im] The company advertises on other media	3.596106	3.551228	0.044877
IMP [4/2 Co Im] The company behind the site is reputable	6.074876	6.223666	-0.14879
IMP [5/2 Co Im] The website instils confidence among its customers	6.084175	6.196698	-0.11252
IMP [6/2 Co Im] The website offers high quality merchandise	6.380822	6.513868	-0.13305
IMP [7/2 Co Im] I receive special rewards and discounts from doing business with this web	5.091302	5.212557	-0.12126
PERF [1/2 Co Im] The company has a well known name	5.539291	5.632426	-0.09313
PERF [2/2 Co Im] The website fits with my image of the company	5.567585	5.627853	-0.06027
PERF [3/2 Co Im] The company advertises on other media	4.591031	4.644653	-0.05362
PERF [4/2 Co Im] The company behind the site is reputable	5.966688	6.050573	-0.08388
PERF [5/2 Co Im] The website instils confidence among its customers	6.011995	6.109568	-0.09757
PERF [6/2 Co Im] The website offers high quality merchandise	6.257793	6.362774	-0.10498
PERF [7/2 Co Im] I receive special rewards and discounts from doing business with this website	4.237113	4.263459	-0.02635
IMP [1/3 Wbst] The website is easy to customize	4.012106	4.013451	-0.00135
IMP [2/3 Wbst] It's fun to shop at the website	4.502681	4.558534	-0.05585
IMP [3/3 Wbst] There are features at the site that are entertaining to use	3.752903	3.725448	0.027455
IMP [4/3 Wbst] The website does a good job of guessing what kind of things I might like	3.914295	3.904772	0.009523
IMP [5/3 Wbst] The website has the capability to save a list of items I might want to buy later	4.900032	5.000035	-0.1
IMP [6/3 Wbst] The level of personalization at this site is about right, not too much, not too little	4.816549	4.907277	-0.09073

IMP [7/3 Wbst] The website stores my information to facilitate future transactions	5.31873	5.465256	-0.14653
PERF [1/3 Wbst]The website is easy to customize	4.572938	4.616261	-0.04332
PERF [2/3 Wbst] It's fun to shop at the website	4.99005	5.039432	-0.04938
PERF [3/3 Wbst] There are features at the site that are entertaining to use	4.338488	4.363307	-0.02482
PERF [4/3 Wbst] The website does a good job of guessing what kind of things I might like	4.406751	4.449047	-0.0423
PERF [5/3 Wbst] The website has the capability to save a list of items I might want to buy later	5.114915	5.216008	-0.10109
PERF [6/3 Wbst] The level of personalization at this site is about right, not too much, not too little	5.151515	5.217733	-0.06622
PERF [7/3 Wbst] The website stores my information to facilitate future transactions	5.581697	5.702163	-0.12047
IMP [1/4 Cont] Telephone calls are answered promptly	5.902729	6.101034	-0.19831
IMP [2/4 Cont] A contact address is shown on the website	6.245336	6.402087	-0.15675
IMP [3/4 Cont] When the company promises to email or call by a certain time it does so	6.397428	6.54733	-0.1499
IMP [4/4 Cont] A contact telephone number is displayed on the site so that I can talk to	5.987929	6.178526	-0.1906
PERF [1/4 Cont] Telephone calls are answered promptly	5.277394	5.356348	-0.07895
PERF [2/4 Cont] A contact address is shown on the website	5.861802	5.964395	-0.10259
PERF [3/4 Cont] When the company promises to email or call by a certain time it does so	5.774533	5.905395	-0.13086
PERF [4/4 Cont] A contact telephone number is displayed on the site so that I can talk to a 'live'	5.60453	5.716609	-0.11208
IMP [1/5 Cust Srv] The website is always available for business	6.349938	6.488724	-0.13879
IMP [2/5 Cust Srv] The website is working correctly and functions as it should	6.491768	6.626834	-0.13507
IMP [3/5 Cust Srv] You get good value for money at this website	6.446278	6.573722	-0.12744
IMP [4/5 Cust Srv] The site has competitive prices	6.451914	6.583048	-0.13113
IMP [5/5 Cust Srv] The website has good pictures of the products	6.037683	6.200197	-0.16251
IMP [6/5 Cust Srv] It is quick and easy to complete a transaction at this website	6.449424	6.571982	-0.12256
IMP [7/5 Cust Srv] After sale support at this site is excellent	6.280562	6.405593	-0.12503
IMP [8/5 Cust Srv] The products were delivered by the time promised	6.475862	6.613723	-0.13786
IMP [9/5 Cust Srv] The company willingly handles returns and exchanges	6.402188	6.541041	-0.13885
IMP [10/5 Cust Srv] Customer service personnel are always willing to help you	6.402952	6.541422	-0.13847
IMP [11/5 Cust Srv] When you have a problem, the company shows a sincere interest in solving	6.453844	6.592706	-0.13886
IMP [12/5 Cust Srv] I can return items ordered online to the company's retail stores	5.383897	5.537664	-0.15377
IMP [13/5 Cust Srv] The company refunds shipping charges when the product doesnt arrive in time	5.727096	5.876898	-0.1498
IMP [14/5 Cust Srv] I feel like the company wants to provide me with a good buying experience	6.193508	6.313286	-0.11978
IMP [15/5 Cust Srv] The company offers free delivery for orders over a certain value	6.181376	6.324815	-0.14344
PERF [1/5 Cust Srv] The website is always available for business	6.294459	6.404568	-0.11011
PERF [2/5 Cust Srv] The website is working correctly and functions as it should	6.261134	6.37917	-0.11804
PERF [3/5 Cust Srv] You get good value for money at this website	6.039665	6.143699	-0.10403
PERF [4/5 Cust Srv] The site has competitive prices	5.981029	6.09164	-0.11061
PERF [5/5 Cust Srv] The website has good pictures of the products	5.888925	5.992771	-0.10385
PERF [6/5 Cust Srv] It is quick and easy to complete a transaction at this website	6.21267	6.33459	-0.12192
PERF [7/5 Cust Srv] After sale support at this site is excellent	5.829185	5.955165	-0.12598
PERF [8/5 Cust Srv] The products were delivered by the time promised	5.928688	6.09483	-0.16614
PERF [9/5 Cust Srv] The company willingly handles returns and exchanges	5.863717	5.963987	-0.10027
PERF [10/5 Cust Srv] Customer service personnel are always willing to help you	5.873269	5.987319	-0.11405
PERF [11/5 Cust Srv] When you have a problem, the company shows a sincere interest in solving it	5.83613	5.965905	-0.12978
PERF [12/5 Cust Srv] I can return items ordered online to the company's retail stores	4.937133	5.041258	-0.10413
PERF [13/5 Cust Srv] The company refunds shipping charges when the product doesnt arrive in time	4.777982	4.864425	-0.08644
PERF [14/5 Cust Srv] I feel like the company wants to provide me with a good buying experience	5.9384	6.060019	-0.12162
PERF [15/5 Cust Srv] The company offers free delivery for orders over a	5.5536	5.726222	-0.17262

certain value			
IMP [1/6 Trst] The website has adequate security features	6.62101	6.778157	-0.15715
IMP [2/6 Trst] I feel secure giving out credit information to this site	6.668224	6.823468	-0.15524
IMP [3/6 Trst] I feel safe in my transactions with this site	6.667814	6.817433	-0.14962
IMP [4/6 Trst] You know exactly what you're buying from the website	6.649314	6.786922	-0.13761
IMP [5/6 Trst] I feel like my privacy and personal information is protected at this site	6.667188	6.812847	-0.14566
PERF [1/6 Trst] The website has adequate security features	6.282303	6.384491	-0.10219
PERF [2/6 Trst] I feel secure giving out credit information to this site	6.288518	6.404845	-0.11633
PERF [3/6 Trst] I feel safe in my transactions with this site	6.312173	6.424229	-0.11206
PERF [4/6 Trst] You know exactly what you're buying from the website	6.353977	6.477474	-0.1235
PERF [5/6 Trst] I feel like my privacy and personal information is protected at this site	6.276818	6.387041	-0.11022
IMP [1/7 Inf] I receive notification when the product will be delivered	6.425313	6.563542	-0.13823
IMP [2/7 Inf] Most products are available for delivery within 48 hours	6.10839	6.231605	-0.12321
IMP [3/7 Inf] The website provides in-depth information	6.180359	6.295474	-0.11512
IMP [4/7 Inf] The site helps me research products	5.964773	6.089407	-0.12463
IMP [5/7 Inf] It's easy to track the shipping and delivery of items purchased on this website	6.201244	6.32632	-0.12508
IMP [6/7 Inf] The website lets me know about product availability during search	6.324015	6.454398	-0.13038
PERF [1/7 Inf] I receive notification when the product will be delivered	6.093832	6.254593	-0.16076
PERF [2/7 Inf] Most products are available for delivery within 48 hours	5.789218	5.925163	-0.13595
PERF [3/7 Inf] The website provides in-depth information	5.715641	5.826062	-0.11042
PERF [4/7 Inf] The site helps me research products	5.608261	5.710637	-0.10238
PERF [5/7 Inf] It's easy to track the shipping and delivery of items purchased on this website	5.660694	5.817131	-0.15644
PERF [6/7 Inf] The website lets me know about product availability during search	5.719011	5.884898	-0.16589
IMP [1/8 Adm Eff] There are no pop-up advertisements	6.407915	6.581853	-0.17394
IMP [2/8 Adm Eff] There are no advertisements on the website	5.673941	5.82613	-0.15219
IMP [3/8 Adm Eff] The site confirms exactly what is ordered	6.607862	6.742837	-0.13498
IMP [4/8 Adm Eff] The quantity and quality of the product was exactly as ordered	6.649338	6.796751	-0.14741
IMP [5/8 Adm Eff] I can set up an account with the company to be billed monthly	4.058843	4.065381	-0.00654
IMP [6/8 Adm Eff] I have the option to pay by cheque by post	4.011089	4.012321	-0.00123
IMP [7/8 Adm Eff] I do not receive junk mail from being on their mailing list	6.363866	6.545834	-0.18197
IMP [8/8 Adm Eff] The product that came was accurately represented by pictures and descriptions on the website	6.502996	6.644924	-0.14193
IMP [9/8 Adm Eff] The billing process was accurately handled and its records kept accurately	6.594037	6.734045	-0.14001
IMP [10/8 Adm Eff] The company has bulletin boards and chat rooms for customers to seek support	3.766882	3.74098	0.025902
PERF [1/8 Adm Eff] There are no pop-up advertisements	6.181066	6.296462	-0.1154
PERF [2/8 Adm Eff] There are no advertisements on the website	5.809814	5.895375	-0.08556
PERF [3/8 Adm Eff] The site confirms exactly what is ordered	6.414995	6.542238	-0.12724
PERF [4/8 Adm Eff] The quantity and quality of the product was exactly as ordered	6.381896	6.534211	-0.15231
PERF [5/8 Adm Eff] I can set up an account with the company to be billed monthly	4.467121	4.519023	-0.0519
PERF [6/8 Adm Eff] I have the option to pay by cheque by post	4.866317	4.962574	-0.09626
PERF [7/8 Adm Eff] I do not receive junk mail from being on their mailing list	6.069397	6.196607	-0.12721
PERF [8/8 Adm Eff] The product that came was accurately represented by pictures and descriptions on the website	6.28869	6.413433	-0.12474
PERF [9/8 Adm Eff] The billing process was accurately handled and its records kept accurately	6.321881	6.462864	-0.14098
PERF [10/8 Adm Eff] The company has bulletin boards and chat rooms for customers to seek support	4.351572	4.390636	-0.03906
			-0.11127

APPENDIX 6.4

Items Tests For Normality

Tests of Normality

	Kolmogorov-Smirnov(a)		
	Statistic	df	Sig.
IMP [1/1 Pr Id Av] The website has a useful search function	0.302	3331	0.000
IMP [2/1 Pr Id Av] It's easy to get around and find what you want at this site	0.307	3319	0.000
IMP [3/1 Pr Id Av] The website is laid out in a logical fashion	0.267	3311	0.000
IMP [4/1 Pr Id Av] The layout of the site is clean and simple	0.243	3297	0.000
IMP [5/1 Pr Id Av] The website has a good user interface	0.243	3265	0.000
IMP [6/1 Pr Id Av] Pricing is clear and easy to understand	0.347	3297	0.000
IMP [7/1 Pr Id Av] I know what all my options are when I shop at this website	0.268	3293	0.000
IMP [8/1 Pr Id Av] The website lets me know delivery charges up-front	0.358	3277	0.000
IMP [9/1 Pr Id Av] The site doesn't waste my time	0.343	3291	0.000
IMP [10/1 Pr Id Av] The website has products I can't find in stores	0.196	3250	0.000
IMP [11/1 Pr Id Av] There are hard to find products on this website	0.192	3193	0.000
IMP [12/1 Pr Id Av] All the items I want are in stock	0.240	3259	0.000
IMP [13/1 Pr Id Av] The website has a good selection	0.300	3260	0.000
IMP [14/1 Pr Id Av] The contents of the website are concise and easy to understand	0.281	3277	0.000
IMP [15/1 Pr Id Av] The site gives me enough information so that I can identify the item as if I am in a store	0.293	3267	0.000
PERF [1/1 Pr Id Av] The website has a useful search function	0.223	3260	0.000
PERF [2/1 Pr Id Av] It's easy to get around and find what you want at this site	0.222	3251	0.000
PERF [3/1 Pr Id Av] The website is laid out in a logical fashion	0.215	3244	0.000
PERF [4/1 Pr Id Av] The layout of the site is clean and simple	0.217	3230	0.000
PERF [5/1 Pr Id Av] The website has a good user interface	0.221	3187	0.000
PERF [6/1 Pr Id Av] Pricing is clear and easy to understand	0.284	3215	0.000
PERF [7/1 Pr Id Av] I know what all my options are when I shop at this website	0.216	3212	0.000
PERF [8/1 Pr Id Av] The website lets me know delivery charges up-front	0.288	3190	0.000
PERF [9/1 Pr Id Av] The site doesn't waste my time	0.249	3207	0.000
PERF [10/1 Pr Id Av] The website has products I can't find in stores	0.194	3125	0.000
PERF [11/1 Pr Id Av] There are hard to find products on this website	0.176	3076	0.000
PERF [12/1 Pr Id Av] All the items I want are in stock	0.195	3181	0.000
PERF [13/1 Pr Id Av] The website has a good selection	0.242	3185	0.000
PERF [14/1 Pr Id Av] The contents of the website are concise and easy to understand	0.231	3206	0.000
PERF [15/1 Pr Id Av] The site gives me enough information so that I can identify the item as well as if I am in a store	0.231	3199	0.000
IMP [1/2 Co Im] The company has a well known name	0.165	3348	0.000
IMP [2/2 Co Im] The website fits with my image of the company	0.152	3254	0.000
IMP [3/2 Co Im] The company advertises on other media	0.173	3184	0.000
IMP [4/2 Co Im] The company behind the site is reputable	0.285	3232	0.000
IMP [5/2 Co Im] The website instils confidence among its customers	0.264	3267	0.000
IMP [6/2 Co Im] The website offers high quality merchandise	0.337	3285	0.000
IMP [7/2 Co Im] I receive special rewards and discounts from doing business with this web	0.165	3242	0.000
PERF [1/2 Co Im] The company has a well known name	0.189	3245	0.000
PERF [2/2 Co Im] The website fits with my image of the company	0.198	3159	0.000
PERF [3/2 Co Im] The company advertises on other media	0.202	2988	0.000
PERF [4/2 Co Im] The company behind the site is reputable	0.253	3122	0.000
PERF [5/2 Co Im] The website instils confidence among its customers	0.236	3168	0.000
PERF [6/2 Co Im] The website offers high quality merchandise	0.306	3208	0.000
PERF [7/2 Co Im] I receive special rewards and discounts from doing business with this website	0.167	3104	0.000
IMP [1/3 Wbst] The website is easy to customize	0.169	3139	0.000
IMP [2/3 Wbst] It's fun to shop at the website	0.151	3171	0.000
IMP [3/3 Wbst] There are features at the site that are entertaining to use	0.178	3100	0.000
IMP [4/3 Wbst] The website does a good job of guessing what kind of things I might like	0.168	3127	0.000
IMP [5/3 Wbst] The website has the capability to save a list of items I might want to buy later	0.161	3151	0.000

IMP [6/3 Wbst] The level of personalization at this site is about right, not too much, not too little	0.168	3118	0.000
IMP [7/3 Wbst] The website stores my information to facilitate future transactions	0.207	3150	0.000
PERF [1/3 Wbst] The website is easy to customize	0.215	2934	0.000
PERF [2/3 Wbst] It's fun to shop at the website	0.182	3015	0.000
PERF [3/3 Wbst] There are features at the site that are entertaining to use	0.229	2910	0.000
PERF [4/3 Wbst] The website does a good job of guessing what kind of things I might like	0.187	2933	0.000
PERF [5/3 Wbst] The website has the capability to save a list of items I might want to buy later	0.161	2950	0.000
PERF [6/3 Wbst] The level of personalization at this site is about right, not too much, not too little	0.178	2970	0.000
PERF [7/3 Wbst] The website stores my information to facilitate future transactions	0.212	3005	0.000
IMP [1/4 Cont] Telephone calls are answered promptly	0.272	3115	0.000
IMP [2/4 Cont] A contact address is shown on the website	0.327	3216	0.000
IMP [3/4 Cont] When the company promises to email or call by a certain time it does so	0.359	3188	0.000
IMP [4/4 Cont] A contact telephone number is displayed on the site so that I can talk to	0.297	3148	0.000
PERF [1/4 Cont] Telephone calls are answered promptly	0.180	2747	0.000
PERF [2/4 Cont] A contact address is shown on the website	0.246	2974	0.000
PERF [3/4 Cont] When the company promises to email or call by a certain time it does so	0.240	2945	0.000
PERF [4/4 Cont] A contact telephone number is displayed on the site so that I can talk to a 'live'	0.217	2870	0.000
IMP [1/5 Cust Srv] The website is always available for business	0.334	3232	0.000
IMP [2/5 Cust Srv] The website is working correctly and functions as it should	0.376	3219	0.000
IMP [3/5 Cust Srv] You get good value for money at this website	0.361	3211	0.000
IMP [4/5 Cust Srv] The site has competitive prices	0.363	3213	0.000
IMP [5/5 Cust Srv] The website has good pictures of the products	0.275	3211	0.000
IMP [6/5 Cust Srv] It is quick and easy to complete a transaction at this website	0.352	3213	0.000
IMP [7/5 Cust Srv] After sale support at this site is excellent	0.317	3133	0.000
IMP [8/5 Cust Srv] The products were delivered by the time promised	0.372	3190	0.000
IMP [9/5 Cust Srv] The company willingly handles returns and exchanges	0.359	3108	0.000
IMP [10/5 Cust Srv] Customer service personnel are always willing to help you	0.355	3117	0.000
IMP [11/5 Cust Srv] When you have a problem, the company shows a sincere interest in solving	0.370	3109	0.000
IMP [12/5 Cust Srv] I can return items ordered online to the company's retail stores	0.214	2571	0.000
IMP [13/5 Cust Srv] The company refunds shipping charges when the product doesn't arrive in time	0.224	2576	0.000
IMP [14/5 Cust Srv] I feel like the company wants to provide me with a good buying experience	0.289	3173	0.000
IMP [15/5 Cust Srv] The company offers free delivery for orders over a certain value	0.315	2674	0.000
PERF [1/5 Cust Srv] The website is always available for business	0.328	3104	0.000
PERF [2/5 Cust Srv] The website is working correctly and functions as it should	0.312	3121	0.000
PERF [3/5 Cust Srv] You get good value for money at this website	0.265	3101	0.000
PERF [4/5 Cust Srv] The site has competitive prices	0.251	3110	0.000
PERF [5/5 Cust Srv] The website has good pictures of the products	0.226	3097	0.000
PERF [6/5 Cust Srv] It is quick and easy to complete a transaction at this website	0.308	3094	0.000
PERF [7/5 Cust Srv] After sale support at this site is excellent	0.237	2933	0.000
PERF [8/5 Cust Srv] The products were delivered by the time promised	0.261	3071	0.000
PERF [9/5 Cust Srv] The company willingly handles returns and exchanges	0.266	2803	0.000
PERF [10/5 Cust Srv] Customer service personnel are always willing to help you	0.254	2817	0.000
PERF [11/5 Cust Srv] When you have a problem, the company shows a sincere interest in solving it	0.251	2801	0.000
PERF [12/5 Cust Srv] I can return items ordered online to the company's retail stores	0.164	2211	0.000
PERF [13/5 Cust Srv] The company refunds shipping charges when the product doesn't arrive in time	0.189	2171	0.000
PERF [14/5 Cust Srv] I feel like the company wants to provide me with a good buying experience	0.234	2987	0.000
PERF [15/5 Cust Srv] The company offers free delivery for orders over a certain value	0.270	2500	0.000
IMP [1/6 Trst] The website has adequate security features	0.442	3227	0.000
IMP [2/6 Trst] I feel secure giving out credit information to this site	0.458	3210	0.000
IMP [3/6 Trst] I feel safe in my transactions with this site	0.457	3197	0.000
IMP [4/6 Trst] You know exactly what you're buying from the website	0.443	3208	0.000

IMP [5/6 Trst] I feel like my privacy and personal information is protected at this site	0.457	3200	0.000
PERF [1/6 Trst] The website has adequate security features	0.322	3057	0.000
PERF [2/6 Trst] I feel secure giving out credit information to this site	0.327	3057	0.000
PERF [3/6 Trst] I feel safe in my transactions with this site	0.333	3056	0.000
PERF [4/6 Trst] You know exactly what you're buying from the website	0.345	3068	0.000
PERF [5/6 Trst] I feel like my privacy and personal information is protected at this site	0.325	3067	0.000
IMP [1/7 Inf] I receive notification when the product will be delivered	0.360	3200	0.000
IMP [2/7 Inf] Most products are available for delivery within 48 hours	0.286	2777	0.000
IMP [3/7 Inf] The website provides in-depth information	0.273	3177	0.000
IMP [4/7 Inf] The site helps me research products	0.239	3151	0.000
IMP [5/7 Inf] It's easy to track the shipping and delivery of items purchased on this website	0.288	2733	0.000
IMP [6/7 Inf] The website lets me know about product availability during search	0.316	3148	0.000
PERF [1/7 Inf] I receive notification when the product will be delivered	0.305	3048	0.000
PERF [2/7 Inf] Most products are available for delivery within 48 hours	0.221	2671	0.000
PERF [3/7 Inf] The website provides in-depth information	0.208	3056	0.000
PERF [4/7 Inf] The site helps me research products	0.204	3002	0.000
PERF [5/7 Inf] It's easy to track the shipping and delivery of items purchased on this website	0.227	2623	0.000
PERF [6/7 Inf] The website lets me know about product availability during search	0.230	2993	0.000
IMP [1/8 Adm Eff] There are no pop-up advertisements	0.394	3209	0.000
IMP [2/8 Adm Eff] There are no advertisements on the website	0.241	3162	0.000
IMP [3/8 Adm Eff] The site confirms exactly what is ordered	0.421	3180	0.000
IMP [4/8 Adm Eff] The quantity and quality of the product was exactly as ordered	0.442	3174	0.000
IMP [5/8 Adm Eff] I can set up an account with the company to be billed monthly	0.159	2974	0.000
IMP [6/8 Adm Eff] I have the option to pay by cheque by post	0.149	2976	0.000
IMP [7/8 Adm Eff] I do not receive junk mail from being on their mailing list	0.386	3166	0.000
IMP [8/8 Adm Eff] The product that came was accurately represented by pictures and descriptions on the website	0.392	3171	0.000
IMP [9/8 Adm Eff] The billing process was accurately handled and its records kept accurately	0.421	3153	0.000
IMP [10/8 Adm Eff] The company has bulletin boards and chat rooms for customers to seek support	0.149	2947	0.000
PERF [1/8 Adm Eff] There are no pop-up advertisements	0.321	3021	0.000
PERF [2/8 Adm Eff] There are no advertisements on the website	0.231	2955	0.000
PERF [3/8 Adm Eff] The site confirms exactly what is ordered	0.376	3041	0.000
PERF [4/8 Adm Eff] The quantity and quality of the product was exactly as ordered	0.367	3027	0.000
PERF [5/8 Adm Eff] I can set up an account with the company to be billed monthly	0.218	2494	0.000
PERF [6/8 Adm Eff] I have the option to pay by cheque by post	0.203	2476	0.000
PERF [7/8 Adm Eff] I do not receive junk mail from being on their mailing list	0.306	2954	0.000
PERF [8/8 Adm Eff] The product that came was accurately represented by pictures and descriptions on the website	0.339	3024	0.000
PERF [9/8 Adm Eff] The billing process was accurately handled and its records kept accurately	0.357	2998	0.000
PERF [10/8 Adm Eff] The company has bulletin boards and chat rooms for customers to seek support	0.216	2449	0.000

Lilliefors Significance
Correction

Importance Items - Equamax / Listwise Rotation

Factor 1: Site Design

Reliability Statistics

Cronbach's Alpha	Cronbach	
	Alpha	N of Items
0.958	0.958	12.000

Inter-Item Correlation Matrix

	IMP [2/1] Pr Id Av] It's easy to get around and find what you want at this site	IMP [3/1] Pr Id Av] The website is laid out in a logical fashion	IMP [4/1] Pr Id Av] The layout of the site is clean and simple	IMP [6/1] Pr Id Av] Pricing is clear and easy to understand	IMP [5/1] Pr Id Av] The website has a good user interface	IMP [1/1] Pr Id Av] The website has a useful search function	IMP [14/1] Pr Id Av] The contents of the website are concise and easy to understand	IMP [9/1] Pr Id Av] The site doesn't waste my time	IMP [7/1] Pr Id Av] I know what all my options are when I shop at this website	IMP [8/1] Pr Id Av] The website lets me know delivery charges up-front	IMP [13/1] Pr Id Av] The website has a good selection	IMP [15/1] Pr Id Av] The site gives me enough information so that I can identify the item as if I am in a store	Corrected Item-Total Correlation	Cronbach' Alpha if Deleted
IMP [2/1 Pr Id Av]	1.000	0.776	0.707	0.731	0.697	0.769	0.698	0.671	0.663	0.664	0.673	0.619	0.844	0.953
IMP [3/1 Pr Id Av]	0.776	1.000	0.771	0.695	0.715	0.667	0.701	0.648	0.655	0.628	0.642	0.601	0.824	0.953
IMP [4/1 Pr Id Av]	0.707	0.771	1.000	0.669	0.743	0.612	0.712	0.642	0.653	0.603	0.609	0.579	0.800	0.954
IMP [6/1 Pr Id Av]	0.731	0.696	0.669	1.000	0.670	0.638	0.714	0.693	0.716	0.754	0.669	0.629	0.833	0.953
IMP [5/1 Pr Id Av]	0.697	0.715	0.743	0.670	1.000	0.618	0.659	0.617	0.643	0.606	0.596	0.561	0.779	0.955
IMP [1/1 Pr Id Av]	0.769	0.667	0.612	0.638	0.618	1.000	0.603	0.588	0.577	0.587	0.608	0.546	0.741	0.956
IMP [14/1 Pr Id Av]	0.698	0.701	0.712	0.714	0.659	0.603	1.000	0.698	0.687	0.655	0.750	0.708	0.835	0.953
IMP [9/1 Pr Id Av]	0.671	0.648	0.642	0.693	0.617	0.588	0.698	1.000	0.651	0.682	0.649	0.616	0.782	0.954
IMP [7/1 Pr Id Av]	0.663	0.655	0.653	0.716	0.643	0.577	0.687	0.651	1.000	0.660	0.633	0.618	0.782	0.954
IMP [8/1 Pr Id Av]	0.664	0.628	0.603	0.754	0.606	0.587	0.655	0.682	0.660	1.000	0.636	0.617	0.774	0.955
IMP [13/1 Pr Id Av]	0.673	0.642	0.609	0.669	0.596	0.608	0.750	0.649	0.633	0.636	1.000	0.665	0.760	0.955
IMP [15/1 Pr Id Av]	0.619	0.601	0.579	0.629	0.581	0.546	0.708	0.616	0.618	0.617	0.665	1.000	0.735	0.956

The covariance matrix is calculated and used in the analysis.

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Inter-Item Correlations	0.658	0.546	0.776	0.230	1.420	0.003	12.000

The covariance matrix is calculated and used in the analysis.

Appendix 6.5 Correlation and Alpha Scores

Factor 2: Trust

Reliability Statistics

Cronbach's Alpha	Cronbach Alpha	N of Items
0.963	0.964	9.000

Inter-Item Correlation Matrix

	IMP [2/6] Trst] I feel secure giving out credit information to this site	IMP [3/6] Trst] I feel safe in my transactions with this site	IMP [5/6] Trst] I feel like my privacy and personal information is protected at this site	IMP [1/6] Trst] The website has adequate security features	IMP [4/6] Trst] You know exactly what you're buying from the website	IMP [4/8] Adm Em] The quantity and quality of the product that came was accurately represented by the pictures and descriptions on the website	IMP [9/8] Adm Em] The billing process was accurately handled and its records kept accurately	IMP [3/8] Adm Em] The site confirms exactly what is ordered	Corrected Item-Total Correlation	Cronbach's Alpha if Deleted	
IMP [2/6] Trst] I feel secure giving out credit information to this site	1.000	0.932	0.881	0.882	0.852	0.665	0.621	0.691	0.700	0.880	0.957
IMP [3/6] Trst] I feel safe in my transactions with this site	0.932	1.000	0.909	0.875	0.888	0.685	0.633	0.709	0.725	0.905	0.956
IMP [5/6] Trst] I feel like my privacy and personal information is protected at this site	0.881	0.909	1.000	0.835	0.893	0.674	0.634	0.684	0.709	0.883	0.957
IMP [1/6] Trst] The website has adequate security features	0.882	0.875	0.835	1.000	0.834	0.656	0.624	0.680	0.700	0.858	0.959
IMP [4/6] Trst] You know exactly what you're buying from the website	0.852	0.888	0.893	0.834	1.000	0.700	0.664	0.716	0.742	0.895	0.957
IMP [4/8] Adm Em] The quantity and quality of the product that came was accurately represented by the pictures and descriptions on the website	0.665	0.685	0.674	0.656	0.700	1.000	0.689	0.769	0.852	0.801	0.961
IMP [9/8] Adm Em] The billing process was accurately handled and its records kept accurately	0.621	0.633	0.634	0.624	0.664	0.689	1.000	0.773	0.708	0.748	0.964
IMP [3/8] Adm Em] The site confirms exactly what is ordered	0.691	0.709	0.684	0.680	0.716	0.769	0.773	1.000	0.789	0.821	0.960
IMP [3/8] Adm Em] The site confirms exactly what is ordered	0.700	0.725	0.709	0.700	0.742	0.852	0.708	0.789	1.000	0.838	0.959

The covariance matrix is calculated and used in the analysis.

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Inter-Item Correlations	0.749	0.621	0.932	0.312	1.502	0.009	9.000

The covariance matrix is calculated and used in the analysis.

Factor 3: Customer Service

Reliability Statistics

Cronbach's Alpha	Cronbach	
	Alpha	N of Items
0.955	0.957	14.000

Inter-Item Correlation Matrix

	IMP [4/5 Cust Srv] The site has competitive prices	IMP [3/5 Cust Srv] You get good value for money at this website	IMP [6/5 Cust Srv] It is quick and easy to complete a transaction at this website	IMP [9/5 Cust Srv] The company willingly handles returns and exchanges	IMP [2/5 Cust Srv] The website is working correctly and functions as it should	IMP [8/5 Cust Srv] The products were delivered by the time promised	IMP [11/5 Cust Srv] When you have a problem, the company service personnel are sincere and willing to help you solve	IMP [10/5 Cust Srv] Customer service personnel are always quality	IMP [6/2 Co lm] The website offers high quality merchandise	IMP [7/5 Cust Srv] After sale support at this site is excellent	IMP [1/5 Cust Srv] The website is always available for business	IMP [5/5 Cust Srv] The website has good pictures of the products	IMP [14/5 Cust Srv] I feel like the company wants to provide me with a good buying experience	IMP [15/5 Cust Srv] The company offers free delivery over a certain value	Corrected Item-Total Correlation	Cronbach's Alpha if Deleted
IMP [4/5 Cust Srv] The site has competitive prices	1.000	0.835	0.754	0.656	0.714	0.675	0.657	0.615	0.544	0.618	0.646	0.610	0.536	0.514	0.802	0.950
IMP [3/5 Cust Srv] You get good value for money at this website	0.835	1.000	0.735	0.652	0.750	0.677	0.650	0.624	0.571	0.623	0.679	0.608	0.564	0.507	0.813	0.950
IMP [6/5 Cust Srv] It is quick and easy to complete a transaction at this website	0.754	0.735	1.000	0.711	0.746	0.740	0.707	0.695	0.602	0.714	0.666	0.677	0.643	0.503	0.857	0.949
IMP [9/5 Cust Srv] The company willingly handles returns and exchanges	0.656	0.652	0.711	1.000	0.876	0.732	0.790	0.794	0.538	0.691	0.607	0.555	0.584	0.483	0.813	0.950
IMP [2/5 Cust Srv] The website is working correctly and functions as it should	0.714	0.750	0.746	0.876	1.000	0.713	0.695	0.670	0.592	0.637	0.801	0.604	0.571	0.464	0.829	0.950
IMP [8/5 Cust Srv] The products were delivered by the time promised	0.675	0.677	0.740	0.732	0.713	1.000	0.737	0.732	0.540	0.673	0.620	0.592	0.580	0.504	0.818	0.950
IMP [11/5 Cust Srv] When you have a problem, the company service personnel are sincere and willing to help you solve	0.657	0.650	0.707	0.790	0.695	0.737	1.000	0.851	0.542	0.699	0.615	0.570	0.633	0.483	0.830	0.950
IMP [10/5 Cust Srv] Customer service personnel are always quality	0.615	0.624	0.695	0.794	0.670	0.732	0.851	1.000	0.533	0.706	0.581	0.567	0.621	0.485	0.814	0.950
IMP [6/2 Co lm] The website offers high quality merchandise	0.544	0.571	0.602	0.538	0.592	0.540	0.542	0.533	1.000	0.526	0.514	0.466	0.499	0.389	0.648	0.954
IMP [7/5 Cust Srv] After sale support at this site is excellent	0.618	0.623	0.714	0.691	0.637	0.673	0.699	0.706	0.526	1.000	0.568	0.572	0.635	0.422	0.773	0.951
IMP [1/5 Cust Srv] The website is always available for business	0.646	0.679	0.666	0.607	0.801	0.620	0.615	0.581	0.514	0.568	1.000	0.522	0.535	0.440	0.741	0.952
IMP [5/5 Cust Srv] The website has good pictures of the products	0.610	0.608	0.677	0.555	0.604	0.592	0.570	0.567	0.466	0.572	0.522	1.000	0.559	0.447	0.699	0.953
IMP [14/5 Cust Srv] I feel like the company wants to provide me with a good buying experience	0.536	0.564	0.643	0.584	0.571	0.580	0.633	0.621	0.499	0.635	0.535	0.559	1.000	0.467	0.709	0.953
IMP [15/5 Cust Srv] The company offers free delivery over a certain value	0.514	0.507	0.503	0.483	0.464	0.504	0.483	0.485	0.389	0.422	0.440	0.447	0.467	1.000	0.575	0.957

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Inter-Item Correlations	0.616	0.389	0.851	0.462	2.187	0.010	14.000

The covariance matrix is calculated and used in the analysis.

Factor 4: Information

Reliability Statistics

Cronbach's Alpha	Alpha	N of Items
	0.893	6.000

Inter-Item Correlation Matrix

	IMP [1/7] Inf] I receive notification when the product will be delivered	IMP [2/7] Inf] Most products are available for delivery within 48 hours	IMP [3/7] Inf] The website provides in-depth information	IMP [4/7] Inf] The site helps me research products	IMP [5/7] Inf] It's easy to track the shipping and delivery of products	IMP [6/7] Inf] The website lets me know about product availability	Corrected Item-Total Correlation	Cronbach's Alpha if Deleted
IMP [1/7] Inf] I receive notification when the product will be delivered	1.000	0.600	0.649	0.508	0.640	0.645	0.742	0.871
IMP [2/7] Inf] Most products are available for delivery within 48 hours	0.600	1.000	0.571	0.483	0.533	0.517	0.647	0.886
IMP [3/7] Inf] The website provides in-depth information	0.649	0.571	1.000	0.678	0.623	0.623	0.777	0.865
IMP [4/7] Inf] The site helps me research products	0.508	0.483	0.678	1.000	0.563	0.555	0.672	0.883
IMP [5/7] Inf] It's easy to track the shipping and delivery of products	0.640	0.533	0.623	0.563	1.000	0.689	0.742	0.870
IMP [6/7] Inf] The website lets me know about product availability	0.645	0.517	0.623	0.555	0.689	1.000	0.738	0.871

The covariance matrix is calculated and used in the analysis.

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Inter-Item Correlations	0.592	0.483	0.689	0.206	1.427	0.004	6.000

The covariance matrix is calculated and used in the analysis.

Factor 5: Contactability

Reliability Statistics

Cronbach's Alpha	Alpha	N of Items
	0.852	4.000

Inter-Item Correlation Matrix

	IMP [1/4] Cont] Telephone calls are answered promptly	IMP [2/4] Cont] A contact address is shown on the website	IMP [3/4] Cont] When the company promises to email or call, it does so	IMP [4/4] Cont] A contact telephone number is displayed on the website	Corrected Item-Total Correlation	Cronbach's Alpha if Deleted
IMP [1/4] Cont] Telephone calls are answered promptly	1.000	0.572	0.530	0.671	0.694	0.817
IMP [2/4] Cont] A contact address is shown on the website	0.572	1.000	0.680	0.627	0.725	0.800
IMP [3/4] Cont] When the company promises to email or call, it does so	0.530	0.680	1.000	0.544	0.666	0.829
IMP [4/4] Cont] A contact telephone number is displayed on the website	0.671	0.627	0.544	1.000	0.728	0.797

The covariance matrix is calculated and used in the analysis.

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Inter-Item Correlations	0.604	0.530	0.680	0.149	1.281	0.004	4.000

The covariance matrix is calculated and used in the analysis.

Factor 6: No Advertisements

Reliability Statistics

Cronbach's Alpha	Cronbach Alpha	N of Items
0.688	0.697	3.000

Inter-Item Correlation Matrix

	IMP [1/8 Adm Eff] There are no pop-up advertisements	IMP [2/8 Adm Eff] There are no advertisements on the website	IMP [7/8 Adm Eff] I do not receive junk mail from being on their mailing list	Corrected Item-Total Correlation	Cronbach's Alpha if Deleted
IMP [1/8 Adm Eff] There are no pop-up advertisements	1.000	0.525	0.436	0.591	0.500
IMP [2/8 Adm Eff] There are no advertisements on the website	0.525	1.000	0.341	0.508	0.607
IMP [7/8 Adm Eff] I do not receive junk mail from being on their mailing list	0.436	0.341	1.000	0.437	0.673

The covariance matrix is calculated and used in the analysis.

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Inter-Item Correlations	0.434	0.341	0.525	0.184	1.540	0.007	3.000

The covariance matrix is calculated and used in the analysis.

Factor 7: Customisation / Personalisation

Reliability Statistics

Cronbach's Alpha	Cronbach Alpha	N of Items
0.879	0.879	7.000

Inter-Item Correlation Matrix

	IMP [1/3 Wbst] The website is easy to customize	IMP [2/3 Wbst] It's fun to shop at the website	IMP [3/3 Wbst] There are features at the site that are entertaining	IMP [4/3 Wbst] The website does a good job of guessing what kind of things I might want to buy later	IMP [5/3 Wbst] The website has the capability to save a list of items I might want to buy later	IMP [6/3 Wbst] The level of personalization at this site is not too much, not too little	IMP [7/3 Wbst] The website stores my information to facilitate future transactions	Corrected Item-Total Correlation	Cronbach's Alpha if Deleted
IMP [1/3 Wbst] The website is easy to customize	1.000	0.584	0.614	0.526	0.390	0.488	0.329	0.633	0.865
IMP [2/3 Wbst] It's fun to shop at the website	0.584	1.000	0.714	0.551	0.450	0.525	0.402	0.708	0.855
IMP [3/3 Wbst] There are features at the site that are entertaining	0.614	0.714	1.000	0.682	0.466	0.523	0.376	0.748	0.850
IMP [4/3 Wbst] The website does a good job of guessing what kind of things I might want to buy later	0.526	0.551	0.682	1.000	0.534	0.531	0.389	0.703	0.856
IMP [5/3 Wbst] The website has the capability to save a list of items I might want to buy later	0.390	0.450	0.466	0.534	1.000	0.576	0.534	0.633	0.865
IMP [6/3 Wbst] The level of personalization at this site is not too much, not too little	0.488	0.525	0.523	0.531	0.576	1.000	0.504	0.684	0.859
IMP [7/3 Wbst] The website stores my information to facilitate future transactions	0.329	0.402	0.376	0.389	0.534	0.504	1.000	0.533	0.877

The covariance matrix is calculated and used in the analysis.

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Inter-Item Correlations	0.509	0.329	0.714	0.385	2.171	0.009	7.000

The covariance matrix is calculated and used in the analysis.

Factor 8: Product Availability

Reliability Statistics

Cronbach's Alpha	Cronbach	
	Alpha	N of Items
0.713	0.709	3.000

Inter-Item Correlation Matrix

IMP [10/1 Pr Id Av]	IMP [11/1 Pr Id Av]	IMP [12/1 Pr Id Av]	Corrected Item-Total Correlation	Cronbach's Alpha if Deleted
1.000	0.597	0.353	0.585	0.555
0.597	1.000	0.396	0.618	0.508
0.353	0.396	1.000	0.419	0.748

The covariance matrix is calculated and used in the analysis.

Summary Item Statistics

Inter-Item Correlations	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
The covariance matrix is calculated and used in the analysis.	0.449	0.353	0.597	0.244	1.693	0.014	3.000

Factor 9: Company Image

Reliability Statistics

Cronbach's Alpha	Cronbach	
	Alpha	N of Items
0.741	0.742	5.000

Inter-Item Correlation Matrix

IMP [1/2 Co Im]	IMP [2/2 Co Im]	IMP [3/2 Co Im]	IMP [4/2 Co Im]	IMP [5/2 Co Im]	Corrected Item-Total Correlation	Cronbach's Alpha if Deleted
1.000	0.628	0.501	0.264	0.247	0.613	0.652
0.628	1.000	0.513	0.250	0.349	0.648	0.636
0.501	0.513	1.000	0.163	0.157	0.486	0.710
0.264	0.250	0.163	1.000	0.582	0.382	0.737
0.247	0.349	0.157	0.582	1.000	0.423	0.728

The covariance matrix is calculated and used in the analysis.

Summary Item Statistics

Inter-Item Correlations	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
The covariance matrix is calculated and used in the analysis.	0.365	0.157	0.628	0.472	4.013	0.029	5.000

Factor 10: Special Features

Reliability Statistics

Cronbach's Alpha	Cronbach	
	Alpha	N of Items
0.769	0.764	6.000

Inter-Item Correlation Matrix

	IMP [7/2 Co Im] I receive special rewards and discounts from doing business with this web	IMP [12/5 Cust Srv] I can return items ordered online to the retail stores	IMP [13/5 Cust Srv] The company refunds shipping charges when the product doesnt arrive in time	IMP [5/8 Adm Eff] I can set up an account with the company to be billed monthly	IMP [6/8 Adm Eff] I have the option to pay by cheque by post	IMP [10/8 Adm Eff] The company has bulletin boards and chat rooms for customers to seek support	Corrected Item-Totals Correlation	Cronbach's Alpha if Item Deleted
IMP [7/2 Co Im] I receive special rewards and discounts from doing business with this web	1.000	0.223	0.311	0.202	0.187	0.237	0.308	0.779
IMP [12/5 Cust Srv] I can return items ordered online to the retail stores	0.223	1.000	0.544	0.348	0.340	0.322	0.493	0.739
IMP [13/5 Cust Srv] The company refunds shipping charges when the product doesnt arrive in time	0.311	0.544	1.000	0.276	0.257	0.235	0.446	0.752
IMP [5/8 Adm Eff] I can set up an account with the company to be billed monthly	0.202	0.348	0.276	1.000	0.676	0.559	0.644	0.697
IMP [6/8 Adm Eff] I have the option to pay by cheque by post	0.187	0.340	0.257	0.676	1.000	0.535	0.617	0.705
IMP [10/8 Adm Eff] The company has bulletin boards and chat rooms for customers to seek support	0.237	0.322	0.235	0.559	0.535	1.000	0.575	0.718

The covariance matrix is calculated and used in the analysis.

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Inter-Item Correlations	0.350	0.187	0.676	0.489	3.611	0.023	6.000

The covariance matrix is calculated and used in the analysis.

GAP STORE'S VARIMAX LISTWISE												
	Website	Trust	Information	Customization	Problem Resolution	Admin Eff.	?	Contact	Image	Special Features	No. Adverts	Product Range
	1	2	3	4	5	6	7	8	9	10	11	12
[21 Pr Id Av] It's easy to get around and find what you want at this site	0.92											
[31 Pr Id Av] The website is laid out in a logical fashion	0.82											
[41 Pr Id Av] The layout of the site is clean and simple	0.80											
[51 Pr Id Av] The website has a good user interface	0.79											
[11 Pr Id Av] The website has a useful search function	0.74											
[71 Pr Id Av] I know what all my options are when I shop at this website	0.72											
[141 Pr Id Av] The contents of the website are concise and easy to understand	0.72											
[81 Pr Id Av] The site doesn't waste my time	0.72											
[61 Pr Id Av] Pricing is clear and easy to understand	0.71											
[81 Pr Id Av] The website lets me know delivery charges up-front	0.64											
[151 Pr Id Av] The site gives me enough information so that I can identify the item as if I am in a	0.50											
[131 Pr Id Av] The website has a good selection	0.54											
[65 Cust Srv] It is quick and easy to complete a transaction at this website	0.42											
[26 Trst] I feel secure giving out credit information to this site		0.81										
[38 Trst] I feel safe in my transactions with this site		0.79										
[56 Trst] I feel like my privacy and personal information is protected at this site		0.75										
[148 Trst] The website has adequate security features		0.75										
[48 Trst] You know exactly what you're buying from the website		0.62										
[87 Inf] It's easy to track the shipping and delivery of items purchased on this website			0.67									
[27 Inf] Most products are available for delivery within 48 hours			0.66									
[67 Inf] The website lets me know about product availability during search			0.63									
[17 Inf] I receive notification when the product will be delivered			0.58									
[37 Inf] The website provides in-depth information			0.51									
[121 Pr Id Av] All the items I want are in stock	0.42		0.47									
[85 Cust Srv] The products were delivered by the time promised			0.47			0.41						
[47 Inf] The site helps me research products			0.46									
[72 Co Im] I receive special rewards and discounts from doing business with this web			0.45									
[155 Cust Srv] The company offers free delivery for orders over a certain value												
[33 Webst] There are features at the site that are interesting to use				0.74								
[43 Webst] The website does a good job of guessing what kind of things I might like				0.72								
[63 Webst] The level of personalization at this site is about right, not too much, not too little				0.71								
[53 Webst] The website has the capability to save a list of items I might want to buy later				0.69								
[23 Webst] It's fun to shop at the website				0.67								
[13 Webst] The website is easy to customize				0.62								
[73 Webst] The website stores my information to facilitate future transactions				0.59								
[115 Cust Srv] When you have a problem, the company shows a sincere interest in solving					0.73							
[105 Cust Srv] Customer service personnel are always willing to help you					0.72							
[185 Cust Srv] The company willingly handles returns and exchanges					0.68							
[75 Cust Srv] After sale support at this site is excellent					0.58							
[135 Cust Srv] The company refunds shipping charges when the product doesn't arrive in time			0.44		0.54							
[125 Cust Srv] I can return items ordered online to the company's retail stores					0.51							
[145 Cust Srv] I feel like the company wants to provide me with a good buying experience					0.49							
[48 Adm Eff] The quantity and quality of the product was exactly as ordered						0.88						
[98 Adm Eff] The billing process was accurately handled and its records kept accurately						0.83						
[88 Adm Eff] The product that came was accurately represented by pictures and descriptions on						0.80						
[38 Adm Eff] The site confirms exactly what is ordered						0.59						
[62 Co Im] The website offers high quality merchandise												
[45 Cust Srv] The site has competitive prices									0.66			
[35 Cust Srv] You get good value for money at this website									0.64			
[95 Cust Srv] The website has good pictures of the products									0.56			
[25 Cust Srv] The website is working correctly and functions as it should									0.46			
[175 Cust Srv] The website is always available for business									0.43			
[144 Cont] A contact telephone number is displayed on the site so that I can talk to								0.76				
[114 Cont] Telephone calls are answered promptly								0.73				
[24 Cont] A contact address is shown on the website								0.60				
[34 Cont] When the company promises to email or call by a certain time it does so								0.50				
[12 Co Im] The company has a well known name									0.76			
[22 Co Im] The website fits with my image of the company									0.68			
[42 Co Im] The company behind the site is reputable									0.62			
[32 Co Im] The company advertises on other media									0.58			
[52 Co Im] The website instills confidence among its customers									0.51			
[58 Adm Eff] I can set up an account with the company to be billed monthly										0.78		
[88 Adm Eff] I have the option to pay by check by post										0.78		
[108 Adm Eff] The company has bulletin boards and chat rooms for customers to seek support										0.65		
[28 Adm Eff] There are no advertisements on the website											0.75	
[18 Adm Eff] There are no pop-up advertisements											0.66	
[78 Adm Eff] I do not receive junk mail from being on their mailing list											0.40	
[101 Pr Id Av] The website has products I can't find in stores												0.78
[111 Pr Id Av] There are hard to find products on this website												0.73
Coefficient Alpha	0.9421	0.993	0.8671	0.8545	0.8751	0.881	0.8447	0.8568	0.7341	0.7247	0.72	0.7173
Variance Extracted (cumulative)	11.397	18.845	26.248	32.361	38.383	43.845	48.605	52.926	56.826	60.08	63.06	65.78

PERFORMANCE EQUIMAX LISTINGS	Website Design	Trust	Problem Resolution	Customer Satisfaction	Admin Eff	?	Information	Image	Product Range	Contact	Special Features
PERF 131 Pr Id Av) The website is laid out in a logical fashion	1.00	2.99	3.00	4.99	5.00	6.00	7.00	8.00	9.00	10.00	11.00
PERF 121 Pr Id Av) It's easy to get around and find what you want at this site	0.70										
PERF 411 Pr Id Av) The layout of the site is clean and simple	0.89										
PERF 151 Pr Id Av) The website has a good user interface	0.87										
PERF 111 Pr Id Av) The website has a useful search function	0.61										
PERF 1141 Pr Id Av) The contents of the website are concise and easy to understand	0.54										
PERF 191 Pr Id Av) The site doesn't waste my time	0.54										
PERF 711 Pr Id Av) I know what all my options are when I shop at this website	0.52										
PERF 611 Pr Id Av) Pricing is clear and easy to understand	0.50										
PERF 161 Pr Id Av) The website lets me know delivery charges upfront	0.47										
PERF 126 Trst) I feel secure giving out credit information to this site		0.80									
PERF 346 Trst) I feel safe in my transactions with this site		0.79									
PERF 118 Trst) The website has adequate security features		0.75									
PERF 1518 Trst) I feel like my privacy and personal information is protected at this site		0.73									
PERF 146 Trst) You know exactly what you're buying from the website		0.69									
PERF 1115 Cust Srv) When you have a problem, the company shows a sincere interest in solving			0.74								
PERF 1105 Cust Srv) Customer service personnel are always willing to help you			0.72								
PERF 1915 Cust Srv) The company willingly handles returns and exchanges			0.63								
PERF 715 Cust Srv) After sale support at this site is excellent			0.59								
PERF 815 Cust Srv) The products were delivered by the time promised			0.53				0.44				
PERF 1415 Cust Srv) I feel like the company wants to provide me with a good buying experience			0.50								
PERF 1513 Wbst) The website has the capability to save a list of items I might want to buy later				0.72							
PERF 1613 Wbst) The level of personalization at this site is about right, not too much, not too little				0.70							
PERF 143 Wbst) The website does a good job of guessing what kind of things I might like				0.65							
PERF 1713 Wbst) The website stores my information to facilitate future transactions				0.64							
PERF 1313 Wbst) There are features at the site that are entertaining to use				0.63							
PERF 1213 Wbst) It's fun to shop at the website				0.61							
PERF 1113 Wbst) The website is easy to customize				0.60							
PERF 1118 Adm Eff) There are no pop-up advertisements					0.73						
PERF 218 Adm Eff) There are no advertisements on the website					0.70						
PERF 318 Adm Eff) The site confirms exactly what is ordered					0.60						
PERF 718 Adm Eff) I do not receive junk mail from being on their mailing list					0.55						
PERF 418 Adm Eff) The quantity and quality of the product was exactly as ordered					0.54						
PERF 1318 Adm Eff) The billing process was accurately handled and its records kept accurately					0.51						
PERF 1618 Adm Eff) The product that came was accurately represented by pictures and description					0.50						
PERF 1415 Cust Srv) The site has competitive prices						0.70					
PERF 1315 Cust Srv) You get good value for money at this website						0.70					
PERF 1515 Cust Srv) The website has good pictures of the products						0.56					
PERF 1215 Cust Srv) The website is working correctly and functions as it should						0.46					
PERF 1115 Cust Srv) The website is always available for business						0.45					
PERF 1615 Cust Srv) It is quick and easy to complete a transaction at this website						0.43					
PERF 1151 Pr Id Av) The site gives me enough information so that I can identify the item as well											
PERF 1517 Inf) It's easy to track the shipping and delivery of items purchased on this website							0.65				
PERF 117 Inf) I receive notification when the product will be delivered							0.64				
PERF 1217 Inf) Most products are available for delivery within 48 hours							0.62				
PERF 1617 Inf) The website lets me know about product availability during search							0.61				
PERF 11515 Cust Srv) The company offers free delivery for orders over a certain value							0.61				
PERF 1317 Inf) The website provides in-depth information							0.61				
PERF 1417 Inf) The site helps me research products							0.61				
PERF 1112 Co Im) The company has a well known name								0.79			
PERF 1612 Co Im) The company behind the site is reputable								0.70			
PERF 1212 Co Im) The website fits with my image of the company								0.63			
PERF 1512 Co Im) The website instills confidence among its customers								0.59			
PERF 1312 Co Im) The company advertises on other media								0.52			
PERF 1612 Co Im) The website offers high quality merchandise								0.52			
PERF 1111 Pr Id Av) There are hard to find products on this website									0.82		
PERF 1101 Pr Id Av) The website has products I can't find in stores									0.74		
PERF 1131 Pr Id Av) The website has a good selection									0.51		
PERF 1121 Pr Id Av) All the items I want are in stock									0.47		
PERF 1614 Cont) A contact telephone number is displayed on the site so that I can talk to a live										0.80	
PERF 1214 Cont) A contact address is shown on the website										0.79	
PERF 1114 Cont) Telephone calls are answered promptly										0.67	
PERF 1314 Cont) When the company promises to email or call by a certain time it does so										0.51	
PERF 1518 Adm Eff) I can set up an account with the company to be billed monthly											0.77
PERF 11018 Adm Eff) The company has bulletin boards and chat rooms for customers to seek out											0.74
PERF 1618 Adm Eff) I have the option to pay by cheque by post											0.68
PERF 11215 Cust Srv) I can return items ordered online to the company's retail stores											0.65
PERF 11315 Cust Srv) The company refunds shipping charges when the product doesn't arrive in											0.59
PERF 11712 Co Im) I receive special rewards and discounts from doing business with this website											
Coefficient Alpha	0.95	0.96	0.93	0.89	0.90	0.91	0.88	0.83	0.76	0.86	0.81
Variance Extracted (cumulative)	7.46	14.74	21.18	27.56	33.89	40.17	46.26	52.01	57.69	63.32	68.90

GAP SCORES EQUIVAX/LISTWISE

Website Design	Trust	Problem Resolution/Alignment	Information	Customization	Contact	Product Range	No Adverts	Image	Special Features
131 Pr 19 Ad	1.00	4.00	5.00	7.00	8.00	9.00	10.00	11.00	12.00
132 Pr 19 Ad	0.74								
133 Pr 19 Ad	0.74								
134 Pr 19 Ad	0.74								
135 Pr 19 Ad	0.74								
136 Pr 19 Ad	0.74								
137 Pr 19 Ad	0.74								
138 Pr 19 Ad	0.74								
139 Pr 19 Ad	0.74								
140 Pr 19 Ad	0.74								
141 Pr 19 Ad	0.74								
142 Pr 19 Ad	0.74								
143 Pr 19 Ad	0.74								
144 Pr 19 Ad	0.74								
145 Pr 19 Ad	0.74								
146 Pr 19 Ad	0.74								
147 Pr 19 Ad	0.74								
148 Pr 19 Ad	0.74								
149 Pr 19 Ad	0.74								
150 Pr 19 Ad	0.74								
151 Pr 19 Ad	0.74								
152 Pr 19 Ad	0.74								
153 Pr 19 Ad	0.74								
154 Pr 19 Ad	0.74								
155 Pr 19 Ad	0.74								
156 Pr 19 Ad	0.74								
157 Pr 19 Ad	0.74								
158 Pr 19 Ad	0.74								
159 Pr 19 Ad	0.74								
160 Pr 19 Ad	0.74								
161 Pr 19 Ad	0.74								
162 Pr 19 Ad	0.74								
163 Pr 19 Ad	0.74								
164 Pr 19 Ad	0.74								
165 Pr 19 Ad	0.74								
166 Pr 19 Ad	0.74								
167 Pr 19 Ad	0.74								
168 Pr 19 Ad	0.74								
169 Pr 19 Ad	0.74								
170 Pr 19 Ad	0.74								
171 Pr 19 Ad	0.74								
172 Pr 19 Ad	0.74								
173 Pr 19 Ad	0.74								
174 Pr 19 Ad	0.74								
175 Pr 19 Ad	0.74								
176 Pr 19 Ad	0.74								
177 Pr 19 Ad	0.74								
178 Pr 19 Ad	0.74								
179 Pr 19 Ad	0.74								
180 Pr 19 Ad	0.74								
181 Pr 19 Ad	0.74								
182 Pr 19 Ad	0.74								
183 Pr 19 Ad	0.74								
184 Pr 19 Ad	0.74								
185 Pr 19 Ad	0.74								
186 Pr 19 Ad	0.74								
187 Pr 19 Ad	0.74								
188 Pr 19 Ad	0.74								
189 Pr 19 Ad	0.74								
190 Pr 19 Ad	0.74								
191 Pr 19 Ad	0.74								
192 Pr 19 Ad	0.74								
193 Pr 19 Ad	0.74								
194 Pr 19 Ad	0.74								
195 Pr 19 Ad	0.74								
196 Pr 19 Ad	0.74								
197 Pr 19 Ad	0.74								
198 Pr 19 Ad	0.74								
199 Pr 19 Ad	0.74								
200 Pr 19 Ad	0.74								
201 Pr 19 Ad	0.74								
202 Pr 19 Ad	0.74								
203 Pr 19 Ad	0.74								
204 Pr 19 Ad	0.74								
205 Pr 19 Ad	0.74								
206 Pr 19 Ad	0.74								
207 Pr 19 Ad	0.74								
208 Pr 19 Ad	0.74								
209 Pr 19 Ad	0.74								
210 Pr 19 Ad	0.74								
211 Pr 19 Ad	0.74								
212 Pr 19 Ad	0.74								
213 Pr 19 Ad	0.74								
214 Pr 19 Ad	0.74								
215 Pr 19 Ad	0.74								
216 Pr 19 Ad	0.74								
217 Pr 19 Ad	0.74								
218 Pr 19 Ad	0.74								
219 Pr 19 Ad	0.74								
220 Pr 19 Ad	0.74								
221 Pr 19 Ad	0.74								
222 Pr 19 Ad	0.74								
223 Pr 19 Ad	0.74								
224 Pr 19 Ad	0.74								
225 Pr 19 Ad	0.74								
226 Pr 19 Ad	0.74								
227 Pr 19 Ad	0.74								
228 Pr 19 Ad	0.74								
229 Pr 19 Ad	0.74								
230 Pr 19 Ad	0.74								
231 Pr 19 Ad	0.74								
232 Pr 19 Ad	0.74								
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234 Pr 19 Ad	0.74								
235 Pr 19 Ad	0.74								
236 Pr 19 Ad	0.74								
237 Pr 19 Ad	0.74								
238 Pr 19 Ad	0.74								
239 Pr 19 Ad	0.74								
240 Pr 19 Ad	0.74								
241 Pr 19 Ad	0.74								
242 Pr 19 Ad	0.74								
243 Pr 19 Ad	0.74								
244 Pr 19 Ad	0.74								
245 Pr 19 Ad	0.74								
246 Pr 19 Ad	0.74								
247 Pr 19 Ad	0.74								
248 Pr 19 Ad	0.74								
249 Pr 19 Ad	0.74								
250 Pr 19 Ad	0.74								
251 Pr 19 Ad	0.74								
252 Pr 19 Ad	0.74								
253 Pr 19 Ad	0.74								
254 Pr 19 Ad	0.74								
255 Pr 19 Ad	0.74								
256 Pr 19 Ad	0.74								
257 Pr 19 Ad	0.74								
258 Pr 19 Ad	0.74								
259 Pr 19 Ad	0.74								
260 Pr 19 Ad	0.74								
261 Pr 19 Ad	0.74								
262 Pr 19 Ad	0.74								
263 Pr 19 Ad	0.74								
264 Pr 19 Ad	0.74								
265 Pr 19 Ad	0.74								
266 Pr 19 Ad	0.74								
267 Pr 19 Ad	0.74								
268 Pr 19 Ad	0.74								
269 Pr 19 Ad	0.74								
270 Pr 19 Ad	0.74								
271 Pr 19 Ad	0.74								
272 Pr 19 Ad	0.74								
273 Pr 19 Ad	0.74								
274 Pr 19 Ad	0.74								
275 Pr 19 Ad	0.74								
276 Pr 19 Ad	0.74								
277 Pr 19 Ad	0.74								
278 Pr 19 Ad	0.74								
279 Pr 19 Ad	0.74								
280 Pr 19 Ad	0.74								
281 Pr 19 Ad	0.74								
282 Pr 19 Ad	0.74								
283 Pr 19 Ad	0.74								
284 Pr 19 Ad	0.74								
285 Pr 19 Ad	0.74								
286 Pr 19 Ad	0.74								
287 Pr 19 Ad	0.74								
288 Pr 19 Ad	0.74								
289 Pr 19 Ad	0.74								
290 Pr 19 Ad	0.74								
291 Pr 19 Ad	0.74								
292 Pr 19 Ad	0.74								
293 Pr 19 Ad	0.74								
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296 Pr 19 Ad	0.74								
297 Pr 19 Ad	0.74								
298 Pr 19 Ad	0.74								
299 Pr 19 Ad	0.74								
300 Pr 19 Ad	0.74								
301 Pr 19 Ad	0.74								
302 Pr 19 Ad	0.74								
303 Pr 19 Ad	0.74								
304 Pr 19 Ad	0.74								
305 Pr 19 Ad	0.74								
306 Pr 19 Ad	0.74								
307 Pr 19 Ad	0.74								
308 Pr 19 Ad	0.74								
309 Pr 19 Ad	0.74								
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311 Pr 19 Ad	0.74								
312 Pr 19 Ad	0.74								
313 Pr 19 Ad	0.74								
314 Pr 19 Ad	0.74								
315 Pr 19 Ad	0.74								
316 Pr 19 Ad	0.74								
317 Pr 19 Ad	0.74								
318 Pr 19 Ad	0.74								
319 Pr 19 Ad	0.74								
320 Pr 19 Ad	0.74								
321 Pr 19 Ad	0.74								
322 Pr 19 Ad	0.74								
323 Pr 19 Ad	0.74								
324 Pr 19 Ad	0.74								
325 Pr 19 Ad	0.74								
326 Pr 19 Ad	0.74								
327 Pr 19 Ad	0.74								
328 Pr 19 Ad	0.74								
329 Pr 19 Ad	0.74								
330 Pr 19 Ad	0.74								
331 Pr 19 Ad	0.74								
332 Pr 19 Ad	0.74								
333 Pr 19 Ad	0.74								
334 Pr 19 Ad	0.74								
335 Pr 19 Ad	0.74								
336 Pr 19 Ad	0.74								
337 Pr									

IMPORTANCE EQUANAX PAIRWISE	Website Design	Trust	Customer Service	Information	Contact	?	Customisation	Product Availability/Image	Special Features	
	1.00	2.00	3.00	4.00	5.00	6.00	7.00	8.00	9.00	10.00
IMP 2/1 Pr Id Av] It's easy to get around and find what you want at this site	0.74									
IMP 3/1 Pr Id Av] The website is laid out in a logical fashion	0.73									
IMP 6/1 Pr Id Av] Pricing is clear and easy to understand	0.71									
IMP 14/1 Pr Id Av] The layout of the site is clean and simple	0.71									
IMP 5/1 Pr Id Av] The website has a good user interface	0.70									
IMP 14/1 Pr Id Av] The contents of the website are concise and easy to understand	0.66							0.32		
IMP 11/1 Pr Id Av] The website has a useful search function	0.65									
IMP 7/1 Pr Id Av] I know what all my options are when I shop at this website	0.64									
IMP 8/1 Pr Id Av] The website lets me know delivery charges up-front	0.63							0.32		
IMP 9/1 Pr Id Av] The site doesn't waste my time	0.62							0.32		
IMP 13/1 Pr Id Av] The website has a good selection	0.57							0.46		
IMP 11/1 Pr Id Av] The site gives me enough information so that I can identify the item as if I am	0.55							0.36		
IMP 3/8 Trst] I feel safe in my transactions with this site		0.78								
IMP 2/6 Trst] I feel secure giving out credit information to this site		0.77								
IMP 5/6 Trst] I feel like my privacy and personal information is protected at this site		0.74								
IMP 1/6 Trst] The website has adequate security features		0.73								
IMP 4/6 Trst] You know exactly what you're buying from the website		0.72								
IMP 9/8 Adm Eff] The billing process was accurately handled and its records kept accurately		0.47			0.32		0.46			
IMP 9/5 Cust Srv] The company willingly handles returns and exchanges		0.30	0.55			0.35				
IMP 3/5 Cust Srv] You get good value for money at this website		0.40	0.54							
IMP 10/5 Cust Srv] Customer service personnel are always willing to help you		0.37	0.54			0.44				
IMP 8/5 Cust Srv] It is quick and easy to complete a transaction at this website		0.33	0.53			0.40				
IMP 11/5 Cust Srv] When you have a problem, the company shows a sincere interest in solving		0.43	0.53							
IMP 4/5 Cust Srv] The site has competitive prices		0.38	0.52			0.31				
IMP 8/5 Cust Srv] The products were delivered by the time promised		0.50				0.34				
IMP 7/5 Cust Srv] After sale support at this site is excellent		0.45	0.47							
IMP 2/5 Cust Srv] The website is working correctly and functions as it should		0.47								
IMP 14/5 Cust Srv] I feel like the company wants to provide me with a good buying experience		0.47			0.33					
IMP 5/5 Cust Srv] The website has good pictures of the products		0.46						0.30		
IMP 1/5 Cust Srv] The website is always available for business		0.35	0.44							
IMP 15/5 Cust Srv] The company offers free delivery for orders over a certain value		0.42			0.31					
IMP 6/2 Co Im] The website offers high quality merchandise	0.36		0.37						0.33	
IMP 14/7 Inf] The site helps me research products				0.70						
IMP 13/7 Inf] The website provides in-depth information				0.66						
IMP 5/7 Inf] It's easy to track the shipping and delivery of items purchased on this website				0.65						
IMP 6/7 Inf] The website lets me know about product availability during search				0.62						
IMP 2/7 Inf] Most products are available for delivery within 48 hours				0.57						
IMP 1/7 Inf] I receive notification when the product will be delivered	0.36			0.57						
IMP 1/4 Cont] Telephone calls are answered promptly					0.62					
IMP 4/4 Cont] A contact telephone number is displayed on the site so that I can talk to					0.60					
IMP 2/4 Cont] A contact address is shown on the website					0.74					
IMP 3/4 Cont] When the company promises to email or call by a certain time it does so					0.66					
IMP 1/8 Adm Eff] There are no pop-up advertisements						0.78				
IMP 2/8 Adm Eff] There are no advertisements on the website						0.73				
IMP 7/8 Adm Eff] I do not receive junk mail from being on their mailing list						0.60				
IMP 3/8 Adm Eff] The site confirms exactly what is ordered		0.49			0.32		0.54			
IMP 4/8 Adm Eff] The quantity and quality of the product was exactly as ordered		0.50					0.50			
IMP 8/8 Adm Eff] The product that came was accurately represented by pictures and description		0.38	0.31	0.34			0.40			
IMP 5/3 What] The website has the capability to save a list of items I might want to buy later								0.75		
IMP 6/3 What] The level of personalization at this site is about right, not too much, not too little								0.75		
IMP 3/3 What] There are features at the site that are entertaining to use								0.72		0.34
IMP 4/3 What] The website does a good job of guessing what kind of things I might like								0.71		
IMP 7/3 What] The website stores my information to facilitate future transactions								0.69		
IMP 2/3 What] It's fun to shop at the website								0.69		
IMP 1/3 What] The website is easy to customize								0.60		
IMP 11/1 Pr Id Av] There are hard to find products on this website									0.78	
IMP 10/1 Pr Id Av] The website has products I can't find in stores									0.78	
IMP 12/1 Pr Id Av] All the items I want are in stock	0.40								0.50	
IMP 7/2 Co Im] I receive special rewards and discounts from doing business with this web									0.36	
IMP 1/2 Co Im] The company has a well known name										0.74
IMP 2/2 Co Im] The website fits with my image of the company										0.73
IMP 3/2 Co Im] The company advertises on other media										0.56
IMP 4/2 Co Im] The company behind the site is reputable										0.55
IMP 5/2 Co Im] The website instils confidence among its customers	0.30									0.50
IMP 6/8 Adm Eff] I can set up an account with the company to be billed monthly										0.83
IMP 6/8 Adm Eff] I have the option to pay by cheque by post										0.80
IMP 10/8 Adm Eff] The company has bulletin boards and chat rooms for customers to seek supp										0.72
IMP 12/5 Cust Srv] I can return items ordered online to the company's retail stores										0.54
IMP 13/5 Cust Srv] The company refunds shipping charges when the product doesn't arrive in tim			0.40							0.43
Coefficient Alpha	0.98	0.98	0.95	0.88	0.85	0.82	0.88	0.66	0.74	0.78
Variance Extracted (cumulative)	9.34	18.08	25.41	32.36	39.15	45.54	51.73	57.40	62.43	67.24

APPENDIX 6.7 CFA TESTS FOR NORMALITY

Descriptives

			Statistic	Std. Error
website importance	Mean		6.2680	.01605
	95% Confidence Interval	Lower Bound	6.2365	
	for Mean	Upper Bound	6.2994	
	5% Trimmed Mean		6.3802	
	Median		6.5000	
	Variance		.798	
	Std. Deviation		.89344	
	Minimum		1.00	
	Maximum		7.00	
	Range		6.00	
	Interquartile Range		1.00	
	Skewness		-2.698	.044
	Kurtosis		11.329	.088
	trust importance	Mean		6.6649
95% Confidence Interval		Lower Bound	6.6365	
for Mean		Upper Bound	6.6933	
5% Trimmed Mean			6.8043	
Median			7.0000	
Variance			.664	
Std. Deviation			.81475	
Minimum			1.00	
Maximum			7.00	
Range			6.00	
Interquartile Range			.33	
Skewness			-3.820	.044
Kurtosis			18.610	.087
customer service importance		Mean		6.4024
	95% Confidence Interval	Lower Bound	6.3718	
	for Mean	Upper Bound	6.4329	
	5% Trimmed Mean		6.5167	
	Median		6.6667	
	Variance		.748	
	Std. Deviation		.86486	
	Minimum		1.00	
	Maximum		7.00	
	Range		6.00	
	Interquartile Range		1.00	
	Skewness		-2.383	.044
	Kurtosis		8.553	.088
	information importance (uswitch no 58 shipping)	Mean		6.2275
95% Confidence Interval		Lower Bound	6.1953	
for Mean		Upper Bound	6.2596	
5% Trimmed Mean			6.3302	
Median			6.5000	
Variance			.815	
Std. Deviation			.90285	
Minimum			1.00	
Maximum			7.00	
Range			6.00	
Interquartile Range			1.25	
Skewness			-1.934	.044
Kurtosis			6.121	.089
contactability importance		Mean		5.9449
	95% Confidence Interval	Lower Bound	5.8962	
	for Mean	Upper Bound	5.9936	
	5% Trimmed Mean		6.1138	
	Median		6.5000	
	Variance		1.880	
	Std. Deviation		1.37118	
	Minimum		1.00	
	Maximum		7.00	

no ads importance	Range		6.00		
	Interquartile Range		1.50		
	Skewness		-1.624	.044	
	Kurtosis		2.560	.089	
	Mean		6.3852	.01805	
	95% Confidence Interval for Mean	Lower Bound	6.3498		
		Upper Bound	6.4206		
	5% Trimmed Mean		6.5228		
	Median		7.0000		
	Variance		1.024		
	Std. Deviation		1.01210		
	Minimum		1.00		
	Maximum		7.00		
	Range		6.00		
	Interquartile Range		1.00		
personalisation importance	Skewness		-2.305	.044	
	Kurtosis		6.613	.087	
	Mean		3.9622	.02897	
	95% Confidence Interval for Mean	Lower Bound	3.9054		
		Upper Bound	4.0190		
	5% Trimmed Mean		3.9580		
	Median		4.0000		
	Variance		2.584		
	Std. Deviation		1.60736		
	Minimum		1.00		
	Maximum		7.00		
	Range		6.00		
	Interquartile Range		2.00		
	Skewness		-.050	.044	
	Kurtosis		-.614	.088	
company image importance	Mean		4.6485	.02583	
	95% Confidence Interval for Mean	Lower Bound	4.5978		
		Upper Bound	4.6991		
	5% Trimmed Mean		4.7068		
	Median		5.0000		
	Variance		2.166		
	Std. Deviation		1.47160		
	Minimum		1.00		
	Maximum		7.00		
	Range		6.00		
	Interquartile Range		1.50		
	Skewness		-.414	.043	
	Kurtosis		-.126	.086	
	Mean		5.3619	.02612	
	product availabilty importance	95% Confidence Interval for Mean	Lower Bound	5.3106	
		Upper Bound	5.4131		
5% Trimmed Mean			5.4772		
Median			5.5000		
Variance			2.154		
Std. Deviation			1.46753		
Minimum			1.00		
Maximum			7.00		
Range			6.00		
Interquartile Range			2.50		
Skewness			-.808	.044	
Kurtosis			.257	.087	
Mean			5.9735	.01755	
website performance		95% Confidence Interval for Mean	Lower Bound	5.9391	
			Upper Bound	6.0079	
	5% Trimmed Mean		6.0525		
	Median		6.1250		
	Variance		.922		
	Std. Deviation		.96043		
	Minimum		1.00		
	Maximum		7.00		
	Range		6.00		
	Interquartile Range		1.38		
	Skewness		-1.136	.045	
	Kurtosis		1.540	.089	
	Mean		6.3091	.01721	
	trust performance				

	95% Confidence Interval	Lower Bound	6.2753	
	for Mean	Upper Bound	6.3428	
	5% Trimmed Mean		6.4184	
	Median		7.0000	
	Variance		.891	
	Std. Deviation		.94389	
	Minimum		1.00	
	Maximum		7.00	
	Range		6.00	
	Interquartile Range		1.00	
	Skewness		-1.621	.045
	Kurtosis		2.956	.089
customer service	Mean		5.9948	.02031
performance	95% Confidence Interval	Lower Bound	5.9549	
	for Mean	Upper Bound	6.0346	
	5% Trimmed Mean		6.0983	
	Median		6.3333	
	Variance		1.180	
	Std. Deviation		1.08620	
	Minimum		1.00	
	Maximum		7.00	
	Range		6.00	
	Interquartile Range		1.67	
	Skewness		-1.277	.046
	Kurtosis		1.647	.092
information performance	Mean		5.7622	.02214
(uswitch no 58 shipping)	95% Confidence Interval	Lower Bound	5.7188	
	for Mean	Upper Bound	5.8056	
	5% Trimmed Mean		5.8632	
	Median		6.0000	
	Variance		1.388	
	Std. Deviation		1.17827	
	Minimum		1.00	
	Maximum		7.00	
	Range		6.00	
	Interquartile Range		1.75	
	Skewness		-1.045	.046
	Kurtosis		.899	.092
contactability performance	Mean		5.4270	.02491
	95% Confidence Interval	Lower Bound	5.3782	
	for Mean	Upper Bound	5.4759	
	5% Trimmed Mean		5.4983	
	Median		5.5000	
	Variance		1.658	
	Std. Deviation		1.28774	
	Minimum		1.00	
	Maximum		7.00	
	Range		6.00	
	Interquartile Range		2.00	
	Skewness		-.515	.047
	Kurtosis		-.204	.095
no ads performance	Mean		6.1184	.01951
	95% Confidence Interval	Lower Bound	6.0802	
	for Mean	Upper Bound	6.1567	
	5% Trimmed Mean		6.2129	
	Median		6.5000	
	Variance		1.103	
	Std. Deviation		1.05019	
	Minimum		1.00	
	Maximum		7.00	
	Range		6.00	
	Interquartile Range		1.50	
	Skewness		-1.264	.045
	Kurtosis		1.450	.091
personalisation	Mean		4.4904	.02457
performance	95% Confidence Interval	Lower Bound	4.4422	
	for Mean	Upper Bound	4.5385	
	5% Trimmed Mean		4.5102	
	Median		4.5000	
	Variance		1.723	

company image performance	Std. Deviation		1.31263	
	Minimum		1.00	
	Maximum		7.00	
	Range		6.00	
	Interquartile Range		1.50	
	Skewness		-.017	.046
	Kurtosis		-.004	.092
	Mean		5.5508	.02012
	95% Confidence Interval for Mean	Lower Bound	5.5113	
		Upper Bound	5.5902	
	5% Trimmed Mean		5.6082	
	Median		5.5000	
	Variance		1.271	
	Std. Deviation		1.12735	
	product availability performance	Minimum		1.00
Maximum			7.00	
Range			6.00	
Interquartile Range			1.50	
Skewness			-.542	.044
Kurtosis			.021	.087
Mean			5.4391	.02297
95% Confidence Interval for Mean		Lower Bound	5.3940	
		Upper Bound	5.4841	
5% Trimmed Mean			5.5098	
Median			5.5000	
Variance			1.598	
Std. Deviation			1.26410	
Minimum			1.00	
Maximum			7.00	
Range		6.00		
Interquartile Range		2.00		
Skewness		-.542	.044	
Kurtosis		-.090	.089	

Tests of Normality

	Kolmogorov-Smirnov(a)			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
website importance	.206	3100	.000	.743	3100	.000
trust importance	.406	3163	.000	.471	3163	.000
customer service importance	.247	3091	.000	.711	3091	.000
information importance (uswitch no 58 shipping)	.196	3034	.000	.799	3034	.000
contactability importance	.221	3048	.000	.771	3048	.000
no ads importance	.313	3144	.000	.664	3144	.000
personalisation importance	.104	3079	.000	.968	3079	.000
company image importance	.114	3246	.000	.959	3246	.000
product availability importance	.135	3156	.000	.903	3156	.000
website performance	.143	2995	.000	.894	2995	.000
trust performance	.279	3008	.000	.754	3008	.000
customer service performance	.177	2860	.000	.850	2860	.000
information performance (uswitch no 58 shipping)	.147	2832	.000	.892	2832	.000
contactability performance	.125	2672	.000	.915	2672	.000
no ads performance	.226	2896	.000	.811	2896	.000
personalisation performance	.137	2853	.000	.963	2853	.000
company image performance	.136	3141	.000	.930	3141	.000
product availability performance	.128	3028	.000	.921	3028	.000

a. Lilliefors Significance Correction

APPENDIX 7.1. Situational Missing Values

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
S2 Approximately how much did you spend on this product?	2906	85.40%	497	14.60%	3403	100.00%
personalisation of purchase	3338	98.10%	65	1.90%	3403	100.00%
purchase spontaneity	3380	99.30%	23	0.70%	3403	100.00%
S5 How often do you purchase this type of product? (recode so higher=more freq purchase)	3358	98.70%	45	1.30%	3403	100.00%
S6 Research product prior to purchase	3403	100.00%	0	0.00%	3403	100.00%
S7 Purchase Involvement	3342	98.20%	61	1.80%	3403	100.00%
S8 The money saved by finding lower prices is usually not worth the time and effort	3373	99.10%	30	0.90%	3403	100.00%
S9 The price of a product is a good indicator of its quality	3375	99.20%	28	0.80%	3403	100.00%
S10 I do not have time to fully research products so rely on names I trust	3376	99.20%	27	0.80%	3403	100.00%
S11 When purchasing the type of product you have, how important is low price	3388	99.60%	15	0.40%	3403	100.00%
S12 When purchasing the type of product you have, how important is high quality service	3385	99.50%	18	0.50%	3403	100.00%
S13 Online History	3206	94.20%	197	5.80%	3403	100.00%
S14a Company History (for ServCo no purchase measure)	3228	94.90%	175	5.10%	3403	100.00%
S15 When purchasing the type of product you indicated at the start, how many companies do you purchase from?	3367	98.90%	36	1.10%	3403	100.00%
S17 I shop with the company because there are no alternatives for the products I require	3391	99.60%	12	0.40%	3403	100.00%
S18 I shop with this company out of choice because their offering best matches my needs	3386	99.50%	17	0.50%	3403	100.00%
S20 I prefer to purchase from internet companies that I know from the high street	3375	99.20%	28	0.80%	3403	100.00%
S21 I would purchase from a company that is only reachable via the internet or email	3372	99.10%	31	0.90%	3403	100.00%
S22 Technoreadiness	3067	90.10%	336	9.90%	3403	100.00%
S23 Time Capacity	3239	95.20%	164	4.80%	3403	100.00%
S24 Products Purchased Online	3231	94.90%	172	5.10%	3403	100.00%
S25 Online Activities	3256	95.70%	147	4.30%	3403	100.00%
S26 connection speed (where multiple answers, fastest home connection taken)	3010	88.50%	393	11.50%	3403	100.00%
D1 Gender:	3329	97.80%	74	2.20%	3403	100.00%
D2 Age group:	3335	98.00%	68	2.00%	3403	100.00%
CLASS (occupation based)	2966	87.20%	437	12.80%	3403	100.00%
D4 What is the highest educational qualification you hold?	3276	96.30%	127	3.70%	3403	100.00%
D5 Roughly what is your annual household income?	3038	89.30%	365	10.70%	3403	100.00%
O1 I would recommend this company to others	3388	99.60%	15	0.40%	3403	100.00%
O2 I am likely to shop with this company again	3385	99.50%	18	0.50%	3403	100.00%
AVERAGE		96.45%				
website importance	3100	91.10%	303	8.90%	3403	100.00%
trust importance	3163	92.90%	240	7.10%	3403	100.00%
customer service importance	3091	90.80%	312	9.20%	3403	100.00%
information importance (ServCo no 58 shipping)	3034	89.20%	369	10.80%	3403	100.00%
contactability importance	3048	89.60%	355	10.40%	3403	100.00%
no ads importance	3144	92.40%	259	7.60%	3403	100.00%
personalisation importance	3079	90.50%	324	9.50%	3403	100.00%
company image importance	3246	95.40%	157	4.60%	3403	100.00%
product Range importance	3156	92.70%	247	7.30%	3403	100.00%
AVERAGE		91.62%				
website performance	2995	88.00%	408	12.00%	3403	100.00%
trust performance	3008	88.40%	395	11.60%	3403	100.00%
customer service performance	2860	84.00%	543	16.00%	3403	100.00%
information performance (ServCo no 58 shipping)	2832	83.20%	571	16.80%	3403	100.00%
contactability performance	2672	78.50%	731	21.50%	3403	100.00%
no ads performance	2896	85.10%	507	14.90%	3403	100.00%
personalisation performance	2853	83.80%	550	16.20%	3403	100.00%
company image performance	3141	92.30%	262	7.70%	3403	100.00%
Product Range performance	3028	89.00%	375	11.00%	3403	100.00%
AVERAGE		85.82%				

APPENDIX 7.2.

Outlier and Normality Descriptives

S2 Approximately how much did you spend on this product?	Mean		2.95
	95% Confidence Interval for Mean	Lower Bound	2.91
		Upper Bound	3.00
	5% Trimmed Mean		2.90
	Skewness		0.68
personalisation of purchase	Kurtosis		0.10
	Mean		2.72
	95% Confidence Interval for Mean	Lower Bound	2.70
		Upper Bound	2.74
	5% Trimmed Mean		2.80
purchase spontaneity	Skewness		-1.89
	Kurtosis		2.49
	Mean		1.32
	95% Confidence Interval for Mean	Lower Bound	1.30
		Upper Bound	1.34
S5 How often do you purchase this type of product? (recode so higher=more freq purchase)	5% Trimmed Mean		1.25
	Skewness		1.81
	Kurtosis		1.69
	Mean		2.28
	95% Confidence Interval for Mean	Lower Bound	2.24
S6 Research product prior to purchase		Upper Bound	2.31
	5% Trimmed Mean		2.25
	Skewness		0.23
	Kurtosis		-0.83
	Mean		0.77
S7 Purchase Involvement	95% Confidence Interval for Mean	Lower Bound	0.76
		Upper Bound	0.79
	5% Trimmed Mean		0.80
	Skewness		-1.30
	Kurtosis		-0.32
S8 The money saved by finding lower prices is usually not worth the time and effort	Mean		11.55
	95% Confidence Interval for Mean	Lower Bound	11.47
		Upper Bound	11.63
	5% Trimmed Mean		11.68
	Skewness		-0.82
S9 The price of a product is a good indicator of its quality	Kurtosis		0.96
	Mean		2.16
	95% Confidence Interval for Mean	Lower Bound	2.12
		Upper Bound	2.20
	5% Trimmed Mean		2.07
S10 I do not have time to fully research products so rely on names I trust	Skewness		0.83
	Kurtosis		-0.31
	Mean		2.82
	95% Confidence Interval for Mean	Lower Bound	2.75
		Upper Bound	2.86
S11 When purchasing the type of product you have, how important is low price	5% Trimmed Mean		2.81
	Skewness		0.00
	Kurtosis		-0.70
	Mean		3.82
	95% Confidence Interval for Mean	Lower Bound	3.79
		Upper Bound	3.86
	5% Trimmed Mean		3.92
	Skewness		-1.15
	Kurtosis		1.09

S12 When purchasing the type of product you have, how important is high quality service	Mean		4.18
	95% Confidence Interval for Mean	Lower Bound	4.14
		Upper Bound	4.22
	5% Trimmed Mean		4.31
	Skewness		-1.76
S13 Online History	Kurtosis		2.22
	Mean		11.95
	95% Confidence Interval for Mean	Lower Bound	11.88
		Upper Bound	12.03
	5% Trimmed Mean		12.18
S14a Company History (for ServCo no purchase measure)	Skewness		-1.61
	Kurtosis		2.87
	Mean		2.98
	95% Confidence Interval for Mean	Lower Bound	2.94
		Upper Bound	3.01
S15 When purchasing the type of product you indicated at the start, how many companies do you purchase from?	5% Trimmed Mean		3.00
	Skewness		-0.53
	Kurtosis		-0.70
	Mean		2.33
	95% Confidence Interval for Mean	Lower Bound	2.30
S17 I shop with the company because there are no alternatives for the products I require		Upper Bound	2.37
	5% Trimmed Mean		2.32
	Skewness		0.13
	Kurtosis		-0.93
	Mean		1.83
S18 I shop with this company out of choice because their offering best matches my needs	95% Confidence Interval for Mean	Lower Bound	1.79
		Upper Bound	1.87
	5% Trimmed Mean		1.73
	Skewness		1.21
	Kurtosis		0.62
S20 I prefer to purchase from internet companies that I know from the high street	Mean		4.07
	95% Confidence Interval for Mean	Lower Bound	4.04
		Upper Bound	4.10
	5% Trimmed Mean		4.14
	Skewness		-0.99
S21 I would purchase from a company that is only reachable via the internet or email	Kurtosis		1.54
	Mean		2.73
	95% Confidence Interval for Mean	Lower Bound	2.70
		Upper Bound	2.77
	5% Trimmed Mean		2.70
S22 Technoreadiness	Skewness		0.10
	Kurtosis		-0.63
	Mean		2.97
	95% Confidence Interval for Mean	Lower Bound	2.92
		Upper Bound	3.01
S23 Time Capacity	5% Trimmed Mean		2.96
	Skewness		-0.01
	Kurtosis		-1.15
	Mean		6.14
	95% Confidence Interval for Mean	Lower Bound	5.95
S24 Products Purchased Online		Upper Bound	6.34
	5% Trimmed Mean		6.09
	Skewness		0.14
	Kurtosis		-0.30
	Mean		11.32
S15 When purchasing the type of product you indicated at the start, how many companies do you purchase from?	95% Confidence Interval for Mean	Lower Bound	11.22
		Upper Bound	11.41
	5% Trimmed Mean		11.48
	Skewness		-0.63
	Kurtosis		-0.06
S14a Company History (for ServCo no purchase measure)	Mean		5.16
	95% Confidence Interval for Mean	Lower Bound	5.09
		Upper Bound	5.24
	5% Trimmed Mean		5.12
	Skewness		0.29

	Kurtosis		-0.38
S25 Online Activities	Mean		3.65
	95% Confidence Interval for Mean	Lower Bound	3.61
		Upper Bound	3.69
	5% Trimmed Mean		3.63
	Skewness		0.21
	Kurtosis		-0.24
S26 connection speed (where multiple answers, fastest home connection taken)	Mean		1.69
	95% Confidence Interval for Mean	Lower Bound	1.68
		Upper Bound	1.71
	5% Trimmed Mean		1.71
	Skewness		-0.84
	Kurtosis		-1.30
D1 Gender:	Mean		1.40
	95% Confidence Interval for Mean	Lower Bound	1.39
		Upper Bound	1.42
	5% Trimmed Mean		1.39
	Skewness		0.40
	Kurtosis		-1.84
D2 Age group:	Mean		3.91
	95% Confidence Interval for Mean	Lower Bound	3.86
		Upper Bound	3.95
	5% Trimmed Mean		3.88
	Skewness		0.33
	Kurtosis		-0.21
D3 Class	Mean		2.43
	95% Confidence Interval for Mean	Lower Bound	2.38
		Upper Bound	2.47
	5% Trimmed Mean		2.36
	Skewness		0.71
	Kurtosis		-0.48
D4 What is the highest educational qualification you hold?	Mean		4.11
	95% Confidence Interval for Mean	Lower Bound	4.06
		Upper Bound	4.16
	5% Trimmed Mean		4.18
	Skewness		-0.42
	Kurtosis		-0.75
D5 Roughly what is your annual household income?	Mean		3.74
	95% Confidence Interval for Mean	Lower Bound	3.66
		Upper Bound	3.79
	5% Trimmed Mean		3.77
	Skewness		-0.47
	Kurtosis		-0.82
O1 I would recommend this company to others	Mean		4.46
	95% Confidence Interval for Mean	Lower Bound	4.43
		Upper Bound	4.49
	5% Trimmed Mean		4.56
	Skewness		-1.91
	Kurtosis		5.04
O2 I am likely to shop with this company again	Mean		4.54
	95% Confidence Interval for Mean	Lower Bound	4.51
		Upper Bound	4.57
	5% Trimmed Mean		4.65
	Skewness		-2.33
	Kurtosis		6.62
website importance	Mean		6.27
	95% Confidence Interval for Mean	Lower Bound	6.24
		Upper Bound	6.30
	5% Trimmed Mean		6.38
	Skewness		-2.70
	Kurtosis		11.33
trust importance	Mean		6.66
	95% Confidence Interval for Mean	Lower Bound	6.64
		Upper Bound	6.69
	5% Trimmed Mean		6.80

	Skewness		-3.82
	Kurtosis		18.61
customer service importance	Mean		6.40
	95% Confidence Interval for Mean	Lower Bound	6.37
		Upper Bound	6.43
	5% Trimmed Mean		6.52
	Skewness		-2.38
	Kurtosis		8.55
information importance (ServCo no 58 shipping)	Mean		6.23
	95% Confidence Interval for Mean	Lower Bound	6.20
		Upper Bound	6.26
	5% Trimmed Mean		6.33
	Skewness		-1.93
	Kurtosis		6.12
contactability importance	Mean		5.94
	95% Confidence Interval for Mean	Lower Bound	5.90
		Upper Bound	5.99
	5% Trimmed Mean		6.11
	Skewness		-1.62
	Kurtosis		2.56
no ads importance	Mean		6.39
	95% Confidence Interval for Mean	Lower Bound	6.35
		Upper Bound	6.42
	5% Trimmed Mean		6.52
	Skewness		-2.30
	Kurtosis		6.61
personalisation importance	Mean		3.96
	95% Confidence Interval for Mean	Lower Bound	3.91
		Upper Bound	4.02
	5% Trimmed Mean		3.96
	Skewness		-0.05
	Kurtosis		-0.61
company image importance	Mean		4.65
	95% Confidence Interval for Mean	Lower Bound	4.60
		Upper Bound	4.70
	5% Trimmed Mean		4.71
	Skewness		-0.41
	Kurtosis		-0.13
product Range importance	Mean		5.36
	95% Confidence Interval for Mean	Lower Bound	5.31
		Upper Bound	5.41
	5% Trimmed Mean		5.48
	Skewness		-0.81
	Kurtosis		0.26
website performance	Mean		5.97
	95% Confidence Interval for Mean	Lower Bound	5.94
		Upper Bound	6.01
	5% Trimmed Mean		6.05
	Skewness		-1.14
	Kurtosis		1.54
trust performance	Mean		6.31
	95% Confidence Interval for Mean	Lower Bound	6.28
		Upper Bound	6.34
	5% Trimmed Mean		6.42
	Skewness		-1.62
	Kurtosis		2.96
customer service performance	Mean		5.99
	95% Confidence Interval for Mean	Lower Bound	5.95
		Upper Bound	6.03
	5% Trimmed Mean		6.10
	Skewness		-1.28
	Kurtosis		1.65
information performance (ServCo no 58 shipping)	Mean		5.76
	95% Confidence Interval for Mean	Lower Bound	5.72
		Upper Bound	5.81

	5% Trimmed Mean		5.86
	Skewness		-1.05
	Kurtosis		0.90
contactability performance	Mean		5.43
	95% Confidence Interval for Mean	Lower Bound	5.38
		Upper Bound	5.48
	5% Trimmed Mean		5.50
	Skewness		-0.51
	Kurtosis		-0.20
no ads performance	Mean		6.12
	95% Confidence Interval for Mean	Lower Bound	6.08
		Upper Bound	6.16
	5% Trimmed Mean		6.21
	Skewness		-1.26
	Kurtosis		1.45
personalisation performance	Mean		4.49
	95% Confidence Interval for Mean	Lower Bound	4.44
		Upper Bound	4.54
	5% Trimmed Mean		4.51
	Skewness		-0.02
	Kurtosis		0.00
company image performance	Mean		5.55
	95% Confidence Interval for Mean	Lower Bound	5.51
		Upper Bound	5.59
	5% Trimmed Mean		5.61
	Skewness		-0.54
	Kurtosis		0.02
Product Range performance	Mean		5.44
	95% Confidence Interval for Mean	Lower Bound	5.39
		Upper Bound	5.49
	5% Trimmed Mean		5.53
	Skewness		-0.54
	Kurtosis		-0.05

APPENDIX 7.3

Tests of Normality: Service Importance, Performance and Gap Scores

	Kolmogorov-Smirnov(a)			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
website importance	.206	3100	.000	.743	3100	.000
trust importance	.406	3163	.000	.471	3163	.000
customer service importance	.247	3091	.000	.711	3091	.000
information importance	.196	2643	.000	.798	2643	.000
contactability importance	.221	3048	.000	.771	3048	.000
no ads importance	.313	3144	.000	.664	3144	.000
personalisation importance	.104	3079	.000	.968	3079	.000
company image importance	.114	3246	.000	.959	3246	.000
product Range importance	.135	3156	.000	.903	3156	.000
website performance	.143	2995	.000	.894	2995	.000
trust performance	.279	3008	.000	.754	3008	.000
customer service performance	.177	2860	.000	.850	2860	.000
information performance	.150	2506	.000	.888	2506	.000
contactability performance	.125	2672	.000	.915	2672	.000
no ads performance	.226	2896	.000	.811	2896	.000
personalisation performance	.137	2853	.000	.963	2853	.000
company image performance	.136	3141	.000	.930	3141	.000
Product Range performance	.128	3028	.000	.921	3028	.000
website gap	.160	2929	.000	.831	2929	.000
trust gap	.291	2968	.000	.706	2968	.000
customer service gap	.210	2832	.000	.835	2832	.000
information gap	.171	2462	.000	.877	2462	.000
contactability gap	.194	2639	.000	.926	2639	.000
no ads gap	.241	2879	.000	.850	2879	.000
personalisation gap	.155	2829	.000	.955	2829	.000
company image gap	.144	3110	.000	.941	3110	.000
Product Range gap	.218	2996	.000	.903	2996	.000

a. Lilliefors Significance Correction

Tests of Normality Continuous Situations

	Kolmogorov-Smirnov(a)			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Purchase Involvement	.127	2682	.000	.943	2682	.000
The money saved by finding lower prices is usually not worth the time and effort : In relation	.259	2682	.000	.827	2682	.000
The price of a product is a good indicator of its quality : In relation to the type of product	.180	2682	.000	.913	2682	.000
I do not have time to fully research products so rely on names I trust	.190	2682	.000	.903	2682	.000
Low Price : When purchasing the type of product you have, how important is:]	.308	2682	.000	.804	2682	.000
High Quality Service : When purchasing the type of product you have, how important is:]	.301	2682	.000	.660	2682	.000
Online History	.222	2682	.000	.821	2682	.000
Company History (for ServCo no purchase measure)	.139	2682	.000	.931	2682	.000
I shop with the company because there are no alternatives for the products I require : In relat	.311	2682	.000	.750	2682	.000
I shop with this company out of choice because their offering best matches my needs : In relat	.284	2682	.000	.802	2682	.000
Overall Satisfaction	.321	2682	.000	.674	2682	.000
I prefer to purchase from internet companies that I know from the high street : In relation to	.189	2682	.000	.910	2682	.000
I would purchase from a company that is only reachable via the internet or email : In relation	.169	2682	.000	.903	2682	.000
Technoreadiness	.055	2682	.000	.991	2682	.000
Time Capacity	.154	2682	.000	.929	2682	.000
Products Purchased Online	.106	2682	.000	.978	2682	.000
Online Activities	.155	2682	.000	.948	2682	.000

a Lilliefors Significance Correction

**APPENDIX 7.4.
Multi-item Situation Correlations**

Time Capacity

Spearman's rho		I have a very hectic life :	I don't seem to have enough time to do all the activities I would like each day :	I am always rushing around :
I have a very hectic life	Correlation Coefficient Sig. (2-tailed) N	1.000 .000 3254	.736(**) .000 3250	.786(**) .000 3242
I don't seem to have enough time to do all the activities I would like each day :	Correlation Coefficient Sig. (2-tailed) N	.736(**) .000 3250	1.000 .000 3257	.751(**) .000 3244
I am always rushing around :	Correlation Coefficient Sig. (2-tailed) N	.786(**) .000 3242	.751(**) .000 3244	1.000 .000 3247

** Correlation is significant at the 0.01 level (2-tailed).

Satisfaction

Spearman's rho		I am likely to shop with this company again	I would recommend this company to others
I am likely to shop with this company again :	Correlation Coefficient Sig. (2-tailed) N	1.000 .000 3385	.781(**) .000 3376
I would recommend this company to others :	Correlation Coefficient Sig. (2-tailed) N	.781(**) .000 3376	1.000 .000 3388

** Correlation is significant at the 0.01 level (2-tailed).

Company History

Spearman's rho		Online from this company? : How often do you purchase goods or services:]	Online from this company? : How long have you been purchasing:]	Online from this company? : Over the last year, approximately what is the total value of your
Online from this company? : How often do you purchase goods or services:]	Correlation Coefficient Sig. (2-tailed) N	1.000 .000 3300	.487(**) .000 3260	.441(**) .000 2821
Online from this company? : How long have you been purchasing:]	Correlation Coefficient Sig. (2-tailed) N	.487(**) .000 3260	1.000 .000 3329	.370(**) .000 2851
Online from this company? last year, approximately what is the total value of purchases	Correlation Coefficient Sig. (2-tailed) N	.441(**) .000 2821	.370(**) .000 2851	1.000 .000 2888

** Correlation is significant at the 0.01 level (2-tailed).

Online History

Spearman's rho		Online? : How often do you purchase goods or services:]	Online? : How long have you been purchasing:]	Online? : Over the last year, approximately what is the total value of your purchases:]
Online? : How often do you purchase goods or services:]	Correlation Coefficient Sig. (2-tailed) N	1.000 . 3383	.305(**) .000 3235	.375** .000 322
Online? : How long have you been purchasing:]	Correlation Coefficient Sig. (2-tailed) N	.305(**) .000 3235	1.000 . 3239	.357** .000 321
Online? : Over the last year, approximately what is the total value of your purchases:]	Correlation Coefficient Sig. (2-tailed) N	.379(**) .000 3232	.357(**) .000 3210	1.000 . 322

** Correlation is significant at the 0.01 level (2-tailed).

Purchase Involvement

Spearman's rho		When buying this product I choose very carefully : In relation to the type of product you have	Consumer reports are very relevant to me : In relation to the type of product you have purchase	It is important to me to be aware of all the alternatives before I buy this type of product : I
When buying this product I choose very carefully : In relation to the type of product you have	Correlation Coefficient Sig. (2-tailed) N	1.000 . 3377	.312(**) .000 3369	.425** .000 335
Consumer reports are very relevant to me : In relation to the type of product you have purchase	Correlation Coefficient Sig. (2-tailed) N	.312(**) .000 3369	1.000 . 3380	.413** .000 335
It is important to me to be aware of all the alternatives before I buy this type of product : I	Correlation Coefficient Sig. (2-tailed) N	.426(**) .000 3350	.413(**) .000 3351	1.000 . 335

** Correlation is significant at the 0.01 level (2-tailed).

APPENDIX 7.5
Correlations for Market Orientation Construct

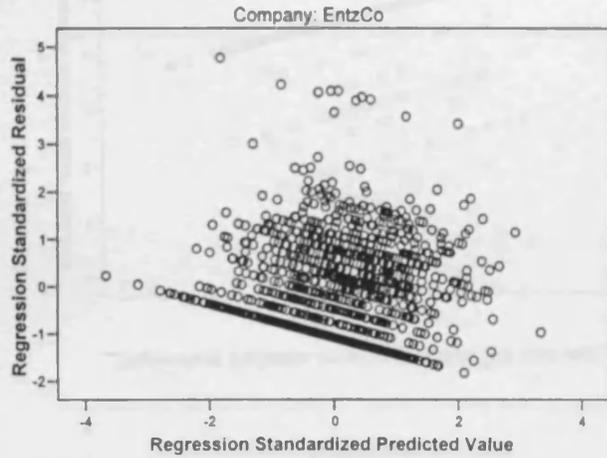
		MO 1	MO 2	MO 3	MO 4	MO 5	MO 6	MO 7	MO 8	MO 9	MO 10	MO 11	MO 12	MO 13	MO 14	MO 15	MO 16	MO 17	MO 18
MO 1. Our business objectives are driven primarily by customer satisfaction	Pearson Correlation	1	.529(**)	.235	.408(*)	.121	-.007	.201	.660(**)	.034	.078	.197	.231	.171	.277	.132	.417(*)	.196	.523(**)
	Sig (2-tailed)		.005	.238	.035	.548	.972	.314	.000	.868	.712	.334	.246	.393	.163	.511	.031	.328	.005
	N	27	27	27	27	27	26	27	27	26	25	26	27	27	27	27	27	27	27
MO 2. We constantly monitor our level of commitment and orientation to serving customer needs	Pearson Correlation	.529(**)	1	.247	.414(*)	.574(**)	.218	.252	.384(*)	.247	.362	.488(*)	.444(*)	.343	.403(*)	.275	.357	.529(**)	.351
	Sig (2-tailed)	.005		.214	.032	.002	.285	.205	.048	.225	.075	.012	.020	.080	.037	.166	.067	.005	.072
	N	27	27	27	27	27	26	27	27	27	26	25	26	27	27	27	27	27	27
MO 3. We freely communicate information about our successful and unsuccessful customer experiences across all business functions	Pearson Correlation	.235	.247	1	.276	.264	.000	.289	.040	.415(*)	.501(*)	.012	-.005	.133	.303	.154	.461(*)	.493(**)	.407(*)
	Sig (2-tailed)	.238	.214		.163	.184	1.000	.144	.842	.035	.011	.955	.981	.507	.124	.444	.016	.009	.035
	N	27	27	27	27	27	26	27	27	26	25	26	27	27	27	27	27	27	27
MO 4. Our strategy for competitive advantage is based on our understanding of customer needs	Pearson Correlation	.408(*)	.414(*)	.276	1	.424(*)	.198	.337	.528(**)	.109	.265	.537(**)	.231	.411(*)	.458(*)	.263	.504(**)	.358	.046
	Sig (2-tailed)	.035	.032	.163		.027	.332	.086	.005	.597	.201	.005	.246	.033	.016	.185	.007	.067	.821
	N	27	27	27	27	27	26	27	27	26	25	26	27	27	27	27	27	27	27
MO 5. We measure customer satisfaction systematically and frequently	Pearson Correlation	.121	.574(**)	.264	.424(*)	1	.627(**)	.234	.264	.494(*)	.700(**)	.548(**)	.302	.154	.464(*)	.448(*)	.186	.537(**)	.247
	Sig (2-tailed)	.548	.002	.184	.027		.001	.239	.183	.010	.000	.004	.126	.444	.015	.019	.353	.004	.214
	N	27	27	27	27	27	26	27	27	26	25	26	27	27	27	27	27	27	27
MO 6. We have routine or regular measures of customer service	Pearson Correlation	-.007	.218	.000	.198	.627(**)	1	.271	.335	.509(**)	.549(**)	.580(**)	.376	-.015	.452(*)	.680(**)	.392(*)	.333	.279
	Sig (2-tailed)	.972	.285	1.000	.332	.001		.180	.094	.009	.005	.002	.059	.943	.021	.000	.048	.096	.168
	N	26	26	26	26	26	26	26	26	25	24	25	26	26	26	26	26	26	26
MO 7. We are more customer focused than our competitors	Pearson Correlation	.201	.252	.289	.337	.234	.271	1	.355	.091	.216	.251	.129	.293	.129	.119	.271	.019	.095
	Sig (2-tailed)	.314	.205	.144	.086	.239	.180		.069	.659	.300	.216	.521	.138	.521	.554	.172	.924	.639
	N	27	27	27	27	27	26	27	27	26	25	26	27	27	27	27	27	27	27
MO 8. I believe this business exists primarily to service customers	Pearson Correlation	.660(**)	.384(*)	.040	.528(**)	.264	.335	.355	1	-.110	.188	.539(**)	.379	.160	.238	.358	.384(*)	.191	.320
	Sig (2-tailed)	.000	.048	.842	.005	.183	.094	.069		.593	.369	.005	.051	.426	.232	.066	.048	.340	.103
	N	27	27	27	27	27	26	27	27	26	25	26	27	27	27	27	27	27	27
MO 9. We poll end users at least once a year to assess the quality of our products and services	Pearson Correlation	.034	.247	.415(*)	.109	.494(*)	.509(**)	.091	-.110	1	.499(*)	.200	.252	-.088	.530(**)	.528(**)	.409(*)	.430(*)	.224
	Sig (2-tailed)	.868	.225	.035	.597	.010	.009	.659	.593		.011	.329	.214	.669	.005	.006	.038	.028	.271
	N	27	27	27	27	27	26	27	27	26	25	26	27	27	27	27	27	27	27

	N	26	26	26	26	26	25	26	26	26	25	26	26	26	26	26	26	26	26
MO 10. Data on customer satisfaction are disseminated at all levels in this business unit on a regular basis.	Pearson Correlation Sig. (2-tailed)	.078	.362	.501(*)	.265	.700(**)	.549(**)	.216	.188	.499(*)	.1	.525(**)	.290	.207	.449(*)	.496(*)	.393	.722(**)	.363
	N	.712	.075	.011	.201	.000	.005	.300	.369	.011		.007	.160	.321	.024	.012	.052	.000	.075
	N	25	25	25	25	25	24	25	25	25	25	25	25	25	25	25	25	25	25
MO 11. High-quality customers service is of similarly high importance to us as the quality of our products	Pearson Correlation Sig. (2-tailed)	.197	.488(*)	.012	.537(**)	.548(**)	.580(**)	.251	.539(**)	.200	.525(**)	.1	.642(**)	.608(**)	.481(*)	.548(**)	.380	.460(*)	.208
	N	.334	.012	.955	.005	.004	.002	.216	.005	.329	.007		.000	.001	.013	.004	.055	.018	.308
	N	26	26	26	26	26	25	26	26	26	25	26	26	26	26	26	26	26	26
MO 12. In our business we expect that customer requests are answered at once	Pearson Correlation Sig. (2-tailed)	.231	.444(*)	-.005	.231	.302	.376	.129	.379	.252	.290	.642(**)	.1	.367	.419(*)	.507(**)	.255	.447(*)	.406(*)
	N	.246	.020	.981	.246	.126	.059	.521	.051	.214	.160	.000		.060	.029	.007	.199	.020	.035
	N	27	27	27	27	27	26	27	27	26	25	26	27	27	27	27	27	27	27
MO 13. The managers in our company regularly interact with customers	Pearson Correlation Sig. (2-tailed)	.171	.343	.133	.411(*)	.154	-.015	.293	.160	-.088	.207	.608(**)		.367	.1	.183	-.035	.142	.105
	N	.393	.080	.507	.033	.444	.943	.138	.426	.669	.321	.001	.060		.360	.861	.480	.602	.522
	N	27	27	27	27	27	26	27	27	26	25	26	27	27	27	27	27	27	27
MO 14. Customer complaints are used to improve customer service	Pearson Correlation Sig. (2-tailed)	.277	.403(*)	.303	.458(*)	.464(*)	.452(*)	.129	.238	.530(**)	.449(*)	.481(*)	.419(*)	.183	.1	.647(**)	.676(**)	.516(**)	.406(*)
	N	.163	.037	.124	.016	.015	.021	.521	.232	.005	.024	.013	.029	.360		.000	.000	.006	.035
	N	27	27	27	27	27	26	27	27	26	25	26	27	27	27	27	27	27	27
MO 15. Outstanding performance in customer service is highly appreciated by the company	Pearson Correlation Sig. (2-tailed)	.132	.275	.154	.263	.448(*)	.680(**)	.119	.358	.528(**)	.496(*)	.548(**)	.507(**)	-.035	.647(**)	.1	.593(**)	.544(**)	.458(*)
	N	.511	.166	.444	.185	.019	.000	.554	.066	.006	.012	.004	.007	.861	.000		.001	.003	.016
	N	27	27	27	27	27	26	27	27	26	25	26	27	27	27	27	27	27	27
MO 16. Employees with a distinctive service orientation have very good opportunities for career development	Pearson Correlation Sig. (2-tailed)	.417(*)	.357	.461(*)	.504(**)	.186	.392(*)	.271	.384(*)	.409(*)	.393	.380	.255	.142	.676(**)	.593(**)	.1	.541(**)	.436(*)
	N	.031	.067	.016	.007	.353	.048	.172	.048	.038	.052	.055	.199	.480	.000	.001		.004	.023
	N	27	27	27	27	27	26	27	27	26	25	26	27	27	27	27	27	27	27
MO 17. Outstanding performance in customer service is rewarded in the context of compensation, for example through bonuses	Pearson Correlation Sig. (2-tailed)	.196	.529(**)	.493(**)	.358	.537(**)	.333	.019	.191	.430(*)	.722(**)	.460(*)	.447(*)	.105	.516(**)	.544(**)	.541(**)	.1	.584(**)
	N	.328	.005	.009	.067	.004	.096	.924	.340	.028	.000	.018	.020	.602	.006	.003	.004		.001
	N	27	27	27	27	27	26	27	27	26	25	26	27	27	27	27	27	27	27
MO 18. The company supports customer focus by telling stories of people providing exemplary customer service	Pearson Correlation Sig. (2-tailed)	.523(**)	.351	.407(*)	.046	.247	.279	.095	.320	.224	.363	.208	.406(*)	.129	.406(*)	.458(*)	.436(*)	.584(**)	.1
	N	.005	.072	.035	.821	.214	.168	.639	.103	.271	.075	.308	.035	.522	.035	.016	.023	.001	
	N	27	27	27	27	27	26	27	27	26	25	26	27	27	27	27	27	27	27

** Correlation is significant at the 0.01 level (2-tailed).

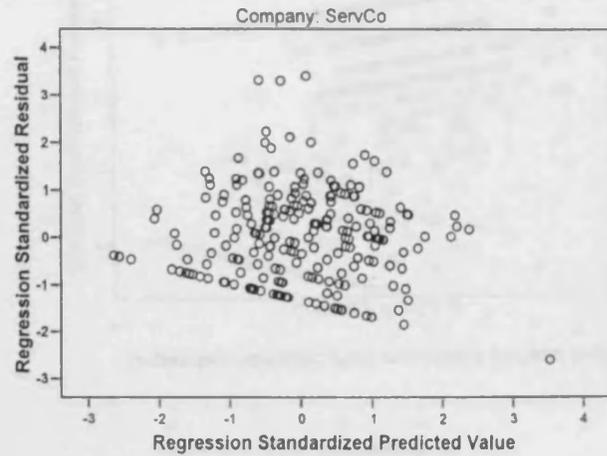
* Correlation is significant at the 0.05 level (2-tailed).

Dependent Variable: website importance (ref and log)

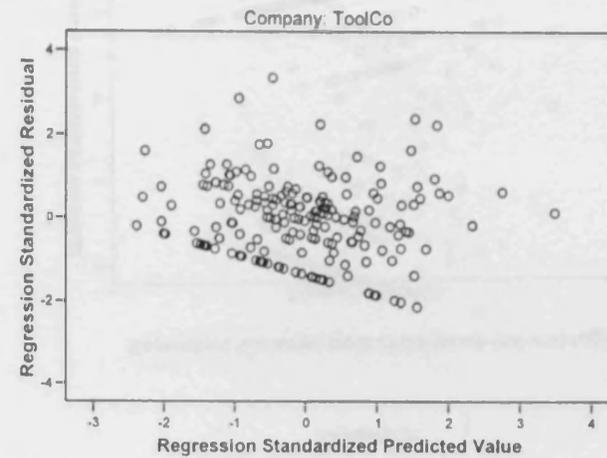


Scatterplot

Dependent Variable: website importance (ref and log)

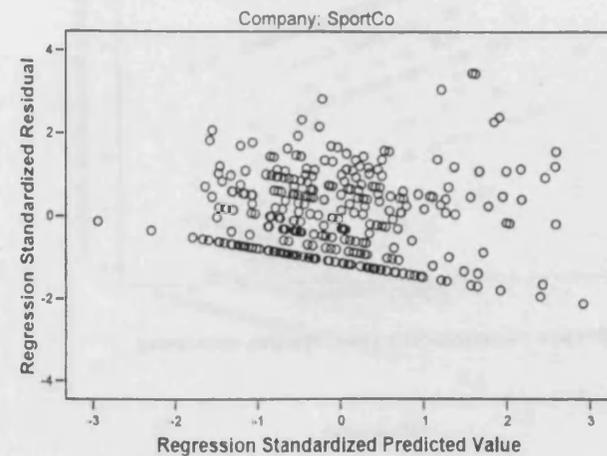


Dependent Variable: website importance (ref and log)



Scatterplot

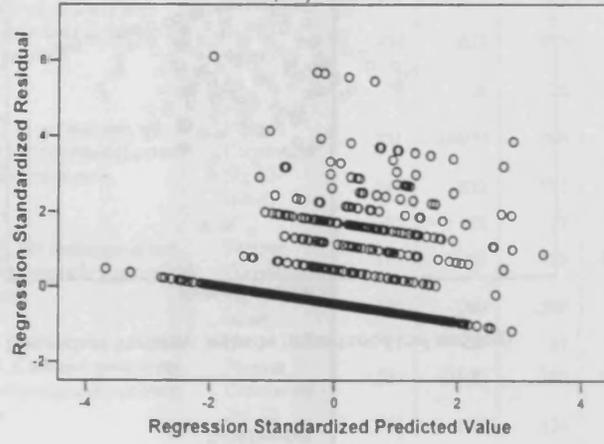
Dependent Variable: website importance (ref and log)



Scatterplot

Dependent Variable: trust importance (ref and log)

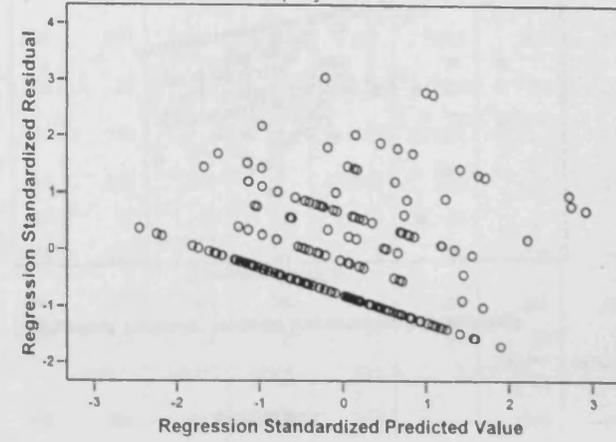
Company: EntzCo



Scatterplot

Dependent Variable: trust importance (ref and log)

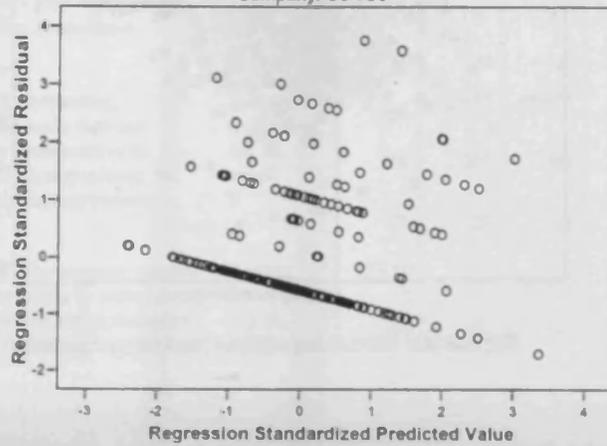
Company: ToolCo



Scatterplot

Dependent Variable: trust importance (ref and log)

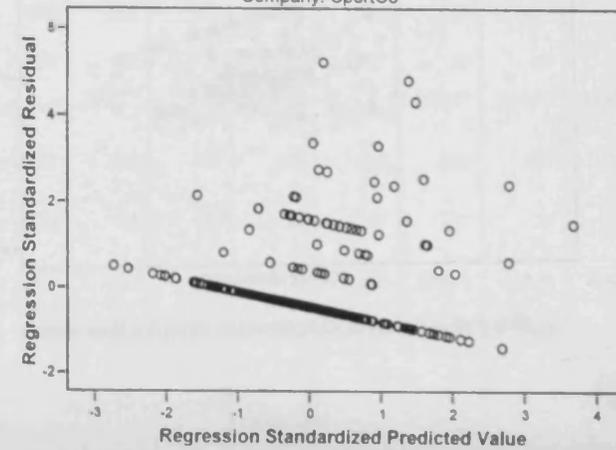
Company: ServCo



Scatterplot

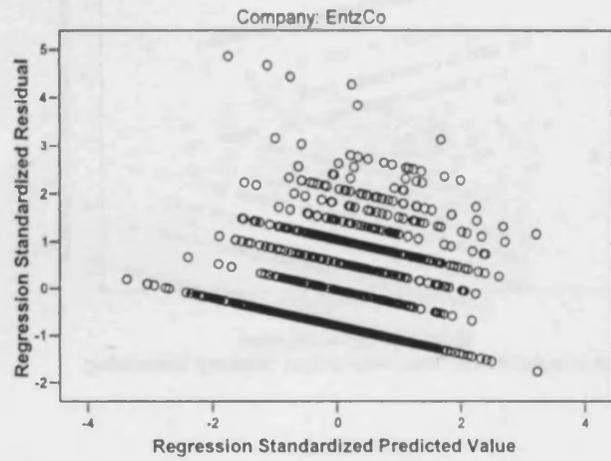
Dependent Variable: trust importance (ref and log)

Company: SportCo



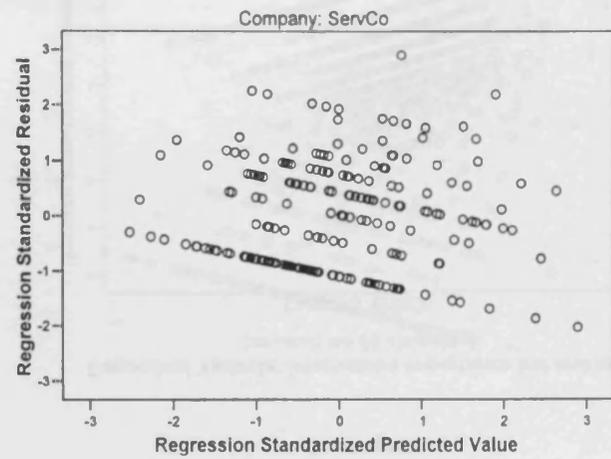
Scatterplot

Dependent Variable: customer service importance (ref and log)



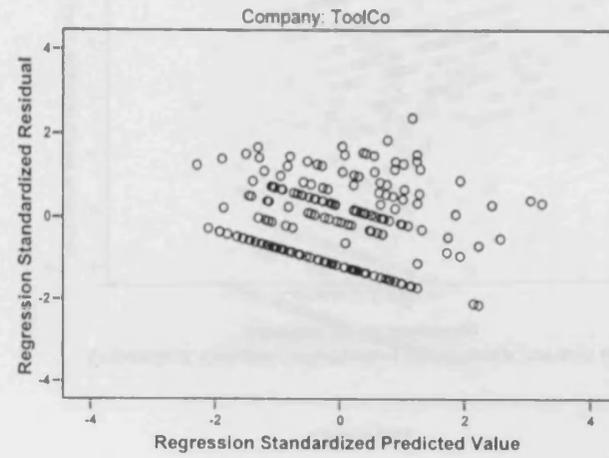
Scatterplot

Dependent Variable: customer service importance (ref and log)



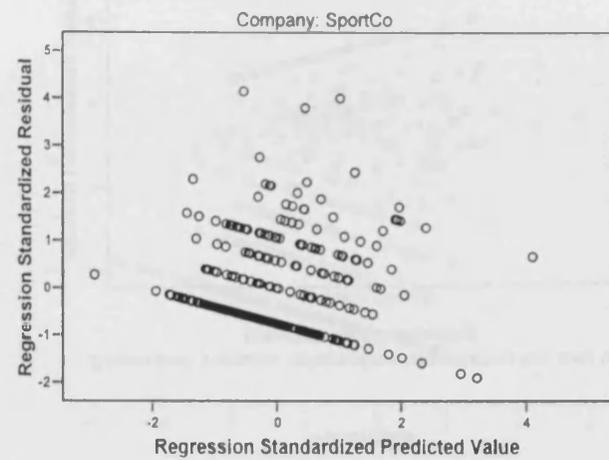
Scatterplot

Dependent Variable: customer service importance (ref and log)

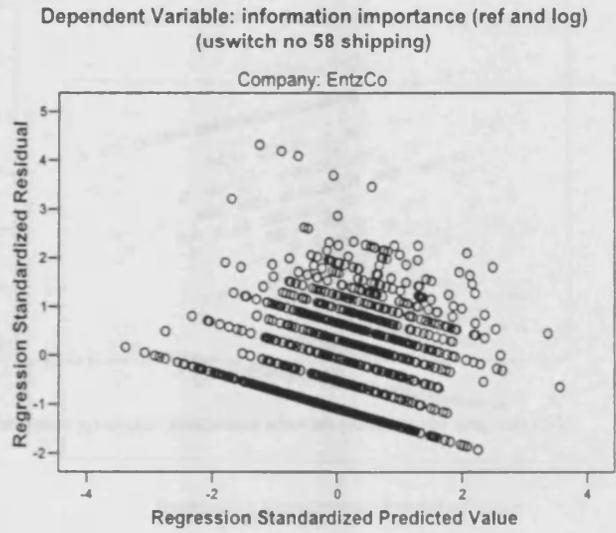


Scatterplot

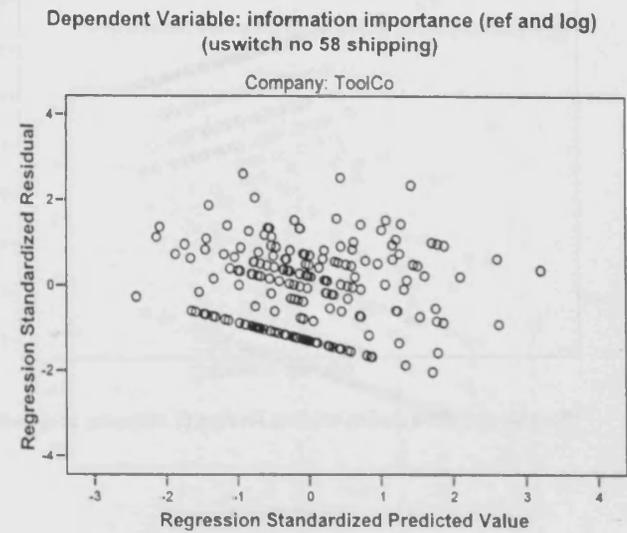
Dependent Variable: customer service importance (ref and log)



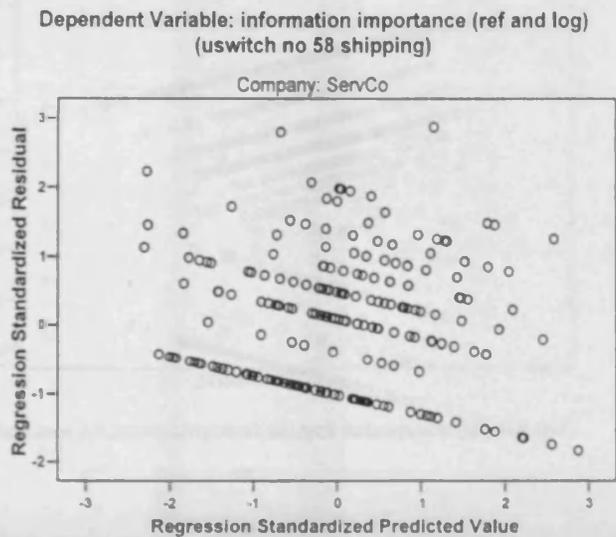
Scatterplot



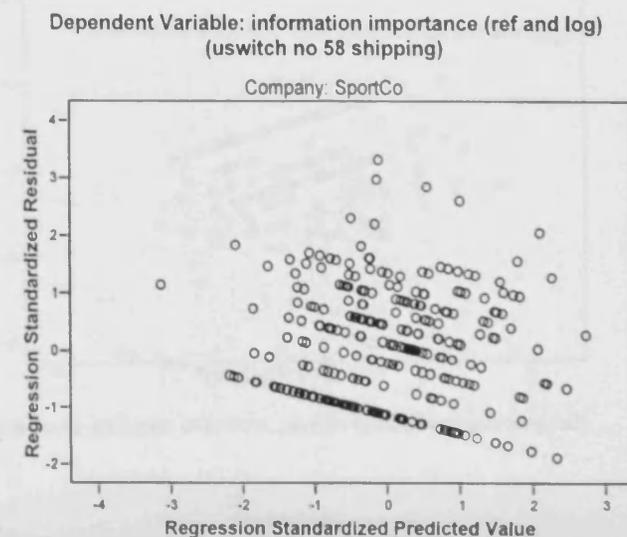
Scatterplot



Scatterplot

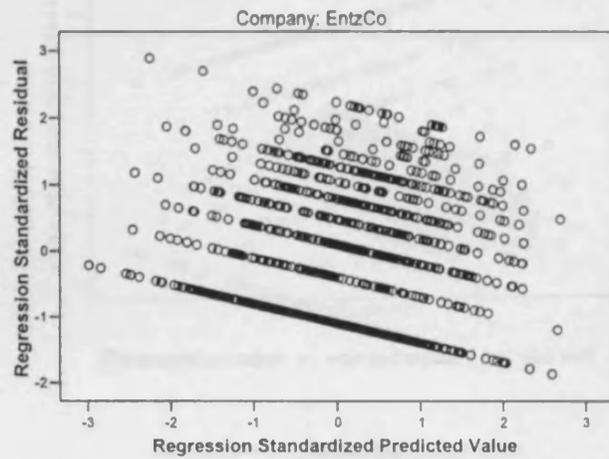


Scatterplot



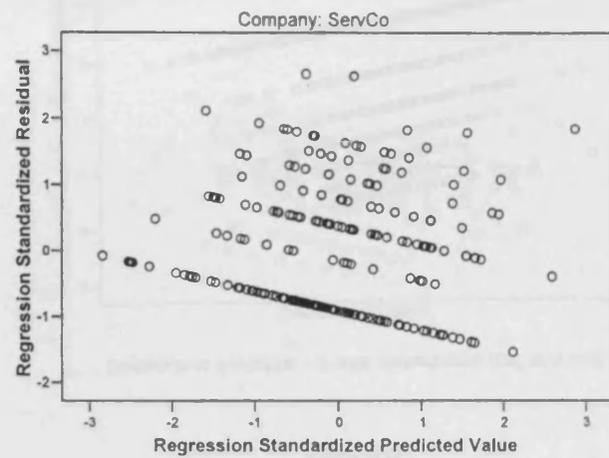
Scatterplot

Dependent Variable: contactability importance (ref and log)



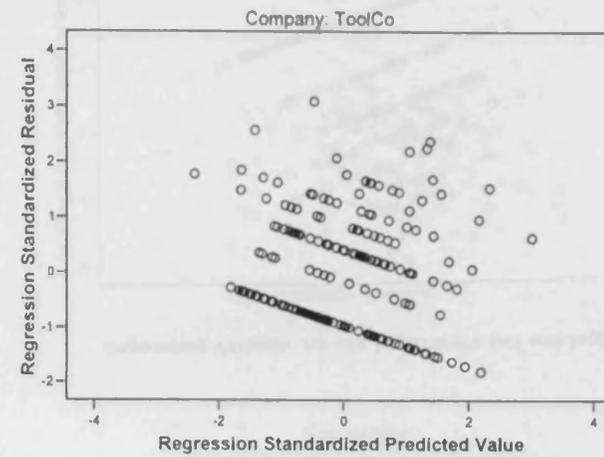
Scatterplot

Dependent Variable: contactability importance (ref and log)



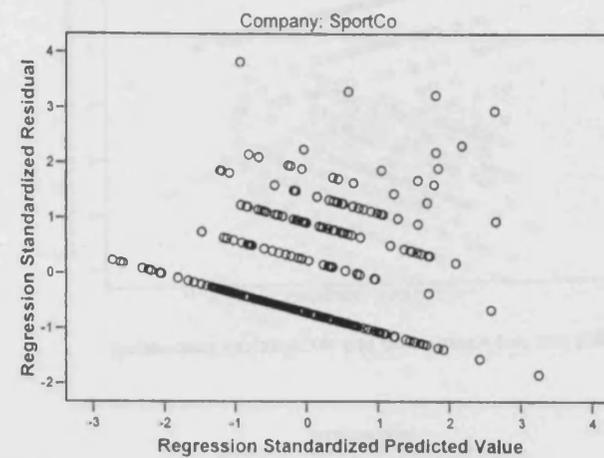
Scatterplot

Dependent Variable: contactability importance (ref and log)

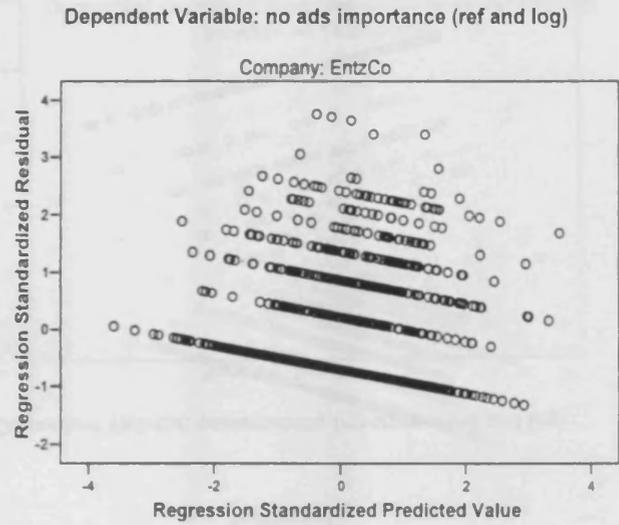


Scatterplot

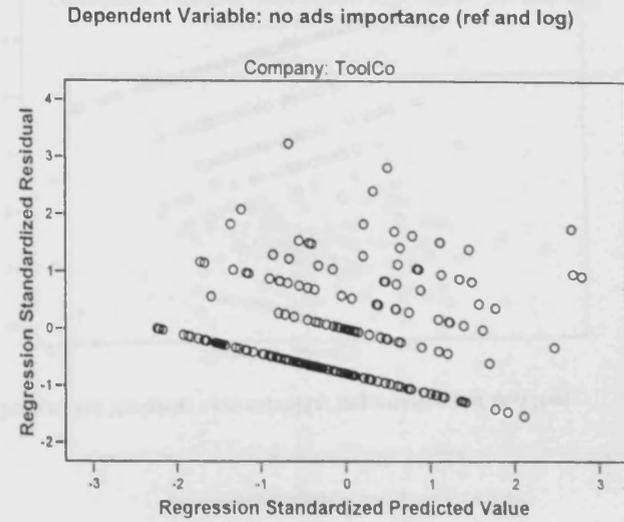
Dependent Variable: contactability importance (ref and log)



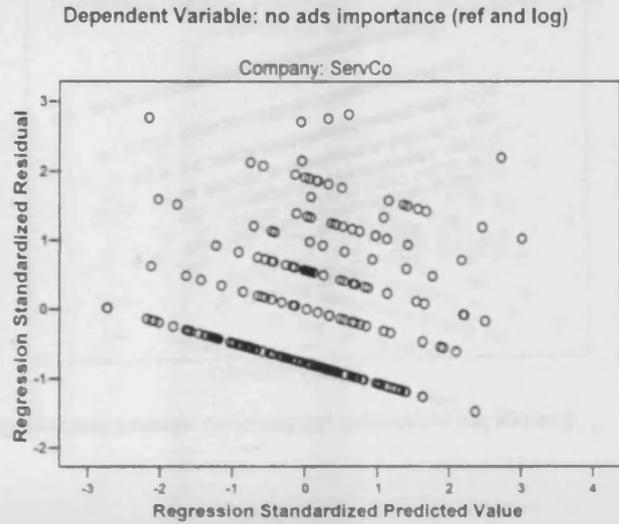
Scatterplot



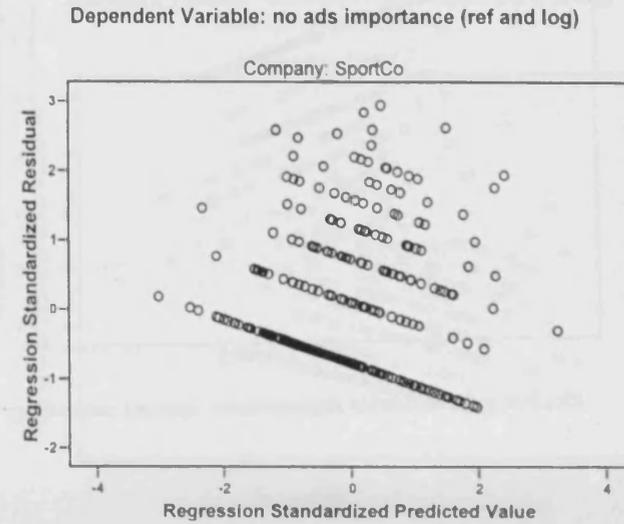
Scatterplot



Scatterplot

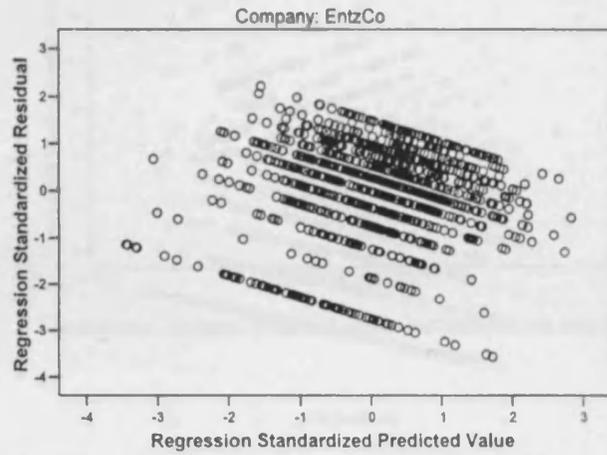


Scatterplot



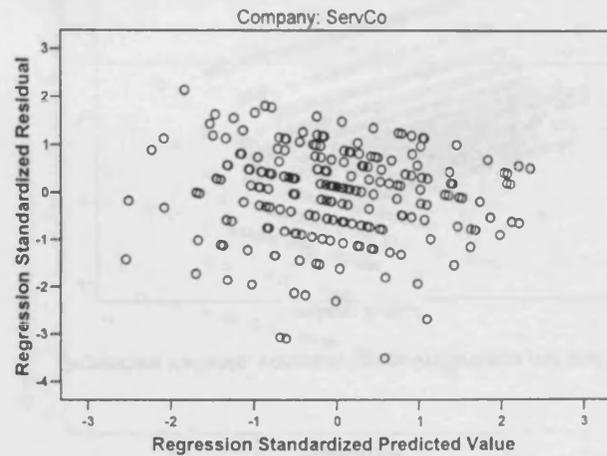
Scatterplot

Dependent Variable: personalisation importance (ref and log)



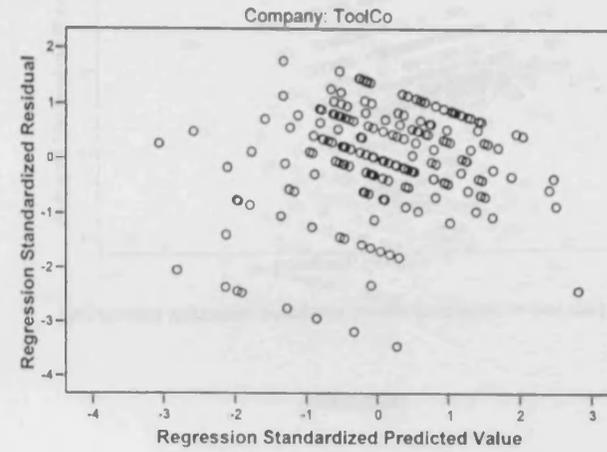
Scatterplot

Dependent Variable: personalisation importance (ref and log)



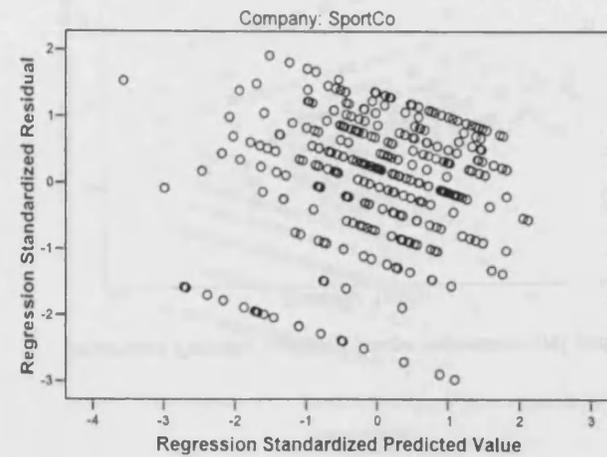
Scatterplot

Dependent Variable: personalisation importance (ref and log)



Scatterplot

Dependent Variable: personalisation importance (ref and log)

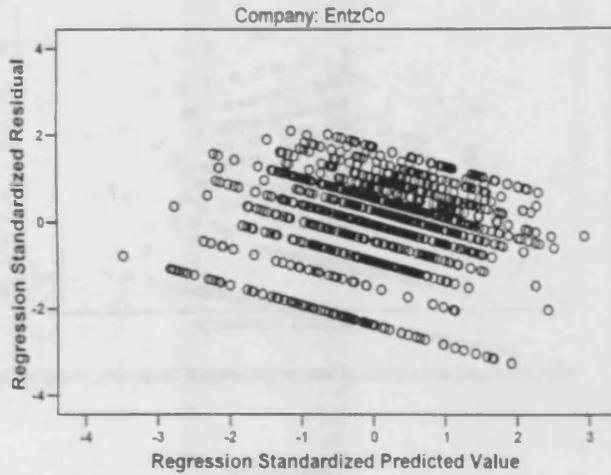


Regression
Company = EntzCo

A-123

Scatterplot

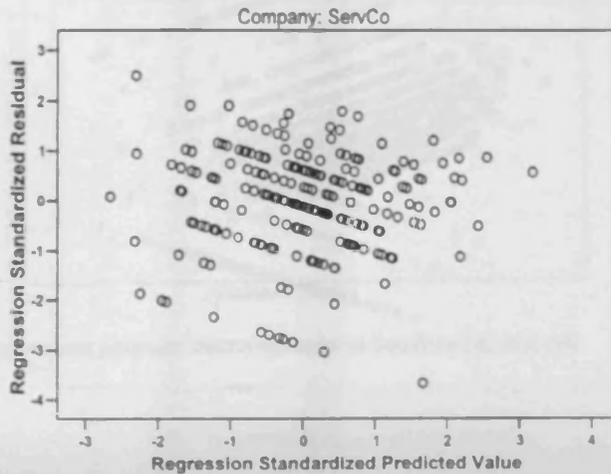
Dependent Variable: company image importance (ref and log)



Company = ServCo

Scatterplot

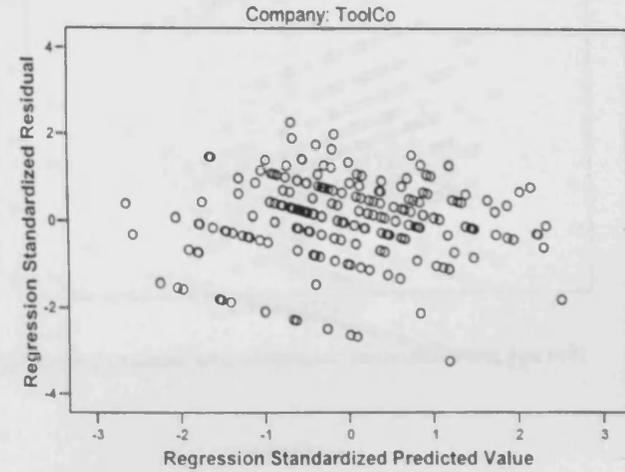
Dependent Variable: company image importance (ref and log)



Company = ToolCo

Scatterplot

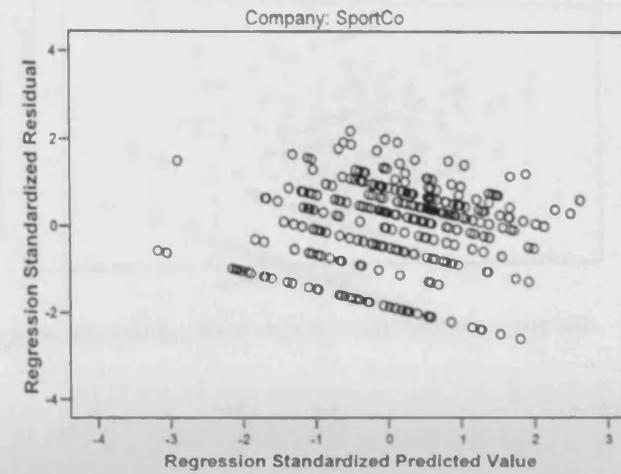
Dependent Variable: company image importance (ref and log)



Company = SportCo

Scatterplot

Dependent Variable: company image importance (ref and log)

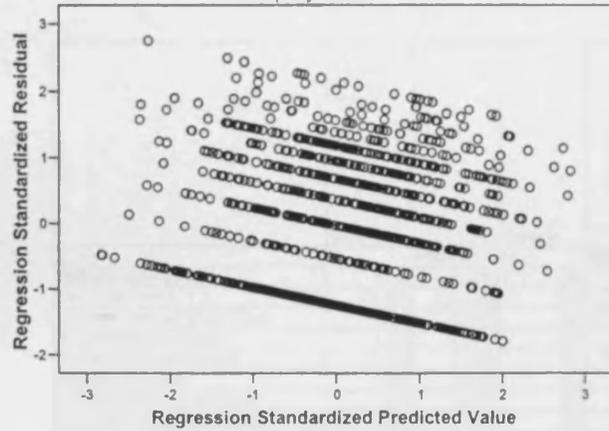


Regression

Scatterplot

Dependent Variable: product availiltiy importance (ref and log)

Company: EntzCo

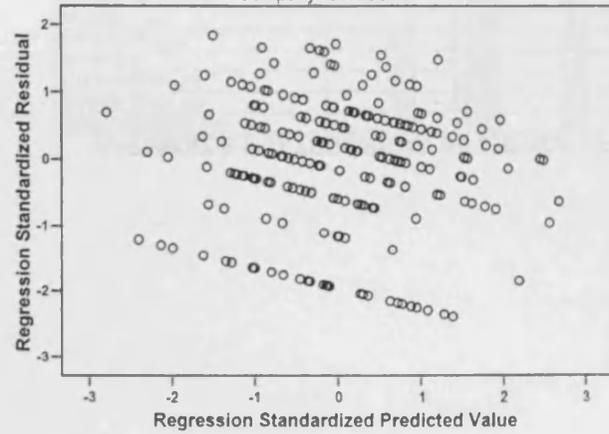


Company = ServCo

Scatterplot

Dependent Variable: product availiltiy importance (ref and log)

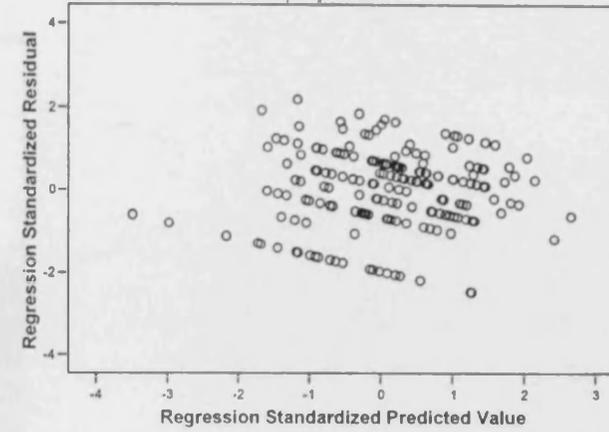
Company: ServCo



Scatterplot

Dependent Variable: product availiltiy importance (ref and log)

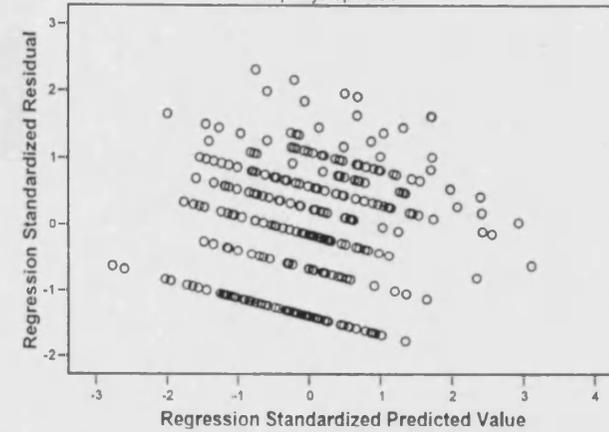
Company: ToolCo



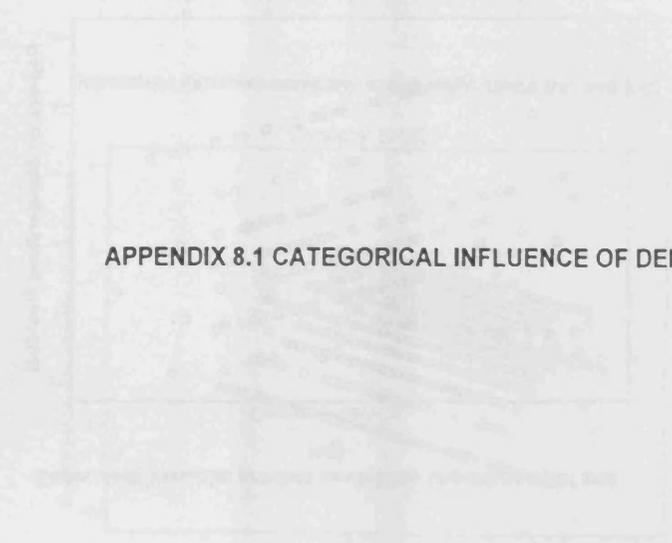
Scatterplot

Dependent Variable: product availiltiy importance (ref and log)

Company: SportCo



APPENDIX 8.1 CATEGORICAL INFLUENCE OF DEMOGRAPHICS



COMPANY = EntzCo
CATEGORY

COMPANY = EntzCo
CATEGORY

	Male		Female			
	N	MEAN	N	MEAN		Asymp. Sig.
website importance	1,174	6.3389	544	6.4168	website importance	0.000
trust importance	1,220	6.7560	565	6.7676	trust importance	0.024
customer service importance	1,193	6.4926	549	6.5701	customer service importance	0.000
information importance	1,191	6.2676	537	6.4195	information importance	0.000
contactability importance	1,135	5.8123	487	5.8737	contactability importance	0.000
no ads importance	1,207	6.4391	558	6.4982	no ads importance	0.021
personalisation importance	1,173	3.9731	529	4.2221	personalisation importance	0.003
company image importance	1,215	4.4901	554	4.6218	company image importance	0.089
product availability importance	1,209	5.4731	549	5.7605	product availability importance	0.000
website performance	1,158	6.2511	535	6.4180	website performance	0.000
trust performance	1,202	6.5333	557	6.6254	trust performance	0.003
customer service performance	1,157	6.2872	508	6.4377	customer service performance	0.000
information performance	1,185	6.0483	518	6.3653	information performance	0.000
contactability performance	1,004	5.2769	398	5.5314	contactability performance	0.001
no ads performance	1,189	6.3571	523	6.3996	no ads performance	0.288
personalisation performance	1,132	4.5495	494	4.9727	personalisation performance	0.000
company image performance	1,198	5.3842	540	5.5583	company image performance	0.007
product availability performance	1,179	5.5988	541	5.9094	product availability performance	0.000
website gap	1,134	-0.0990	526	-0.0012	website gap	0.067
trust gap	1,191	-0.2256	548	-0.1496	trust gap	0.126
customer service gap	1,145	-0.2166	504	-0.1495	customer service gap	0.204
information gap	1,155	-0.2268	503	-0.0790	information gap	0.005
contactability gap	995	-0.3422	392	-0.3801	contactability gap	0.303
no ads gap	1,162	-0.0938	518	-0.1535	no ads gap	0.201
personalisation gap	1,127	0.5337	486	0.6687	personalisation gap	0.133
company image gap	1,189	0.8789	534	0.9082	company image gap	0.985
product availability gap	1,175	0.0923	532	0.1034	product availability gap	0.984

ServCo
CATEGORY

ServCo
CATEGORY

	Male		Female			
	N	MEAN	N	MEAN		Asymp. Sig.
website importance	288	6.0985	106	6.1474	website importance	0.344
trust importance	291	6.5830	108	6.5432	trust importance	0.703
customer service importance	275	6.1152	105	6.2127	customer service importance	0.303
information importance	0		0		information importance	
contactability importance	280	6.0286	110	6.1636	contactability importance	0.400
no ads importance	295	6.2356	113	6.3053	no ads importance	0.258
personalisation importance	283	3.8551	107	3.9626	personalisation importance	0.451
company image importance	305	4.6525	115	4.4670	company image importance	0.552
product availability importance	281	4.9377	106	4.9213	product availability importance	0.808
website performance	263	5.5661	99	5.6742	website performance	0.287
trust performance	248	5.8401	90	5.9704	trust performance	0.491
customer service performance	228	5.4415	91	5.3919	customer service performance	0.661
information performance	0		0		information performance	
contactability performance	230	4.9739	87	5.0402	contactability performance	0.747
no ads performance	241	5.8432	93	5.6889	no ads performance	0.594
personalisation performance	248	4.3286	92	4.5924	personalisation performance	0.126
company image performance	281	5.1957	104	5.2788	company image performance	0.643
product availability performance	258	5.1589	93	5.1559	product availability performance	0.891
website gap	260	-0.5168	93	-0.4758	website gap	0.329
trust gap	240	-0.6583	90	-0.5963	trust gap	0.355
customer service gap	225	-0.6000	89	-0.6380	customer service gap	0.127
information gap	0		0		information gap	
contactability gap	224	-0.9988	86	-1.0174	contactability gap	0.867
no ads gap	240	-0.5500	93	-0.6882	no ads gap	0.427
personalisation gap	247	0.3684	90	0.5056	personalisation gap	0.553
company image gap	280	0.5125	103	0.7282	company image gap	0.284
product availability gap	257	0.2004	93	0.1935	product availability gap	0.625

ToolCo
CATEGORY

ToolCo
CATEGORY

	Male		Female			
	N	MEAN	N	MEAN		Asymp. Sig.
website importance	337	5.8939	79	6.3212	website importance	0.000
trust importance	338	6.1923	84	6.6587	trust importance	0.002
customer service importance	328	5.9339	79	6.2532	customer service importance	0.047
information importance	320	5.8992	77	6.2175	information importance	0.082
contactability importance	359	6.0474	89	6.3876	contactability importance	0.006
no ads importance	343	6.1574	84	6.5417	no ads importance	0.019
personalisation importance	337	3.8958	85	3.4176	personalisation importance	0.136
company image importance	357	4.8681	86	4.4419	company image importance	0.141
product availability importance	337	4.7819	82	4.8720	product availability importance	0.638
website performance	314	5.0916	72	5.5347	website performance	0.000
trust performance	305	5.4907	71	5.7934	trust performance	0.038
customer service performance	293	5.1081	64	5.2083	customer service performance	0.268
information performance	289	4.9258	55	5.1409	information performance	0.137
contactability performance	328	5.3354	77	5.5130	contactability performance	0.153
no ads performance	301	5.4834	64	5.8047	no ads performance	0.035
personalisation performance	304	4.0576	70	4.3357	personalisation performance	0.102
company image performance	341	5.5572	79	6.0888	company image performance	0.000
product availability performance	312	4.8747	74	4.9189	product availability performance	0.045
website gap	303	-0.8267	69	-0.7736	website gap	0.573
trust gap	300	-0.7467	70	-0.8524	trust gap	0.918
customer service gap	289	-0.8270	64	-1.0573	customer service gap	0.970
information gap	280	-0.9598	55	-1.0682	information gap	0.698
contactability gap	324	-0.7022	77	-0.8638	contactability gap	0.759
no ads gap	299	-0.6756	64	-0.7109	no ads gap	0.899
personalisation gap	301	0.2973	69	0.6522	personalisation gap	0.039
company image gap	335	0.8433	77	1.5649	company image gap	0.001
product availability gap	303	-0.0858	73	-0.0068	product availability gap	0.615

SportCo
CATEGORY

COMPANY = SportCo
CATEGORY

	Male		Female			
	N	MEAN	N	MEAN		Asymp. Sig.
website importance	34	6.4559	480	6.3258	website importance	0.369
trust importance	31	6.6559	498	6.7343	trust importance	0.273
customer service importance	33	6.5152	496	6.5403	customer service importance	0.422
information importance	28	6.2321	471	6.1555	information importance	0.823
contactability importance	32	6.5938	506	6.4694	contactability importance	0.556
no ads importance	29	6.0345	494	6.3856	no ads importance	0.019
personalisation importance	31	4.3710	486	3.9928	personalisation importance	0.151
company image importance	34	5.2353	519	5.0713	company image importance	0.611
product availability importance	32	5.4844	501	5.4561	product availability importance	0.973
website performance	34	5.6103	467	5.8169	website performance	0.288
trust performance	32	6.1354	479	6.3278	trust performance	0.385
customer service performance	29	5.7126	465	5.9011	customer service performance	0.224
information performance	27	4.8241	436	5.0728	information performance	0.243
contactability performance	29	5.7586	475	6.0042	contactability performance	0.176
no ads performance	27	5.6111	459	6.0730	no ads performance	0.042
personalisation performance	29	4.1207	441	4.2494	personalisation performance	0.908
company image performance	34	5.7353	511	6.1370	company image performance	0.011
product availability performance	32	4.8594	484	5.3585	product availability performance	0.010
website gap	34	-0.8456	458	-0.5139	website gap	0.371
trust gap	31	-0.5484	474	-0.4107	trust gap	0.891
customer service gap	29	-0.7816	462	-0.6494	customer service gap	0.532
information gap	26	-1.4519	427	-1.1054	information gap	0.184
contactability gap	29	-0.8103	469	-0.4638	contactability gap	0.177
no ads gap	27	-0.5185	457	-0.3074	no ads gap	0.365
personalisation gap	29	-0.1724	438	0.1884	personalisation gap	0.421
company image gap	34	0.5000	505	1.0436	company image gap	0.034
product availability gap	31	-0.7419	480	-0.1156	product availability gap	0.054

AMOUNT SPEND

COMPANY = EntzCo
CATEGORY

	UNDER18		18-24		25-34		35-44		45-54		55-64		OVER 65	
	N	MEAN	N	MEAN	N	MEAN	N	MEAN	N	MEAN	N	MEAN	N	MEAN
website importance	10	6.2125	166	6.2899	568	6.2890	519	6.3760	268	6.4616	139	6.4793	29	6.5302
trust importance	10	6.8000	171	6.6764	585	6.7470	538	6.7429	297	6.8092	154	6.8182	32	6.9375
customer service importance	9	6.6296	187	6.4631	580	6.4583	520	6.5013	291	6.6128	142	6.6221	33	6.7778
information importance	10	6.2000	166	6.3087	577	6.2405	520	6.2966	284	6.3952	142	6.4965	30	6.4833
contactability importance	9	5.5000	161	5.7236	548	5.6366	476	5.6618	275	5.7182	129	5.8721	25	5.9800
no ads importance	10	6.1000	168	6.3452	588	6.4462	526	6.4819	298	6.4782	148	6.5203	30	6.4833
personalisation importance	10	3.8500	167	4.2934	589	4.0018	514	3.8667	279	4.0072	134	4.5709	30	4.9000
company image importance	10	3.5000	171	4.5526	589	4.3480	533	4.4859	290	4.6000	146	5.1541	31	5.3710
product availability importance	10	5.6500	171	5.7485	583	5.4991	526	5.4506	289	5.6419	148	5.7905	32	5.8594
website performance	10	6.3125	162	6.3372	556	6.2415	505	6.2748	289	6.3676	145	6.4319	28	6.4509
trust performance	10	6.5333	169	6.5207	576	6.5301	530	6.5409	292	6.5913	152	6.7039	31	6.6882
customer service performance	9	6.2222	162	6.1996	552	6.2820	498	6.3098	271	6.3936	142	6.5822	33	6.5859
information performance	10	5.7750	164	6.1448	583	6.0861	499	6.1022	274	6.2062	145	6.3793	29	6.3879
contactability performance	8	5.1875	147	5.3741	470	5.2830	411	5.2336	235	5.4043	113	5.8319	20	5.5750
no ads performance	10	6.8000	166	6.2500	566	6.3578	502	6.3438	277	6.4007	142	6.5246	30	6.5187
personalisation performance	10	4.3500	165	4.7515	545	4.5596	490	4.5959	263	4.7376	125	5.2320	30	5.0167
company image performance	10	5.4500	170	5.4412	578	5.3218	518	5.3639	289	5.5857	144	5.8611	29	5.8552
product availability performance	10	5.6500	172	5.7703	575	5.6304	508	5.6739	282	5.6755	146	5.9521	31	5.8871
website gap	10	0.1000	160	0.0086	550	-0.0570	497	-0.1147	282	-0.0842	135	-0.0139	28	-0.1116
trust gap	10	-0.2667	167	-0.1776	570	-0.2222	528	-0.2008	288	-0.2188	147	-0.1270	31	-0.2473
customer service gap	9	-0.4074	160	-0.2771	547	-0.1853	493	-0.1968	270	-0.2296	137	-0.0803	33	-0.1919
information gap	10	-0.4250	162	-0.1836	558	-0.1662	493	-0.1952	269	-0.2138	138	-0.1359	29	-0.1293
contactability gap	7	-0.2143	147	-0.4082	465	-0.3516	407	-0.3907	233	-0.3906	110	-0.0682	20	-0.5000
no ads gap	10	0.5000	165	-0.1152	563	-0.1075	500	-0.1750	276	-0.0815	137	-0.0584	30	0.0333
personalisation gap	10	0.5000	164	0.4482	545	0.5358	487	0.6725	260	0.6154	120	0.5583	29	0.0345
company image gap	10	1.9500	170	0.8853	577	0.9558	515	0.8583	284	0.9085	141	0.7092	28	0.3036
product availability gap	10	0.0000	170	-0.0206	573	0.1230	503	0.1511	280	0.0071	142	0.1303	31	-0.0161

ServCo
CATEGORY

	UNDER18		18-24		25-34		35-44		45-54		55-64		OVER 65	
	N	MEAN	N	MEAN	N	MEAN	N	MEAN	N	MEAN	N	MEAN	N	MEAN
website importance	15	6.3500	73	5.8425	111	6.2275	88	6.1378	88	6.1030	34	6.1544		
trust importance	14	6.7143	72	6.3657	109	6.5062	90	6.6593	76	6.7325	40	6.5833		
customer service importance	14	6.3095	72	5.9768	106	6.1950	85	6.1333	71	6.2347	33	6.0909		
information importance	0		0		0		0		0		0			
contactability importance	14	6.5000	75	5.9000	104	6.1154	67	6.0862	75	6.0133	36	6.1389		
no ads importance	14	6.2500	78	5.9872	113	6.2699	87	6.2931	79	6.3797	38	6.4342		
personalisation importance	14	4.3214	72	3.8472	109	3.9954	86	3.6221	75	3.9067	34	4.0441		
company image importance	14	4.6429	80	4.3588	114	4.5482	94	4.5000	78	4.7564	41	5.1585		
product availability importance	14	5.5000	74	4.6486	106	4.9491	82	4.8907	72	4.9681	34	5.2353		
website performance	13	5.9327	72	5.4238	97	5.5902	82	5.5488	65	5.6385	34	5.8660		
trust performance	12	6.0566	64	5.7656	92	5.7754	77	5.8229	63	6.0741	31	6.0430		
customer service performance	12	5.6111	61	5.3224	89	5.2097	71	5.2629	59	5.7910	28	5.9048		
information performance	0		0		0		0		0		0			
contactability performance	12	5.0833	62	4.8871	84	4.9226	70	4.9500	62	5.0242	28	5.4107		
no ads performance	12	5.7083	64	5.2656	94	5.5213	78	5.7171	61	5.8115	28	6.0179		
personalisation performance	12	4.7500	65	4.2615	93	4.3172	78	4.3590	63	4.5000	30	4.7000		
company image performance	13	5.5885	74	5.0270	104	5.1635	88	5.0568	69	5.5145	35	5.4342		
product availability performance	12	5.5000	70	4.9357	92	5.0870	81	5.3765	64	5.1018	33	5.2424		
website gap	13	-0.5096	68	-0.3768	95	-0.6211	80	-0.5844	65	-0.4596	33	-0.3447		
trust gap	12	-0.7222	62	-0.5161	88	-0.5671	76	-0.8158	62	-0.6398	31	-0.6129		
customer service gap	12	-0.8056	59	-0.5876	88	-0.9205	70	-0.8143	58	-0.4124	27	-0.1605		
information gap	0		0		0		0		0		0			
contactability gap	12	-1.5000	61	-0.8852	81	-1.0864	69	-1.0870	61	-0.9262	27	-0.6667		
no ads gap	12	-0.4167	63	-0.5238	94	-0.6809	76	-0.5658	61	-0.6557	28	-0.5000		
personalisation gap	12	0.4583	64	0.3203	92	0.1902	77	0.6429	62	0.4919	30	0.4333		
company image gap	12	1.0000	74	0.5811	103	0.6019	86	0.5455	69	0.6594	38	0.2237		
product availability gap	12	0.0000	70	0.3000	92	0.0272	81	0.5247	64	0.0858	32	-0.0311		

ToolCo
CATEGORY

	UNDER 18		18-24		25-34		35-44		45-54		55-64		OVER 65	
	N	MEAN	N	MEAN	N	MEAN	N	MEAN	N	MEAN	N	MEAN	N	MEAN
website importance			20	6.0000	146	6.1344	144	5.8203	74	5.9645	31	5.9516	1	6.0000
trust importance			20	6.3333	148	6.4414	144	6.0324	77	6.4329	31	6.2796	2	6.8333
customer service importance			19	6.1930	139	6.1871	142	5.7160	77	6.2121	29	5.7471	1	6.0000
information importance			18	6.0139	141	6.1206	135	5.7574	75	5.9787	27	6.0556	1	6.2500
contactability importance			20	6.3000	155	6.2806	151	5.9040	85	6.2471	34	5.8362	3	6.3333
no ads importance			19	6.7895	149	6.3859	146	6.0473	80	6.2750	30	5.9667	1	5.0000
personalisation importance			19	3.7832	148	3.5709	143	3.5350	80	3.8500	31	3.8226	1	4.0000
company image importance			20	4.5000	153	4.5686	153	4.6275	84	4.7978	32	4.5000	1	4.5000
product availability importance			17	4.8824	144	4.7257	150	4.6400	76	5.0855	31	5.1290	1	6.0000
website performance			19	5.3421	135	5.2907	133	5.0921	71	4.9718	27	5.3796	1	6.0000
trust performance			18	5.9074	135	5.6519	126	5.3968	67	5.3781	28	5.8333	2	6.5000
customer service performance			17	5.4510	124	5.1237	121	5.0000	67	5.1692	26	5.3077	2	6.3333
information performance			16	5.0469	116	4.9914	121	4.8595	64	4.8516	25	5.4200	2	6.2500
contactability performance			19	5.8579	146	5.3870	131	5.1870	75	5.3467	31	5.8226	3	6.5000
no ads performance			17	5.6176	130	5.5154	126	5.5317	63	5.4603	28	5.7857	1	6.5000
personalisation performance			18	4.4444	132	4.1364	126	4.0198	70	4.0214	27	4.4074	1	4.0000
company image performance			19	5.9211	147	5.7449	144	5.8111	79	5.4810	29	5.6552	2	7.0000
product availability performance			17	4.6471	130	4.7923	139	4.7194	71	4.5834	28	4.8214	1	5.5000
website gap			19	-0.6184	133	-0.8703	127	-0.7569	66	-0.9015	26	-0.7981	1	0.0000
trust gap			18	-0.3519	134	-0.7786	124	-0.7285	64	-1.0677	28	-0.4881	2	-0.3333
customer service gap			17	-0.6471	122	-1.0546	120	-0.7276	67	-1.0050	26	-0.4744	1	0.0000
information gap			18	-0.8438	116	-1.1422	114	-0.8355	64	-1.1055	24	-0.6456	1	0.0000
contactability gap			19	-0.6053	145	-0.8897	129	-0.7403	74	-0.7838	31	-0.0161	3	0.1667
no ads gap			17	-1.1471	130	-0.8500	124	-0.5645	63	-0.6825	28	-0.2143	1	1.5000
personalisation gap			18	0.7500	129	0.3760	125	0.4560	70	0.0214	27	0.5185	1	0.0000
company image gap			19	1.3947	145	1.1207	140	0.9929	78	0.5449	29	1.0345	1	2.5000
product availability gap			15	-0.1333	129	0.0349	134	0.1157	69	-0.5217	28	-0.2857	1	-0.5000

COMPANY = SportCo
 CATEGORY

	UNDER18		18-24		25-34		35-44		45-54		55-64		OVER 65	
	N	MEAN	N	MEAN	N	MEAN	N	MEAN	N	MEAN	N	MEAN	N	MEAN
website importance	29	5.9267	90	6.3194	139	6.2563	169	6.3942	73	6.5034	16	6.4219	2	6.6875
trust importance	30	6.7111	96	6.7917	144	6.6667	174	6.7433	67	6.7582	20	6.6333	2	7.0000
customer service importance	29	6.3333	95	6.5333	143	6.4242	178	6.8117	69	6.6425	19	6.6842	2	6.6667
information importance	30	6.0333	91	6.2390	140	6.1054	161	6.1242	65	6.2923	14	6.2321	1	7.0000
contactability importance	32	6.1563	98	6.5357	141	6.3901	178	6.4747	73	6.6507	19	6.6842	1	7.0000
no ads importance	30	6.2333	94	6.4947	142	6.2606	172	6.3808	68	6.4265	19	6.4211	2	6.7500
personalisation importance	31	4.2581	94	4.3085	142	3.9331	169	3.9172	65	3.9231	18	3.8056	2	4.5000
company image importance	32	5.6250	100	4.9750	147	5.0102	182	5.0604	75	5.2133	19	5.0526	2	4.2500
product availability importance	32	4.9531	95	5.3105	142	5.4049	177	5.6298	70	5.6500	19	5.0526	2	6.5000
website performance	27	5.6667	91	5.7706	135	5.8194	164	5.8079	71	5.8310	15	5.8250	2	6.6875
trust performance	30	6.0667	92	6.4312	142	6.3474	166	6.2871	63	6.2910	20	6.1167	2	7.0000
customer service performance	27	5.7531	94	5.9894	135	5.8146	163	5.8814	61	5.9617	17	5.9216	1	7.0000
information performance	28	5.0089	91	5.2987	131	4.9943	147	4.9575	58	5.0179	12	5.3750	1	7.0000
contactability performance	30	5.6500	94	6.0319	134	5.9254	167	5.9820	65	6.1538	17	6.2941	1	7.0000
no ads performance	30	6.0167	91	6.0659	137	6.1022	160	5.9781	55	6.1727	15	5.7333	2	7.0000
personalisation performance	28	4.5714	91	4.2967	131	4.2252	153	4.2190	55	4.0000	14	4.4843	2	4.5000
company image performance	32	6.2031	100	6.2300	144	6.0139	180	6.0889	72	6.1944	19	5.8947	2	6.0000
product availability performance	29	4.6897	83	5.1398	139	5.4173	170	5.4853	68	5.3803	18	5.0000	2	6.2500
website gap	27	-0.2361	89	-0.5632	133	-0.4455	162	-0.5949	70	-0.6929	13	-0.4327	2	0.0000
trust gap	30	-0.6444	92	-0.3514	139	-0.3141	165	-0.4465	61	-0.5828	20	-0.5167	2	0.0000
customer service gap	27	-0.8173	94	-0.5426	134	-0.6118	162	-0.7490	60	-0.6889	17	-0.7647	1	0.0000
information gap	28	-1.0446	87	-0.9626	129	-1.1221	144	-1.2135	55	-1.2727	12	-0.8750	1	0.0000
contactability gap	30	-0.4833	94	-0.5266	131	-0.4818	167	-0.4850	63	-0.5079	16	-0.3125	1	0.0000
no ads gap	30	-0.2167	91	-0.4505	137	-0.1460	158	-0.3956	59	-0.2909	15	-0.7000	2	0.2500
personalisation gap	28	0.2679	90	-0.0444	131	0.2252	152	0.2632	54	0.0463	14	0.2857	2	0.0000
company image gap	32	0.5781	99	1.2525	142	0.9437	179	1.0028	72	0.9931	17	0.8824	2	1.7500
product availability gap	29	-0.2931	93	-0.1720	136	-0.0588	169	-0.1420	67	-0.3060	19	-0.0526	2	-0.2500

COMPANY = EntzCo
 CATEGORY

	under 18 v 18-24	under 18 v 25-34	under 18 v 35-44	under 18 v 45-54	under 18 v 55-64	under 18 v over 65	Asymp.														
website importance							0.465	0.487	0.016	0.002	0.165	0.025	0.000	0.000	0.070	0.022	0.001	0.236	0.166	0.799	0.678
trust importance							0.887	0.706	0.193	0.083	0.088	0.433	0.051	0.024	0.061	0.216	0.088	0.103	0.465	0.222	0.392
customer service importance							0.260	0.914	0.105	0.076	0.032	0.081	0.000	0.001	0.005	0.041	0.044	0.026	0.643	0.141	0.226
information importance							0.036	0.292	0.818	0.066	0.134	0.142	0.002	0.000	0.009	0.072	0.001	0.037	0.054	0.123	0.603
contactability importance							0.317	0.825	0.734	0.173	0.377	0.314	0.094	0.014	0.198	0.494	0.090	0.331	0.246	0.461	0.909
no ads importance							0.197	0.020	0.021	0.002	0.132	0.167	0.142	0.014	0.313	0.782	0.111	0.574	0.197	0.630	0.836
personalisation importance							0.097	0.009	0.262	0.057	0.027	0.146	0.669	0.000	0.002	0.123	0.060	0.000	0.001	0.004	0.379
company image importance							0.199	0.721	0.565	0.001	0.004	0.181	0.021	0.000	0.000	0.248	0.000	0.062	0.001	0.008	0.562
product availability importance							0.029	0.018	0.413	0.998	0.878	0.689	0.123	0.030	0.221	0.070	0.017	0.183	0.380	0.569	0.940
website performance							0.049	0.246	0.906	0.120	0.453	0.267	0.009	0.000	0.093	0.110	0.003	0.192	0.108	0.478	0.886
trust performance							0.724	0.948	0.348	0.078	0.349	0.671	0.093	0.011	0.242	0.189	0.026	0.304	0.292	0.640	0.854
customer service performance							0.714	0.291	0.049	0.000	0.008	0.298	0.020	0.000	0.003	0.164	0.000	0.009	0.005	0.035	0.508
information performance							0.190	0.385	0.756	0.017	0.150	0.565	0.028	0.000	0.033	0.107	0.000	0.051	0.014	0.169	0.869
contactability performance							0.397	0.288	0.813	0.003	0.493	0.673	0.160	0.000	0.253	0.113	0.000	0.227	0.002	0.536	0.342
no ads performance							0.200	0.134	0.041	0.001	0.065	0.736	0.215	0.004	0.174	0.351	0.011	0.209	0.089	0.399	0.983
personalisation performance							0.235	0.229	0.968	0.003	0.430	0.697	0.149	0.000	0.198	0.117	0.000	0.200	0.001	0.503	0.421
company image performance							0.175	0.367	0.314	0.001	0.276	0.640	0.005	0.000	0.100	0.020	0.000	0.158	0.005	0.561	0.458
product availability performance							0.114	0.372	0.450	0.164	0.423	0.344	0.404	0.002	0.114	0.909	0.015	0.218	0.034	0.239	0.951
website gap							0.084	0.013	0.023	0.143	0.203	0.274	0.369	0.977	0.534	0.937	0.452	0.721	0.522	0.720	0.412
trust gap							0.506	0.644	0.772	0.696	0.718	0.778	0.681	0.242	0.960	0.859	0.307	0.901	0.482	0.829	0.469
customer service gap							0.302	0.248	0.720	0.022	0.252	0.885	0.430	0.109	0.544	0.366	0.107	0.517	0.026	0.314	0.884
information gap							0.366	0.613	0.981	0.278	0.631	0.610	0.296	0.706	0.864	0.554	0.502	0.985	0.289	0.843	0.792
contactability gap							0.597	0.939	0.918	0.097	0.901	0.536	0.420	0.133	0.729	0.789	0.056	0.876	0.044	0.957	0.302
no ads gap							0.647	0.308	0.931	0.973	0.641	0.484	0.573	0.599	0.442	0.236	0.328	0.308	0.988	0.602	0.608
personalisation gap							0.524	0.104	0.200	0.435	0.098	0.156	0.352	0.730	0.041	0.808	0.571	0.013	0.738	0.019	0.032
company image gap							0.289	0.955	0.945	0.071	0.009	0.116	0.198	0.002	0.002	0.999	0.037	0.008	0.055	0.008	0.079
product availability gap							0.406	0.223	0.885	0.244	0.458	0.565	0.403	0.581	0.735	0.189	0.845	0.835	0.223	0.456	0.864

SenCo
CATEGORY

	NA	under 18 v 18-24	NA	under 18 v 25-34	NA	under 18 v 35-44	NA	under 18 v 45-54	NA	under 18 v 55-64	NA	under 18 v over 65	18-24 v 25-34	18-24 v 35-44	18-24 v 45-54	18-24 v 55-64	18-24 v over 65	25-34 v 35-44	25-34 c 45-54	25-34 v 55-64	25-34 v over 65	35-44 v 45-54	35-44 v 55-64	35-44 v over 65	45-54 v 55-64	44-54 v over 65	55-64 v over 65		
website importance	NA		Asymp	Asymp	Asymp	Asymp	Asymp	Asymp	Asymp	Asymp	Asymp	Asymp	Asymp	Asymp	Asymp	Asymp	Asymp	Asymp	Asymp										
trust importance													0.127	0.461	0.493	0.281	0.240	0.093	0.181	0.385	0.462	0.809	0.403	0.532	0.590	0.744	0.989	0.603	0.989
customer service importance													0.251	0.883	0.487	0.577	0.323	0.141	0.401	0.173	0.673	0.504	0.940	0.940	0.417	0.588	0.766	0.474	0.251
information importance																													
contactability importance																													
no ads importance													0.196	0.354	0.570	0.248	0.497	0.418	0.272	0.720	0.429	0.640	0.689	0.816	0.392	0.682	0.580	0.370	0.516
personalisation importance													0.344	0.448	0.077	0.289	0.801	0.591	0.341	0.855	0.496	0.070	0.612	0.746	0.199	0.146	0.549	0.344	
company image importance													0.909	0.864	0.746	0.803	0.067	0.422	0.572	0.122	0.005	0.835	0.303	0.008	0.260	0.007	0.083	0.033	0.193
product availability importance													0.210	0.310	0.184	0.398	0.802	0.484	0.795	0.382	0.098	0.609	0.898	0.245	0.475	0.088	0.267	0.210	
trust performance													0.609	0.985	0.954	0.979	0.747	0.978	0.951	0.234	0.286	0.874	0.209	0.246	0.188	0.199	0.795	0.609	
customer service performance													0.539	0.385	0.446	0.482	0.348	0.677	0.706	0.030	0.035	0.950	0.008	0.014	0.009	0.015	0.756	0.539	
information performance																													
contactability performance													0.641	0.744	0.723	0.917	0.304	0.747	0.727	0.571	0.047	0.693	0.761	0.069	0.788	0.080	0.092	0.641	
re ads performance													0.302	0.671	0.971	0.968	0.437	0.218	0.062	0.030	0.012	0.367	0.199	0.040	0.691	0.147	0.286	0.302	
personalisation performance													0.195	0.297	0.057	0.224	0.932	0.847	0.872	0.339	0.163	0.895	0.507	0.144	0.381	0.110	0.376	0.195	
company image performance													0.109	0.205	0.070	0.876	0.807	0.497	0.995	0.006	0.034	0.480	0.073	0.107	0.002	0.026	0.967	0.109	
product availability performance													0.864	0.998	0.701	0.897	0.379	0.415	0.183	0.588	0.592	0.472	0.908	0.220	0.360	0.072	0.239	0.864	
website gap													0.270	0.937	0.581	0.935	0.782	0.721	0.097	0.244	0.882	0.173	0.551	0.848	0.443	0.201	0.433	0.270	
trust gap													0.431	0.832	0.921	0.200	0.051	0.185	0.226	0.046	0.986	0.006	0.001	0.005	0.001	0.346	0.431		
customer service gap																													
information gap																													
contactability gap													0.148	0.305	0.314	0.234	0.037	0.520	0.423	0.520	0.397	0.988	0.918	0.116	0.829	0.089	0.059	0.148	
no ads gap													0.724	0.847	0.901	0.658	0.848	0.960	0.704	0.955	0.472	0.503	0.971	0.248	0.574	0.691	0.214	0.724	
personalisation gap													0.734	0.364	0.645	0.870	0.905	0.192	0.136	0.681	0.804	0.084	0.099	0.153	0.330	0.274	0.919	0.734	
company image gap													0.259	0.223	0.167	0.232	0.029	0.977	0.748	0.907	0.115	0.731	0.918	0.088	0.641	0.104	0.054	0.259	
product availability gap													0.227	0.939	0.394	0.986	0.801	0.055	0.888	0.068	0.043	0.064	0.894	0.656	0.090	0.074	0.720	0.227	

Toolca
CATEGORY

	under 18 v 18-24	under 18 v 25-34	under 18 v 35-44	under 18 v 45-54	under 18 v 55-64	under 18 v over 65	18-24 v 25-34	18-24 v 35-44	18-24 v 45-54	18-24 v 55-64	18-24 v over 65	25-34 v 35-44	25-34 v 45-54	25-34 v 55-64	25-34 v over 65	35-44 v 45-54	35-44 v 55-64	35-44 v over 65	45-54 v 55-64	44-54 v over 65	55-64 v over 65	
website importance	NA	NA	NA	NA	NA	NA	Asymp	Asymp	Asymp	Asymp	NA	Asymp	Asymp	Asymp	NA	Asymp	NA	Asymp	NA	Asymp	NA	NA
trust importance							0.215	0.902	0.478	0.918		0.075	0.721	0.162	0.155	0.995	NA	Asymp	NA	Asymp	NA	NA
customer service importance							0.772	0.511	0.437	0.958		0.043	0.322	0.732	0.014	0.394		Asymp	NA	Asymp	NA	NA
information importance							0.930	0.205	0.596	0.354		0.008	0.980	0.152	0.003	0.892		Asymp	NA	Asymp	NA	NA
contactability importance							0.838	0.366	0.964	0.953		0.022	0.756	0.880	0.136	0.252		Asymp	NA	Asymp	NA	NA
no ads importance							0.840	0.378	0.668	0.426		0.030	0.589	0.153	0.027	0.664		Asymp	NA	Asymp	NA	NA
personalisation importance							0.027	0.004	0.031	0.024		0.050	0.731	0.436	0.222	0.726		Asymp	NA	Asymp	NA	NA
company image importance							0.434	0.512	0.679	0.920		0.918	0.114	0.460	0.152	0.416		Asymp	NA	Asymp	NA	NA
product availability importance							0.690	0.677	0.361	0.939		0.631	0.194	0.716	0.330	0.546		Asymp	NA	Asymp	NA	NA
website performance							0.527	0.493	0.744	0.449		0.606	1.02	0.142	0.042	0.098		Asymp	NA	Asymp	NA	NA
customer service performance							0.758	0.248	0.118	0.911		0.080	0.830	0.671	0.536	0.255		Asymp	NA	Asymp	NA	NA
information performance							0.239	0.053	0.056	0.782		0.137	0.161	0.366	0.879	0.082		Asymp	NA	Asymp	NA	NA
contactability performance							0.486	0.191	0.394	0.801		0.241	0.724	0.664	0.423	0.259		Asymp	NA	Asymp	NA	NA
no ads performance							0.925	0.541	0.476	0.375		0.319	0.276	0.171	0.920	0.060		Asymp	NA	Asymp	NA	NA
personalisation performance							0.437	0.164	0.232	0.650		0.210	0.519	0.126	0.644	0.032		Asymp	NA	Asymp	NA	NA
company image performance							0.748	0.747	0.794	0.629		0.937	0.960	0.229	1.000	0.238		Asymp	NA	Asymp	NA	NA
product availability performance							0.198	0.095	0.083	0.981		0.280	0.392	0.266	0.832	0.130		Asymp	NA	Asymp	NA	NA
trust gap							0.377	0.161	0.054	0.260		0.296	0.035	0.537	0.178	0.957		Asymp	NA	Asymp	NA	NA
customer service gap							0.617	0.922	0.564	0.536		0.321	0.091	0.776	0.316	0.422		Asymp	NA	Asymp	NA	NA
information gap							0.050	0.170	0.090	0.374		0.399	0.786	0.533	0.316	0.422		Asymp	NA	Asymp	NA	NA
contactability gap							0.033	0.032	0.010	0.274		0.628	0.706	0.236	0.252	0.172		Asymp	NA	Asymp	NA	NA
no ads gap							0.226	0.592	0.226	1.000		0.212	0.773	0.077	0.217	0.366		Asymp	NA	Asymp	NA	NA
personalisation gap							0.258	0.825	0.294	0.944		0.252	0.457	0.109	0.264	0.487		Asymp	NA	Asymp	NA	NA
company image gap							0.177	0.324	0.279	0.263		0.634	0.717	0.001	0.963	0.005		Asymp	NA	Asymp	NA	NA
product availability gap							0.321	0.135	0.129	0.020		0.290	0.263	0.036	0.768	0.156		Asymp	NA	Asymp	NA	NA
							0.236	0.260	0.032	0.415		0.987	0.085	0.765	0.070	0.702		Asymp	NA	Asymp	NA	NA
							0.393	0.067	0.004	0.363		0.216	0.004	0.911	0.066	0.483		Asymp	NA	Asymp	NA	NA
							0.560	0.574	0.491	0.709		0.813	0.019	0.095	0.019	0.118		Asymp	NA	Asymp	NA	NA

OCCUPATION

COMPANY = EntzCo
CATEGORY

	Higher managerial and administrative		intermediate manager		supervisory, junior admin		skilled or unskilled manual		retired/pensioner		student		housewife/husband		other casual work	
	N	MEAN	N	MEAN	N	MEAN	N	MEAN	N	MEAN	N	MEAN	N	MEAN	N	MEAN
website importance	308	6.3247	594	6.3310	281	6.3261	198	6.3857	90	6.6167	100	6.2638	82	6.5244	58	6.5517
trust importance	325	6.7892	608	6.7489	294	6.7596	203	6.7077	100	6.9300	102	6.7518	86	6.7326	59	6.7853
customer service importance	318	6.5430	592	6.4766	289	6.4683	194	6.5533	95	6.7018	99	6.4478	86	6.6279	59	6.5424
information importance	314	6.2771	594	6.2487	287	6.2709	194	6.3892	92	6.5380	101	6.3418	83	6.5241	55	6.5091
contactability importance	296	5.6132	557	5.5943	262	5.6603	188	5.7447	84	6.2440	92	5.6957	80	6.0375	56	5.5804
no ads importance	321	6.4768	606	6.4464	282	6.4098	204	6.4853	96	6.5260	99	6.4242	87	6.3851	61	6.7213
personalisation importance	307	3.9511	583	3.8791	279	3.9050	193	4.3135	91	4.5549	102	4.1569	83	4.3795	56	4.7411
company image importance	323	4.5464	600	4.2900	293	4.4812	202	4.8515	97	5.1495	102	4.2010	85	4.9294	59	5.2968
product availability importance	319	5.4326	599	5.5117	287	5.5000	198	5.5707	98	5.8010	102	5.6176	88	6.0640	60	5.7750
website performance	300	6.2179	586	6.2543	279	6.2706	189	6.4028	96	6.5404	99	6.2298	82	6.5869	55	6.4250
trust performance	316	6.5095	600	6.4967	291	6.6392	195	6.5863	100	6.7033	104	6.5321	86	6.7054	58	6.6897
customer service performance	300	6.2878	576	6.2442	277	6.3466	181	6.4494	94	6.5638	96	6.2813	77	6.4589	55	6.5455
information performance	303	6.0050	584	6.0948	274	6.1724	189	6.2553	93	6.3763	100	6.0450	81	6.4568	51	6.3188
contactability performance	252	5.2956	497	5.2133	233	5.2468	159	5.4906	65	5.8462	83	5.1988	66	5.8712	42	5.8571
no ads performance	304	6.2714	586	6.3140	275	6.3545	191	6.4817	95	6.8053	99	6.3990	78	6.4872	57	6.5351
personalisation performance	290	4.6034	561	4.5009	265	4.6057	184	4.8234	92	5.0870	101	4.7178	75	5.3267	51	5.2157
company image performance	312	5.3285	595	5.2193	288	5.4410	199	5.6784	94	5.9840	102	5.3480	82	5.9451	56	6.0089
product availability performance	309	5.5097	592	5.6571	280	5.6429	189	5.7249	98	5.9439	101	5.6931	85	6.2529	57	5.9912
website gap	295	-0.1174	577	-0.0784	273	-0.0609	186	-0.0370	88	-0.0256	98	-0.0421	81	0.0633	55	-0.1341
trust gap	314	-0.2726	598	-0.2589	289	-0.1303	193	-0.1276	95	-0.1825	102	-0.2288	85	-0.0275	57	-0.0819
customer service gap	299	-0.2632	568	-0.2477	276	-0.1316	179	-0.1006	90	-0.1593	96	-0.1806	77	-0.1645	55	-0.0081
information gap	299	-0.2968	576	-0.1645	273	-0.1154	187	-0.1364	88	-0.1678	99	-0.2929	78	-0.1186	50	-0.1650
contactability gap	250	-0.3280	491	-0.3635	230	-0.4281	158	-0.2722	64	-0.5825	82	-0.4817	66	-0.2273	41	0.0854
no ads gap	304	-0.2368	584	-0.1533	272	-0.0790	189	-0.0026	91	0.0330	98	-0.0204	78	0.0084	57	-0.1667
personalisation gap	289	0.5882	557	0.5925	264	0.6326	184	0.4484	87	0.4770	101	0.5792	73	0.7466	51	0.3922
company image gap	311	0.7476	592	0.9172	287	0.9564	197	0.8071	90	0.8222	102	1.1471	82	0.9207	55	0.8182
product availability gap	307	0.0489	587	0.1244	279	0.0932	189	0.1085	95	0.1368	100	0.0350	84	0.1310	57	0.0283

ServCo
CATEGORY

	Higher managerial ad		Intermediate manager		supervisory, junior ad		skilled or unskilled ma		retired/pensioner		student		housewife/husband		other casual work	
	N	MEAN	N	MEAN	N	MEAN	N	MEAN	N	MEAN	N	MEAN	N	MEAN	N	MEAN
website importance	111	6.0653	111	6.0653	56	6.1228	31	5.9395	64	6.2652	4	6.0938	8	6.4063	5	6.5500
trust importance	110	6.7242	110	6.5758	56	6.2083	32	6.4375	70	6.6333	5	6.6000	9	6.7778	6	6.7222
customer service importance	108	6.2253	107	6.0374	55	6.1152	28	6.0256	63	6.1852	5	6.5333	8	6.4583	5	6.0667
information importance	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
contactability importance	102	6.1814	113	5.9115	57	6.2719	29	5.9655	67	5.9851	5	5.8000	9	6.2778	6	5.9167
no ads importance	111	6.2387	111	6.2072	60	6.2750	31	6.0323	73	6.3899	5	6.2000	9	6.7778	5	6.9000
personalisation importance	110	3.9045	110	3.7409	54	4.1389	28	3.9643	65	3.8846	5	4.0000	5	3.7778	5	4.4000
company image importance	113	4.7522	117	4.3504	60	4.5500	32	4.5156	75	4.9333	5	5.3000	9	3.7778	4	4.5000
product availability importance	105	4.9356	110	4.7136	57	4.9825	27	5.0370	65	5.2077	4	5.3750	9	4.8889	5	5.7000
website performance	100	5.5463	101	5.4183	56	5.7589	27	5.5278	56	5.8581	4	5.5313	7	5.4643	5	5.7250
trust performance	93	5.8387	92	5.7355	54	6.0062	26	5.8974	57	6.0819	4	5.8333	6	5.5000	6	5.7778
customer service performance	88	5.3256	92	5.2536	48	5.5000	21	5.6032	54	5.7222	4	5.5000	5	4.9333	5	5.8000
information performance	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
contactability performance	85	4.8847	91	4.7802	49	5.2041	28	5.3462	51	5.0588	4	5.8750	4	4.5000	6	5.3333
no ads performance	94	5.5745	92	5.2880	53	5.7453	25	5.8400	54	5.9352	4	5.7500	5	6.0000	5	5.9000
personalisation performance	97	4.3886	95	4.2316	53	4.4811	22	4.8409	56	4.5268	4	3.7500	6	4.4167	9	4.3000
company image performance	105	5.1762	106	5.0896	57	5.1053	30	5.2000	67	5.5373	4	5.7500	6	5.1875	4	5.1250
product availability performance	95	5.2172	97	4.9227	55	5.2545	24	5.1250	58	5.3986	4	5.2500	7	4.7857	5	5.0000
website gap	97	-0.4910	95	-0.6288	53	-0.3514	27	-0.3657	58	-0.4634	4	-0.5625	7	-1.8000	5	-0.8250
trust gap	91	-0.8059	91	-0.7692	50	-0.1533	28	-0.4103	56	-0.5952	4	-0.9187	6	-1.3933	6	-0.9444
customer service gap	87	-0.7778	91	-0.7875	46	-0.6304	21	-0.3651	53	-0.4340	4	-0.9167	5	-1.4000	5	-0.2667
information gap	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
contactability gap	80	-1.1813	91	-1.1264	49	-0.9592	25	-0.6000	50	-0.8400	4	0.3750	4	-1.6250	6	-0.5833
no ads gap	93	-0.6073	92	-0.8096	53	-0.4823	25	-0.0800	54	-0.5741	4	-0.3500	5	-0.8000	5	-1.0000
personalisation gap	96	0.3594	94	0.4840	52	0.2788	22	0.5909	55	0.4091	4	0.1250	6	0.9333	5	-0.1000
company image gap	104	0.3990	105	0.7429	57	0.5088	30	0.5833	67	0.5000	4	0.5000	6	1.1875	4	0.6250
product availability gap	95	0.2525	97	0.1804	55	0.2809	24	0.1458	57	0.1140	4	-0.1250	7	0.1429	5	-0.7000

ToolCo
CATEGORY

	Higher managerial ad		intermediate manag		supervisory, junior ad		skilled or unskilled ma		pensioner		student		other casual work		
	N	MEAN	N	MEAN	N	MEAN	N	MEAN	N	MEAN	N	MEAN	N	MEAN	
website importance	143	6.0789	148	5.9552	53	5.9316	40	5.6219	7	5.9821	5	6.4000		6	5.6667
trust importance	142	6.2700	155	6.3376	52	6.3077	43	6.0233	6	6.8333	5	6.8667		6	5.8889
customer service importance	137	6.0292	147	5.9751	52	5.9295	42	5.9441	6	6.3333	4	6.5833		6	5.8889
information importance	137	5.9288	142	5.9824	49	5.9949	41	5.7990	6	6.4583	4	6.4375		6	5.9167
contactability importance	152	6.1513	163	6.1503	54	6.0463	44	5.8750	8	6.0625	5	6.7000		6	6.0000
no ads importance	145	6.1793	155	6.3613	53	6.1981	43	5.9302	6	6.0000	5	7.0000		6	6.4167
personalisation importance	145	3.5897	151	3.5099	52	3.5673	43	4.2791	7	3.4286	4	3.5000		6	4.0833
company image importance	151	4.6060	164	4.5976	51	4.3235	45	5.0000	7	5.0714	5	5.7000		6	4.9167
product availability importance	144	4.8229	153	4.7190	53	4.6792	42	5.0476	6	5.8333	4	3.2500		4	5.8750
website performance	131	5.1355	138	5.1198	45	5.3056	42	5.1837	6	5.4167	5	5.3500		6	5.6875
trust performance	120	5.4381	141	5.5272	48	5.6042	39	5.6752	6	6.2222	4	5.6667		5	6.1333
customer service performance	119	5.0392	130	5.1179	44	4.9924	38	5.5088	6	5.5556	4	4.5833		5	6.0667
information performance	118	4.9174	118	4.9343	44	4.9034	39	5.2051	6	5.5833	4	4.6875		5	5.7500
contactability performance	138	5.2572	146	5.3151	49	5.3571	41	5.6829	8	5.8125	5	5.8000		5	5.8000
no ads performance	118	5.4681	134	5.5522	47	5.3723	39	5.8205	6	6.0833	5	6.3000		5	5.8000
personalisation performance	127	4.0689	136	4.0037	45	4.1556	39	4.6026	6	3.3333	3	3.8333		6	4.8333
company image performance	142	5.6937	155	5.5548	47	5.7340	44	5.6591	7	5.5000	5	6.5000		6	5.9167
product availability performance	129	4.7558	141	4.6596	47	4.7660	39	4.7821	6	5.1667	4	3.8250		6	5.0000
website gap	126	-0.9286	134	-0.8442	45	-0.8381	38	-0.3783	6	-0.8875	5	-1.0500		6	0.0208
trust gap	119	-0.8739	140	-0.8286	46	-0.8261	39	-0.3590	6	-0.6111	4	-1.1667		5	0.4667
customer service gap	116	-0.9626	130	-0.8385	43	-1.0000	38	-0.5702	6	-0.7778	4	-2.0000		5	0.4000
information gap	115	-1.0326	118	-1.0496	43	-0.9942	37	-0.5338	6	-0.8750	4	-1.7500		5	0.0500
contactability gap	136	-0.8529	145	-0.8379	49	-0.7245	41	-0.2195	8	-0.2500	5	-0.9000		5	0.0000
no ads gap	118	-0.7034	133	-0.7895	47	-0.9043	38	-0.0658	6	0.0833	5	-0.7000		5	-0.7000
personalisation gap	124	0.4234	135	0.4074	45	0.4778	39	0.1154	6	-0.2500	3	-0.5000		6	0.7500
company image gap	138	1.0580	154	0.8994	46	1.3476	43	0.5814	7	0.4286	5	0.8000		6	1.0000
product availability gap	126	0.0000	138	-0.0797	47	-0.0213	39	-0.2949	6	-0.6667	4	0.3750		4	-0.3750

COMPANY = SportCo
CATEGORY

	Higher managerial adri		intermediate manager		supervisory, junior adri		skilled or unskilled ma		retired/pensioner		student		other casual work	
	N	MEAN	N	MEAN	N	MEAN	N	MEAN	N	MEAN	N	MEAN	N	MEAN
website importance	120	6.3979	178	6.3083	66	6.2841	25	6.3300	4	6.6875	70	6.1893	25	6.5800
trust importance	120	6.7500	186	6.6541	69	6.6908	24	6.6944	6	6.9444	73	6.7945	23	6.9130
customer service importance	122	6.6093	187	6.4902	71	6.5399	26	6.5513	6	6.7778	68	6.4314	22	6.7576
information importance	112	6.1987	178	6.1011	64	6.1133	24	6.1771	4	6.1250	69	6.0978	23	6.6196
contactability importance	124	6.5444	188	6.4628	69	6.4855	25	6.5200	5	7.0000	75	6.3600	22	6.5909
no ads importance	115	6.3087	188	6.3989	70	6.3786	23	6.3696	6	6.5000	71	6.2608	23	6.7174
personalisation importance	118	3.7161	178	4.0449	66	4.0227	25	4.2800	6	2.6667	72	4.1389	23	4.7609
company image importance	125	4.9000	192	4.9688	70	5.1286	27	5.2407	6	3.6667	77	5.2662	25	5.6000
product availability importance	121	5.4793	187	5.4439	69	5.2464	25	5.7800	6	5.8333	74	5.3581	24	5.8542
website performance	118	5.6875	174	5.7685	83	5.9821	25	5.7200	3	6.2500	70	5.7411	23	6.0707
trust performance	116	6.2011	179	6.3464	65	6.2308	25	6.0687	6	6.3333	72	6.3472	24	6.6944
customer service performance	116	5.8707	174	5.8314	64	5.8958	25	5.8533	4	6.3333	65	5.8584	21	6.4127
information performance	105	4.7571	166	5.0904	59	5.1314	21	5.2857	2	5.8750	67	5.1418	22	5.7727
contactability performance	116	6.0431	180	5.9972	63	5.9841	24	5.7500	4	6.8750	70	5.7786	22	6.4318
no ads performance	109	5.9128	176	5.9915	64	6.1563	20	5.7500	4	6.1250	70	6.1286	24	6.5208
personalisation performance	102	3.9481	168	4.2857	61	4.3934	24	4.1875	4	3.7500	67	4.3731	23	4.5870
company image performance	125	5.9980	189	6.0899	69	6.1449	24	6.0192	6	6.0000	77	6.2857	25	6.2200
product availability performance	117	5.3547	181	5.3039	68	5.4394	25	5.3200	6	5.2500	71	5.0282	24	5.6875
website gap	116	-0.7198	171	-0.5263	61	-0.3381	24	-0.6146	3	-0.5417	69	-0.4583	23	-0.6033
trust gap	115	-0.5449	178	-0.2959	64	-0.5260	24	-0.6250	6	-0.8111	72	-0.4444	23	-0.2319
customer service gap	114	-0.7544	173	-0.6590	64	-0.6583	23	-0.7067	4	-0.6667	65	-0.5897	21	-0.3333
information gap	102	-1.4730	163	-1.0383	59	-0.9915	21	-0.9843	2	-0.2500	65	-0.9808	22	-0.8750
contactability gap	115	-0.5043	177	-0.4681	62	-0.4839	24	-0.8125	4	-0.1250	70	-0.5500	21	-0.2143
no ads gap	108	-0.3981	178	-0.3977	64	-0.1641	20	-0.9000	4	-0.7500	70	-0.1214	23	-0.2174
personalisation gap	101	0.2079	166	0.2139	61	0.3443	24	-0.2083	4	0.2500	67	0.2239	23	-0.1739
company image gap	123	1.0978	187	1.0882	67	0.9925	26	0.6538	6	2.3333	77	1.0195	25	0.6200
product availability gap	118	-0.1466	179	-0.1453	64	0.1094	25	-0.4600	6	-0.5833	71	-0.3592	24	-0.1667

	Asymp. Sig.												
website importance	0.000	0.010	0.005	0.008	0.029	0.216	0.216	0.000	0.548	0.200	0.000	0.000	0.002
trust importance	0.602	0.574	0.001	0.442	0.291	0.178	0.623	0.067	0.648	0.294	0.760	0.494	0.438
customer service importance	0.001	0.137	0.038	0.096	0.036	0.771	0.001	0.910	0.910	0.185	0.001	0.146	0.702
information importance	0.001	0.012	0.105	0.367	0.189	0.447	0.027	0.822	0.565	0.050	0.135	0.753	0.753
contactability importance	0.001	0.017	0.004	0.440	0.014	0.874	0.001	0.894	0.894	0.021	0.002	0.627	0.044
no ads importance	0.360	0.608	0.263	0.101	0.991	0.093	0.020	0.389	0.389	0.537	0.223	0.008	0.191
personalisation importance	0.016	0.000	0.113	0.006	0.331	0.092	0.040	0.597	0.594	0.544	0.177	0.011	0.332
company image importance	0.002	0.000	0.249	0.335	0.662	0.077	0.000	0.866	0.717	0.001	0.000	0.000	0.595
product availability importance	0.001	0.078	0.138	0.050	0.003	0.126	0.215	0.185	0.811	0.811	0.009	0.165	0.364
website performance	0.000	0.072	0.006	0.038	0.007	0.503	0.000	0.895	0.720	0.000	0.000	0.031	0.194
trust performance	0.215	0.390	0.187	0.415	0.085	0.198	0.058	0.627	0.795	0.023	0.064	0.886	0.886
customer service performance	0.012	0.105	0.010	0.142	0.146	0.133	0.001	0.330	0.465	0.022	0.021	0.068	0.566
information performance	0.000	0.109	0.074	0.144	0.003	0.407	0.008	0.256	0.638	0.000	0.000	0.068	0.171
contactability performance	0.000	0.001	0.054	0.072	0.047	0.085	0.002	0.989	0.774	0.001	0.004	0.004	0.785
no ads performance	0.009	0.113	0.152	0.267	0.187	0.712	0.022	0.903	0.422	0.031	0.342	0.423	0.423
personalisation performance	0.000	0.008	0.206	0.485	0.913	0.097	0.085	0.322	0.629	0.004	0.033	0.033	0.618
company image performance	0.000	0.000	0.014	0.018	0.065	0.065	0.000	0.599	0.759	0.000	0.000	0.000	0.862
product availability performance	0.000	0.046	0.036	0.334	0.000	0.081	0.018	0.183	0.957	0.000	0.000	0.000	0.210
website gap	0.744	0.327	0.384	0.197	0.426	0.617	0.487	0.946	0.188	0.188	0.097	0.270	0.270
trust gap	0.328	0.768	0.444	0.070	0.415	0.831	0.328	0.123	0.366	0.013	0.042	0.042	0.585
customer service gap	0.685	0.244	0.583	0.776	0.849	0.166	0.611	0.690	0.438	0.833	0.211	0.227	0.227
information gap	0.300	0.631	0.597	0.481	0.123	0.917	0.370	0.482	0.443	0.087	0.730	0.138	0.138
contactability gap	0.420	0.020	0.181	0.427	0.971	0.115	0.576	0.253	0.008	0.008	0.516	0.085	0.148
no ads gap	0.443	0.691	0.194	0.595	0.728	0.148	0.603	0.492	0.044	0.384	0.087	0.298	0.298
personalisation gap	0.924	0.385	0.330	0.758	0.600	0.765	0.311	0.229	0.505	0.642	0.568	0.664	0.664
company image gap	0.174	0.047	0.307	0.002	0.752	0.425	0.012	0.602	0.795	0.055	0.012	0.754	0.754
product availability gap	0.788	0.268	0.287	0.885	0.943	0.343	0.374	0.281	0.088	0.845	0.294	0.373	0.373

Service
CATEGORY

	higher v interned	higher v supervise	higher v manual	higher v retired	interned v supervise	interned v manual	interned v retired	superv v manual	superv v retired	man v retired
website importance	0.922	0.367	0.668	0.119	0.392	0.681	0.129	0.331	0.680	0.149
trust importance	0.142	0.028	0.320	0.252	0.294	0.978	0.833	0.473	0.271	0.669
customer service importance	0.102	0.121	0.446	0.519	0.319	0.708	0.379	0.681	0.636	0.827
information importance										
contactability importance	0.019	0.791	0.317	0.311	0.028	0.497	0.328	0.262	0.265	0.907
no ads importance	0.912	0.932	0.506	0.554	0.827	0.592	0.501	0.505	0.676	0.305
personalisation importance	0.408	0.311	0.995	0.965	0.079	0.579	0.514	0.465	0.400	0.900
company image importance	0.022	0.592	0.645	0.395	0.138	0.381	0.008	0.993	0.187	0.288
product availability importance	0.216	0.916	0.775	0.308	0.304	0.341	0.041	0.757	0.328	0.643
website performance	0.276	0.185	0.431	0.031	0.041	0.813	0.004	0.155	0.574	0.022
trust performance	0.342	0.164	0.823	0.165	0.035	0.570	0.823	0.190	0.865	0.207
customer service performance	0.536	0.822	0.272	0.071	0.290	0.150	0.828	0.540	0.260	0.821
information performance										
contactability performance	0.647	0.102	0.073	0.280	0.027	0.034	0.100	0.611	0.691	0.339
no ads performance	0.077	0.406	0.281	0.052	0.025	0.046	0.995	0.730	0.432	0.916
personalisation performance	0.184	0.640	0.080	0.612	0.124	0.007	0.095	0.251	0.960	0.248
company image performance	0.245	0.418	0.914	0.034	0.932	0.468	0.603	0.607	0.020	0.108
product availability performance	0.053	0.988	0.557	0.489	0.099	0.410	0.613	0.601	0.308	0.244
website gap	0.255	0.197	0.654	0.365	0.034	0.698	0.039	0.224	0.717	0.388
trust gap	0.977	0.800	0.370	0.240	0.000	0.347	0.215	0.035	0.009	0.879
customer service gap	0.841	0.846	0.233	0.061	0.836	0.157	0.038	0.196	0.058	0.805
information gap										
contactability gap	0.427	0.138	0.046	0.095	0.313	0.131	0.275	0.639	0.903	0.593
no ads gap	0.458	0.290	0.054	0.521	0.113	0.028	0.241	0.172	0.751	0.113
personalisation gap	0.923	0.963	0.555	0.964	0.582	0.588	0.912	0.772	0.502	0.480
company image gap	0.118	0.640	0.885	0.775	0.388	0.402	0.273	0.833	0.664	0.958
product availability gap	0.960	0.199	0.784	0.924	0.304	0.793	0.615	0.294	0.159	0.816

	higher v interned	higher v supervise	higher v manual	higher v student	higher v other	interned v supervise	interned v manual	interned v student	interned v other	superv v manual	superv v student	superv v other	man v student	man v other	student v other
website importance	0.115	0.148	0.550	0.892	0.022	0.884	0.294	0.294	0.066	0.760	0.475	0.066	0.414	0.254	0.018
trust importance	0.210	0.326	0.708	0.594	0.450	0.978	0.785	0.533	0.165	0.782	0.666	0.196	0.977	0.398	0.281
customer service importance	0.214	0.244	0.380	0.099	0.151	0.866	0.915	0.098	0.048	0.872	0.218	0.044	0.301	0.064	0.006
information importance	0.289	0.369	0.507	0.323	0.071	0.955	0.922	0.669	0.007	1.000	0.938	0.020	0.943	0.038	0.016
contactability importance	0.372	0.191	0.729	0.055	0.548	0.545	0.926	0.193	0.303	0.701	0.563	0.191	0.398	0.519	0.118
no ads importance	0.578	0.873	0.927	0.272	0.121	0.748	0.072	0.072	0.183	0.789	0.150	0.234	0.404	0.215	0.020
personalisation importance	0.057	0.245	0.097	0.096	0.018	0.913	0.456	0.700	0.112	0.546	0.750	0.103	0.654	0.423	0.213
company image importance	0.788	0.297	0.320	0.085	0.035	0.384	0.315	0.069	0.038	0.745	0.501	0.172	0.922	0.363	0.417
product availability importance	0.775	0.545	0.417	0.499	0.166	0.653	0.305	0.619	0.109	0.274	0.982	0.127	0.198	0.565	0.087
website performance	0.413	0.048	0.727	0.956	0.129	0.181	0.968	0.416	0.307	0.492	0.043	0.966	0.748	0.431	0.117
customer service performance	0.828	0.517	0.955	0.116	0.003	0.266	0.399	0.734	0.066	0.820	0.493	0.019	0.488	0.072	0.048
information performance	0.926	0.773	0.842	0.990	0.030	0.782	0.820	0.944	0.632	0.970	0.758	0.075	0.889	0.145	0.637
contactability performance	0.088	0.147	0.114	0.119	0.002	0.860	0.411	0.788	0.020	0.602	0.912	0.052	0.559	0.282	0.055
no ads performance	0.987	0.914	0.444	0.086	0.117	0.827	0.453	0.073	0.093	0.441	0.143	0.228	0.781	0.107	0.012
personalisation performance	0.344	0.086	0.993	0.182	0.006	0.238	0.868	0.554	0.012	0.285	0.821	0.112	0.473	0.032	0.046
company image performance	0.016	0.064	0.314	0.061	0.142	0.852	0.935	0.687	0.499	0.838	0.927	0.871	0.824	0.478	0.650
product availability performance	0.233	0.285	0.807	0.032	0.141	0.887	0.733	0.250	0.380	0.641	0.361	0.472	0.297	0.341	0.657
website gap	0.598	0.617	0.808	0.082	0.260	0.354	0.883	0.195	0.151	0.426	0.055	0.497	0.519	0.182	0.031
customer service gap	0.072	0.803	0.204	0.048	0.428	0.598	0.466	0.897	0.555	0.472	0.207	0.947	0.588	0.572	0.572
information gap	0.002	0.308	0.418	0.126	0.018	0.120	0.511	0.274	0.545	0.736	0.686	0.102	0.982	0.350	0.191
contactability gap	0.151	0.044	0.081	0.068	0.055	0.630	0.682	0.377	0.232	0.660	0.705	0.445	0.830	0.551	0.191
no ads gap	0.055	0.444	0.522	0.978	0.114	0.551	0.352	0.387	0.578	0.260	0.631	0.845	0.588	0.246	0.902
personalisation gap	0.514	0.284	0.172	0.110	0.227	0.621	0.148	0.081	0.211	0.008	0.784	0.800	0.823	0.933	0.933
company image gap	0.905	0.050	0.248	0.938	0.317	0.600	0.301	0.792	0.484	0.218	0.961	0.287	0.266	0.637	0.394
product availability gap	0.799	0.656	0.193	0.855	0.283	0.402	0.112	0.688	0.203	0.297	0.782	0.539	0.244	0.759	0.366
	0.410	0.328	0.139	0.146	0.831	0.093	0.384	0.482	0.792	0.056	0.931	0.409	0.696	0.401	0.487

EDUCATION

COMPANY = EntzCo
CATEGORY

	none		vocational		GCSE / O		A Levels		UG		PG	
	N	MEAN	N	MEAN	N	MEAN	N	MEAN	N	MEAN	N	MEAN
website importance	116	6.5657	157	6.4029	360	6.3951	325	6.3685	409	6.2803	317	6.3446
trust importance	118	6.8446	164	6.7419	373	6.7131	346	6.7582	423	6.7636	325	6.7826
customer service importance	117	6.6382	160	6.6271	357	6.5219	335	6.4896	418	6.4689	319	6.4953
information importance	111	6.4302	158	6.4114	359	6.3809	327	6.2859	422	6.2352	317	6.2776
contactability importance	110	5.7773	148	5.8376	337	5.8976	315	5.7238	387	5.5879	299	5.4632
no ads importance	118	6.5000	165	6.5606	368	6.3981	335	6.4313	420	6.4429	324	6.5062
personalisation importance	108	4.8657	159	4.3428	354	4.3531	320	3.9219	416	3.7356	314	3.8137
company image importance	120	5.4333	162	4.8519	372	4.7460	341	4.3974	419	4.3079	322	4.2065
product availability importance	116	5.9612	161	5.5217	366	5.5546	338	5.5176	422	5.4704	323	5.6037
website performance	120	6.5698	153	6.4575	344	6.4350	324	6.3275	409	6.1751	309	6.1323
trust performance	120	6.7500	158	6.6730	366	6.6257	342	6.5478	417	6.5238	320	6.4313
customer service performance	112	6.5595	154	6.5909	339	6.4228	319	6.2435	402	6.2247	305	6.2656
information performance	114	6.4474	153	6.3775	347	6.3048	318	6.0991	412	6.0601	308	5.9221
contactability performance	90	5.8167	127	5.5984	297	5.6717	270	5.2907	347	5.1398	255	5.0294
no ads performance	114	6.5677	155	6.5839	346	6.4368	323	6.3560	407	6.3071	315	6.2063
personalisation performance	110	5.3318	152	4.8289	332	5.0166	302	4.6076	401	4.4975	303	4.3102
company image performance	119	6.0294	160	5.7750	364	5.6717	337	5.3501	414	5.2343	312	5.1298
product availability performance	117	6.0812	158	5.7785	352	5.7884	332	5.6913	413	5.5763	317	5.5789
website gap	113	0.0288	149	-0.0327	340	0.0426	316	-0.0534	402	-0.1042	306	-0.2120
trust gap	114	-0.0906	156	-0.1389	363	-0.0882	339	-0.2045	413	-0.2381	318	-0.3470
customer service gap	108	-0.0895	153	-0.0871	338	-0.1085	315	-0.2593	399	-0.2414	302	-0.2439
information gap	109	0.0275	150	-0.1233	343	-0.0773	311	-0.1853	409	-0.1828	305	-0.3590
contactability gap	89	-0.0955	128	-0.3016	293	-0.1758	267	-0.3801	343	-0.4985	253	-0.4130
no ads gap	110	0.0682	155	-0.0258	346	0.0029	321	-0.0981	404	-0.1584	314	-0.3041
personalisation gap	104	0.4183	151	0.4272	330	0.6076	301	0.8196	398	0.7060	303	0.4620
company image gap	116	0.5580	157	0.8854	362	0.9227	336	0.9271	411	0.9015	311	0.9196
product availability gap	114	0.1053	157	0.2008	350	0.1871	331	0.1329	410	0.0768	315	-0.0556

ServCo
CATEGORY

	none		vocational		GCSE / O		A Levels		UG		PG	
	N	MEAN	N	MEAN	N	MEAN	N	MEAN	N	MEAN	N	MEAN
website importance	20	6.2938	36	6.1447	54	6.3358	54	6.1620	109	6.0493	114	5.9879
trust importance	18	6.7778	36	6.5000	61	6.7760	52	6.6090	114	6.4474	113	6.5516
customer service importance	18	6.4444	34	6.1765	52	6.4872	52	6.1474	111	5.9970	108	6.0556
information importance	0		0		0		0		0		0	
contactability importance	20	6.4000	39	6.0513	56	6.4554	52	6.0385	113	5.9867	105	5.9048
no ads importance	20	6.5750	39	6.2949	55	6.4091	54	6.4537	119	6.0252	116	6.2759
personalisation importance	20	4.6750	34	4.0441	54	4.3796	53	3.8019	110	3.6909	113	3.6593
company image importance	19	5.1053	41	4.8293	60	4.9917	56	4.3750	119	4.4370	119	4.5084
product availability importance	18	5.0000	36	4.9167	55	5.0364	52	4.9519	115	4.8913	108	4.8333
website performance	18	5.7153	35	5.4857	53	5.8231	47	5.4840	102	5.6679	102	5.5098
trust performance	19	6.2708	30	5.4667	53	6.1572	42	5.9524	98	5.9288	95	5.7298
customer service performance	17	6.0196	31	5.4731	46	5.9275	42	5.2302	94	5.3830	88	5.1744
information performance	0		0		0		0		0		0	
contactability performance	16	5.5313	34	4.8382	47	5.5106	42	4.9405	92	4.8533	82	4.8476
no ads performance	18	5.9444	30	5.7500	48	6.0833	43	5.4884	98	5.5255	94	5.4828
personalisation performance	18	4.8889	28	4.4821	49	4.7653	45	4.2556	97	4.2990	98	4.2704
company image performance	18	5.6389	37	5.2568	58	5.3879	48	5.1250	111	5.1847	107	5.1215
product availability performance	17	5.2941	32	4.9083	50	5.1500	43	5.1163	105	5.2619	99	5.1212
website gap	18	-0.5000	34	-0.7537	53	-0.5142	46	-0.6250	97	-0.3879	100	-0.4338
trust gap	15	-0.5111	29	-1.0345	52	-0.6346	42	-0.5635	96	-0.4097	92	-0.7681
customer service gap	16	-0.3750	30	-0.8222	45	-0.5259	42	-0.7857	93	-0.5125	85	-0.8353
information gap	0		0		0		0		0		0	
contactability gap	16	-0.7188	34	-1.1912	46	-0.9239	41	-0.9268	92	-1.0054	77	-1.0390
no ads gap	18	-0.5833	30	-0.4833	48	-0.4479	43	-0.8953	98	-0.4490	93	-0.7204
personalisation gap	18	0.1887	28	0.1807	49	0.2857	44	0.4545	96	0.5000	96	0.4948
company image gap	18	0.4722	37	0.2432	57	0.3947	48	0.7917	111	0.7182	106	0.5755
product availability gap	17	0.1471	31	0.0645	50	0.1100	43	0.1744	105	0.3618	99	0.2071

ToolCo
CATEGORY

	none		vocational		GCSE / O		A Levels		UG		PG	
	N	MEAN	N	MEAN	N	MEAN	N	MEAN	N	MEAN	N	MEAN
website importance			36	6.2014	70	5.8643	64	5.8047	139	5.9775	95	6.1355
trust importance			36	6.5926	75	6.2089	69	6.3720	137	6.2360	92	6.3587
customer service importance			35	6.1905	72	5.8611	64	5.9896	136	5.9804	88	6.1364
information importance			31	6.2581	70	5.9929	66	5.8182	135	5.9444	84	6.0855
contactability importance			35	6.1429	79	6.0633	71	6.1831	152	6.0592	97	6.2732
no ads importance			35	6.4571	76	6.1776	70	6.2500	141	6.2340	93	6.2903
personalisation importance			36	4.1389	71	3.8521	69	3.2971	141	3.6170	94	3.5160
company image importance			37	4.8784	77	4.9545	67	4.5522	150	4.4733	100	4.5550
product availability importance			36	5.1250	76	5.0592	63	4.3492	138	4.7029	94	4.8830
website performance			34	5.5809	65	5.3327	65	5.1846	128	5.0244	83	5.1521
trust performance			33	5.7172	65	5.7179	63	5.7037	128	5.3588	78	5.5263
customer service performance			33	5.2323	64	5.4323	59	5.2542	120	4.8500	72	5.1806
information performance			31	5.0081	63	5.2341	59	4.9788	112	4.7388	69	5.0471
contactability performance			34	5.3382	73	5.5342	66	5.5806	135	5.2111	84	5.2976
no ads performance			33	5.8030	65	5.5923	62	5.6774	122	5.3852	72	5.5069
personalisation performance			34	4.6765	64	4.4063	61	3.9754	128	3.8945	77	4.0325
company image performance			35	6.1143	73	5.7329	68	5.7868	143	5.6119	88	5.4773
product availability performance			33	5.0455	70	4.8357	63	4.6825	129	4.6899	80	4.6375
website gap			33	-0.6667	62	-0.6794	62	-0.5585	124	-0.9274	81	-1.0216
trust gap			33	-0.8889	65	-0.6462	62	-0.6559	123	-0.8618	76	-0.8816
customer service gap			33	-0.9798	64	-0.5052	57	-0.7310	118	-1.0621	72	-0.9491
information gap			28	-1.0804	62	-0.7903	58	-0.8578	111	-1.1486	66	-1.0076
contactability gap			33	-0.8030	73	-0.5959	66	-0.5909	134	-0.8321	83	-0.9217
no ads gap			31	-0.6813	65	-0.6789	62	-0.5887	122	-0.7787	72	-0.7292
personalisation gap			34	0.4706	63	0.3413	61	0.4754	125	0.3040	77	0.3506
company image gap			34	1.1785	72	0.6944	66	1.1591	141	1.1383	88	0.8011
product availability gap			33	-0.1818	69	-0.3116	61	0.3607	124	0.0524	79	-0.2858

COMPANY = SportCo
 CATEGORY

	none		vocational		GCSE / O		A Levels		UG		PG	
	N	MEAN	N	MEAN	N	MEAN	N	MEAN	N	MEAN	N	MEAN
website importance	21	6.0833	34	6.1176	116	6.3125	126	6.3621	117	6.4177	95	6.3355
trust importance	21	6.4444	34	6.7157	119	6.8162	132	6.7399	123	6.8347	95	6.7684
customer service importance	20	6.3667	33	6.5455	118	6.4463	132	6.5934	124	6.5887	97	6.5258
information importance	18	5.8333	29	5.8793	109	6.1124	129	6.2422	119	6.2185	91	6.1484
contactability importance	22	6.0682	34	6.5882	125	6.3760	131	6.5811	127	6.6083	92	6.3859
no ads importance	21	6.0952	33	6.1970	118	6.2288	130	6.3731	122	6.5041	96	6.4792
personalisation importance	20	4.8250	33	3.8636	119	4.3445	128	3.9727	121	3.6860	91	3.8462
company image importance	23	5.8478	36	5.2778	128	5.3730	135	5.0296	129	4.8643	97	4.7526
product availability importance	22	5.4318	34	5.3971	120	5.3833	134	5.4851	122	5.4508	96	5.5833
website performance	18	5.8472	30	5.8333	113	6.0608	122	5.9160	120	5.6792	93	5.4677
trust performance	20	5.9000	30	6.2000	118	6.4253	128	6.4323	121	6.3113	91	6.1392
customer service performance	18	5.9815	28	5.7738	111	6.2042	125	6.0213	118	5.7684	89	5.5243
information performance	17	5.0147	27	4.8704	98	5.4847	116	5.2047	112	4.8371	88	4.7188
contactability performance	20	5.8000	29	6.0172	118	6.1356	128	6.0547	119	6.1176	83	5.6205
no ads performance	19	6.3158	25	6.2600	109	6.1608	128	5.9921	115	6.1043	89	5.8427
personalisation performance	19	5.1053	30	3.9000	106	4.7311	120	4.2417	111	3.9144	79	3.8797
company image performance	21	6.3571	34	6.1618	128	6.3016	133	6.1729	127	6.0276	97	5.7887
product availability performance	18	4.6944	34	5.4412	115	5.5391	131	5.2366	120	5.3333	93	5.2903
website gap	18	-0.4028	30	-0.2583	111	-0.2689	122	-0.4518	115	-0.7109	91	-0.8736
trust gap	20	-0.5167	30	-0.5444	113	-0.2212	128	-0.3042	120	-0.5167	91	-0.6190
customer service gap	18	-0.3704	28	-0.7282	109	-0.2630	124	-0.5699	118	-0.8305	89	-1.0150
information gap	18	-0.8281	28	-1.1058	97	-0.6368	115	-1.0874	111	-1.4054	84	-1.4288
contactability gap	19	-0.1842	29	-0.6034	117	-0.2564	128	-0.4961	117	-0.5000	81	-0.7284
no ads gap	19	0.0789	25	0.1000	107	-0.0701	128	-0.3849	115	-0.3870	89	-0.6067
personalisation gap	19	0.2368	30	0.1500	105	0.2381	120	0.1833	111	0.2117	77	0.0065
company image gap	21	0.4048	34	0.8529	124	0.8952	133	1.1165	124	1.1331	96	1.0573
product availability gap	18	-0.7778	33	-0.0303	113	0.1283	131	-0.2901	119	-0.1218	92	-0.2828

ServCo
CATEGORY

	none v vocation	none v GCSE	none v A levels	none v UG	none v PG	voc v GCSE	voc v A Lev	voc v UG	voc v PG	GCSE v A Levels	GCSE v UG	GCSE v PG	A Level v UG	A Level v PG	UG v PG
	Asymp.	Asymp.	Asymp.	Asymp.	Asymp.	Asymp.	Asymp.	Asymp.	Asymp.	Asymp.	Asymp.	Asymp.	Asymp.	Asymp.	Asymp.
website importance	0.158	0.591	0.176	0.070	0.023	0.208	0.968	0.833	0.480	0.217	0.052	0.012	0.649	0.271	0.454
trust importance	0.468	0.591	0.956	0.305	0.538	0.111	0.423	0.785	0.797	0.418	0.017	0.079	0.170	0.456	0.421
customer service importance	0.361	0.620	0.419	0.169	0.154	0.088	0.902	0.685	0.629	0.106	0.012	0.007	0.571	0.491	0.929
information importance															
contactability importance	0.419	0.673	0.316	0.332	0.095	0.086	0.916	0.964	0.339	0.061	0.056	0.003	0.838	0.439	0.234
no ads importance	0.335	0.559	0.591	0.080	0.444	0.587	0.561	0.340	0.698	0.965	0.086	0.768	0.075	0.779	0.082
personalisation importance	0.136	0.352	0.034	0.008	0.013	0.333	0.529	0.174	0.278	0.056	0.004	0.009	0.536	0.595	0.944
company image importance	0.309	0.417	0.019	0.029	0.047	0.566	0.079	0.145	0.177	0.007	0.014	0.020	0.568	0.540	0.920
product availability importance	0.427	0.681	0.428	0.359	0.353	0.624	0.973	0.986	0.972	0.597	0.554	0.539	0.992	0.990	0.984
website performance	0.468	0.910	0.480	0.475	0.194	0.291	0.914	0.795	0.805	0.305	0.257	0.063	0.817	0.610	0.378
trust performance	0.013	0.929	0.914	0.358	0.153	0.011	0.064	0.070	0.237	0.775	0.264	0.063	0.579	0.232	0.350
customer service performance	0.301	0.969	0.024	0.011	0.007	0.219	0.363	0.377	0.215	0.010	0.003	0.001	0.698	0.880	0.470
information performance															
contactability performance	0.193	0.981	0.180	0.042	0.041	0.081	0.882	0.804	0.781	0.061	0.003	0.003	0.575	0.419	0.720
no ads performance	0.712	0.594	0.192	0.166	0.128	0.302	0.258	0.229	0.167	0.015	0.008	0.004	0.887	0.935	0.784
personalisation performance	0.262	0.384	0.027	0.046	0.032	0.527	0.303	0.515	0.416	0.037	0.112	0.064	0.457	0.540	0.817
company image performance	0.200	0.303	0.043	0.075	0.065	0.659	0.390	0.557	0.556	0.154	0.200	0.223	0.758	0.748	0.967
product availability performance	0.268	0.656	0.490	0.938	0.539	0.316	0.405	0.109	0.275	0.833	0.495	0.963	0.341	0.717	0.398
website gap	0.408	0.442	0.834	0.840	0.585	0.633	0.552	0.572	0.529	0.773	0.935	0.912	0.900	0.901	0.924
trust gap	0.316	0.981	0.485	0.657	0.541	0.305	0.119	0.091	0.539	0.345	0.467	0.446	0.733	0.098	0.084
customer service gap	0.246	0.328	0.175	0.244	0.145	0.659	0.962	0.760	0.760	0.473	0.634	0.296	0.800	0.809	0.474
information gap															
contactability gap	0.259	0.563	0.645	0.172	0.236	0.464	0.335	0.914	0.785	0.868	0.293	0.492	0.234	0.331	0.791
no ads gap	0.893	0.781	0.220	0.767	0.419	0.617	0.119	0.683	0.316	0.047	0.399	0.120	0.164	0.367	0.445
personalisation gap	0.765	0.415	0.247	0.162	0.221	0.657	0.364	0.215	0.305	0.468	0.286	0.405	0.821	0.993	0.841
company image gap	0.488	0.546	0.543	0.844	0.885	0.908	0.093	0.217	0.162	0.108	0.191	0.216	0.515	0.433	0.948
product availability gap	0.930	0.458	0.225	0.153	0.437	0.553	0.306	0.113	0.447	0.485	0.135	0.725	0.389	0.822	0.228

ToolCo
CATEGORY

	none v vocation	none v GCSE	none v A levels	none v UG	none v PG	voc v GCSE	voc v A Lev	voc v UG	voc v PG	GCSE v A Levels	GCSE v UG	GCSE v PG	A Level v UG	A Level v PG	UG v PG
	NA	NA	NA	NA	NA	Asymp.	Asymp.	Asymp.	Asymp.	Asymp.	Asymp.	Asymp.	Asymp.	Asymp.	Asymp.
website importance						0.213	0.043	0.027	0.213	0.489	0.589	0.674	0.957	0.253	0.170
trust importance						0.063	0.035	0.003	0.057	0.991	0.272	0.931	0.239	0.933	0.184
customer service importance						0.128	0.102	0.036	0.212	0.813	0.581	0.457	0.580	0.657	0.272
information importance						0.145	0.009	0.022	0.081	0.154	0.400	0.784	0.409	0.086	0.410
contactability importance						0.455	0.442	0.136	0.846	0.983	0.371	0.419	0.227	0.438	0.049
no ads importance						0.177	0.062	0.057	0.173	0.627	0.651	0.871	0.916	0.497	0.491
personalisation importance						0.477	0.007	0.055	0.045	0.039	0.221	0.191	0.116	0.497	0.496
company image importance						0.648	0.360	0.072	0.268	0.101	0.005	0.059	0.403	0.818	0.534
product availability importance						0.759	0.049	0.235	0.533	0.007	0.028	0.216	0.214	0.072	0.387
website performance						0.190	0.126	0.005	0.091	0.733	0.109	0.346	0.242	0.682	0.543
trust performance						0.776	0.658	0.046	0.219	0.940	0.034	0.262	0.025	0.248	0.304
customer service performance						0.791	0.948	0.089	0.682	0.682	0.008	0.342	0.027	0.580	0.103
information performance						0.532	0.902	0.141	0.929	0.380	0.009	0.503	0.163	0.818	0.103
contactability performance						0.609	0.440	0.498	0.912	0.723	0.088	0.396	0.044	0.265	0.445
no ads performance						0.218	0.498	0.023	0.174	0.535	0.182	0.760	0.052	0.368	0.382
personalisation performance						0.282	0.005	0.001	0.016	0.026	0.003	0.069	0.768	0.744	0.504
company image performance						0.072	0.057	0.003	0.003	0.851	0.401	0.161	0.278	0.095	0.368
product availability performance						0.409	0.170	0.146	0.120	0.520	0.495	0.333	0.811	0.882	0.641
website gap						0.640	0.787	0.341	0.288	0.912	0.104	0.088	0.128	0.195	0.763
trust gap						0.542	0.858	0.942	0.925	0.525	0.288	0.174	0.657	0.441	0.826
customer service gap						0.143	0.650	0.897	0.798	0.183	0.024	0.085	0.457	0.789	0.622
information gap						0.154	0.560	0.958	0.555	0.400	0.081	0.421	0.488	0.930	0.478
contactability gap						0.307	0.278	0.878	0.798	0.883	0.222	0.377	0.179	0.369	0.812
no ads gap						0.981	0.504	0.729	0.956	0.377	0.636	0.960	0.186	0.443	0.603
personalisation gap						0.321	0.397	0.345	0.502	0.996	0.987	0.917	0.988	0.962	0.886
company image gap						0.119	0.901	0.958	0.295	0.046	0.007	0.444	0.647	0.184	0.056
product availability gap						0.504	0.178	0.376	0.778	0.016	0.047	0.628	0.397	0.042	0.122

COMPANY = SportCo
 CATEGORY

	none v vocation	none v GCSE	none v A levels	none v UG	none v PG	voc v GCSE	voc v A Lev	voc v UG	voc v PG	GCSE v A Levels	GCSE v UG	GCSE v PG	A Level v UG	A Level v PG	UG v PG
	Asymp.	Asymp.	Asymp.	Asymp.	Asymp.	Asymp.	Asymp.	Asymp.	Asymp.	Asymp.	Asymp.	Asymp.	Asymp.	Asymp.	Asymp.
website importance	0.726	0.809	0.667	0.674	0.847	0.159	0.176	0.069	0.332	0.918	0.689	0.640	0.656	0.764	0.428
trust importance	0.762	0.966	0.435	0.259	0.727	0.802	0.550	0.270	0.901	0.180	0.041	0.572	0.484	0.472	0.159
customer service importance	0.927	0.989	0.689	0.797	0.956	0.844	0.750	0.932	0.725	0.430	0.646	0.807	0.741	0.296	0.464
information importance	0.938	0.451	0.260	0.381	0.505	0.364	0.177	0.312	0.456	0.491	0.905	0.874	0.549	0.397	0.777
contactability importance	0.179	0.452	0.149	0.110	0.890	0.356	0.973	0.893	0.151	0.150	0.091	0.437	0.793	0.028	0.014
no ads importance	0.838	0.550	0.259	0.178	0.153	0.650	0.282	0.171	0.140	0.370	0.192	0.198	0.720	0.610	0.873
personalisation importance	0.017	0.333	0.021	0.003	0.011	0.095	0.558	0.733	0.991	0.059	0.002	0.028	0.164	0.489	0.584
company image importance	0.111	0.112	0.007	0.001	0.001	0.562	0.441	0.116	0.063	0.026	0.001	0.001	0.192	0.092	0.573
product availability importance	0.558	0.585	0.652	0.689	0.784	0.876	0.897	0.884	0.673	0.632	0.664	0.432	0.966	0.682	0.709
website performance	0.974	0.309	0.734	0.545	0.190	0.174	0.726	0.427	0.099	0.161	0.002	0.000	0.076	0.003	0.130
trust performance	0.810	0.244	0.291	0.724	0.971	0.260	0.378	0.977	0.575	0.683	0.056	0.014	0.124	0.034	0.421
customer service performance	0.597	0.708	0.813	0.224	0.064	0.143	0.468	0.722	0.239	0.172	0.004	0.000	0.057	0.001	0.103
information performance	0.546	0.240	0.607	0.521	0.353	0.014	0.107	0.667	0.845	0.231	0.001	0.000	0.028	0.009	0.368
contactability performance	0.665	0.343	0.641	0.540	0.534	0.837	0.672	0.869	0.070	0.347	0.592	0.001	0.657	0.006	0.002
no ads performance	0.525	0.485	0.137	0.161	0.064	0.911	0.304	0.414	0.140	0.096	0.161	0.022	0.666	0.407	0.209
personalisation performance	0.004	0.257	0.010	0.001	0.000	0.003	0.117	0.712	0.907	0.005	0.000	0.000	0.071	0.024	0.871
company image performance	0.124	0.226	0.093	0.049	0.005	0.297	0.710	0.640	0.062	0.337	0.048	0.000	0.302	0.001	0.065
product availability performance	0.109	0.033	0.193	0.116	0.169	0.840	0.405	0.883	0.469	0.078	0.277	0.142	0.489	0.847	0.690
website gap	0.949	0.664	0.550	0.167	0.054	0.738	0.584	0.140	0.026	0.123	0.003	0.000	0.094	0.004	0.231
trust gap	0.533	0.692	0.980	0.328	0.173	0.193	0.381	0.709	0.377	0.510	0.009	0.001	0.040	0.007	0.439
customer service gap	0.364	0.912	0.373	0.048	0.017	0.186	0.814	0.378	0.113	0.067	0.000	0.000	0.038	0.002	0.229
information gap	0.287	0.867	0.288	0.069	0.088	0.081	0.646	0.421	0.446	0.064	0.000	0.001	0.064	0.083	0.912
contactability gap	0.587	0.902	0.229	0.149	0.043	0.484	0.813	0.718	0.315	0.119	0.081	0.008	0.799	0.150	0.198
no ads gap	0.615	0.370	0.024	0.041	0.041	0.904	0.102	0.179	0.048	0.006	0.029	0.001	0.535	0.422	0.183
personalisation gap	0.900	0.884	0.958	0.913	0.659	0.939	0.857	0.760	0.793	0.913	0.751	0.640	0.794	0.529	0.427
company image gap	0.125	0.056	0.025	0.003	0.027	0.826	0.484	0.300	0.623	0.264	0.038	0.342	0.473	0.974	0.449
product availability gap	0.057	0.041	0.108	0.051	0.079	0.482	0.463	0.888	0.592	0.033	0.441	0.083	0.250	0.799	0.363

INCOME

COMPANY = EntzCo
CATEGORY

	under 15k		£15k-19999		£20k-29999		£30k-39999		£40k-100k		Over £100k	
	N	MEAN	N	MEAN	N	MEAN	N	MEAN	N	MEAN	N	MEAN
website importance	208	6.4624	190	6.4954	340	6.3787	310	6.2411	438	6.3325	84	6.2693
trust importance	213	6.7371	203	6.8128	351	6.8053	321	6.6989	462	6.7489	84	6.7738
customer service importance	212	6.4811	195	6.5726	344	6.5804	317	6.4595	447	6.4884	84	6.4921
information importance	206	6.4138	195	6.4372	343	6.3477	306	6.2492	454	6.2225	78	6.1859
contactability importance	194	5.8531	181	5.8204	319	5.6897	300	5.6350	419	5.5907	75	5.6267
no ads importance	211	6.5545	200	6.4450	349	6.4799	315	6.4357	451	6.4180	84	6.3214
personalisation importance	201	4.5423	194	4.4278	338	4.1065	308	3.9107	441	3.7698	84	3.5298
company image importance	212	4.7264	201	5.0498	347	4.6239	319	4.2853	461	4.2267	82	4.4268
product availability importance	218	5.7708	197	5.6218	344	5.7253	312	5.3894	455	5.4571	83	5.1145
website performance	205	6.4104	189	6.4081	332	6.3302	302	6.2666	437	6.2308	81	6.1991
trust performance	217	6.6221	201	6.6418	349	6.5473	311	6.5734	449	6.5145	82	6.4756
customer service performance	204	6.4216	189	6.4021	319	6.3804	304	6.3333	429	6.2246	83	6.3333
information performance	205	6.3366	191	6.3037	335	6.1925	296	6.1529	444	6.0011	74	5.8953
contactability performance	173	5.5116	156	5.6314	275	5.3545	263	5.2548	370	5.2554	66	5.1667
no ads performance	204	6.5221	197	6.4162	338	6.3393	303	6.4439	435	6.2460	78	6.2244
personalisation performance	198	5.0657	189	4.9233	321	4.8037	293	4.5512	427	4.4707	75	4.2733
company image performance	206	5.7330	198	5.7222	343	5.4708	310	5.3532	453	5.1976	82	5.1585
product availability performance	212	5.8703	195	5.7897	335	5.8313	308	5.8299	441	5.5454	82	5.4085
website gap	200	-0.0406	183	-0.0943	326	-0.0878	300	0.0271	428	-0.1042	81	-0.0802
trust gap	210	-0.1381	200	-0.1750	343	-0.2624	308	-0.1450	449	-0.2309	82	-0.2927
customer service gap	202	-0.1056	186	-0.1756	316	-0.2141	303	-0.1419	428	-0.2746	82	-0.1667
information gap	199	-0.1108	190	-0.1481	330	-0.1742	291	-0.1040	440	-0.2267	74	-0.2635
contactability gap	171	-0.3743	155	-0.1871	271	-0.3911	262	-0.2958	365	-0.3164	65	-0.5154
no ads gap	200	-0.0725	196	-0.0510	334	-0.1647	303	-0.0215	433	-0.1894	77	-0.1364
personalisation gap	193	0.5052	187	0.4519	318	0.6053	292	0.6130	427	0.6628	75	0.6600
company image gap	203	0.9803	198	0.8667	339	0.8437	308	1.0307	452	0.9502	81	0.7222
product availability gap	209	0.0502	192	0.1354	333	0.0375	306	0.2255	440	0.0838	82	0.2927

ServCo
CATEGORY

	under 15k		£15k-19999		£20k-29999		£30k-39999		£40k-100k		Over £100k	
	N	MEAN	N	MEAN	N	MEAN	N	MEAN	N	MEAN	N	MEAN
website importance	24	6.4063	37	6.1822	71	6.0581	73	6.0497	137	6.1058	24	5.8958
trust importance	27	6.5185	33	6.4444	77	6.5152	88	6.7010	142	6.5399	24	6.7778
customer service importance	26	6.2821	31	6.1505	64	6.0677	73	6.1826	135	6.0568	25	6.2667
information importance	0		0		0		0		0		0	
contactability importance	28	5.8750	34	6.2059	67	6.1493	72	6.1042	132	5.9735	26	6.1538
no ads importance	28	6.1964	37	6.4865	72	6.2431	73	6.3699	142	6.2254	26	5.8482
personalisation importance	26	4.4808	32	4.1250	70	3.8000	71	3.8099	139	3.8993	24	4.0000
company image importance	29	4.9310	36	4.4444	78	4.5256	74	4.3581	145	4.6517	27	4.9630
product availability importance	25	5.0600	36	4.7917	68	4.8897	69	4.7464	141	5.0638	25	4.6800
website performance	21	5.8571	37	5.7297	66	5.6913	67	5.4963	127	5.4774	22	5.4432
trust performance	22	5.9242	27	6.2716	70	5.9905	80	5.8833	123	5.7615	20	5.3000
customer service performance	22	5.7879	27	5.7037	56	5.5893	63	5.4021	114	5.2164	19	5.1053
information performance	0		0		0		0		0		0	
contactability performance	25	4.9000	26	5.2500	60	5.3500	56	4.8214	111	4.8649	19	4.6316
no ads performance	24	5.8125	28	6.0357	65	5.6615	59	5.6186	120	5.4875	21	5.2381
personalisation performance	22	4.7273	28	4.8036	61	4.3115	62	4.2419	128	4.3398	21	4.4524
company image performance	24	5.4792	34	5.3382	75	5.2200	68	5.0956	134	5.1381	25	5.2800
product availability performance	22	5.2727	32	5.1094	62	5.1694	65	5.0308	127	5.1417	22	5.0682
website gap	21	-0.5238	36	-0.4618	64	-0.3672	67	-0.5616	122	-0.6117	21	-0.4167
trust gap	22	-0.5000	26	-0.1410	68	-0.4559	57	-0.7251	123	-0.7561	18	-1.2222
customer service gap	21	-0.5238	26	-0.3205	55	-0.4848	63	-0.7513	113	-0.7876	18	-0.8704
information gap	0		0		0		0		0		0	
contactability gap	25	-0.9000	26	-0.7500	58	-0.8793	58	-1.2232	107	-1.0794	18	-1.1389
no ads gap	24	-0.4792	28	-0.4464	65	-0.5538	59	-0.7119	120	-0.7250	20	-0.3250
personalisation gap	22	0.0909	28	0.5538	61	0.3279	62	0.3306	125	0.3920	20	0.2500
company image gap	24	0.2708	33	0.8836	75	0.6667	68	0.7574	133	0.4248	25	0.2600
product availability gap	22	0.0909	31	0.2742	62	0.2258	65	0.3154	127	0.0868	22	0.2045

ToolCo
CATEGORY

	under 15k		£15k-19999		£20k-29999		£30k-39999		£40k-100k		Over £100k	
	N	MEAN	N	MEAN	N	MEAN	N	MEAN	N	MEAN	N	MEAN
website importance	9	6.1111	16	6.2734	67	6.1175	75	5.8633	197	5.9353	24	5.8958
trust importance	9	6.2963	17	6.7843	62	6.3656	80	6.2458	200	6.2133	25	6.2133
customer service importance	9	6.1481	18	6.2593	62	6.2043	74	5.8892	191	5.9564	23	6.1594
information importance	9	6.0556	17	6.5735	59	5.9958	76	5.7533	188	5.9335	25	6.0700
contactability importance	9	6.3889	19	6.6316	69	6.1199	82	5.8659	213	6.1127	25	6.2800
no ads importance	9	6.5000	16	6.5625	64	6.2422	80	6.0625	206	6.2087	24	6.2292
personalisation importance	9	4.9444	18	4.6944	67	3.7236	76	3.3616	200	3.5075	24	3.5208
company image importance	9	4.7222	18	5.3611	71	4.7968	80	4.5438	211	4.4976	25	4.7400
product availability importance	9	5.4444	18	5.0278	69	4.9058	75	4.7400	196	4.7092	25	4.6000
website performance	9	5.1944	14	5.3929	66	5.3409	70	5.1125	182	5.1229	21	5.1905
trust performance	7	5.7619	15	5.8000	59	5.5993	73	5.6347	178	5.5243	20	5.5000
customer service performance	8	5.5833	16	5.5833	56	5.2500	66	5.1465	166	5.0261	21	5.0794
information performance	7	5.2143	15	5.4000	54	5.2083	63	5.0317	166	4.8584	19	4.5526
contactability performance	9	5.9444	19	6.0769	65	5.5077	70	5.4643	192	5.0964	23	5.6304
no ads performance	7	5.6429	15	5.7667	59	5.7386	69	5.6522	172	5.4506	21	5.4524
personalisation performance	8	5.1250	16	4.7188	61	4.2187	65	4.0692	178	3.9691	21	4.0476
company image performance	9	6.0000	17	6.0588	71	5.7042	77	5.5775	196	5.6352	22	5.4318
product availability performance	8	5.3750	15	4.8667	65	4.7615	67	4.7313	184	4.6603	21	4.7619
website gap	9	-0.9167	15	-0.7692	63	-0.7618	81	-0.7687	176	-0.8203	21	-0.7679
trust gap	7	-0.3333	15	-0.9456	58	-0.8103	71	-0.8336	175	-0.7371	20	-0.9000
customer service gap	8	-0.4583	16	-0.5833	56	-1.0417	65	-0.5333	164	-0.9228	20	-0.9167
information gap	7	-0.5714	15	-1.1167	61	-0.7652	62	-0.6613	162	-1.0602	19	-1.4737
contactability gap	9	-0.4444	18	-0.4444	64	-0.8406	70	-0.3714	190	-0.9895	23	-0.6522
no ads gap	7	-0.1143	14	-0.7500	58	-0.4914	66	-0.3696	172	-0.7529	21	-0.7381
personalisation gap	8	-0.1875	16	-0.0625	61	0.4426	64	0.5936	176	0.3571	21	0.5000
company image gap	9	1.2778	16	0.4688	66	0.9058	75	0.9733	194	1.0618	25	0.6818
product availability gap	8	0.1250	15	-0.0333	64	-0.2576	66	0.0076	176	0.0000	21	0.0000

COMPANY = SportCo
 CATEGORY

	under 15k		£15k-19999		£20k-29999		£30k-39999		£40k-100k		Over £100k	
	N	MEAN	N	MEAN	N	MEAN	N	MEAN	N	MEAN	N	MEAN
website importance	34	6.2059	60	6.3875	75	6.3400	87	6.3190	177	6.3347	33	6.1970
trust importance	35	6.7238	64	6.7604	78	6.7735	88	6.6250	182	6.6996	33	6.8182
customer service importance	35	6.4476	60	6.6056	76	6.5000	90	6.4037	186	6.5269	33	6.6162
information importance	34	6.3235	62	6.3347	75	6.1133	84	6.1399	169	6.0621	30	5.9500
contactability importance	34	6.4265	63	6.5635	77	6.4935	93	6.2581	184	6.5109	30	6.6500
no ads importance	35	6.3429	63	6.3413	79	6.4620	88	6.3409	180	6.3139	30	6.3667
personalisation importance	34	4.5441	64	4.3750	72	4.0000	88	4.1932	180	3.7778	30	3.4333
company image importance	35	5.5571	66	5.2273	79	5.2278	93	4.9570	190	4.8921	31	4.7097
product availability importance	34	5.7059	61	5.5246	78	5.5833	94	5.5798	184	5.3832	30	5.2833
website performance	34	6.0331	57	5.9627	71	5.6849	85	5.8044	175	5.7371	33	5.8030
trust performance	33	6.4141	60	6.4333	74	6.2838	89	6.2247	179	6.3408	31	6.1075
customer service performance	34	6.2059	57	6.0877	72	5.8333	88	5.7946	171	5.9025	30	5.7444
information performance	34	5.5368	56	5.4509	68	5.0110	77	4.9740	161	4.9239	28	4.5769
contactability performance	30	6.0500	61	5.9508	79	6.0063	89	5.9607	168	5.9881	28	5.9643
no ads performance	34	6.1324	58	6.2241	74	5.9595	83	5.9639	171	6.0322	28	5.9286
personalisation performance	34	4.8529	57	4.6053	66	4.1061	83	4.4277	164	3.9329	24	4.0417
company image performance	35	6.2286	64	6.1328	77	6.0649	94	6.0798	188	6.1090	32	5.9375
product availability performance	34	5.4265	60	5.5083	74	5.3041	92	5.4130	177	5.2345	30	5.3167
website gap	33	-0.2159	57	-0.4430	71	-0.6373	82	-0.5290	172	-0.5996	33	-0.9939
trust gap	33	-0.2929	60	-0.3444	74	-0.4775	87	-0.4253	177	-0.3578	31	-0.6989
customer service gap	34	-0.2549	58	-0.5298	72	-0.6713	85	-0.6196	171	-0.6355	30	-0.9000
information gap	33	-0.8258	56	-0.8616	67	-1.1866	75	-1.1633	157	-1.1417	25	-1.4300
contactability gap	30	-0.3633	58	-0.6121	76	-0.5000	89	-0.2921	168	-0.5238	28	-0.6786
no ads gap	34	-0.2647	58	-0.1379	74	-0.5068	82	-0.3720	171	-0.2661	28	-0.4643
personalisation gap	34	0.3088	57	0.1842	68	0.0076	81	0.2099	164	0.1402	23	0.5000
company image gap	35	0.6714	63	0.8175	78	0.7961	91	1.0934	188	1.2074	31	1.3065
product availability gap	34	-0.2794	58	-0.1121	74	-0.3311	91	-0.1868	176	-0.1563	29	0.0345

Service
CATEGORY

		under15 v 15-19	uncer15 v 20-29	under15 v 30-39	under 15 v 40-100	under15 - 100+	15-19 v 20-29	15-19 v 30-39	15-19 v 40-100	15-19 v 100+	20-29 v 30-39	20-29 v 40-100	20-29 v 100+	30-39 v 40-100	30-39 v 100+	40-100 v 100+
website importance	Asymp. 0.448	Asymp. 0.174	Asymp. 0.043	Asymp. 0.066	Asymp. 0.146	Asymp. 0.586	Asymp. 0.234	Asymp. 0.328	Asymp. 0.422	Asymp. 0.484	Asymp. 0.655	Asymp. 0.747	Asymp. 0.772	Asymp. 0.782	Asymp. 0.975	
trust importance	0.769	0.396	0.096	0.447	0.047	0.630	0.174	0.695	0.096	0.303	0.848	0.153	0.177	0.421	0.104	
customer service importance	0.934	0.660	0.636	0.416	0.196	0.741	0.876	0.469	0.246	0.793	0.625	0.089	0.400	0.092	0.043	
information importance																
contactability importance	0.281	0.205	0.333	0.379	0.247	0.921	0.730	0.650	0.911	0.849	0.732	0.762	0.903	0.633	0.585	
no ads importance	0.124	0.733	0.358	0.566	0.959	0.143	0.331	0.196	0.221	0.464	0.822	0.837	0.608	0.594	0.754	
personalisation importance	0.305	0.044	0.053	0.059	0.290	0.393	0.422	0.592	0.960	0.972	0.521	0.476	0.561	0.483	0.599	
company image importance	0.113	0.094	0.021	0.134	0.873	0.732	0.608	0.378	0.109	0.287	0.492	0.087	0.072	0.013	0.134	
product availability importance	0.739	0.540	0.295	0.975	0.571	0.945	0.505	0.571	0.807	0.545	0.297	0.779	0.075	0.815	0.407	
website performance	0.839	0.486	0.204	0.087	0.374	0.627	0.196	0.068	0.416	0.480	0.222	0.992	0.667	0.640	0.377	
trust performance	0.115	0.507	0.907	0.625	0.679	0.233	0.102	0.817	0.112	0.526	0.096	0.329	0.431	0.526	0.810	
customer service performance	0.792	0.490	0.227	0.035	0.587	0.258	0.133	0.016	0.411	0.415	0.038	0.849	0.268	0.551	0.417	
information performance																
contactability performance	0.297	0.161	0.568	0.774	0.620	0.696	0.101	0.114	0.217	0.027	0.019	0.095	0.679	0.675	0.909	
no ads performance	0.445	0.936	0.561	0.154	0.414	0.366	0.146	0.013	0.140	0.608	0.137	0.333	0.390	0.516	0.907	
personalisation performance	0.835	0.210	0.098	0.124	0.663	0.127	0.061	0.041	0.683	0.455	0.889	0.421	0.523	0.345	0.370	
company image performance	0.506	0.266	0.076	0.107	0.910	0.640	0.345	0.370	0.707	0.513	0.601	0.365	0.756	0.148	0.138	
product availability performance	0.594	0.750	0.447	0.651	0.831	0.762	0.769	0.912	0.635	0.533	0.694	0.889	0.621	0.510	0.658	
website gap	0.606	0.812	0.737	0.519	0.799	0.765	0.282	0.188	0.841	0.408	0.204	1.000	0.630	0.572	0.348	
trust gap	0.431	0.718	0.344	0.207	0.263	0.196	0.067	0.026	0.080	0.344	0.136	0.255	0.765	0.577	0.666	
customer service gap	0.466	0.760	0.484	0.313	0.560	0.249	0.129	0.077	0.208	0.534	0.283	0.674	0.794	0.889	0.951	
information gap																
contactability gap	0.936	0.896	0.404	0.544	0.430	0.637	0.247	0.360	0.336	0.347	0.514	0.414	0.671	0.794	0.586	
no ads gap	0.759	0.736	0.310	0.302	0.834	0.476	0.172	0.930	0.358	0.417	0.535	0.844	0.245	0.325	0.325	
personalisation gap	0.084	0.394	0.297	0.240	0.797	0.200	0.288	0.352	0.257	0.746	0.665	0.756	0.913	0.595	0.548	
company image gap	0.047	0.125	0.086	0.474	0.673	0.360	0.674	0.058	0.175	0.741	0.163	0.377	0.095	0.357	0.971	
product availability gap	0.948	0.975	0.854	0.559	0.652	0.976	0.884	0.466	0.636	0.837	0.337	0.570	0.324	0.475	0.996	

COMPANY = SportCo
 CATEGORY

	under15 v 15-19	under15 v 20-29	under15 v 30-39	under15 v 40-100	under15 - 100+	15-19 v 20-29	15-19 v 30-39	15-19 v 40-100	15-19 v 100+	20-29 v 30-39	20-29 v 40-100	20-29 v 100+	30-39 v 40-100	30-39 v 100+	40-100 v 100+
	Asymp.	Asymp.	Asymp.	Asymp.	Asymp.	Asymp.	Asymp.	Asymp.	Asymp.	Asymp.	Asymp.	Asymp.	Asymp.	Asymp.	Asymp.
website importance	0.680	0.221	0.527	0.541	0.693	0.357	0.693	0.825	0.968	0.232	0.175	0.445	0.916	0.905	0.941
trust importance	0.520	0.281	0.775	0.471	0.230	0.649	0.273	0.968	0.451	0.097	0.557	0.668	0.179	0.115	0.395
customer service importance	0.190	0.452	0.941	0.360	0.333	0.467	0.084	0.409	0.851	0.294	0.965	0.690	0.153	0.240	0.687
information importance	0.706	0.714	0.266	0.119	0.101	0.381	0.061	0.013	0.025	0.371	0.133	0.118	0.558	0.351	0.577
contactability importance	0.365	0.714	0.289	0.844	0.480	0.476	0.013	0.278	0.915	0.054	0.834	0.603	0.024	0.048	0.451
no ads importance	0.788	0.553	0.869	0.778	0.863	0.712	0.552	0.433	0.599	0.288	0.182	0.344	0.902	0.944	0.997
personalisation importance	0.664	0.154	0.320	0.025	0.019	0.149	0.394	0.011	0.014	0.401	0.423	0.112	0.049	0.028	0.247
company image importance	0.445	0.245	0.035	0.017	0.016	0.571	0.098	0.059	0.050	0.188	0.099	0.044	0.805	0.308	0.411
product availability importance	0.360	0.881	0.340	0.142	0.222	0.489	0.982	0.540	0.521	0.448	0.133	0.308	0.451	0.481	0.780
website performance	0.849	0.124	0.377	0.091	0.381	0.096	0.336	0.062	0.414	0.402	0.829	0.592	0.418	0.935	0.641
trust performance	0.598	0.578	0.360	0.539	0.254	0.195	0.090	0.143	0.072	0.652	0.984	0.444	0.553	0.610	0.321
customer service performance	0.826	0.229	0.180	0.115	0.167	0.109	0.095	0.040	0.121	0.994	0.964	0.786	0.986	0.734	0.717
information performance	0.946	0.051	0.065	0.007	0.007	0.039	0.037	0.004	0.009	0.795	0.737	0.194	0.410	0.178	0.242
contactability performance	0.941	0.955	0.694	0.862	0.830	0.920	0.654	0.767	0.749	0.735	0.912	0.867	0.730	0.867	0.932
no ads performance	0.753	0.229	0.199	0.221	0.378	0.242	0.234	0.226	0.441	0.990	0.831	0.889	0.855	0.906	0.997
personalisation performance	0.349	0.016	0.097	0.001	0.067	0.061	0.454	0.001	0.176	0.137	0.295	0.971	0.002	0.328	0.576
company image performance	0.633	0.419	0.405	0.467	0.220	0.692	0.804	0.818	0.299	0.912	0.803	0.475	0.664	0.476	0.319
product availability performance	0.936	0.344	0.782	0.256	0.421	0.282	0.788	0.136	0.384	0.414	0.721	0.962	0.245	0.561	0.601
website gap	0.202	0.007	0.151	0.008	0.151	0.070	0.940	0.128	0.727	0.095	0.518	0.354	0.202	0.993	0.448
trust gap	0.627	0.127	0.210	0.304	0.021	0.093	0.179	0.283	0.007	0.586	0.354	0.242	0.693	0.089	0.038
customer service gap	0.509	0.035	0.099	0.015	0.010	0.111	0.301	0.067	0.039	0.472	0.963	0.506	0.384	0.169	0.404
information gap	0.780	0.070	0.221	0.071	0.193	0.038	0.105	0.027	0.165	0.450	0.743	0.695	0.599	0.522	0.532
contactability gap	0.841	0.958	0.493	0.625	0.284	0.795	0.286	0.817	0.410	0.372	0.618	0.354	0.103	0.109	0.435
no ads gap	0.469	0.140	0.403	0.346	0.682	0.264	0.799	0.653	0.872	0.369	0.332	0.361	0.949	0.807	0.756
personalisation gap	0.456	0.309	0.571	0.504	0.459	0.657	0.952	0.989	0.249	0.686	0.619	0.158	0.991	0.288	0.248
company image gap	0.988	0.443	0.086	0.040	0.027	0.408	0.056	0.016	0.019	0.269	0.108	0.081	0.712	0.365	0.477
product availability gap	0.637	0.670	0.714	0.645	0.545	0.314	0.925	0.912	0.717	0.300	0.260	0.253	0.992	0.643	0.643

APPENDIX 8.2 CATEGORICAL INFLUENCE ON SITUATIONS

The table is a large grid with approximately 15 columns and 25 rows. The columns are labeled with various categories, and the rows represent different situations. The cells contain small, illegible text or symbols, possibly indicating the influence of each category on each situation.

AMOUNT SPEND
 (no ServCo amounts as no product purchased)
 COMPANY = EntzCo
 CATEGORY

means for sq AT sit level:

	Up to £10		£11 - £20		£21 - £50		£51 - £100		£101 - £200		Over £201	
	N	MEAN	N	MEAN	N	MEAN	N	MEAN	N	MEAN	N	MEAN
website importance	148	6.4649	841	6.3751	563	6.2991	119	6.4170	45	6.4361	21	6.4940
trust importance	153	6.7778	872	6.7741	582	6.7211	122	6.7814	44	6.8182	21	6.8730
customer service importance	148	6.5405	852	6.5325	585	6.4832	122	6.5765	42	6.4762	20	6.5000
information importance	141	6.3954	858	6.3140	580	6.2821	118	6.4131	44	6.4318	19	6.4342
contactability importance	138	5.9493	801	5.8211	533	5.7073	108	5.5708	43	6.0465	16	6.0313
no ads importance	150	6.5100	863	6.4316	572	6.4580	121	6.5124	43	6.5581	21	6.8905
personalisation importance	140	4.4714	838	4.0012	566	4.0194	113	4.1150	42	3.8690	18	4.3056
company image importance	154	4.6364	866	4.5312	581	4.4604	120	4.7750	45	4.3889	20	4.9250
product availability importance	151	5.9139	866	5.4988	573	5.5384	119	5.5882	44	5.8636	22	5.9091
website performance	141	6.3661	833	6.2971	554	6.2897	114	6.3136	44	6.3920	21	6.2202
trust performance	149	6.4362	851	6.5879	579	6.5619	123	6.5176	44	6.5152	22	6.5758
customer service performance	142	6.1925	820	6.3333	533	6.3558	113	6.3510	43	6.3178	20	6.4333
information performance	139	6.0414	828	6.1541	550	6.1518	115	6.0804	42	6.2560	21	6.2143
contactability performance	117	5.5598	882	5.2898	468	5.3718	94	5.4043	39	5.4744	13	5.8077
no ads performance	142	6.3134	822	6.3814	553	6.3562	117	6.3718	42	6.3214	21	6.5714
personalisation performance	134	4.6866	799	4.6383	540	4.6843	106	4.9151	42	4.6190	18	4.7500
company image performance	149	5.5067	856	5.4387	567	5.3915	117	5.5598	43	5.1828	17	5.7941
product availability performance	149	5.8893	844	5.8214	560	5.7089	117	5.7735	44	6.1250	20	5.9000
website gap	139	-0.1430	813	-0.0961	547	0.0016	111	-0.1092	44	-0.0540	20	-0.2750
trust gap	149	-0.3356	843	-0.1977	571	-0.1582	120	-0.2556	44	-0.3030	21	-0.3175
customer service gap	140	-0.3310	812	-0.2163	529	-0.1361	113	-0.2884	42	-0.1508	19	-0.0702
information gap	135	-0.3704	819	-0.1847	539	-0.1090	114	-0.3355	42	-0.1845	19	-0.1842
contactability gap	115	-0.5913	674	-0.3620	466	-0.3165	91	-0.0989	39	-0.5641	13	-0.4615
no ads gap	142	-0.2289	815	-0.0902	550	-0.1064	116	-0.1552	42	-0.2262	20	-0.1250
personalisation gap	133	0.1805	793	0.5757	536	0.6194	105	0.7095	42	0.7500	17	0.5000
company image gap	149	0.8188	848	0.8844	563	0.9227	116	0.7716	43	0.7791	17	0.7647
product availability gap	148	-0.0642	839	0.0864	556	0.1358	115	0.1043	43	0.2558	20	-0.0250

COMPANY = ToolCo
 CATEGORY

means for sq AT sit level:

	Up to £10		£11 - £20		£21 - £50		£51 - £100		£101 - £200		Over £201	
	N	MEAN	N	MEAN	N	MEAN	N	MEAN	N	MEAN	N	MEAN
	website importance	3	6.5833	25	5.9850	171	6.0029	100	5.8550	69	6.0344	48
trust importance	3	6.3333	25	5.9733	172	6.3043	95	6.2140	68	6.5147	47	6.1844
customer service importance	3	6.5556	22	5.4091	170	5.9647	92	5.9348	67	6.1592	45	6.1778
information importance	3	6.7500	24	5.6250	161	5.8727	89	6.0253	65	6.1500	43	5.9709
contactability importance	3	6.6667	26	5.8929	178	6.0337	108	6.1604	75	6.2467	53	6.1321
no ads importance	3	7.0000	24	6.1250	171	6.2135	98	6.1531	69	6.3913	48	6.2604
personalisation importance	3	2.5000	28	3.0179	189	3.7840	98	3.5102	69	3.6377	47	3.6915
company image importance	3	4.3333	28	4.0179	181	4.7348	105	4.5524	74	4.4392	53	4.8019
product availability importance	3	5.5000	28	4.3393	169	4.8521	98	4.6173	70	5.0714	48	4.7500
website performance	3	5.5417	26	4.8796	155	5.2548	93	5.1452	64	4.9453	45	5.2306
trust performance	3	5.2222	22	5.5909	148	5.6216	87	5.5670	62	5.3978	41	5.4959
customer service performance	3	3.5556	19	4.7018	143	5.2517	81	5.2058	58	4.9885	43	5.1938
information performance	3	3.7500	19	4.6316	136	5.1048	79	5.0601	56	4.7232	40	4.9125
contactability performance	3	4.3333	25	5.1400	153	5.4542	100	5.3650	70	5.1857	50	5.4200
no ads performance	3	5.1667	20	5.4250	150	5.5067	80	5.6063	60	5.4833	38	5.5658
personalisation performance	3	3.8333	23	3.6522	150	4.1967	86	4.1512	62	4.0403	42	4.0357
company image performance	3	6.5000	26	5.4821	165	5.6272	100	5.6600	70	5.4857	52	5.6538
product availability performance	3	3.6667	27	4.4830	154	4.8344	91	4.6758	66	4.6742	45	4.5333
website gap	3	-1.0417	23	-1.0652	151	-0.7591	92	-0.7554	62	-1.0766	41	-0.7378
trust gap	3	-1.1111	22	-0.4091	146	-0.7009	85	-0.6863	61	-1.0674	40	-0.8667
customer service gap	3	-3.0000	19	-0.7018	143	-0.7249	81	-0.7449	58	-1.1149	40	-1.0417
information gap	3	-3.0000	19	-0.9605	133	-0.7632	77	-0.9156	55	-1.3818	37	-1.0473
contactability gap	3	-2.3333	25	-0.6400	153	-0.5784	99	-0.8232	70	-1.0214	46	-0.8304
no ads gap	3	-1.8333	20	-0.5750	149	-0.6846	79	-0.5696	60	-0.8750	38	-0.7237
personalisation gap	3	1.3333	23	0.3696	148	0.3041	85	0.5059	62	0.4032	41	0.1220
company image gap	3	2.1667	27	1.4074	168	0.8512	99	1.0808	69	0.9783	46	0.7917
product availability gap	3	-1.8333	27	0.1111	150	0.0033	88	0.0625	64	-0.3628	42	-0.2143

COMPANY = SportCo
CATEGORY

means for sq AT sit level:

	Up to £10		£11 - £20		£21 - £50		£51 - £100		£101 - £200		Over £201	
	N	MEAN	N	MEAN	N	MEAN	N	MEAN	N	MEAN	N	MEAN
website importance	34	6.0848	48	6.2500	141	6.3307	190	6.3671	78	6.2869	24	6.5573
trust importance	34	6.5686	47	6.6099	142	6.8451	191	6.7330	82	6.5935	25	6.6667
customer service importance	34	6.3529	49	6.4218	142	6.5540	194	6.6065	82	6.4228	24	6.6806
information importance	31	6.1048	45	6.0722	132	6.1799	178	6.1404	81	6.1296	23	6.3913
contactability importance	34	6.3088	49	6.4288	146	6.5342	198	6.4848	84	6.3810	26	6.6923
no ads importance	33	6.2576	47	6.4043	139	6.2862	191	6.4738	81	6.2963	23	6.5870
personalisation importance	32	4.5313	47	3.7447	138	3.9275	195	4.0282	80	3.9000	23	4.2174
company image importance	35	5.2571	49	4.7653	154	4.9805	202	5.1388	88	5.2442	27	5.0926
product availability importance	33	5.2424	50	5.5100	148	5.4122	196	5.5153	84	5.4464	25	5.6200
website performance	32	5.4883	48	5.8958	133	5.8073	188	5.8364	77	5.7744	24	5.7813
trust performance	31	6.0000	48	6.2828	133	6.4010	188	6.2832	84	6.3651	24	6.3889
customer service performance	30	5.4889	45	6.0074	132	5.9444	180	5.9333	81	5.7901	23	5.8116
information performance	28	5.3661	44	5.3409	115	4.9370	170	5.1458	78	4.9327	24	4.8250
contactability performance	30	5.5833	43	5.9302	138	6.0290	188	6.0133	84	5.9464	23	6.2391
no ads performance	31	5.8548	45	6.2222	125	6.1400	179	6.0670	79	5.8924	22	6.0455
personalisation performance	31	4.5181	43	4.3258	124	4.1894	172	4.2035	77	4.2208	22	4.3638
company image performance	34	5.6785	49	5.8878	151	6.1424	200	6.1475	87	6.1667	25	6.4200
product availability performance	30	4.8333	49	5.5918	142	5.3897	191	5.3141	84	5.3452	23	5.4348
website gap	32	-0.6641	48	-0.4375	132	-0.5038	184	-0.5328	78	-0.4951	23	-0.7826
trust gap	31	-0.5914	46	-0.3188	131	-0.4631	185	-0.4450	82	-0.2439	24	-0.4722
customer service gap	30	-0.8000	45	-0.4222	131	-0.6361	179	-0.6872	81	-0.6255	22	-0.9848
information gap	27	-0.8519	44	-0.7330	114	-1.2917	164	-1.0213	77	-1.1948	23	-1.8043
contactability gap	30	-0.7000	42	-0.4524	137	-0.4927	188	-0.4677	82	-0.4634	23	-0.5652
no ads gap	31	-0.3871	45	-0.1778	124	-0.1008	179	-0.4385	79	-0.3861	21	-0.5714
personalisation gap	31	0.0181	43	0.4535	123	0.1504	171	0.1608	77	0.2882	21	0.0952
company image gap	34	0.4118	48	1.1042	150	1.1200	196	1.0028	86	0.9244	25	1.2800
product availability gap	30	-0.5167	49	0.0306	141	-0.0567	188	-0.1968	83	-0.0723	23	-0.3261

website importance	Asymp. Sig.	0.407	0.228	0.177	0.208	0.351	0.195	0.435	0.737	0.920	0.401	0.839	0.790	0.575	0.430	0.678
trust importance	0.633	0.842	0.732	0.949	0.673	0.362	0.565	0.146	0.359	0.660	0.272	0.253	0.694	0.437	0.101	0.246
customer service importance	0.220	0.313	0.462	0.528	1.000	0.003	0.172	0.142	0.058	0.016	0.764	0.263	0.014	0.437	0.101	0.246
information importance	0.058	0.083	0.156	0.139	0.202	0.485	0.323	0.114	0.069	0.152	0.205	0.173	0.294	0.839	0.935	0.985
contactability importance	0.399	0.311	0.397	0.467	0.485	0.624	0.770	0.770	0.570	0.545	0.441	0.217	0.316	0.601	0.693	0.945
no ads importance	0.126	0.112	0.101	0.200	0.223	0.962	0.929	0.352	0.352	0.778	0.778	0.154	0.159	0.130	0.139	0.976
personalisation importance	0.637	0.113	0.286	0.181	0.129	0.028	0.239	0.083	0.105	0.081	0.105	0.375	0.675	0.554	0.327	0.692
company image importance	0.305	0.821	0.665	0.568	0.669	0.017	0.063	0.143	0.018	0.018	0.392	0.239	0.700	0.620	0.343	0.181
website availability importance	0.164	0.496	0.299	0.643	0.504	0.056	0.305	0.018	0.145	0.145	0.196	0.421	0.905	0.073	0.442	0.504
product performance	0.162	0.574	0.527	0.261	0.495	0.092	0.213	0.695	0.212	0.660	0.078	0.078	0.784	0.284	0.875	0.269
trust performance	0.612	0.561	0.598	0.788	0.688	0.917	0.836	0.483	0.900	0.900	0.955	0.210	0.848	0.248	0.840	0.459
customer service performance	0.096	0.041	0.090	0.100	0.067	0.021	0.041	0.181	0.059	0.059	0.895	0.299	0.772	0.285	0.744	0.219
information performance	0.266	0.090	0.097	0.226	0.136	0.072	0.108	0.608	0.317	0.969	0.064	0.064	0.434	0.112	0.448	0.441
contactability performance	0.242	0.089	0.113	0.178	0.118	0.168	0.245	0.704	0.282	0.733	0.109	0.109	0.820	0.237	0.953	0.282
no ads performance	0.451	0.477	0.360	0.493	0.376	0.537	0.337	0.673	0.380	0.346	0.988	0.988	0.468	0.440	0.993	0.519
personalisation performance	0.868	0.372	0.517	0.570	0.531	0.028	0.092	0.100	0.202	0.725	0.725	0.599	0.367	0.816	0.617	0.768
company image performance	0.084	0.058	0.194	0.060	0.154	0.781	0.488	0.783	0.481	0.422	0.321	0.488	0.218	0.981	0.241	0.241
product availability performance	0.911	0.501	0.570	0.697	0.965	0.058	0.334	0.595	0.525	0.402	0.402	0.181	0.125	0.675	0.538	0.671
website gap	0.841	0.503	0.565	0.990	0.427	0.182	0.230	0.825	0.222	0.896	0.100	0.100	0.937	0.170	0.926	0.180
trust gap	0.348	0.512	0.376	0.734	0.561	0.641	0.594	0.048	0.048	0.511	0.041	0.041	0.672	0.008	0.396	0.203
customer service gap	0.043	0.028	0.033	0.051	0.067	0.901	0.841	0.415	0.724	0.806	0.109	0.109	0.495	0.110	0.423	0.579
information gap	0.024	0.013	0.021	0.051	0.033	0.535	0.908	0.339	0.896	0.479	0.008	0.008	0.350	0.062	0.735	0.277
contactability gap	0.133	0.047	0.084	0.148	0.070	0.222	0.497	0.935	0.670	0.314	0.024	0.024	0.457	0.211	0.993	0.329
no ads gap	0.126	0.049	0.048	0.120	0.066	0.790	0.425	0.888	0.705	0.193	0.591	0.591	0.710	0.130	0.558	0.500
personalisation gap	0.151	0.124	0.231	0.262	0.085	0.634	0.577	0.764	0.380	0.107	0.340	0.340	0.566	0.708	0.677	0.177
company image gap	0.944	0.482	0.568	0.950	0.459	0.027	0.174	0.131	0.040	0.401	0.564	0.564	0.820	0.762	0.403	0.559
product availability gap	0.076	0.081	0.061	0.135	0.132	0.597	0.808	0.149	0.530	0.807	0.082	0.082	0.790	0.047	0.597	0.433

BUS PERS GIFT

spearman's rho correlation, missing cases excluded analysis by analysis

COMPANY = EntzCo

CATEGORY

COMPANY = EntzCo

CATEGORY

means for sq AT sit level:

	Business		Personal		Gift			Personal v Business	Personal v Gift	Business v Gift
	N	MEAN	N	MEAN	N	MEAN		Asymp. Sig.	Asymp. Sig.	Asymp. Sig.
website importance	22	6.1080	1,227	6.3605	482	6.3846	website importance	0.984	0.233	0.796
trust importance	24	6.5278	1,273	6.7554	494	6.7821	trust importance	0.104	0.171	0.044
customer service importance	24	6.3889	1,245	6.5044	478	6.5607	customer service importance	0.567	0.196	0.376
information importance	24	6.1875	1,242	6.2834	468	6.4022	information importance	0.895	0.008	0.435
contactability importance	23	5.5000	1,175	5.5706	435	6.0253	contactability importance	0.932	0.000	0.277
no ads importance	24	6.5208	1,265	6.4530	479	6.4718	no ads importance	0.590	0.675	0.674
personalisation importance	23	3.4348	1,228	4.0529	464	4.0776	personalisation importance	0.060	0.735	0.060
company image importance	23	4.2391	1,265	4.5059	495	4.6222	company image importance	0.403	0.191	0.241
product availability importance	24	5.3958	1,263	5.5776	485	5.5495	product availability importance	0.655	0.555	0.740
website performance	21	5.8512	1,208	6.2863	474	6.3666	website performance	0.018	0.014	0.004
trust performance	24	6.0417	1,253	6.5547	488	6.5956	trust performance	0.200	0.090	0.094
customer service performance	22	5.8030	1,202	6.3394	445	6.3386	customer service performance	0.001	0.454	0.001
information performance	22	5.5909	1,213	6.0981	455	6.2907	information performance	0.112	0.000	0.013
contactability performance	21	4.6429	1,017	5.3029	371	5.5027	contactability performance	0.140	0.012	0.046
no ads performance	22	5.7500	1,220	6.3930	453	6.3311	no ads performance	0.236	0.367	0.335
personalisation performance	23	3.5652	1,174	4.6512	440	4.7989	personalisation performance	0.002	0.058	0.000
company image performance	23	5.1304	1,240	5.4190	483	5.4938	company image performance	0.153	0.332	0.100
product availability performance	23	5.7826	1,232	5.6863	476	5.7279	product availability performance	0.799	0.487	0.967
website gap	21	-0.2976	1,181	-0.0817	468	-0.0296	website gap	0.031	0.143	0.011
trust gap	24	-0.4861	1,237	-0.2064	484	-0.1880	trust gap	0.961	0.689	0.894
customer service gap	22	-0.6818	1,187	-0.1803	444	-0.2237	customer service gap	0.005	0.693	0.006
information gap	22	-0.6023	1,197	-0.2026	446	-0.1143	information gap	0.071	0.043	0.017
contactability gap	21	-0.9524	1,006	-0.2903	367	-0.5136	contactability gap	0.144	0.002	0.524
no ads gap	22	-0.7273	1,212	-0.0813	449	-0.1782	no ads gap	0.122	0.278	0.219
personalisation gap	23	0.1304	1,163	0.5546	438	0.6393	personalisation gap	0.245	0.232	0.148
company image gap	22	0.9318	1,231	0.8952	480	0.8438	company image gap	0.776	0.414	0.959
product availability gap	23	0.3043	1,223	0.0707	472	0.1409	product availability gap	0.417	0.112	0.700

ServCo
CATEGORY

ServCo
CATEGORY

	Business		Personal		Gift			Personal v Business	Personal v Gift	Business v Gift
	N	MEAN	N	MEAN	N	MEAN				
website importance	4	5.5625	399	6.1068	0		website importance	NA	NA	NA
trust importance	4	6.5000	398	6.5611	0		trust importance			
customer service importance	4	5.1667	382	6.1457	0		customer service importance			
information importance	0		0		0		information importance			
contactability importance	4	5.7500	393	6.0725	0		contactability importance			
no ads importance	4	6.2500	407	6.2432	0		no ads importance			
personalisation importance	4	4.1250	393	3.8677	0		personalisation importance			
company image importance	4	3.6250	425	4.6059	0		company image importance			
product availability importance	4	4.6250	392	4.9401	0		product availability importance			
website performance	4	5.5625	367	5.5940	0		website performance			
trust performance	3	6.6667	340	5.8451	0		trust performance			
customer service performance	4	4.2500	321	5.4216	0		customer service performance			
information performance	0		0		0		information performance			
contactability performance	4	4.5000	320	4.9984	0		contactability performance			
no ads performance	4	5.5000	333	5.5901	0		no ads performance			
personalisation performance	4	4.3750	344	4.3837	0		personalisation performance			
company image performance	4	4.3750	389	5.2134	0		company image performance			
product availability performance	3	5.5000	356	5.1615	0		product availability performance			
website gap	4	0.0000	358	-0.5038	0		website gap			
trust gap	3	0.0000	332	-0.6596	0		trust gap			
customer service gap	4	-0.9167	316	-0.6814	0		customer service gap			
information gap	0		0		0		information gap			
contactability gap	4	-1.2500	313	-0.9984	0		contactability gap			
no ads gap	4	-0.7500	332	-0.6089	0		no ads gap			
personalisation gap	4	0.2500	340	0.4103	0		personalisation gap			
company image gap	4	0.7500	387	0.5659	0		company image gap			
product availability gap	3	0.5000	354	0.1963	0		product availability gap			

ToolCo
CATEGORY

ToolCo
CATEGORY

	Business		Personal		Gift		Asymp. Sig.	Personal v Business	Personal v Gift	Business v Gift
	N	MEAN	N	MEAN	N	MEAN				
website importance	115	5.7228	276	6.0634	2	6.0000	0.044	NA	NA	
trust importance	115	6.0638	271	6.4059	2	6.1667	0.008			
customer service importance	113	5.8319	260	6.0615	2	6.3333	0.070			
information importance	105	5.7857	255	6.0235	2	6.2500	0.074			
contactability importance	127	6.0118	289	6.1574	2	6.2500	0.156			
no ads importance	118	6.1186	271	6.3266	2	4.7500	0.425			
personalisation importance	114	3.5614	276	3.6359	2	4.7500	0.774			
company image importance	126	4.4921	290	4.6483	2	4.5000	0.480			
product availability importance	112	4.7366	276	4.7464	2	6.2500	0.977			
website performance	99	4.9003	262	5.2309	2	4.8750	0.007			
trust performance	96	5.2639	242	5.6791	2	4.5000	0.004			
customer service performance	98	5.0034	224	5.2232	2	5.1667	0.125			
information performance	92	4.9076	217	4.9827	2	5.0000	0.682			
contactability performance	115	5.1826	259	5.4537	2	4.7500	0.024			
no ads performance	94	5.3883	234	5.5962	2	5.2500	0.241			
personalisation performance	97	4.0979	246	4.1138	2	4.5000	0.693			
company image performance	118	5.4958	276	5.7011	2	5.7500	0.061			
product availability performance	104	4.4135	256	4.7910	2	5.2500	0.001			
website gap	93	-0.8844	256	-0.8325	2	-1.1250	0.489			
trust gap	96	-0.8715	237	-0.7496	2	-1.6667	0.174			
customer service gap	96	-0.8542	223	-0.8416	2	-1.1667	0.528			
information gap	88	-0.8182	213	-1.0458	2	-1.2500	0.238			
contactability gap	110	-0.7682	259	-0.7143	2	-1.5000	0.625			
no ads gap	93	-0.7312	233	-0.7146	2	0.5000	0.812			
personalisation gap	95	0.3579	244	0.3852	2	-0.2500	0.969			
company image gap	112	0.8661	274	1.0292	2	1.2500	0.185			
product availability gap	96	-0.2969	252	0.0337	2	-1.0000	0.048			

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	Business		Personal		Gift			Personal v Business	Personal v Gift	Business v Gift
	N	MEAN	N	MEAN	N	MEAN		Asymp. Sig.	Asymp. Sig.	Asymp. Sig.
website importance	10	5.7625	486	6.3292	22	6.5398	website importance	0.216	0.130	0.069
trust importance	13	6.2564	493	6.7282	20	6.9333	trust importance	0.380	0.172	0.112
customer service importance	13	6.1282	493	6.5341	22	6.7727	customer service importance	0.486	0.161	0.157
information importance	13	5.8654	461	6.1551	21	6.4524	information importance	0.742	0.237	0.309
contactability importance	13	5.9231	504	6.4772	23	6.7391	contactability importance	0.147	0.244	0.065
no ads importance	13	5.8977	485	6.3639	21	6.7857	no ads importance	0.438	0.057	0.101
personalisation importance	11	4.1364	488	4.0051	20	3.7250	personalisation importance	0.695	0.622	0.618
company image importance	13	4.8462	520	5.0788	23	5.2391	company image importance	0.697	0.659	0.688
product availability importance	13	5.0385	502	5.4602	24	5.8750	product availability importance	0.632	0.072	0.181
website performance	10	5.5500	471	5.8063	23	5.5870	website performance	0.647	0.505	0.906
trust performance	12	6.1944	476	6.3067	20	6.4000	trust performance	0.753	0.645	0.546
customer service performance	12	5.5833	463	5.8992	20	5.8833	customer service performance	0.342	0.890	0.430
information performance	12	4.8958	430	5.0535	19	5.3158	information performance	0.989	0.333	0.475
contactability performance	13	6.3077	474	5.9757	22	5.8636	contactability performance	0.203	0.804	0.296
no ads performance	11	6.2273	456	6.0406	19	6.2895	no ads performance	0.480	0.252	0.963
personalisation performance	9	4.7779	449	4.2365	18	3.8333	personalisation performance	0.094	0.307	0.058
company image performance	13	6.3462	512	6.1025	24	5.9375	company image performance	0.283	0.304	0.124
product availability performance	13	5.2309	483	5.3344	24	5.2917	product availability performance	0.661	0.869	0.910
website gap	10	-0.2125	463	-0.5346	22	-0.8295	website gap	0.875	0.381	0.727
trust gap	12	0.0000	471	-0.4266	20	-0.5333	trust gap	0.778	0.512	0.597
customer service gap	12	-0.5276	460	-0.6500	20	-1.0667	customer service gap	0.684	0.563	0.984
information gap	12	-1.0000	425	-1.1280	19	-1.1579	information gap	0.878	0.708	0.667
contactability gap	13	0.3846	489	-0.5021	21	-0.8810	contactability gap	0.095	0.135	0.030
no ads gap	11	0.0909	454	-0.3183	19	-0.4737	no ads gap	0.385	0.608	0.315
personalisation gap	9	0.4444	443	0.1637	18	0.2778	personalisation gap	0.717	0.574	0.449
company image gap	13	1.5000	508	1.0000	23	0.7391	company image gap	0.135	0.583	0.044
product availability gap	13	0.1923	479	-0.1357	24	-0.5833	product availability gap	0.798	0.237	0.658

spearman's rho correlation, missing cases excluded analysis by analysis
 COMPANY = EntzCo
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COMPANY = EntzCo
 CATEGORY

means for sq AT sit level:

	Planned		Impulse		Prompted by Ad			Planned v Impulse	Planned v Ad	Impulse v Ad
	N	MEAN	N	MEAN	N	MEAN		Asymp. Sig. (2-tailed)	Asymp. Sig.	Asymp. Sig.
website importance	1,253	6.3795	269	6.3615	209	6.2715	website importance	0.518	0.141	0.451
trust importance	1,294	6.7604	274	6.7762	223	6.7294	trust importance	0.965	0.805	0.820
customer service importance	1,264	6.5280	269	6.4957	213	6.4836	customer service importance	0.222	0.442	0.788
information importance	1,253	6.3274	265	6.2613	216	6.2998	information importance	0.125	0.786	0.358
contactability importance	1,186	5.7407	255	5.4314	193	5.6917	contactability importance	0.030	0.772	0.188
no ads importance	1,279	6.4695	272	6.4632	216	6.3819	no ads importance	0.985	0.318	0.437
personalisation importance	1,244	4.0442	263	4.1025	209	3.9187	personalisation importance	0.280	0.302	0.101
company image importance	1,295	4.5139	270	4.6148	218	4.5275	company image importance	0.290	0.840	0.340
product availability importance	1,285	5.5961	270	5.7463	217	5.1590	product availability importance	0.146	0.000	0.000
website performance	1,229	6.3053	268	6.3246	207	6.2597	website performance	0.797	0.183	0.183
trust performance	1,271	6.5691	274	6.5535	220	6.5136	trust performance	0.782	0.390	0.383
customer service performance	1,203	6.3286	259	6.3063	206	6.3722	customer service performance	0.948	0.527	0.580
information performance	1,221	6.1591	262	6.0277	206	6.1784	information performance	0.128	0.871	0.218
contactability performance	1,023	5.3690	221	5.2964	166	5.2681	contactability performance	0.689	0.406	0.721
no ads performance	1,226	6.3858	261	6.2816	208	6.3678	no ads performance	0.427	0.565	0.855
personalisation performance	1,179	4.6662	258	4.7481	201	4.6169	personalisation performance	0.289	0.628	0.257
company image performance	1,263	5.4402	268	5.4030	215	5.4163	company image performance	0.713	0.806	0.921
product availability performance	1,253	5.7255	264	5.8144	214	5.3925	product availability performance	0.153	0.000	0.000
website gap	1,207	-0.0797	263	-0.0580	201	-0.0224	website gap	0.413	0.859	0.478
trust gap	1,256	-0.1961	270	-0.2296	219	-0.2146	trust gap	0.557	0.455	0.311
customer service gap	1,190	-0.2154	258	-0.2067	204	-0.0980	customer service gap	0.241	0.195	0.873
information gap	1,202	-0.1787	257	-0.2519	205	-0.1451	information gap	0.557	0.774	0.494
contactability gap	1,016	-0.3730	217	-0.2258	162	-0.4074	contactability gap	0.066	0.574	0.082
no ads gap	1,218	-0.1059	259	-0.2066	206	-0.0534	no ads gap	0.160	0.694	0.510
personalisation gap	1,175	0.5783	252	0.4861	198	0.6288	personalisation gap	0.385	0.438	0.177
company image gap	1,255	0.9088	264	0.7557	214	0.8738	company image gap	0.194	0.993	0.358
product availability gap	1,245	0.0920	261	0.0230	212	0.1934	product availability gap	0.634	0.538	0.401

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means for sq AT sit level:

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	Planned				Impulse				Prompted by Ad				Planned v Impulse	Planned v Ad	Impulse v Ad			
	N		MEAN		N		MEAN		N		MEAN					Asymp. Sig. (2-tailed)	Asymp. Sig.	Asymp. Sig.
website importance	307	6.1270	33	5.6970	65	6.1981	website importance	0.004	0.542	0.006								
trust importance	305	6.5705	30	6.3667	70	6.6190	trust importance	0.099	0.845	0.193								
customer service importance	290	6.1241	30	5.9778	69	6.2609	customer service importance	0.329	0.283	0.146								
information importance	0		0		0		information importance											
contactability importance	296	6.0084	30	6.2000	73	6.2466	contactability importance	0.435	0.209	0.928								
no ads importance	309	6.2480	33	6.1212	72	6.3194	no ads importance	0.100	0.209	0.029								
personalisation importance	297	3.7475	32	3.8281	70	4.4000	personalisation importance	0.662	0.002	0.075								
company image importance	320	4.5078	35	4.7429	76	4.9013	company image importance	0.225	0.016	0.667								
product availability importance	299	4.9257	33	4.6970	70	5.0286	product availability importance	0.322	0.484	0.207								
website performance	276	5.6091	32	5.1879	65	5.7558	website performance	0.039	0.463	0.023								
trust performance	258	5.8307	26	5.7692	60	5.9833	trust performance	0.429	0.686	0.365								
customer service performance	241	5.4177	26	4.9615	60	5.5556	customer service performance	0.111	0.573	0.075								
information performance	0		0		0		information performance											
contactability performance	237	4.9599	25	4.9600	63	5.0873	contactability performance	0.863	0.722	0.749								
no ads performance	254	5.5787	25	5.5800	61	5.6967	no ads performance	0.730	0.775	0.560								
personalisation performance	257	4.3074	29	4.3966	64	4.6975	personalisation performance	0.718	0.062	0.465								
company image performance	293	5.1109	33	5.3636	69	5.5145	company image performance	0.185	0.006	0.508								
product availability performance	267	5.1461	29	5.0000	66	5.2955	product availability performance	0.433	0.404	0.256								
website gap	274	-0.4904	31	-0.5282	59	-0.5021	website gap	0.594	0.446	0.417								
trust gap	251	-0.6720	26	-0.5641	59	-0.6215	trust gap	0.854	0.962	0.900								
customer service gap	238	-0.6541	25	-1.0667	59	-0.6441	customer service gap	0.348	0.541	0.543								
information gap	0		0		0		information gap											
contactability gap	231	-0.9610	25	-1.1800	62	-1.0887	contactability gap	0.523	0.594	0.768								
no ads gap	253	-0.5929	25	-0.5600	61	-0.6721	no ads gap	0.529	0.601	0.334								
personalisation gap	254	0.4500	26	0.4255	64	0.2500	personalisation gap	0.780	0.157	0.276								
company image gap	291	0.5687	33	0.5152	69	0.5797	company image gap	0.938	0.302	0.448								
product availability gap	267	0.2154	28	0.0000	65	0.2769	product availability gap	0.967	0.973	0.969								

ToolCo
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means for sq AT sit level:

ToolCo
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	Planned				Impulse				Prompted by Ad				Planned v Impulse	Planned v Ad	Impulse v Ad
	N		MEAN		N		MEAN		N		MEAN				
website importance	414	5.9617	12	5.5000	2	7.0000	website importance	NA	NA	NA					
trust importance	408	6.2908	11	5.8182	3	6.6667	trust importance								
customer service importance	396	5.9907	11	5.7879	3	6.5556	customer service importance								
information importance	385	5.9727	10	5.2250	2	7.0000	information importance								
contactability importance	440	6.1170	12	5.7083	3	6.3333	contactability importance								
no ads importance	412	6.2549	11	5.4091	3	6.3333	no ads importance								
personalisation importance	414	3.6014	10	3.8500	3	4.8333	personalisation importance								
company image importance	440	4.5886	12	4.4583	4	5.8750	company image importance								
product availability importance	413	4.7833	12	4.4583	3	6.0000	product availability importance								
website performance	387	5.1480	7	5.3750	3	4.6667	website performance								
trust performance	363	5.5721	8	4.5833	3	4.6667	trust performance								
customer service performance	345	5.1314	8	4.6667	3	4.7778	customer service performance								
information performance	331	4.9781	8	3.7188	3	4.2500	information performance								
contactability performance	399	5.3496	10	5.5000	3	5.1667	contactability performance								
no ads performance	352	5.5696	8	4.3125	3	3.5000	no ads performance								
personalisation performance	366	4.1052	8	3.8750	3	4.3333	personalisation performance								
company image performance	421	5.6378	8	4.7500	3	4.6667	company image performance								
product availability performance	387	4.7080	7	4.5000	3	4.0000	product availability performance								
website gap	374	-0.8249	7	-0.5536	2	-2.1875	website gap								
trust gap	357	-0.7442	8	-1.3750	3	-2.0000	trust gap								
customer service gap	342	-0.8450	8	-1.2917	3	-1.7778	customer service gap								
information gap	325	-0.9762	7	-1.0714	2	-3.0000	information gap								
contactability gap	394	-0.7525	10	-0.2000	3	-1.1667	contactability gap								
no ads gap	350	-0.6657	8	-1.1875	3	-2.8333	no ads gap								
personalisation gap	363	0.3815	7	0.2143	3	-0.5000	personalisation gap								
company image gap	413	1.0012	8	0.3125	3	-1.1667	company image gap								
product availability gap	375	-0.0573	7	0.1429	3	-2.0000	product availability gap								

SportCo
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	Planned		Impulse		Prompted by Ad			Planned v Impulse	Planned v Ad	Impulse v Ad
	N	MEAN	N	MEAN	N	MEAN		Asymp. Sig. (2-tailed)	Asymp. Sig.	Asymp. Sig.
website importance	450	6.3444	34	6.0699	36	6.3715	website importance	0.067	0.913	0.176
trust importance	460	6.7167	33	6.6970	34	6.8627	trust importance	0.445	0.713	0.392
customer service importance	462	6.5303	32	6.4792	36	6.6204	customer service importance	0.681	0.521	0.431
information importance	434	6.1561	31	6.0081	30	6.3583	information importance	0.273	0.293	0.150
contactability importance	470	6.4883	34	6.3529	38	6.4211	contactability importance	0.445	0.721	0.774
no ads importance	453	6.3962	32	6.0625	34	6.2941	no ads importance	0.167	0.705	0.487
personalisation importance	452	3.9889	35	3.9286	34	4.2353	personalisation importance	0.689	0.395	0.346
company image importance	483	5.0487	37	5.3108	38	5.1711	company image importance	0.162	0.519	0.593
product availability importance	470	5.5085	35	4.8571	35	5.5286	product availability importance	0.049	0.753	0.118
website performance	437	5.7943	34	5.7574	35	5.8750	website performance	0.903	0.382	0.651
trust performance	443	6.3205	33	6.2727	33	6.1818	trust performance	0.960	0.928	0.994
customer service performance	436	5.8792	28	5.8929	32	5.9271	customer service performance	0.712	0.937	0.862
information performance	403	5.0509	28	4.8393	30	5.4000	information performance	0.496	0.166	0.156
contactability performance	445	5.9831	31	5.9032	35	6.0286	contactability performance	0.948	0.762	0.841
no ads performance	423	6.0603	32	6.1406	31	5.9516	no ads performance	0.657	0.702	0.559
personalisation performance	411	4.2336	31	4.1290	32	4.2813	personalisation performance	0.582	0.880	0.668
company image performance	476	6.0998	37	6.0270	38	6.1711	company image performance	0.909	0.936	0.830
product availability performance	452	5.3682	35	5.0000	35	5.3000	product availability performance	0.307	0.630	0.643
website gap	429	-0.5539	33	-0.3447	35	-0.4964	website gap	0.122	0.267	0.571
trust gap	439	-0.4002	32	-0.4375	33	-0.6768	trust gap	0.711	0.474	0.398
customer service gap	433	-0.6651	28	-0.5238	32	-0.7500	customer service gap	0.365	0.644	0.308
information gap	394	-1.1256	28	-1.2321	29	-1.0000	information gap	0.834	0.948	0.987
contactability gap	439	-0.5091	31	-0.4194	35	-0.3571	contactability gap	0.404	0.442	0.979
no ads gap	421	-0.3325	32	0.0781	31	-0.4516	no ads gap	0.122	0.586	0.143
personalisation gap	408	0.1740	31	0.1774	32	0.1719	personalisation gap	0.801	0.774	0.961
company image gap	469	1.0309	37	0.7162	38	1.0000	company image gap	0.072	0.963	0.118
product availability gap	448	-0.1563	35	0.1429	34	-0.2847	product availability gap	0.490	0.686	0.427

(no ServCo amounts as no product purchased)
 COMPANY = EntzCo
 CATEGORY

	First Time		Less than Once a Month		Once or more a month		Once or more a fortnight	
	N	MEAN	N	MEAN	N	MEAN	N	MEAN
website importance	47	6.1410	511	6.3263	846	6.3849	319	6.3969
trust importance	49	6.4898	530	6.7497	876	6.7888	327	6.7870
customer service importance	48	6.3542	509	6.4951	858	6.5354	323	6.5273
information importance	48	6.1615	508	6.3337	852	6.3110	316	6.3030
contactability importance	44	5.8977	488	5.8237	806	5.6067	305	5.6721
no ads importance	46	6.2935	525	6.4724	865	6.4405	321	6.5047
personalisation importance	45	4.4867	501	3.9541	847	4.0508	313	4.1550
company image importance	44	4.8523	531	4.5320	869	4.4868	330	4.6045
product availability importance	48	5.4375	519	5.5424	871	5.5178	325	5.7338
website performance	45	6.0722	507	6.2808	829	6.3031	314	6.3674
trust performance	50	6.3333	519	6.5112	865	6.5788	322	6.6201
customer service performance	45	6.1481	478	6.3243	820	6.3248	315	6.3714
information performance	43	6.1279	486	6.2058	836	6.1211	314	6.0932
contactability performance	35	5.6571	398	5.2739	695	5.3504	272	5.4138
no ads performance	43	6.2209	494	6.2905	831	6.3881	317	6.4495
personalisation performance	43	4.9651	476	4.6702	811	4.6252	299	4.7592
company image performance	43	5.4884	520	5.3837	855	5.4140	319	5.5502
product availability performance	45	5.7778	509	5.8473	849	5.6938	319	5.7898
website gap	44	-0.0199	494	-0.0625	818	-0.0863	306	-0.0462
trust gap	48	-0.1042	515	-0.2485	856	-0.1928	317	-0.1756
customer service gap	44	-0.1667	474	-0.1842	812	-0.2245	312	-0.1899
information gap	42	0.0179	479	-0.1357	827	-0.2025	308	-0.2402
contactability gap	35	-0.4000	392	-0.5204	691	-0.2612	267	-0.3296
no ads gap	41	-0.1220	493	-0.1888	827	-0.0828	312	-0.0801
personalisation gap	41	0.4268	473	0.6564	808	0.5353	295	0.5424
company image gap	42	0.6786	517	0.8269	848	0.9151	317	0.9038
product availability gap	44	0.3182	503	0.0527	846	0.1436	316	0.0016

ServCo
CATEGORY

	First Time		Less than Once a Month		Once or more a month		Once or more a fortnight	
	N	MEAN	N	MEAN	N	MEAN	N	MEAN
website importance	238	6.0583	158	6.1717	4	5.9375	1	6.7500
trust importance	241	6.5712	153	6.5904	6	5.6111	1	7.0000
customer service importance	227	6.1087	152	6.1974	5	5.5333	1	6.0000
information importance	0		0		0		0	
contactability importance	239	6.1192	150	6.0633	5	4.5000	1	6.0000
no ads importance	245	6.2143	158	6.3101	6	5.7500	1	6.0000
personalisation importance	232	3.8427	155	3.9065	6	3.9167	1	4.5000
company image importance	251	4.6574	168	4.4970	6	4.7500	1	6.0000
product availability importance	232	4.8039	158	5.0994	5	4.8000	1	5.0000
website performance	218	5.5912	145	5.6326	4	5.5625	1	1.7500
trust performance	207	5.8035	128	5.9583	5	4.7333	1	6.0000
customer service performance	190	5.3825	127	5.4488	5	4.8667	1	2.8667
information performance	0		0		0		0	
contactability performance	190	4.9711	125	5.0400	6	4.5833	1	5.0000
no ads performance	198	5.5000	131	5.7405	6	5.3333	1	6.5000
personalisation performance	199	4.2990	139	4.5216	6	4.1667	1	2.0000
company image performance	229	5.1441	154	5.2987	6	5.0000	1	3.5000
product availability performance	208	5.0385	143	5.3638	5	4.6000	1	3.5000
website gap	211	-0.4461	144	-0.5373	4	-0.3750	1	-5.0000
trust gap	201	-0.6683	126	-0.6455	5	-0.6000	1	-1.0000
customer service gap	185	-0.6378	127	-0.7638	5	-0.6667	1	-3.3333
information gap	0		0		0		0	
contactability gap	188	-1.0426	121	-0.9876	5	-0.4000	1	-1.0000
no ads gap	197	-0.6447	131	-0.5611	6	-0.4167	1	0.5000
personalisation gap	196	0.3291	136	0.5362	6	0.2500	1	-2.5000
company image gap	227	0.4361	154	0.7727	6	0.2500	1	-2.5000
product availability gap	207	0.2126	142	0.2324	5	-0.2000	1	-1.5000

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	First Time		Less than Once a Month		Once or more a month		Once or more a fortnight	
	N	MEAN	N	MEAN	N	MEAN	N	MEAN
website importance	231	5.9854	167	5.9895	15	5.6917	12	5.1667
trust importance	232	6.2718	164	6.3537	12	6.2778	12	5.6111
customer service importance	223	6.0000	160	5.9792	13	6.0000	11	5.7273
information importance	221	5.9152	150	6.0250	12	6.0625	11	5.5000
contactability importance	246	6.0998	179	6.1397	16	6.0625	12	5.6667
no ads importance	232	6.2026	166	6.2500	14	6.5000	11	5.9091
personalisation importance	230	3.5739	168	3.6190	14	4.2500	12	3.6667
company image importance	243	4.5226	182	4.6703	15	4.8333	12	4.3333
product availability importance	234	4.6902	165	4.9364	14	5.2143	12	4.2083
website performance	215	5.1948	158	5.0815	12	5.7188	10	4.5000
trust performance	204	5.6225	149	5.5168	11	5.8788	10	4.2333
customer service performance	192	5.0894	144	5.2593	9	5.4815	10	4.3000
information performance	185	4.9270	136	4.9963	11	5.5909	9	4.0833
contactability performance	220	5.3341	168	5.4375	13	5.6154	10	4.2000
no ads performance	195	5.5179	146	5.5993	11	5.8182	9	4.1667
personalisation performance	208	4.0413	146	4.1678	12	4.5833	11	3.8636
company image performance	233	5.6137	175	5.6086	12	6.1667	11	5.2727
product availability performance	217	4.7512	157	4.6656	11	5.4091	11	3.7273
website gap	207	-0.8297	152	-0.8964	12	0.1354	10	-0.8500
trust gap	201	-0.6816	146	-0.8425	11	-0.3333	10	-1.6333
customer service gap	190	-0.9421	142	-0.6995	9	-0.3333	10	-1.6000
information gap	180	-0.9597	133	-1.0207	10	0.0750	9	-1.7500
contactability gap	218	-0.7752	165	-0.6727	13	-0.2692	10	-1.3500
no ads gap	195	-0.6897	144	-0.6076	11	-0.5455	9	-1.9444
personalisation gap	205	0.3659	143	0.3646	12	0.3750	11	0.2273
company image gap	229	1.0721	170	0.8294	12	1.1667	11	1.0909
product availability gap	212	0.0283	150	-0.2200	11	0.3636	11	-0.5000

SportCo
CATEGORY

	First Time		Less than Once a Month		Once or more a month		Once or more a fortnight	
	N	MEAN	N	MEAN	N	MEAN	N	MEAN
website importance	158	6.3054	310	6.3605	40	6.1469	8	6.4531
trust importance	161	6.8977	317	6.7413	35	6.6762	8	6.8750
customer service importance	165	6.5313	314	6.5531	37	6.3333	8	6.7083
information importance	153	6.1324	294	6.1811	35	6.0429	8	6.2813
contactability importance	164	6.4728	329	6.5000	37	6.2838	8	6.3125
no ads importance	156	6.3462	314	6.3758	36	6.2917	8	6.5000
personalisation importance	158	4.2437	314	3.8583	37	4.1218	8	4.3125
company image importance	168	5.2292	335	4.9821	41	5.2683	8	5.3125
product availability importance	167	5.5060	324	5.4630	36	5.2778	8	5.9375
website performance	151	5.8288	303	5.7578	39	6.0032	8	5.7969
trust performance	154	6.2619	308	6.3063	32	6.4896	8	6.5000
customer service performance	155	5.8968	293	5.8601	33	5.9091	8	6.4167
information performance	141	5.1117	276	5.0091	32	5.2891	8	5.0625
contactability performance	154	5.9448	313	5.9824	33	6.0909	8	6.3750
no ads performance	149	6.1007	290	5.9983	34	6.2206	8	6.5625
personalisation performance	142	4.4789	288	4.0903	32	4.3750	8	4.2500
company image performance	169	6.1450	329	6.0471	38	6.3684	8	6.3750
product availability performance	159	5.3994	314	5.2834	35	5.2857	8	5.9375
website gap	150	-0.5200	298	-0.5857	38	-0.1612	8	-0.6563
trust gap	152	-0.4474	305	-0.4383	32	-0.1563	8	-0.3750
customer service gap	153	-0.6427	292	-0.7123	33	-0.3938	8	-0.2917
information gap	138	-1.0996	288	-1.1757	32	-0.7856	8	-1.2188
contactability gap	151	-0.5397	310	-0.5177	33	-0.1364	8	0.0625
no ads gap	149	-0.2584	289	-0.3754	33	-0.0808	8	0.0625
personalisation gap	141	0.1084	288	0.2083	32	0.1094	8	-0.0625
company image gap	166	0.8916	325	1.0682	38	0.8684	8	1.0825
product availability gap	158	-0.1456	312	-0.1795	33	-0.0909	8	0.0000

COMPANY = EntzCo
 CATEGORY

	first time v less once mth	first time v more once mth	first time v once more a mth	less once month v more o	less once a month v once	once or more a month v o
	Asymp. Sig.	Asymp. Sig.	Asymp. Sig.	Asymp. Sig.	Asymp. Sig.	Asymp. Sig.
website importance	0.074	0.036	0.012	0.423	0.037	0.097
trust importance	0.006	0.001	0.002	0.341	0.369	0.858
customer service importance	0.351	0.171	0.208	0.200	0.354	0.918
information importance	0.447	0.510	0.591	0.620	0.780	0.895
contactability importance	0.832	0.299	0.449	0.033	0.234	0.574
no ads importance	0.630	0.793	0.478	0.525	0.559	0.241
personalisation importance	0.028	0.060	0.146	0.355	0.177	0.461
company image importance	0.205	0.159	0.378	0.736	0.408	0.234
product availability importance	0.242	0.363	0.027	0.476	0.016	0.002
website performance	0.225	0.134	0.038	0.470	0.036	0.112
trust performance	0.165	0.029	0.024	0.045	0.052	0.685
customer service performance	0.489	0.539	0.325	0.763	0.433	0.259
information performance	0.975	0.897	0.550	0.287	0.154	0.568
contactability performance	0.031	0.112	0.181	0.201	0.133	0.608
no ads performance	0.779	0.240	0.093	0.016	0.002	0.162
personalisation performance	0.146	0.081	0.297	0.446	0.506	0.174
company image performance	0.628	0.787	0.660	0.452	0.030	0.085
product availability performance	0.607	0.746	0.848	0.589	0.120	0.217
website gap	0.712	0.478	0.545	0.387	0.567	0.661
trust gap	0.094	0.247	0.337	0.112	0.097	0.652
customer service gap	0.923	0.406	0.990	0.078	0.851	0.079
information gap	0.730	0.493	0.330	0.353	0.132	0.375
contactability gap	0.266	0.729	0.988	0.000	0.038	0.439
no ads gap	0.858	0.637	0.455	0.067	0.047	0.540
personalisation gap	0.211	0.593	0.485	0.080	0.337	0.663
company image gap	0.422	0.205	0.239	0.233	0.408	0.925
product availability gap	0.173	0.320	0.059	0.323	0.191	0.027

Service
CATEGORY

	Asymp. Sig.	NA	NA	NA	NA	NA
website importance	0.291					
trust importance	0.800					
customer service importance	0.537					
information importance	0.644					
contactability importance	0.399					
no ads importance	0.547					
personalisation importance	0.509					
company image importance	0.043					
product availability importance	0.687					
website performance	0.336					
trust performance	0.461					
customer service performance	0.523					
information performance	0.157					
contactability performance	0.086					
no ads performance	0.172					
personalisation performance	0.009					
company image performance	0.802					
product availability performance	0.607					
website gap	0.696					
trust gap	0.748					
customer service gap	0.748					
information gap	0.134					
contactability gap	0.028					
no ads gap	0.407					
personalisation gap						
company image gap						
product availability gap						

ToolCo
CATEGORY

	Asymp. Sig.	Asymp. Sig.	Asymp. Sig.	Asymp. Sig.	Exact Sig.
website importance	0.077	0.806	0.013	0.827	0.256
trust importance	0.998	0.646	0.040	0.604	0.033
customer service importance	0.472	0.734	0.312	0.557	0.392
information importance	0.789	0.251	0.193	0.212	0.135
contactability importance	0.950	0.738	0.074	0.670	0.146
no ads importance	0.428	0.027	0.247	0.096	0.051
personalisation importance	0.704	0.112	0.484	0.170	0.755
company image importance	0.293	0.454	0.707	0.739	0.410
product availability importance	0.197	0.155	0.217	0.244	0.067
website performance	0.153	0.128	0.121	0.056	0.222
trust performance	0.306	0.119	0.001	0.049	0.002
customer service performance	0.171	0.142	0.120	0.215	0.028
information performance	0.744	0.032	0.066	0.032	0.047
contactability performance	0.661	0.265	0.008	0.350	0.005
no ads performance	0.574	0.120	0.004	0.199	0.003
personalisation performance	0.294	0.162	0.165	0.262	0.551
company image performance	0.877	0.072	0.165	0.074	0.137
product availability performance	0.403	0.064	0.004	0.039	0.012
website gap	0.937	0.007	0.727	0.004	0.696
trust gap	0.085	0.419	0.113	0.143	0.226
customer service gap	0.172	0.250	0.303	0.398	0.143
information gap	0.418	0.145	0.266	0.073	0.298
contactability gap	0.695	0.240	0.418	0.282	0.331
no ads gap	0.744	0.709	0.036	0.805	0.030
personalisation gap	0.803	0.644	0.634	0.575	0.571
company image gap	0.047	0.937	0.961	0.462	0.667
product availability gap	0.101	0.471	0.187	0.174	0.380

COMPANY = Spornco
CATEGORY

	first time v less once r	first time v more once	first time v once more	less once month v mo	less once a month v o	once or more a month
ht						
website importance	Asymp, Sig. 0.633	Asymp, Sig. 0.344	NA	Asymp, Sig. 0.194	NA	NA
trust importance	0.435	0.577		0.855		
customer service importance	0.763	0.188		0.097		
information importance	0.734	0.549		0.400		
contactability importance	0.986	0.248		0.210		
no ads importance	0.666	0.669		0.874		
personalisation importance	0.022	0.626		0.428		
company image importance	0.066	0.501		0.079		
product availability importance	0.617	0.460		0.699		
website performance	0.571	0.422		0.228		
trust performance	0.764	0.187		0.218		
customer service performance	0.982	0.849		0.781		
information performance	0.373	0.539		0.228		
contactability performance	0.917	0.539		0.556		
no ads performance	0.373	0.641		0.335		
personalisation performance	0.011	0.606		0.441		
company image performance	0.326	0.248		0.078		
product availability performance	0.371	0.801		0.648		
website gap	0.246	0.230		0.056		
trust gap	0.976	0.229		0.188		
customer service gap	0.567	0.379		0.244		
information gap	0.368	0.375		0.170		
contactability gap	0.601	0.206		0.118		
no ads gap	0.609	0.826		0.878		
personalisation gap	0.381	0.809		0.866		
company image gap	0.085	0.712		0.197		
product availability gap	0.482	0.557		0.798		

(no ServCo amounts as no product purchased)

COMPANY = EntzCo

CATEGORY

COMPANY = EntzCo

CATEGORY

means for sq AT sit level:

Did you research the product NOT AT ALL?

	NO (researched before)		YES (no research)			Asymp. Sig.
	N	MEAN	N	MEAN		
website importance	1,300	6.3688	435	6.3494	website importance	0.465
trust importance	1,351	6.7663	444	6.7387	trust importance	0.370
customer service importance	1,316	6.5289	434	6.4854	customer service importance	0.938
information importance	1,314	6.3436	424	6.2258	information importance	0.094
contactability importance	1,232	5.7054	405	5.6383	contactability importance	0.910
no ads importance	1,331	6.4538	440	6.4716	no ads importance	0.167
personalisation importance	1,295	4.0707	423	3.9986	personalisation importance	0.421
company image importance	1,342	4.5551	445	4.4730	company image importance	0.421
product availability importance	1,332	5.5694	444	5.5619	product availability importance	0.931
website performance	1,284	6.2790	423	6.3759	website performance	0.002
trust performance	1,330	6.5454	439	6.6044	trust performance	0.003
customer service performance	1,255	6.3044	416	6.4111	customer service performance	0.001
information performance	1,279	6.1186	414	6.2156	information performance	0.001
contactability performance	1,066	5.2917	347	5.5173	contactability performance	0.001
no ads performance	1,281	6.3528	417	6.4149	no ads performance	0.018
personalisation performance	1,240	4.6500	400	4.7550	personalisation performance	0.269
company image performance	1,319	5.4158	431	5.4896	company image performance	0.155
product availability performance	1,301	5.6691	434	5.7903	product availability performance	0.056
website gap	1,259	-0.0946	415	0.0048	website gap	0.006
trust gap	1,316	-0.2178	433	-0.1617	trust gap	0.032
customer service gap	1,244	-0.2307	412	-0.1080	customer service gap	0.002
information gap	1,282	-0.2347	406	-0.0326	information gap	0.000
contactability gap	1,051	-0.4163	347	-0.1700	contactability gap	0.005
no ads gap	1,272	-0.1179	414	-0.1051	no ads gap	0.230
personalisation gap	1,231	0.5361	398	0.6742	personalisation gap	0.178
company image gap	1,308	0.8394	429	1.0023	company image gap	0.125
product availability gap	1,292	0.0873	430	0.1721	product availability gap	0.188

ServCo
CATEGORY

ServCo
CATEGORY

	NO (researched before)				YES (no research)				Asymp. Sig
	N		MEAN		N		MEAN		
website importance	260	6.1558	145	6.0095	website importance			0.331	
trust importance	258	6.5349	147	6.6145	trust importance			0.286	
customer service importance	254	6.1496	135	6.1136	customer service importance			0.952	
information importance	0		0		information importance				
contactability importance	255	6.0510	144	6.0938	contactability importance			0.673	
no ads importance	266	6.2914	148	6.1723	no ads importance			0.317	
personalisation importance	262	3.8206	137	3.9599	personalisation importance			0.401	
company image importance	277	4.6011	154	4.5877	company image importance			0.884	
product availability importance	256	4.9570	143	4.8671	product availability importance			0.914	
website performance	242	5.5723	131	5.6469	website performance			0.438	
trust performance	227	5.8752	117	5.8091	trust performance			0.903	
customer service performance	211	5.4360	116	5.3534	customer service performance			0.564	
information performance	0		0		information performance				
contactability performance	213	5.0000	112	4.9554	contactability performance			0.813	
no ads performance	222	5.8577	118	5.4915	no ads performance			0.512	
personalisation performance	233	4.3605	117	4.4316	personalisation performance			0.340	
company image performance	255	5.2353	140	5.1429	company image performance			0.481	
product availability performance	236	5.1674	126	5.1508	product availability performance			0.847	
website gap	236	-0.5837	128	-0.3330	website gap			0.058	
trust gap	223	-0.6532	113	-0.6578	trust gap			0.866	
customer service gap	210	-0.7254	112	-0.6071	customer service gap			0.843	
information gap	0		0		information gap				
contactability gap	209	-1.0191	109	-0.9725	contactability gap			0.826	
no ads gap	222	-0.8946	117	-0.6239	no ads gap			0.834	
personalisation gap	232	0.4030	114	0.4298	personalisation gap			0.857	
company image gap	255	0.5686	138	0.5616	company image gap			0.580	
product availability gap	234	0.1517	128	0.3175	product availability gap			0.373	

ToolCo
CATEGORY

ToolCo
CATEGORY

	NO (researched before)		YES (no research)			Asymp. Sig.
	N	MEAN	N	MEAN		
website importance	355	6.0225	77	5.6688	website importance	0.098
trust importance	351	6.3390	77	6.0303	trust importance	0.448
customer service importance	342	6.0370	72	5.7593	customer service importance	0.454
information importance	332	6.0098	69	5.7065	information importance	0.116
contactability importance	380	6.1526	81	5.9198	contactability importance	0.191
no ads importance	354	6.3107	77	5.8831	no ads importance	0.058
personalisation importance	359	3.7103	73	3.2603	personalisation importance	0.025
company image importance	378	4.6561	83	4.3916	company image importance	0.186
product availability importance	357	4.8361	76	4.5921	product availability importance	0.115
website performance	335	5.1556	67	5.1063	website performance	0.510
trust performance	313	5.5708	67	5.4428	trust performance	0.246
customer service performance	299	5.1204	62	5.1237	customer service performance	0.860
information performance	288	5.0009	59	4.7203	information performance	0.053
contactability performance	348	5.3937	70	5.1714	contactability performance	0.089
no ads performance	304	5.5740	64	5.3594	no ads performance	0.190
personalisation performance	319	4.1614	63	3.8651	personalisation performance	0.082
company image performance	361	5.6468	77	5.5130	company image performance	0.173
product availability performance	333	4.7252	69	4.6304	product availability performance	0.320
website gap	323	-0.8580	64	-0.6855	website gap	0.052
trust gap	310	-0.7785	64	-0.7031	trust gap	0.981
customer service gap	296	-0.8885	61	-0.7432	customer service gap	0.897
information gap	281	-0.9742	57	-1.0175	information gap	0.949
contactability gap	344	-0.7471	69	-0.7174	contactability gap	0.523
no ads gap	303	-0.6980	63	-0.6190	no ads gap	0.888
personalisation gap	319	0.3464	59	0.4492	personalisation gap	0.765
company image gap	354	0.9477	75	1.0533	company image gap	0.672
product availability gap	323	-0.0728	67	-0.0597	product availability gap	0.893

SportCo
CATEGORY

COMPANY = SportCo
CATEGORY

	NO (researched before)		YES (no research)			
	N	MEAN	N	MEAN		Asymp. Sig.
website importance	482	6.3711	46	5.9158	website importance	0.001
trust importance	494	6.7510	41	6.4834	trust importance	0.005
customer service importance	497	6.5661	41	6.1707	customer service importance	0.016
information importance	466	6.1738	38	6.0066	information importance	0.621
contactability importance	505	6.5149	46	6.0761	contactability importance	0.007
no ads importance	487	6.4035	41	5.9756	no ads importance	0.025
personalisation importance	487	4.0041	43	4.0233	personalisation importance	0.963
company image importance	521	5.0720	46	5.1630	company image importance	0.800
product availability importance	502	5.5100	46	4.9457	product availability importance	0.004
website performance	489	5.8294	44	5.4517	website performance	0.013
trust performance	476	6.3445	37	5.9099	trust performance	0.008
customer service performance	467	5.9172	33	5.4444	customer service performance	0.037
information performance	431	5.0812	35	4.7929	information performance	0.220
contactability performance	473	6.0391	43	5.3488	contactability performance	0.000
no ads performance	453	6.1049	37	5.3784	no ads performance	0.014
personalisation performance	445	4.2236	36	4.3889	personalisation performance	0.580
company image performance	511	6.1282	47	5.8723	company image performance	0.092
product availability performance	487	5.3337	42	5.2857	product availability performance	0.682
website gap	481	-0.5401	43	-0.5262	website gap	0.764
trust gap	472	-0.4138	37	-0.4955	trust gap	0.290
customer service gap	485	-0.8502	32	-0.8542	customer service gap	0.814
information gap	423	-1.1152	33	-1.2500	information gap	0.645
contactability gap	469	-0.4712	41	-0.7561	contactability gap	0.201
no ads gap	451	-0.3016	37	-0.5405	no ads gap	0.339
personalisation gap	443	0.1524	35	0.3714	personalisation gap	0.704
company image gap	507	1.0266	44	0.7159	company image gap	0.179
product availability gap	483	-0.1801	41	0.1951	product availability gap	0.221

NUMBER OF COMPANIES PURCHASE FROM

COMPANY = EntzCo
CATEGORY

means for sq AT sit level:

	always the same		1 or 2 main		3 to 5 companies		Many different	
	N	MEAN	N	MEAN	N	MEAN	N	MEAN
	website importance	264	6.5028	582	6.3786	653	6.3483	252
trust importance	267	6.8002	587	6.7643	679	6.7624	257	6.7121
customer service importance	265	6.6239	572	6.5227	661	6.4836	248	6.4798
information importance	264	6.3977	559	6.3466	661	6.2685	249	6.2781
contactability importance	249	5.8454	523	5.8358	629	5.6574	231	5.7294
no ads importance	268	6.5317	579	6.4732	668	6.4334	251	6.4163
personalisation importance	253	4.5652	553	4.1483	661	3.8238	246	3.9126
company image importance	271	4.8782	583	4.6449	675	4.4370	253	4.1739
product availability importance	266	5.7258	573	5.6658	679	5.4897	253	5.3972
website performance	256	6.5347	551	6.3745	646	6.2227	249	6.1155
trust performance	262	6.7430	574	6.6022	673	6.5027	255	6.4405
customer service performance	259	6.5858	544	6.4112	629	6.2220	236	6.1582
information performance	265	6.4349	543	6.2270	640	6.0156	240	5.9667
contactability performance	226	5.7412	460	5.4152	532	5.1541	190	5.2711
no ads performance	259	6.6139	559	6.3927	639	6.3138	238	6.1992
personalisation performance	243	5.2634	530	4.7292	626	4.4704	236	4.4894
company image performance	262	5.8588	571	5.5105	666	5.3251	246	5.1159
product availability performance	281	5.9904	582	5.7980	660	5.5871	247	5.4838
website gap	255	0.0245	541	-0.0099	628	-0.1302	246	-0.1479
trust gap	257	-0.0973	569	-0.1652	664	-0.2550	254	-0.2664
customer service gap	253	-0.0751	543	-0.1246	623	-0.2686	233	-0.3176
information gap	257	-0.0078	535	-0.1308	634	-0.2551	237	-0.3143
contactability gap	223	-0.1525	454	-0.2566	526	-0.4838	190	-0.4605
no ads gap	256	0.0215	556	-0.1081	635	-0.1354	234	-0.2222
personalisation gap	240	0.6542	526	0.5390	620	0.5839	236	0.5254
company image gap	261	0.9713	568	0.8472	660	0.8727	245	0.8918
product availability gap	258	0.2326	558	0.0905	654	0.0566	247	0.0567

ServCo
CATEGORY

	always the same		1 or 2 main		3 to 5 companies		Many different	
	N	MEAN	N	MEAN	N	MEAN	N	MEAN
website importance	165	6.1735	120	5.9875	69	6.1486	48	6.0729
trust importance	162	6.5782	124	6.5457	70	6.5143	46	6.6087
customer service importance	153	6.1525	123	6.0542	67	6.1443	45	6.2963
information importance	0		0		0		0	
contactability importance	159	6.0943	124	5.9597	64	5.9453	50	6.4100
no ads importance	168	6.2649	127	6.1535	69	6.3333	48	6.2917
personalisation importance	159	3.8113	126	3.9246	71	3.8239	43	3.9884
company image importance	173	4.8243	131	4.6145	75	4.5333	49	4.5510
product availability importance	160	5.0031	125	5.0920	68	4.6471	44	4.6136
website performance	152	5.7590	115	5.5293	62	5.5625	42	5.2440
trust performance	135	6.0247	107	5.7196	59	5.8475	41	5.6179
customer service performance	128	5.5990	101	5.2937	58	5.4598	39	5.0000
information performance	0		0		0		0	
contactability performance	122	5.1025	101	4.8812	56	4.9821	43	4.8256
no ads performance	141	5.7943	101	5.3762	56	5.6250	40	5.4500
personalisation performance	137	4.4854	111	4.2838	60	4.4500	41	4.2317
company image performance	162	5.4012	116	5.0733	69	5.1087	44	5.0568
product availability performance	149	5.2851	114	5.1754	58	5.1034	39	4.8205
website gap	148	-0.4079	111	-0.4608	61	-0.5738	42	-0.8036
trust gap	132	-0.4975	105	-0.7937	58	-0.6379	39	-0.8376
customer service gap	126	-0.5370	100	-0.7267	57	-0.6374	38	-1.1140
information gap	0		0		0		0	
contactability gap	121	-0.8554	101	-1.0000	52	-0.9712	42	-1.5119
no ads gap	141	-0.4539	101	-0.6931	56	-0.6875	39	-0.7564
personalisation gap	136	0.5699	111	0.2928	60	0.4500	39	0.1410
company image gap	161	0.7547	116	0.4224	69	0.5000	44	0.3864
product availability gap	147	0.2449	114	0.0789	58	0.3534	39	0.2308

ToolCo
CATEGORY

	always the same		1 or 2 main		3 to 5 companies		Many different	
	N	MEAN	N	MEAN	N	MEAN	N	MEAN
website importance	203	6.0197	167	5.9716	39	5.9167	11	5.3750
trust importance	200	6.3567	168	6.2460	39	6.3333	10	6.0333
customer service importance	193	6.0535	164	5.9492	37	6.0631	9	5.4444
information importance	186	6.0040	160	5.9438	36	5.9722	10	5.7500
contactability importance	213	6.1878	185	6.0514	42	6.2381	9	5.6667
no ads importance	201	6.3159	171	6.1754	40	6.2875	9	6.2222
personalisation importance	201	3.7164	175	3.5743	37	3.8378	9	2.7778
company image importance	215	4.7535	183	4.5574	42	4.3929	10	3.8500
product availability importance	200	4.7925	171	4.8772	41	4.8171	9	3.8333
website performance	190	5.4276	159	4.8829	31	4.8831	11	5.0114
trust performance	178	5.8708	155	5.3097	31	4.8817	8	5.8750
customer service performance	168	5.4524	148	4.8694	31	4.6129	6	5.3333
information performance	157	5.2659	149	4.6879	28	4.6786	7	5.4643
contactability performance	192	5.6328	173	5.1445	35	5.2143	8	5.0000
no ads performance	173	5.7890	150	5.2433	30	5.3833	8	6.0000
personalisation performance	179	4.2849	159	3.9340	29	4.0862	7	4.3571
company image performance	206	5.8495	175	5.4429	39	5.4359	9	5.2778
product availability performance	186	4.9812	162	4.4846	33	4.3636	10	4.6500
website gap	184	-0.6311	151	-1.0687	30	-1.1542	11	-0.3636
trust gap	173	-0.5742	154	-0.9134	31	-1.4731	8	-0.2083
customer service gap	168	-0.6310	144	-1.0301	31	-1.5269	6	-0.0556
information gap	155	-0.7516	143	-1.2325	27	-1.1296	7	-0.3571
contactability gap	190	-0.5895	170	-0.8588	35	-0.9571	8	-0.6250
no ads gap	173	-0.5867	148	-0.8547	30	-0.9000	8	-0.1875
personalisation gap	176	0.4034	158	0.3070	29	0.0172	7	1.7143
company image gap	202	1.0396	172	0.8721	37	0.6784	9	1.5000
product availability gap	180	0.1528	157	-0.3439	33	-0.3636	9	1.0000

SportCo
CATEGORY

	always the same		1 or 2 main		3 to 5 companies		Many different	
	N	MEAN	N	MEAN	N	MEAN	N	MEAN
website importance	36	6.4167	194	6.2796	218	6.3813	72	6.2604
trust importance	36	6.5000	207	6.6795	213	6.7840	68	6.8284
customer service importance	35	6.5049	208	6.4599	215	6.5736	70	6.6571
information importance	34	6.1912	196	6.1135	201	6.1866	63	6.1984
contactability importance	35	6.2857	216	6.4792	219	6.4817	71	6.5986
no ads importance	35	6.3000	202	6.4282	211	6.3957	70	6.1357
personalisation importance	34	4.5441	202	4.2277	217	3.8336	67	4.1866
company image importance	37	5.6216	214	5.1005	231	4.9091	74	5.2500
product availability importance	37	5.6216	212	5.4057	223	5.5247	68	5.4118
website performance	33	6.1553	187	5.8436	214	5.6717	71	5.8504
trust performance	37	6.3874	200	6.2333	206	6.3528	65	6.3949
customer service performance	33	5.9899	199	5.8827	196	5.8282	65	5.9846
information performance	32	5.2500	185	5.1892	184	4.8601	58	5.1422
contactability performance	33	6.2121	199	5.9070	210	5.9524	67	6.2015
no ads performance	33	5.9697	192	5.9870	196	6.0842	63	6.1905
personalisation performance	31	4.7903	189	4.3942	193	3.8990	59	4.4237
company image performance	37	6.2838	213	6.0587	226	6.0929	72	6.2083
product availability performance	35	5.7571	204	5.3382	219	5.2397	64	5.3594
website gap	33	-0.3144	185	-0.4743	208	-0.6851	70	-0.4000
trust gap	35	-0.1333	199	-0.4523	204	-0.4428	64	-0.4167
customer service gap	32	-0.5104	197	-0.5888	196	-0.7704	65	-0.6769
information gap	32	-0.9375	178	-0.9128	182	-1.3860	57	-1.1096
contactability gap	32	-0.1250	198	-0.5783	206	-0.5146	67	-0.3881
no ads gap	33	-0.3485	191	-0.4476	195	-0.3026	63	0.0635
personalisation gap	31	0.1613	187	0.1096	192	0.1979	59	0.2627
company image gap	36	0.6806	209	0.9474	224	1.1696	72	0.8542
product availability gap	35	0.0429	201	-0.0896	217	-0.2995	64	-0.0078

COMPANY = EntCo
CATEGORY

	Asymp. Sig.				
website importance	0.001	0.000	0.000	0.285	0.020
trust importance	0.042	0.041	0.001	0.956	0.070
customer service importance	0.000	0.000	0.004	0.353	0.182
information importance	0.013	0.000	0.000	0.030	0.061
contactability importance	0.017	0.012	0.039	0.949	0.942
no ads importance	0.070	0.033	0.007	0.656	0.170
personalisation importance	0.001	0.000	0.000	0.000	0.043
company image importance	0.014	0.000	0.000	0.005	0.000
product availability importance	0.657	0.029	0.016	0.015	0.010
website performance	0.000	0.000	0.000	0.000	0.150
trust performance	0.003	0.000	0.000	0.010	0.002
customer service performance	0.000	0.000	0.000	0.000	0.347
information performance	0.000	0.000	0.000	0.000	0.253
contactability performance	0.000	0.000	0.000	0.001	0.168
no ads performance	0.000	0.000	0.000	0.395	0.004
personalisation performance	0.000	0.000	0.000	0.023	0.755
company image performance	0.000	0.000	0.000	0.002	0.000
product availability performance	0.044	0.000	0.000	0.001	0.001
website gap	0.533	0.000	0.020	0.000	0.040
trust gap	0.349	0.000	0.008	0.001	0.050
customer service gap	0.594	0.001	0.012	0.001	0.017
information gap	0.045	0.000	0.000	0.034	0.006
contactability gap	0.081	0.000	0.003	0.021	0.095
no ads gap	0.014	0.004	0.003	0.509	0.203
personalisation gap	0.653	0.848	0.625	0.647	0.396
company image gap	0.276	0.707	0.893	0.350	0.223
product availability gap	0.087	0.100	0.047	0.956	0.568

always same v 1or2

always same v 3 to 5

always same v many dif

1 or 2 v 3 or 5

1 or 2 v many dif

3 to 5 v many dif

ServCo
CATEGORY

	always same v 1 or 2	always same v 3 to 5	always same v many	1 or 2 v 3 or 5	1 or 2 v many diff	3 to 5 v many diff
	Asymp. Sig.	Asymp. Sig.	Asymp. Sig.	Asymp. Sig.	Asymp. Sig.	Asymp. Sig.
website importance	0.040	0.180	0.810	0.660	0.212	0.376
trust importance	0.174	0.142	0.813	0.736	0.494	0.384
customer service importance	0.201	0.228	0.460	0.988	0.100	0.090
information importance						
contactability importance	0.134	0.212	0.148	0.948	0.018	0.027
no ads importance	0.808	0.746	0.708	0.904	0.494	0.563
personalisation importance	0.547	0.873	0.410	0.771	0.690	0.557
company image importance	0.610	0.904	0.360	0.739	0.532	0.477
product availability importance	0.919	0.045	0.064	0.032	0.047	0.866
website performance	0.031	0.100	0.030	0.766	0.439	0.343
trust performance	0.009	0.067	0.101	0.630	0.894	0.853
customer service performance	0.061	0.370	0.024	0.509	0.263	0.165
information performance						
contactability performance	0.222	0.668	0.389	0.814	0.993	0.725
no ads performance	0.003	0.330	0.208	0.169	0.464	0.660
personalisation performance	0.150	0.696	0.215	0.421	0.801	0.398
company image performance	0.010	0.072	0.109	0.716	0.972	0.874
product availability performance	0.516	0.311	0.037	0.594	0.067	0.182
website gap	0.501	0.132	0.013	0.566	0.078	0.273
trust gap	0.010	0.082	0.138	0.587	0.707	0.939
customer service gap	0.368	0.708	0.025	0.688	0.132	0.074
information gap						
contactability gap	0.466	0.980	0.012	0.549	0.128	0.063
no ads gap	0.125	0.357	0.259	0.686	0.951	0.772
personalisation gap	0.132	0.860	0.078	0.309	0.492	0.152
company image gap	0.031	0.188	0.239	0.708	0.727	0.964
product availability gap	0.398	0.208	0.986	0.054	0.574	0.346

ToolCo
CATEGORY

	always same v 1or2	always same v 3 to 5	always same v many dif	1 or 2 v 3 or 5	1 or 2 v many dif	3 to 5 v many dif
website importance	Asymp, Sig 0.183	Asymp, Sig 0.369	Asymp, Sig 0.120	Asymp, Sig 0.808	Asymp, Sig 0.243	Asymp, Sig 0.397
trust importance	0.094	0.674	0.652	0.595	0.941	0.881
customer service importance	0.121	0.817	0.414	0.501	0.686	0.514
information importance	0.403	0.638	0.818	0.987	0.952	0.936
contactability importance	0.073	0.891	0.897	0.280	0.922	0.673
no ads importance	0.498	0.694	0.977	0.572	0.555	0.863
personalisation importance	0.161	0.536	0.124	0.237	0.170	0.074
company image importance	0.161	0.187	0.137	0.693	0.213	0.380
product availability importance	0.953	0.754	0.093	0.676	0.078	0.160
website performance	0.000	0.000	0.223	0.878	0.864	0.731
customer service performance	0.000	0.000	0.925	0.078	0.145	0.040
information performance	0.000	0.000	0.826	0.237	0.567	0.373
contactability performance	0.000	0.040	0.596	0.856	0.172	0.178
no ads performance	0.000	0.141	0.471	0.801	0.983	0.899
personalisation performance	0.000	0.188	0.375	0.467	0.080	0.275
company image performance	0.000	0.458	0.763	0.318	0.627	0.983
product availability performance	0.000	0.006	0.050	0.802	0.477	0.417
website gap	0.000	0.000	0.244	0.691	0.957	0.840
trust gap	0.002	0.014	0.755	0.597	0.410	0.346
customer service gap	0.003	0.004	0.463	0.134	0.832	0.409
information gap	0.012	0.006	0.823	0.141	0.856	0.352
contactability gap	0.017	0.312	0.550	0.743	0.858	0.915
no ads gap	0.205	0.363	0.928	0.866	0.893	0.811
personalisation gap	0.316	0.892	0.156	0.602	0.145	0.340
company image gap	0.468	0.134	0.089	0.323	0.060	0.029
product availability gap	0.241	0.485	0.562	1.000	0.368	0.432
product availability gap	0.001	0.049	0.308	0.912	0.038	0.054

COMPANY = Sporce
CATEGORY

	always same v	always same v	always same v	1 or 2 v 3 or 5	1 or 2 v many d	3 to 5 v many d
website importance	Asymp. Sig. 0.259	Asymp. Sig. 0.755	Asymp. Sig. 0.902	Sig. 0.087	Sig. 0.088	Sig. 0.506
trust importance	0.975	0.201	0.090	0.012	0.007	0.244
customer service importance	0.126	0.432	0.745	0.067	0.007	0.113
information importance	0.196	0.451	0.719	0.228	0.264	0.662
contactability importance	0.383	0.289	0.040	0.661	0.046	0.092
no ads importance	0.998	0.879	0.751	0.783	0.673	0.838
personalisation importance	0.341	0.003	0.241	0.000	0.716	0.028
company image importance	0.046	0.004	0.276	0.118	0.311	0.033
product availability importance	0.086	0.008	0.062	0.053	0.732	0.274
website performance	0.534	0.969	0.992	0.297	0.481	0.874
trust performance	0.196	0.988	0.868	0.405	0.143	0.348
customer service performance	0.450	0.214	0.802	0.435	0.457	0.170
information performance	0.634	0.104	0.675	0.018	0.930	0.093
contactability performance	0.146	0.122	0.796	0.889	0.126	0.085
no ads performance	0.456	0.819	0.810	0.379	0.195	0.482
personalisation performance	0.130	0.000	0.156	0.001	0.959	0.010
company image performance	0.169	0.273	0.466	0.627	0.409	0.646
product availability performance	0.096	0.042	0.218	0.439	0.732	0.402
website gap	0.244	0.006	0.050	0.001	0.222	0.562
trust gap	0.050	0.019	0.058	0.526	0.835	0.832
customer service gap	0.695	0.149	0.375	0.063	0.374	0.667
information gap	0.578	0.038	0.505	0.001	0.666	0.114
contactability gap	0.018	0.007	0.074	0.526	0.977	0.708
no ads gap	0.318	0.643	0.578	0.246	0.069	0.254
personalisation gap	0.428	0.070	0.466	0.802	0.245	0.494
company image gap	0.428	0.070	0.466	0.802	0.245	0.494
product availability gap	0.301	0.053	0.791	0.107	0.633	0.167

COMPANY = EntzCo
CATEGORY

COMPANY = EntzCo
CATEGORY

	YES		NO			
	N	MEAN	N	MEAN		Asymp. Sig. (2-tailed)
website importance	569	6.36819	1157	6.365925	website importance	0.58
trust importance	577	6.766031	1208	6.756554	trust importance	0.72
customer service importance	569	6.52314	1171	6.516083	customer service importance	0.46
information importance	556	6.264838	1173	6.337383	information importance	0.02
contactability importance	520	5.596154	1110	5.731081	contactability importance	0.38
no ads importance	569	6.446397	1193	6.464376	no ads importance	0.69
personalisation importance	547	3.982633	1161	4.075366	personalisation importance	0.40
company image importance	569	4.491213	1206	4.557629	company image importance	0.43
product availability importance	576	5.59809	1188	5.561448	product availability importance	0.22
website performance	554	6.331679	1145	6.28679	website performance	0.15
trust performance	571	6.58669	1189	6.545556	trust performance	0.49
customer service performance	563	6.397869	1100	6.296364	customer service performance	0.07
information performance	535	6.099533	1151	6.158992	information performance	0.11
contactability performance	456	5.427632	951	5.307571	contactability performance	0.07
no ads performance	555	6.454955	1137	6.326297	no ads performance	0.00
personalisation performance	520	4.545192	1112	4.732014	personalisation performance	0.05
company image performance	555	5.458559	1185	5.426582	company image performance	0.47
product availability performance	564	5.797872	1161	5.654608	product availability performance	0.01
website gap	549	-0.045082	1118	-0.083743	website gap	0.16
trust gap	564	-0.185579	1176	-0.213435	trust gap	0.46
customer service gap	555	-0.144144	1092	-0.226496	customer service gap	0.12
information gap	530	-0.183962	1131	-0.186782	information gap	0.51
contactability gap	449	-0.178174	943	-0.437434	contactability gap	0.00
no ads gap	550	-0.018182	1130	-0.159735	no ads gap	0.01
personalisation gap	516	0.514535	1103	0.599275	personalisation gap	0.17
company image gap	551	0.947368	1176	0.85034	company image gap	0.13
product availability gap	561	0.16934	1151	0.055169	product availability gap	0.20

COMPANY = EntzCo
CATEGORY

COMPANY = EntzCo
CATEGORY

	modem IN	MEAN	N	MEAN	Asymp. Sig.
website importance	441	6.4181	1,148	6.3505	0.007
trust importance	452	6.6083	1,202	6.7360	0.000
customer service importance	451	6.5920	1,160	6.4868	0.022
information importance	441	6.4178	1,160	6.2750	0.000
contactability importance	408	5.7414	1,098	5.6699	0.261
no ads importance	448	6.4978	1,191	6.4484	0.238
personalisation importance	434	4.2028	1,148	3.9904	0.019
company image importance	445	4.7011	1,192	4.4815	0.002
product availability importance	447	5.7774	1,181	5.4725	0.000
website performance	429	6.3248	1,142	6.2508	0.201
trust performance	451	6.5910	1,181	6.5583	0.719
customer service performance	431	6.3550	1,107	6.3189	0.201
information performance	430	6.1971	1,128	6.1114	0.026
contactability performance	352	5.4077	952	5.3319	0.213
no ads performance	430	6.3488	1,142	6.3774	0.848
personalisation performance	413	4.8935	1,101	4.5895	0.000
company image performance	431	5.5664	1,173	5.3968	0.023
product availability performance	440	5.8352	1,150	5.6313	0.001
website gap	423	-0.0887	1,117	-0.0677	0.498
trust gap	442	-0.2459	1,171	-0.1813	0.130
customer service gap	428	-0.2396	1,066	-0.1808	0.408
information gap	426	-0.2285	1,111	-0.1773	0.543
contactability gap	347	-0.4308	943	-0.3240	0.249
no ads gap	426	-0.1831	1,135	-0.0650	0.186
personalisation gap	411	0.6942	1,092	0.5375	0.102
company image gap	427	0.8162	1,165	0.8979	0.102
product availability gap	436	0.0367	1,143	0.1164	0.207

ServCo
CATEGORY

ServCo
CATEGORY

	modem		cable/adsl			
	N	MEAN	N	MEAN		Asymp. Sig.
website importance	107	6.1495	259	6.1023	website importance	0.675
trust importance	112	6.5685	262	6.5929	trust importance	0.775
customer service importance	104	6.0256	251	6.1979	customer service importance	0.390
information importance	0		0		information importance	
contactability importance	110	5.9773	255	6.0706	contactability importance	0.466
no ads importance	111	6.1847	272	6.2941	no ads importance	0.093
personalisation importance	108	3.8426	255	3.9039	personalisation importance	0.426
company image importance	114	4.6886	275	4.6055	company image importance	0.632
product availability importance	104	5.0817	259	4.9151	product availability importance	0.260
website performance	95	5.7487	240	5.5703	website performance	0.213
trust performance	89	6.0262	227	5.8328	trust performance	0.239
customer service performance	90	5.5667	206	5.3867	customer service performance	0.332
information performance	0		0		information performance	
contactability performance	86	5.1512	210	4.8738	contactability performance	0.042
no ads performance	87	5.6379	224	5.6138	no ads performance	0.627
personalisation performance	89	4.4157	229	4.3712	personalisation performance	0.761
company image performance	101	5.3020	254	5.1949	company image performance	0.448
product availability performance	96	5.3646	234	5.1068	product availability performance	0.029
website gap	93	-0.3871	233	-0.5247	website gap	0.635
trust gap	87	-0.4215	221	-0.7285	trust gap	0.133
customer service gap	88	-0.3561	203	-0.7947	customer service gap	0.012
information gap	0		0		information gap	
contactability gap	86	-0.6337	203	-1.1675	contactability gap	0.013
no ads gap	87	-0.4540	223	-0.6502	no ads gap	0.137
personalisation gap	89	0.4831	225	0.3622	personalisation gap	0.182
company image gap	101	0.5446	252	0.5516	company image gap	0.783
product availability gap	95	0.2632	234	0.1816	product availability gap	0.499

ToolCo
CATEGORY

ToolCo
CATEGORY

	modem		cable/adsl			
	N	MEAN	N	MEAN		Asymp. Sig.
website importance	90	5.9097	285	5.9825	website importance	0.817
trust importance	93	6.2509	289	6.3391	trust importance	0.990
customer service importance	89	5.8764	280	6.0452	customer service importance	0.350
information importance	88	5.7699	274	6.0392	information importance	0.083
contactability importance	97	5.9639	304	6.1431	contactability importance	0.461
no ads importance	95	6.1316	291	6.3076	no ads importance	0.647
personalisation importance	90	3.7278	288	3.5694	personalisation importance	0.508
company image importance	96	4.7396	299	4.5535	company image importance	0.396
product availability importance	90	4.8167	284	4.7887	product availability importance	0.974
website performance	86	5.2907	262	5.1355	website performance	0.364
trust performance	82	5.5569	260	5.5538	trust performance	0.974
customer service performance	77	5.3377	249	5.0696	customer service performance	0.149
information performance	76	5.1974	241	4.9087	information performance	0.178
contactability performance	88	5.6193	275	5.3309	contactability performance	0.115
no ads performance	80	5.6000	253	5.5336	no ads performance	0.787
personalisation performance	80	4.5125	255	3.9922	personalisation performance	0.000
company image performance	94	5.8138	283	5.5989	company image performance	0.091
product availability performance	84	4.9107	263	4.6597	product availability performance	0.136
website gap	80	-0.6063	256	-0.8550	website gap	0.155
trust gap	80	-0.6292	256	-0.8281	trust gap	0.202
customer service gap	77	-0.5065	246	-0.9729	customer service gap	0.058
information gap	74	-0.4698	236	-1.1314	information gap	0.001
contactability gap	86	-0.3140	274	-0.8084	contactability gap	0.014
no ads gap	79	-0.3861	252	-0.7937	no ads gap	0.068
personalisation gap	80	0.6750	252	0.3155	personalisation gap	0.093
company image gap	92	1.0870	278	0.9658	company image gap	0.681
product availability gap	81	0.1914	256	-0.1270	product availability gap	0.035

SportCo
CATEGORY

COMPANY = SportCo
CATEGORY

	modem		cable/adsl			
	N	MEAN	N	MEAN		Asymp. Sig.
website importance	205	6.3634	235	6.3420	website importance	0.339
trust importance	218	6.7095	235	6.7603	trust importance	0.969
customer service importance	219	6.5951	234	6.5228	customer service importance	0.408
information importance	202	6.2488	226	6.1073	information importance	0.140
contactability importance	218	6.4908	243	6.4794	contactability importance	0.995
no ads importance	217	6.3318	232	6.4159	no ads importance	0.819
personalisation importance	207	4.0749	235	3.8681	personalisation importance	0.160
company image importance	223	5.1592	248	5.0202	company image importance	0.270
product availability importance	216	5.5278	237	5.4072	product availability importance	0.279
website performance	200	5.8644	231	5.7733	website performance	0.124
trust performance	210	6.3286	231	6.3579	trust performance	0.975
customer service performance	206	5.9142	220	5.9076	customer service performance	0.729
information performance	188	5.2008	210	4.8964	information performance	0.023
contactability performance	203	5.9680	228	6.0241	contactability performance	0.688
no ads performance	203	6.0000	215	6.0977	no ads performance	0.371
personalisation performance	189	4.2884	209	4.1316	personalisation performance	0.174
company image performance	223	6.1211	243	6.0782	company image performance	0.368
product availability performance	211	5.3365	229	5.3079	product availability performance	0.844
website gap	196	-0.4847	228	-0.5844	website gap	0.371
trust gap	208	-0.3926	227	-0.4097	trust gap	0.659
customer service gap	204	-0.7042	219	-0.6104	customer service gap	0.508
information gap	183	-1.0683	207	-1.2077	information gap	0.489
contactability gap	200	-0.5300	226	-0.4358	contactability gap	0.328
no ads gap	201	-0.3333	215	-0.3163	no ads gap	0.846
personalisation gap	187	0.0963	209	0.2536	personalisation gap	0.507
company image gap	220	0.9682	242	1.0351	company image gap	0.412
product availability gap	208	-0.2139	228	-0.1206	product availability gap	0.340

purchased from retail store from company?
 ToolCo
 CATEGORY

ToolCo
 CATEGORY

	no		yes			
	N	MEAN	N	MEAN		Asymp. Sig.
website importance	151	5.8800	281	6.0022	website importance	0.917
trust importance	147	6.1701	281	6.3428	trust importance	0.681
customer service importance	140	5.9476	274	6.0097	customer service importance	0.358
information importance	138	5.9384	263	5.9677	information importance	0.370
contactability importance	161	6.0435	300	6.1483	contactability importance	0.888
no ads importance	147	6.1871	284	6.2588	no ads importance	0.296
personalisation importance	144	3.5903	288	3.6563	personalisation importance	0.616
company image importance	158	4.7120	303	4.5545	company image importance	0.329
product availability importance	151	4.8775	282	4.7482	product availability importance	0.125
website performance	138	5.1664	266	5.1377	website performance	0.599
trust performance	129	5.5142	251	5.5657	trust performance	0.740
customer service performance	118	5.2147	243	5.0754	customer service performance	0.180
information performance	115	4.9957	232	4.9321	information performance	0.506
contactability performance	142	5.3204	276	5.3750	contactability performance	0.640
no ads performance	122	5.6107	248	5.5000	no ads performance	0.456
personalisation performance	122	4.1475	260	4.0982	personalisation performance	0.834
company image performance	147	5.6122	291	5.6289	company image performance	0.943
product availability performance	138	4.8152	264	4.6534	product availability performance	0.058
website gap	133	-0.7782	254	-0.8563	website gap	0.448
trust gap	127	-0.7428	247	-0.7773	trust gap	0.844
customer service gap	118	-0.7910	239	-0.8996	customer service gap	0.909
information gap	113	-0.9757	225	-0.9844	information gap	0.807
contactability gap	141	-0.7376	272	-0.7445	contactability gap	0.775
no ads gap	122	-0.6230	244	-0.7152	no ads gap	0.836
personalisation gap	122	0.4016	256	0.3438	personalisation gap	0.843
company image gap	145	0.8552	284	1.0229	company image gap	0.082
product availability gap	135	-0.1037	255	-0.0529	product availability gap	0.785

SportCo
CATEGORY

COMPANY = SportCo
CATEGORY

SportCo CATEGORY	no		yes		Asym. Sig.	
	N	MEAN	N	MEAN		
website importance	418	6.3178	112	6.3817	website importance	0.787
trust importance	429	6.7172	108	6.7787	trust importance	0.234
customer service importance	428	6.5312	110	6.5545	customer service importance	0.546
information importance	401	6.1727	103	6.1163	information importance	0.188
contactability importance	437	6.4577	114	6.5570	contactability importance	0.295
no ads importance	422	6.3698	106	6.2925	no ads importance	0.476
personalisation importance	424	4.0342	108	3.8915	personalisation importance	0.385
company image importance	448	5.0668	118	5.1271	company image importance	0.597
product availability importance	437	5.5034	111	5.3018	product availability importance	0.072
website performance	406	5.8362	107	5.6484	website performance	0.038
trust performance	414	6.3374	101	6.2145	trust performance	0.142
customer service performance	401	5.9335	99	5.6936	customer service performance	0.028
information performance	368	5.1698	97	4.8686	information performance	0.135
contactability performance	408	6.0123	108	5.8657	contactability performance	0.125
no ads performance	394	6.1041	96	5.8281	no ads performance	0.090
personalisation performance	386	4.2642	85	4.1211	personalisation performance	0.510
company image performance	444	6.0800	114	6.2105	company image performance	0.104
product availability performance	420	5.4118	109	5.0138	product availability performance	0.002
website gap	399	-0.4893	106	-0.7252	website gap	0.046
trust gap	406	-0.3863	100	-0.5567	trust gap	0.054
customer service gap	398	-0.6181	99	-0.8451	customer service gap	0.034
information gap	361	-1.0786	95	-1.3000	information gap	0.244
contactability gap	403	-0.4504	107	-0.6589	contactability gap	0.060
no ads gap	392	-0.2793	96	-0.4844	no ads gap	0.168
personalisation gap	383	0.1580	95	0.2105	personalisation gap	0.704
company image gap	437	0.9920	114	1.0395	company image gap	0.778
product availability gap	416	-0.1166	108	-0.2824	product availability gap	0.278

APPENDIX 8.3

COMPANY BY COMPANY – SITUATIONAL VS SQ DIFFERENCES – CONTINUOUS VARIABLES

ENTZCO

** Correlation is significant at the 0.01 level (2-tailed).
 * Correlation is significant at the 0.05 level (2-tailed).
 spearman's rho nonparametric correlation, missing values exc pairwise

Co by co SIT vs SQ doc

ENTZCO		website importance	trust importance	customer service importance	information importance	contactability importance	no ads importance	personalisation importance	company image importance	product availability importance
Purchase Involvement	Correlation Coefficient	.206(**)	.114(**)	.170(**)	.225(**)	.110(**)	.074(**)	.139(**)	.154(**)	.103(**)
	Sig. (2-tailed)	0	0	0	0	0	0.002	0	0	0
	N	1715	1773	1728	1717	1616	1750	1701	1766	1756
Money saved by finding lower price is not worth the effort	Correlation Coefficient	-.104(**)	-.105(**)	-.100(**)	-.102(**)	-.084(**)	-.051(*)	.067(**)	0.039	0.005
	Sig. (2-tailed)	0	0	0	0	0.001	0.034	0.005	0.103	0.847
	N	1725	1787	1743	1730	1627	1763	1709	1777	1766
Price is a good indicator of quality	Correlation Coefficient	-0.01	-.061(**)	-0.034	-0.001	-0.02	-0.037	.166(**)	.186(**)	0.03
	Sig. (2-tailed)	0.668	0.01	0.159	0.981	0.424	0.122	0	0	0.211
	N	1728	1788	1743	1731	1631	1764	1712	1780	1769
no time to fully research products so rely on name trust	Correlation Coefficient	0.014	0.007	0.03	0.004	-0.01	0.011	.089(**)	.125(**)	0.038
	Sig. (2-tailed)	0.553	0.758	0.21	0.882	0.688	0.652	0	0	0.108
	N	1729	1790	1743	1732	1630	1765	1711	1779	1768
Importance of low price	Correlation Coefficient	0.035	0.041	0.036	0.038	.082(**)	0.036	-0.007	-0.043	-0.031
	Sig. (2-tailed)	0.151	0.086	0.13	0.114	0.001	0.129	0.768	0.07	0.188
	N	1732	1792	1747	1735	1634	1768	1715	1784	1773
Importance of high quality service	Correlation Coefficient	.171(**)	.142(**)	.188(**)	.142(**)	.131(**)	.095(**)	.069(**)	.066(**)	.094(**)
	Sig. (2-tailed)	0	0	0	0	0	0	0.004	0.005	0
	N	1731	1790	1745	1733	1633	1766	1713	1782	1771
Online History	Correlation Coefficient	-0.032	-0.02	-.067(**)	-.097(**)	-.069(**)	-0.019	-.129(**)	-.094(**)	-0.027
	Sig. (2-tailed)	0.19	0.404	0.006	0	0.005	0.42	0	0	0.257

Company History (for ServCo no purchase measure)	N	1712	1772	1728	1715	1619	1747	1696	1765	1755
	Correlation Coefficient	.062(**)	0.029	0.023	-0.005	-.117(**)	.053(*)	0.042	0.023	.080(**)
	Sig. (2-tailed)	0.012	0.232	0.35	0.845	0	0.031	0.092	0.351	0.001
Behavioural Loyalty	N	1652	1708	1665	1653	1564	1685	1635	1701	1691
	Correlation Coefficient	-.056(**)	-.090(**)	-0.043	0.014	-0.032	-0.042	.176(**)	.128(**)	.116(**)
	Sig. (2-tailed)	0.019	0	0.072	0.546	0.192	0.081	0	0	0
Attitudinal Loyalty	N	1734	1795	1749	1737	1636	1770	1717	1786	1775
	Correlation Coefficient	.253(**)	.169(**)	.226(**)	.205(**)	.120(**)	.114(**)	.083(**)	.110(**)	.147(**)
	Sig. (2-tailed)	0	0	0	0	0	0	0.001	0	0
Overall Satisfaction	N	1730	1790	1744	1732	1633	1765	1714	1782	1771
	Correlation Coefficient	.211(**)	.154(**)	.213(**)	.180(**)	.069(**)	.124(**)	0.042	.085(**)	.122(**)
	Sig. (2-tailed)	0	0	0	0	0.005	0	0.08	0	0
Prefer internet companies know from high street	N	1722	1782	1737	1725	1626	1758	1708	1774	1763
	Correlation Coefficient	0.041	-0.028	.048(*)	.100(**)	0.033	0.009	.241(**)	.248(**)	.092(**)
	Sig. (2-tailed)	0.091	0.235	0.045	0	0.183	0.719	0	0	0
Would purchase from company only contactable online	N	1732	1793	1748	1736	1635	1769	1715	1784	1773
	Correlation Coefficient	-.055(*)	-0.033	-.050(*)	-0.03	-.119(**)	-0.019	0.009	-0.041	0.005
	Sig. (2-tailed)	0.022	0.159	0.035	0.212	0	0.413	0.71	0.083	0.828
Technoreadiness	N	1731	1791	1747	1734	1634	1767	1715	1784	1772
	Correlation Coefficient	0.011	.057(*)	0.003	-0.018	-.090(**)	0.046	-.108(**)	-.133(**)	-.048(*)
	Sig. (2-tailed)	0.662	0.02	0.896	0.463	0	0.057	0	0	0.049
Time Capacity	N	1620	1686	1647	1643	1539	1675	1616	1667	1653
	Correlation Coefficient	.108(**)	.082(**)	.101(**)	.127(**)	.076(**)	.103(**)	.077(**)	0.005	.083(**)
	Sig. (2-tailed)	0	0.001	0	0	0.002	0	0.002	0.827	0.001
Products Purchased Online	N	1698	1770	1725	1711	1606	1750	1686	1746	1735
	Correlation Coefficient	-.058(*)	-0.006	-0.038	-0.04	0.033	-0.016	-.139(**)	-.134(**)	-.090(**)
	Sig. (2-tailed)	0.017	0.791	0.109	0.096	0.187	0.504	0	0	0
Online Activities	N	1735	1795	1750	1738	1637	1771	1718	1787	1776
	Correlation Coefficient	-.099(**)	-.074(**)	-.113(**)	-.064(**)	-0.043	-.048(*)	-.051(*)	-.117(**)	-.050(**)
	Sig. (2-tailed)	0	0.002	0	0.008	0.081	0.042	0.033	0	0
	N	1735	1795	1750	1738	1637	1771	1718	1787	1776

ENTZCO		website performance	trust performance	customer service performance	information performance	contactability performance	no ads performance	personalisation performance	company image performance	product availability performance
Purchase Involvement	Correlation Coefficient	.120(**)	0.045	.106(**)	.103(**)	.054(*)	.081(**)	.063(*)	.134(**)	.067(**)
	Sig. (2-tailed)	0	0.062	0	0	0.044	0.001	0.011	0	0.005
	N	1686	1749	1654	1674	1397	1678	1622	1729	1715
Money saved by finding lower price is not worth the effort	Correlation Coefficient	-.075(**)	-0.039	-0.01	-.064(**)	0.024	-0.026	0.044	-0.02	0.026
	Sig. (2-tailed)	0.002	0.102	0.688	0.009	0.365	0.294	0.075	0.399	0.285
	N	1698	1761	1665	1685	1405	1690	1632	1742	1727
Price is a good indicator of quality	Correlation Coefficient	0.02	0.008	0.037	0.044	0.047	-0.011	.141(**)	.081(**)	0.021
	Sig. (2-tailed)	0.404	0.74	0.134	0.069	0.076	0.654	0	0.001	0.377
	N	1701	1762	1665	1686	1408	1691	1634	1743	1728
no time to fully research products so rely on name trust	Correlation Coefficient	0.016	0	.048(*)	0.045	0.017	0.001	.082(**)	0.031	.053(*)
	Sig. (2-tailed)	0.518	0.984	0.05	0.066	0.513	0.98	0.001	0.191	0.028
	N	1700	1763	1665	1688	1408	1692	1633	1742	1727
Importance of low price	Correlation Coefficient	-0.045	-0.031	-.083(**)	-0.036	-0.05	-0.031	-.070(**)	-.082(**)	-.111(**)
	Sig. (2-tailed)	0.063	0.2	0.001	0.134	0.063	0.202	0.005	0.001	0
	N	1704	1766	1669	1690	1410	1695	1637	1747	1732
Importance of high quality service	Correlation Coefficient	.160(**)	.133(**)	.131(**)	.070(**)	.080(**)	.087(**)	.078(**)	.107(**)	.074(**)
	Sig. (2-tailed)	0	0	0	0.004	0.001	0	0.002	0	0.002
	N	1703	1764	1667	1688	1408	1693	1635	1745	1730
Online History	Correlation Coefficient	-0.033	0.006	-.068(**)	-.146(**)	-.074(**)	0.033	-.150(**)	-.056(*)	-0.029
	Sig. (2-tailed)	0.171	0.806	0.006	0	0.005	0.18	0	0.02	0.233
	N	1687	1747	1651	1671	1395	1677	1621	1730	1716
Company History (for ServCo no purchase measure)	Correlation Coefficient	.157(**)	.134(**)	.118(**)	.049(*)	.081(**)	.193(**)	0.047	.143(**)	.156(**)
	Sig. (2-tailed)	0	0	0	0.049	0.003	0	0.064	0	0
	N	1626	1684	1591	1613	1353	1616	1566	1668	1652
Behavioural Loyalty	Correlation Coefficient	-.083(**)	-.056(*)	-0.038	0.02	0.018	-.078(**)	.120(**)	0.027	.077(**)
	Sig. (2-tailed)	0.01	0.018	0.118	0.409	0.499	0.001	0	0.26	0.001
	N	1706	1768	1671	1692	1412	1697	1639	1749	1734
Attitudinal Loyalty	Correlation Coefficient	.340(**)	.241(**)	.293(**)	.292(**)	.206(**)	.238(**)	.180(**)	.239(**)	.208(**)
	Sig. (2-tailed)	0	0	0	0	0	0	0	0	0

	N	1702	1764	1667	1687	1410	1692	1636	1745	1730
Overall Satisfaction	Correlation Coefficient	.369(**)	.293(**)	.358(**)	.328(**)	.191(**)	.270(**)	.182(**)	.289(**)	.234(**)
	Sig. (2-tailed)	0	0	0	0	0	0	0	0	0
	N	1693	1756	1659	1681	1402	1685	1629	1736	1722
Prefer internet companies know from high street	Correlation Coefficient	0.006	-0.03	0.045	.069(**)	0.047	-0.017	.164(**)	.114(**)	-.058(*)
	Sig. (2-tailed)	0.81	0.209	0.064	0.005	0.079	0.479	0	0	0.016
	N	1704	1766	1670	1691	1411	1696	1638	1747	1732
Would purchase from company only contactable online	Correlation Coefficient	-0.035	-0.014	0.008	-0.047	-0.042	-0.004	-0.015	-0.038	-0.015
	Sig. (2-tailed)	0.15	0.552	0.753	0.054	0.117	0.873	0.549	0.113	0.532
	N	1704	1765	1669	1689	1410	1694	1638	1747	1731
Technoreadiness	Correlation Coefficient	.117(**)	.172(**)	.100(**)	0.024	0.013	.124(**)	-.071(**)	-0.008	-0.002
	Sig. (2-tailed)	0	0	0	0.339	0.62	0	0.005	0.738	0.943
	N	1598	1663	1578	1599	1349	1609	1547	1636	1622
Time Capacity	Correlation Coefficient	.048(*)	0.021	0.019	.084(**)	0.011	0.019	0.037	0.028	.057(*)
	Sig. (2-tailed)	0.05	0.376	0.436	0.001	0.679	0.438	0.138	0.251	0.019
	N	1671	1744	1649	1668	1391	1678	1609	1712	1697
Products Purchased Online	Correlation Coefficient	-0.042	-0.018	-.051(*)	-.067(**)	-0.025	-0.041	-.133(**)	-.129(**)	-.087(**)
	Sig. (2-tailed)	0.086	0.44	0.037	0.006	0.352	0.09	0	0	0
	N	1707	1769	1672	1693	1413	1698	1640	1750	1735
Online Activities	Correlation Coefficient	-.089(**)	-.052(*)	-.113(**)	-.078(**)	-.081(**)	-0.041	-.101(**)	-.123(**)	-.063(**)
	Sig. (2-tailed)	0	0.029	0	0.001	0.002	0.092	0	0	0.008
	N	1707	1769	1672	1693	1413	1698	1640	1750	1735

ENTZCO		website gap	trust gap	customer service gap	information gap	contactability gap	no ads gap	personalisation gap	company image gap	product availability gap
Purchase Involvement	Correlation Coefficient	-.067(**)	-0.036	-0.028	-.102(**)	-.053(*)	0.005	-.089(**)	-.072(**)	-0.047
	Sig. (2-tailed)	0.007	0.131	0.264	0	0.049	0.84	0	0.003	0.053
	N	1654	1729	1638	1649	1382	1666	1611	1717	1703
Money saved by finding lower price is not worth the effort	Correlation Coefficient	0.024	0.027	.070(**)	0.03	.099(**)	0.01	-.049(*)	-.057(*)	0.016
	Sig. (2-tailed)	0.334	0.253	0.005	0.222	0	0.667	0.047	0.018	0.505
	N	1665	1741	1649	1660	1390	1678	1619	1729	1714
Price is a good indicator of quality	Correlation Coefficient	0.032	0.038	.059(*)	0.038	0.041	0.017	-.083(**)	-.146(**)	-0.017
	Sig. (2-tailed)	0.188	0.113	0.016	0.118	0.129	0.496	0.001	0	0.492
	N	1668	1742	1649	1661	1393	1679	1621	1730	1715
no time to fully research products so rely on name trust	Correlation Coefficient	0.003	-0.02	0.019	0.038	0.003	-0.025	-0.039	-.096(**)	0.009
	Sig. (2-tailed)	0.899	0.406	0.433	0.119	0.913	0.309	0.121	0	0.721
	N	1668	1744	1649	1663	1393	1680	1620	1729	1714
Importance of low price	Correlation Coefficient	-.067(**)	-.066(**)	-.113(**)	-.074(**)	-.125(**)	-.063(**)	-.051(*)	-0.025	-.064(**)
	Sig. (2-tailed)	0.006	0.006	0	0.003	0	0.01	0.039	0.301	0.008
	N	1671	1746	1653	1665	1395	1683	1624	1734	1719
Importance of high quality service	Correlation Coefficient	0.012	0.032	-0.031	-0.048	-0.013	0.004	-0.001	0.022	-0.032
	Sig. (2-tailed)	0.623	0.188	0.213	0.052	0.626	0.881	0.984	0.35	0.19
	N	1670	1744	1651	1663	1394	1681	1622	1732	1717
Online History	Correlation Coefficient	-0.013	0.008	-0.002	-.082(**)	0.011	0.042	0.01	.063(**)	0.014
	Sig. (2-tailed)	0.593	0.752	0.941	0.001	0.685	0.086	0.684	0.009	0.575
	N	1654	1727	1635	1646	1381	1665	1608	1717	1703
Company History (for ServCo no purchase measure)	Correlation Coefficient	.116(**)	.109(**)	.109(**)	.061(*)	.215(**)	.149(**)	0.005	.099(**)	.064(**)
	Sig. (2-tailed)	0	0	0	0.015	0	0	0.841	0	0.009
	N	1595	1665	1575	1590	1339	1605	1553	1655	1639
Behavioural Loyalty	Correlation Coefficient	0	0.008	-0.01	0.003	0.016	-.064(**)	-.091(**)	-.115(**)	-0.033
	Sig. (2-tailed)	0.994	0.754	0.698	0.906	0.553	0.009	0	0	0.175
	N	1673	1749	1655	1667	1397	1685	1626	1736	1721
Attitudinal Loyalty	Correlation Coefficient	.116(**)	.119(**)	.108(**)	.125(**)	.090(**)	.130(**)	.077(**)	.079(**)	0.044
	Sig. (2-tailed)	0	0	0	0	0.001	0	0.002	0.001	0.068
	N	1669	1744	1651	1662	1396	1680	1623	1732	1717

Overall Satisfaction	Correlation Coefficient	.208(**)	.211(**)	.195(**)	.190(**)	.151(**)	.158(**)	.127(**)	.154(**)	.094(**)
	Sig. (2-tailed)	0	0	0	0	0	0	0	0	0
	N	1661	1737	1643	1656	1387	1673	1617	1724	1709
Prefer internet companies know from high street	Correlation Coefficient	-0.025	0.002	0.032	0.009	-0.002	-0.021	-.121(**)	-.187(**)	-.060(*)
	Sig. (2-tailed)	0.3	0.928	0.197	0.726	0.946	0.397	0	0	0.012
	N	1671	1747	1654	1666	1396	1684	1625	1734	1719
Would purchase from company only contactable online	Correlation Coefficient	0.031	0.012	0.048	-0.02	.068(*)	-0.005	-0.006	0.042	-0.009
	Sig. (2-tailed)	0.211	0.616	0.051	0.426	0.011	0.83	0.806	0.079	0.696
	N	1671	1745	1653	1664	1395	1682	1625	1734	1718
Technoreadiness	Correlation Coefficient	.106(**)	.130(**)	.103(**)	0.038	.108(**)	.084(**)	0.038	.161(**)	.065(**)
	Sig. (2-tailed)	0	0	0	0.135	0	0.001	0.14	0	0.009
	N	1568	1647	1564	1578	1334	1599	1535	1625	1609
Time Capacity	Correlation Coefficient	-0.046	-.055(*)	-.067(**)	-0.038	-.062(*)	-.057(*)	-0.045	0.021	-0.035
	Sig. (2-tailed)	0.061	0.021	0.007	0.119	0.021	0.019	0.073	0.392	0.148
	N	1640	1725	1633	1643	1377	1666	1597	1699	1684
Products Purchased Online	Correlation Coefficient	0.007	-0.025	-0.019	-0.046	-.053(*)	0.007	0.045	.053(*)	0.022
	Sig. (2-tailed)	0.782	0.294	0.443	0.058	0.05	0.783	0.067	0.027	0.368
	N	1674	1749	1656	1668	1398	1686	1627	1737	1722
Online Activities	Correlation Coefficient	0.017	0.001	-0.003	-0.032	-0.021	0.017	-0.016	0.041	.055(*)
	Sig. (2-tailed)	0.48	0.964	0.894	0.195	0.433	0.475	0.522	0.084	0.023
	N	1674	1749	1656	1668	1398	1686	1627	1737	1722

ENTZCO		Purchase Involvement	Money saved by finding lower price is not worth the effort	Price is a good indicator of quality	no time to fully research products so rely on name trust	Importance of low price	Importance of high quality service	Online History	Company History (for ServCo no purchase measure)
Purchase Involvement	Correlation Coefficient	1	-.219(**)	0.028	-.161(**)	.148(**)	.081(**)	0.045	-.123(**)
	Sig. (2-tailed)	.	0	0.237	0	0	0.001	0.053	0
	N	1828	1821	1824	1822	1826	1824	1803	1740
Money saved by finding lower price is not worth the effort	Correlation Coefficient	-.219(**)	1	.200(**)	.298(**)	-.292(**)	-0.035	-0.025	.200(**)
	Sig. (2-tailed)	0	.	0	0	0	0.139	0.286	0
	N	1821	1840	1836	1834	1838	1836	1816	1750
Price is a good indicator of quality	Correlation Coefficient	0.028	.200(**)	1	.241(**)	-.054(*)	-0.029	-.073(**)	0.02
	Sig. (2-tailed)	0.237	0	.	0	0.02	0.216	0.002	0.412
	N	1824	1836	1843	1837	1841	1839	1818	1752
no time to fully research products so rely on name trust	Correlation Coefficient	-.161(**)	.298(**)	.241(**)	1	-.114(**)	0.027	-.091(**)	.104(**)
	Sig. (2-tailed)	0	0	0	.	0	0.256	0	0
	N	1822	1834	1837	1842	1840	1838	1817	1752
Importance of low price	Correlation Coefficient	.148(**)	-.292(**)	-.054(*)	-.114(**)	1	.281(**)	0.021	-.164(**)
	Sig. (2-tailed)	0	0	0.02	0	.	0	0.363	0
	N	1826	1838	1841	1840	1847	1844	1823	1757
Importance of high quality service	Correlation Coefficient	.081(**)	-0.035	-0.029	0.027	.281(**)	1	-0.008	.060(*)
	Sig. (2-tailed)	0.001	0.139	0.216	0.256	0	.	0.743	0.012
	N	1824	1836	1839	1838	1844	1845	1821	1755
Online History	Correlation Coefficient	0.045	-0.025	-.073(**)	-.091(**)	0.021	-0.008	1	.374(**)
	Sig. (2-tailed)	0.053	0.286	0.002	0	0.363	0.743	.	0
	N	1803	1816	1818	1817	1823	1821	1825	1750
Company History (for ServCo no purchase measure)	Correlation Coefficient	-.123(**)	.200(**)	0.02	.104(**)	-.164(**)	.060(*)	.374(**)	1
	Sig. (2-tailed)	0	0	0.412	0	0	0.012	0	.
	N	1740	1750	1752	1752	1757	1755	1750	1759
Behavioural Loyalty	Correlation Coefficient	-.048(*)	.169(**)	.168(**)	.130(**)	-.105(**)	-0.044	-.161(**)	-.050(*)
	Sig. (2-tailed)	0.04	0	0	0	0	0.061	0	0.037
	N	1827	1839	1842	1841	1846	1844	1824	1758
Attitudinal Loyalty	Correlation Coefficient	.154(**)	-.085(**)	0.006	0.032	-0.008	.136(**)	-.056(*)	.082(**)
	Sig. (2-tailed)	0	0	0.797	0.168	0.729	0	0.018	0.009
	N	1822	1834	1837	1836	1841	1839	1820	1754
Overall Satisfaction	Correlation Coefficient	.075(**)	-.057(*)	-0.023	0.028	-.047(*)	.145(**)	-0.014	.174(**)
	Sig. (2-tailed)	0.001	0.015	0.322	0.229	0.043	0	0.554	0
	N	1816	1826	1829	1828	1833	1831	1811	1746

Prefer internet companies know from high street	Correlation Coefficient	0.042	.140(**)	.223(**)	.185(**)	-0.043	0.042	-.144(**)	-0.013
	Sig. (2-tailed)	0.071	0	0	0	0.066	0.07	0	0.594
	N	1825	1837	1840	1840	1844	1842	1822	1757
Would purchase from company only contactable online	Correlation Coefficient	.070(**)	.054(*)	.080(**)	.091(**)	-0.022	-.049(*)	.132(**)	0.017
	Sig. (2-tailed)	0.003	0.021	0.001	0	0.352	0.034	0	0.486
	N	1824	1836	1839	1837	1842	1840	1821	1754
Technoreadiness	Correlation Coefficient	0.025	-.076(**)	-.103(**)	-.156(**)	.057(*)	0.045	.329(**)	.169(**)
	Sig. (2-tailed)	0.297	0.002	0	0	0.019	0.064	0	0
	N	1699	1709	1711	1713	1714	1712	1694	1636
Time Capacity	Correlation Coefficient	0.044	-0.026	0.004	.072(**)	.070(**)	.081(**)	0.027	-0.007
	Sig. (2-tailed)	0.062	0.275	0.873	0.002	0.003	0.001	0.257	0.776
	N	1782	1796	1797	1798	1801	1799	1781	1716
Products Purchased Online	Correlation Coefficient	.059(*)	-.117(**)	-.105(**)	-.127(**)	0.039	-0.02	.374(**)	-0.018
	Sig. (2-tailed)	0.012	0	0	0	0.096	0.398	0	0.442
	N	1828	1840	1843	1842	1847	1845	1825	1759
Online Activities	Correlation Coefficient	-0.044	-0.045	-.076(**)	-.064(**)	0.038	-0.005	.222(**)	.083(**)
	Sig. (2-tailed)	0.061	0.054	0.001	0.006	0.1	0.833	0	0.001
	N	1828	1840	1843	1842	1847	1845	1825	1759

ENTZCO		Behavioural Loyalty	Attitudinal Loyalty	Overall Satisfaction	Prefer internet companies know from high street	Would purchase from company only contactable online	Technoreadiness	Time Capacity	Products Purchased Online	Online Activities
Purchase Involvement	Correlation Coefficient	-.048(*)	.154(**)	.075(**)	0.042	.070(**)	0.025	0.044	.059(*)	-0.044
	Sig. (2-tailed)	0.04	0	0.001	0.071	0.003	0.297	0.062	0.012	0.061
	N	1827	1822	1816	1825	1824	1699	1782	1828	1828
Money saved by finding lower price is not worth the effort	Correlation Coefficient	.169(**)	-.085(**)	-.057(*)	.140(**)	.054(*)	-.076(**)	-0.026	-.117(**)	-0.045
	Sig. (2-tailed)	0	0	0.015	0	0.021	0.002	0.275	0	0.054
	N	1839	1834	1826	1837	1836	1709	1796	1840	1840
Price is a good indicator of quality	Correlation Coefficient	.168(**)	0.006	-0.023	.223(**)	.080(**)	-.103(**)	0.004	-.105(**)	-.076(**)
	Sig. (2-tailed)	0	0.797	0.322	0	0.001	0	0.873	0	0.001
	N	1842	1837	1829	1840	1839	1711	1797	1843	1843
no time to fully research products so rely on name trust	Correlation Coefficient	.130(**)	0.032	0.028	.186(**)	.091(**)	-.156(**)	.072(**)	-.127(**)	-.064(**)
	Sig. (2-tailed)	0	0.168	0.229	0	0	0	0.002	0	0.006
	N	1841	1836	1828	1840	1837	1713	1798	1842	1842
Importance of low price	Correlation Coefficient	-.105(**)	-0.008	-.047(*)	-0.043	-0.022	.057(*)	.070(**)	0.039	0.038
	Sig. (2-tailed)	0	0.729	0.043	0.066	0.352	0.019	0.003	0.096	0.1
	N	1846	1841	1833	1844	1842	1714	1801	1847	1847
Importance of high quality service	Correlation Coefficient	-0.044	.136(**)	.145(**)	0.042	-.049(*)	0.045	.081(**)	-0.02	-0.005
	Sig. (2-tailed)	0.061	0	0	0.07	0.034	0.064	0.001	0.398	0.833
	N	1844	1839	1831	1842	1840	1712	1799	1845	1845
Online History	Correlation Coefficient	-.161(**)	-.056(*)	-0.014	-.144(**)	.132(**)	.329(**)	0.027	.374(**)	.222(**)
	Sig. (2-tailed)	0	0.018	0.554	0	0	0	0.257	0	0
	N	1824	1820	1811	1822	1821	1694	1781	1825	1825
Company History (for ServCo no purchase measure)	Correlation Coefficient	-.050(*)	.062(**)	.174(**)	-0.013	0.017	.169(**)	-0.007	-0.018	.083(**)
	Sig. (2-tailed)	0.037	0.009	0	0.594	0.486	0	0.776	0.442	0.001
	N	1758	1754	1746	1757	1754	1636	1716	1759	1759
Behavioural Loyalty	Correlation Coefficient	1	-.119(**)	-.109(**)	.213(**)	-0.001	-.184(**)	-0.021	-.173(**)	-.076(**)
	Sig. (2-tailed)		0	0	0	0.964	0	0.37	0	0.001
	N	1849	1843	1835	1846	1844	1715	1803	1849	1849
Attitudinal Loyalty	Correlation Coefficient	-.119(**)	1	.465(**)	0.004	-0.012	0.024	.075(**)	-0.022	-.083(**)

	Sig. (2-tailed)	0	0	0	0.85	0.597	0.331	0.001	0.351	0
	N	1843	1844	1830	1841	1839	1710	1798	1844	1844
Overall Satisfaction	Correlation Coefficient	-.109(**)	.465(**)	1	-0.009	0.003	.048(*)	.065(**)	-0.015	-0.044
	Sig. (2-tailed)	0	0		0.706	0.909	0.045	0.006	0.527	0.061
	N	1835	1830	1836	1833	1831	1706	1794	1836	1836
Prefer Internet companies know from high street	Correlation Coefficient	.213(**)	0.004	-0.009	1	-0.003	-.190(**)	0.022	-.143(**)	-.091(**)
	Sig. (2-tailed)	0	0.85	0.706		0.894	0	0.361	0	0
	N	1846	1841	1833	1847	1842	1714	1801	1847	1847
Would purchase from company only contactable online	Correlation Coefficient	-0.001	-0.012	0.003	-0.003	1	.172(**)	0.027	.083(**)	.059(*)
	Sig. (2-tailed)	0.964	0.597	0.909	0.894		0	0.25	0	0.011
	N	1844	1839	1831	1842	1845	1713	1800	1845	1845
Technoreadiness	Correlation Coefficient	-.184(**)	0.024	.048(*)	-.190(**)	.172(**)	1	.048(*)	.305(**)	.272(**)
	Sig. (2-tailed)	0	0.331	0.045	0	0		0.045	0	0
	N	1715	1710	1706	1714	1713	1716	1703	1716	1716
Time Capacity	Correlation Coefficient	-0.021	.075(**)	.065(**)	0.022	0.027	.048(*)	1	.073(**)	0.009
	Sig. (2-tailed)	0.37	0.001	0.006	0.361	0.25	0.045		0.002	0.711
	N	1803	1798	1794	1801	1800	1703	1804	1804	1804
Products Purchased Online	Correlation Coefficient	-.173(**)	-0.022	-0.015	-.143(**)	.083(**)	.305(**)	.073(**)	1	.338(**)
	Sig. (2-tailed)	0	0.351	0.527	0	0	0	0.002		0
	N	1849	1844	1836	1847	1845	1716	1804	1850	1850
Online Activities	Correlation Coefficient	-.076(**)	-.053(**)	-0.044	-.091(**)	.059(*)	.272(**)	0.009	.338(**)	1
	Sig. (2-tailed)	0.001	0	0.061	0	0.011	0	0.711	0	
	N	1849	1844	1836	1847	1845	1716	1804	1850	1850

Descriptive Statistics(a) – EntzCo

	N	Minimum	Maximum	Mean	Std. Deviation
website importance	1735	1	7	6.3639	0.8177
trust importance	1795	1	7	6.7595	0.6701
customer service importance	1750	1	7	6.5181	0.7414
information importance	1738	1	7	6.3149	0.8137
contactability importance	1637	1	7	5.6888	1.5092
no ads importance	1771	1	7	6.4582	0.9138
personalisation importance	1718	1	7	4.053	1.6087
company image importance	1787	1	7	4.5347	1.5311
product availability importance	1776	1	7	5.5676	1.4381
website performance	1707	1	7	6.303	0.7223
trust performance	1769	2	7	6.56	0.7243
customer service performance	1672	3	7	6.3309	0.7958
information performance	1693	1.25	7	6.1424	0.9008
contactability performance	1413	1	7	5.3471	1.3013
no ads performance	1698	1	7	6.3681	0.8759
personalisation performance	1640	1	7	4.6756	1.3145
company image performance	1750	1	7	5.434	1.1641
product availability performance	1735	1	7	5.6994	1.224
website gap	1674	-3.25	6	-0.07	0.7659
trust gap	1749	-5	6	-0.2039	0.6956
customer service gap	1656	-4	6	-0.1997	0.8019
information gap	1668	-5	6	-0.1856	0.9178
contactability gap	1398	-6	6	-0.3552	1.4642
no ads gap	1686	-6	6	-0.1148	0.941
personalisation gap	1627	-5.5	6	0.5698	1.346
company image gap	1737	-5	6	0.8797	1.418
product availability gap	1722	-6	6	0.0935	1.2396
Purchase Involvement	1828	3	15	11.176	2.2409
Money saved by finding lower price is not worth the effort	1840	1	5	2.0353	1.1814
Price is a good indicator of quality	1843	1	5	2.6272	1.0916
no time to fully research products so rely on name trust	1842	1	5	2.8067	1.1501
Importance of low price	1847	1	5	3.9464	1.0418
Importance of high quality service	1845	1	5	4.2959	1.1617
Online History	1825	3	14	12.266	1.7861
Company History (for ServCo no purchase measure)	1759	1	4.6667	3.2181	0.8485
Valid N (listwise)	1039				

a

Company = EntzCo

COMPANY BY COMPANY – SITUATIONAL VS SQ DIFFERENCES – CONTINUOUS VARIABLES

SERVCO

- ** Correlation is significant at the 0.01 level (2-tailed).
 - * Correlation is significant at the 0.05 level (2-tailed).
- spearman's rho nonparametric correlation, missing values exc pairwise

SERVCO		website importance	trust importance	customer service importance	information importance	contactability importance	no ads importance	personalisation importance	company image importance	product availability importance
Purchase Involvement	Correlation Coefficient	.306(**)	.171(**)	.261(**)	.	.143(**)	.109(*)	.172(**)	.177(**)	0.072
	Sig. (2-tailed)	0	0.001	0	.	0.004	0.028	0.001	0	0.151
	N	400	400	385	0	394	409	395	425	394
Money saved by finding lower price is not worth the effort	Correlation Coefficient	-.187(**)	-0.044	-0.071	.	-0.007	-0.07	0.011	0.013	-0.094
	Sig. (2-tailed)	0	0.381	0.164	.	0.888	0.153	0.82	0.793	0.06
	N	404	405	388	0	398	413	398	430	398
Price is a good indicator of quality	Correlation Coefficient	-0.022	0.005	0.021	.	-0.049	0.09	.135(**)	.178(**)	0.053
	Sig. (2-tailed)	0.665	0.913	0.683	.	0.328	0.069	0.007	0	0.291
	N	403	403	387	0	397	412	397	429	397
no time to fully research products so rely on name trust	Correlation Coefficient	-.100(*)	0.035	0.03	.	0.062	0.067	0.025	.168(**)	0.021
	Sig. (2-tailed)	0.045	0.479	0.553	.	0.219	0.176	0.615	0	0.681
	N	403	403	387	0	397	412	397	429	397
Importance of low price	Correlation Coefficient	.103(*)	0.017	-0.019	.	-0.024	-0.059	-0.066	-0.077	0.023
	Sig. (2-tailed)	0.038	0.736	0.703	.	0.638	0.231	0.189	0.11	0.652
	N	405	405	389	0	399	414	399	431	399
Importance of high quality service	Correlation Coefficient	0.096	0.057	0.088	.	.119(*)	0.047	.117(*)	.144(**)	.113(*)
	Sig. (2-tailed)	0.054	0.25	0.083	.	0.018	0.345	0.019	0.003	0.024
	N	404	404	388	0	398	413	398	430	398
Online History	Correlation Coefficient	.141(**)	0.003	0.06	.	-0.059	0.037	0.006	-0.048	0.042
	Sig. (2-tailed)	0.005	0.955	0.242	.	0.249	0.457	0.902	0.322	0.41
	N	396	396	380	0	387	405	390	421	390
Company History (for ServCo no purchase measure)	Correlation Coefficient	0.074	-0.042	0.012	.	0.002	0.021	.102(*)	0.01	.115(*)
	Sig. (2-tailed)	0.149	0.415	0.824	.	0.965	0.679	0.048	0.835	0.022
	N	382	379	365	0	376	389	375	404	373

Behavioural Loyalty	Correlation Coefficient	-.119(*)	-0.073	-0.074	.	-0.092	-0.017	0.08	0.042	.105(*)
	Sig. (2-tailed)	0.017	0.146	0.145	.	0.066	0.732	0.112	0.389	0.036
	N	404	404	388	0	398	413	398	430	398
Attitudinal Loyalty	Correlation Coefficient	.193(**)	.127(*)	.126(*)	.	.116(*)	0.088	.140(**)	.131(**)	0.069
	Sig. (2-tailed)	0	0.011	0.013	.	0.021	0.073	0.005	0.006	0.171
	N	405	403	388	0	398	412	398	430	398
Overall Satisfaction	Correlation Coefficient	.320(**)	.229(**)	.218(**)	.	.142(**)	.128(**)	.170(**)	.105(*)	.178(**)
	Sig. (2-tailed)	0	0	0	.	0.005	0.009	0.001	0.03	0
	N	401	402	385	0	395	412	395	427	395
Prefer internet companies know from high street	Correlation Coefficient	0.023	0.021	0.027	.	0.095	-0.002	.183(**)	.295(**)	.123(*)
	Sig. (2-tailed)	0.64	0.674	0.597	.	0.059	0.965	0	0	0.015
	N	403	403	387	0	397	412	397	429	397
Would purchase from company only contactable online	Correlation Coefficient	0.018	-0.064	-0.055	.	-.143(**)	-.119(*)	-0.038	-0.071	0.062
	Sig. (2-tailed)	0.721	0.196	0.281	.	0.004	0.015	0.445	0.139	0.218
	N	405	405	389	0	399	414	399	431	399
Technoreadiness	Correlation Coefficient	.154(**)	.137(**)	0.063	.	-0.037	0.072	-0.085	-.104(*)	-0.038
	Sig. (2-tailed)	0.003	0.008	0.232	.	0.472	0.159	0.102	0.04	0.464
	N	366	377	363	0	370	387	369	388	365
Time Capacity	Correlation Coefficient	0.062	0.048	0.058	.	0.039	0.094	0.07	0.052	0.059
	Sig. (2-tailed)	0.232	0.345	0.266	.	0.45	0.062	0.173	0.304	0.253
	N	377	391	371	0	378	398	376	399	374
Products Purchased Online	Correlation Coefficient	.102(*)	0.003	0.062	.	-0.072	0.018	0.036	-0.012	-0.008
	Sig. (2-tailed)	0.04	0.954	0.221	.	0.152	0.708	0.474	0.808	0.871
	N	405	405	389	0	399	414	399	431	399
Online Activities	Correlation Coefficient	0.002	-0.064	-0.016	.	-0.078	0.034	0.042	-0.043	-0.063
	Sig. (2-tailed)	0.973	0.195	0.751	.	0.12	0.491	0.4	0.37	0.207
	N	405	405	389	0	399	414	399	431	399

SERVCO		website performance	trust performance	customer service performance	information performance	contactability performance	no ads performance	personalisati on performance	company image performance	product availability performance
Purchase Involvement	Correlation Coefficient	.268(**)	.170(**)	.267(**)	.	.231(**)	.230(**)	.223(**)	.234(**)	.126(*)
	Sig. (2-tailed)	0	0.002	0	.	0	0	0	0	0.018
	N	368	339	322	0	320	335	345	389	357
Money saved by finding lower price is not worth the effort	Correlation Coefficient	-.240(**)	-.199(**)	-.178(**)	.	-.187(**)	-.229(**)	-.115(*)	-.168(**)	-.213(**)
	Sig. (2-tailed)	0	0	0.001	.	0.001	0	0.031	0.001	0
	N	372	343	326	0	325	339	349	394	361
Price is a good indicator of quality	Correlation Coefficient	0.041	0.006	0.068	.	0.068	0.034	.125(*)	0.081	-0.045
	Sig. (2-tailed)	0.429	0.912	0.223	.	0.22	0.529	0.019	0.107	0.399
	N	371	342	325	0	323	338	348	393	360
no time to fully research products so rely on name trust	Correlation Coefficient	-0.033	-0.025	-0.032	.	-0.003	-0.004	0.04	-0.022	-0.061
	Sig. (2-tailed)	0.525	0.639	0.571	.	0.952	0.939	0.452	0.666	0.247
	N	371	342	325	0	324	338	349	393	360
Importance of low price	Correlation Coefficient	-0.037	-.124(*)	-.109(*)	.	-0.044	-0.076	-0.086	-0.086	0.029
	Sig. (2-tailed)	0.474	0.021	0.048	.	0.425	0.163	0.11	0.087	0.577
	N	373	344	327	0	325	340	350	395	362
Importance of high quality service	Correlation Coefficient	0.012	-0.074	0.061	.	.116(*)	-0.097	0.056	0.031	0.063
	Sig. (2-tailed)	0.821	0.17	0.271	.	0.038	0.075	0.299	0.534	0.233
	N	372	343	326	0	324	339	349	394	361
Online History	Correlation Coefficient	.114(*)	0.022	-0.016	.	-0.07	0.02	-0.047	0.031	.152(**)
	Sig. (2-tailed)	0.029	0.684	0.775	.	0.218	0.722	0.388	0.549	0.004
	N	364	335	319	0	314	333	341	385	353
Company History (for ServCo no purchase measure)	Correlation Coefficient	0.049	0.063	0.039	.	0.09	0.025	.139(**)	.140(**)	0.1
	Sig. (2-tailed)	0.366	0.259	0.499	.	0.116	0.652	0.012	0.007	0.066
	N	350	325	305	0	305	318	329	372	338
Behavioural Loyalty	Correlation Coefficient	0.027	0.04	0.077	.	0.056	0.036	0.097	0.031	0.049
	Sig. (2-tailed)	0.599	0.461	0.165	.	0.316	0.508	0.07	0.546	0.349
	N	372	343	326	0	324	339	349	394	361
Attitudinal Loyalty	Correlation Coefficient	.311(**)	.297(**)	.277(**)	.	.254(**)	.225(**)	.213(**)	.279(**)	.121(*)
	Sig. (2-tailed)	0	0	0	.	0	0	0	0	0.021

	N	372	342	326	0	324	338	349	394	361
Overall Satisfaction	Correlation Coefficient	.541(**)	.468(**)	.468(**)	.	.335(**)	.353(**)	.312(**)	.322(**)	.294(**)
	Sig. (2-tailed)	0	0	0	.	0	0	0	0	0
	N	369	341	323	0	321	338	346	391	358
Prefer internet companies know from high street	Correlation Coefficient	0.061	0.047	.126(*)	.	.218(**)	0.073	0.1	.115(*)	0.04
	Sig. (2-tailed)	0.238	0.384	0.023	.	0	0.178	0.061	0.023	0.446
	N	371	342	325	0	323	338	348	393	360
Would purchase from company only contactable online	Correlation Coefficient	-0.005	-0.016	-.119(*)	.	-.146(**)	-.107(*)	-0.045	0.017	0.085
	Sig. (2-tailed)	0.926	0.764	0.031	.	0.009	0.048	0.397	0.735	0.106
	N	373	344	327	0	325	340	350	395	362
Technoreadiness	Correlation Coefficient	.121(*)	.233(**)	0.017	.	-0.007	.124(*)	-0.109	0.012	0.052
	Sig. (2-tailed)	0.026	0	0.764	.	0.903	0.027	0.051	0.827	0.26
	N	334	319	306	0	301	320	322	354	329
Time Capacity	Correlation Coefficient	-0.003	-0.016	-0.021	.	-0.02	0.026	0.003	-0.01	0.055
	Sig. (2-tailed)	0.962	0.767	0.718	.	0.727	0.643	0.953	0.842	0.318
	N	345	332	312	0	307	327	329	364	338
Products Purchased Online	Correlation Coefficient	0.042	0.042	0.037	.	-0.003	0.079	-0.016	0.055	0.011
	Sig. (2-tailed)	0.416	0.437	0.5	.	0.952	0.145	0.769	0.279	0.838
	N	373	344	327	0	325	340	350	395	362
Online Activities	Correlation Coefficient	0.002	0.031	-0.033	.	-0.05	0.01	-0.044	0.04	-0.032
	Sig. (2-tailed)	0.975	0.567	0.548	.	0.368	0.851	0.413	0.432	0.545
	N	373	344	327	0	325	340	350	395	362

SERVCO		website gap	trust gap	customer service gap	information gap	contactability gap	no ads gap	personalisation gap	company image gap	product availability gap
Purchase Involvement	Correlation Coefficient	0.044	0.054	0.086	.	0.098	0.09	-0.09	0.037	0.011
	Sig. (2-tailed)	0.409	0.33	0.123	.	0.083	0.1	0.098	0.465	0.839
	N	359	332	319	0	314	335	342	387	355
Money saved by finding lower price is not worth the effort	Correlation Coefficient	-.140(**)	-.154(**)	-.117(*)	.	-.139(*)	-0.069	-0.083	-.188(**)	-0.065
	Sig. (2-tailed)	0.008	0.005	0.036	.	0.013	0.206	0.125	0	0.222
	N	363	336	321	0	318	338	345	392	359
Price is a good indicator of quality	Correlation Coefficient	.120(*)	0.016	0.007	.	0.075	-0.006	-0.044	-.113(*)	-0.087
	Sig. (2-tailed)	0.023	0.772	0.904	.	0.181	0.909	0.412	0.025	0.101
	N	362	334	320	0	316	337	344	391	358
no time to fully research products so rely on name trust	Correlation Coefficient	0.022	-0.073	-0.03	.	-0.038	-0.077	0.027	-.138(**)	-0.064
	Sig. (2-tailed)	0.68	0.186	0.591	.	0.499	0.161	0.619	0.006	0.23
	N	362	334	320	0	317	337	345	391	358
Importance of low price	Correlation Coefficient	-.141(**)	-.115(*)	-.124(*)	.	-0.083	0.004	0.026	0.048	-0.006
	Sig. (2-tailed)	0.007	0.035	0.026	.	0.264	0.943	0.628	0.342	0.917
	N	364	336	322	0	318	339	346	393	360
Importance of high quality service	Correlation Coefficient	-0.086	-.136(*)	-0.041	.	0.003	-0.097	-.121(*)	-.142(**)	-.107(*)
	Sig. (2-tailed)	0.102	0.013	0.468	.	0.96	0.074	0.024	0.005	0.043
	N	363	335	321	0	317	338	345	392	359
Online History	Correlation Coefficient	0.002	-0.015	-0.082	.	0.006	0.005	-0.051	.129(*)	.134(*)
	Sig. (2-tailed)	0.968	0.79	0.149	.	0.923	0.927	0.347	0.012	0.012
	N	355	327	314	0	307	332	337	383	351
Company History (for ServCo no purchase measure)	Correlation Coefficient	0.037	0.082	0.034	.	0.112	0.005	-0.013	.113(*)	-0.072
	Sig. (2-tailed)	0.495	0.146	0.551	.	0.053	0.936	0.82	0.03	0.186
	N	343	317	301	0	299	317	326	370	336
Behavioural Loyalty	Correlation Coefficient	.150(**)	0.102	.138(*)	.	.165(**)	0.074	-0.023	0.011	-0.081
	Sig. (2-tailed)	0.004	0.063	0.013	.	0.003	0.174	0.677	0.823	0.126
	N	363	335	321	0	317	338	345	392	359
Attitudinal Loyalty	Correlation Coefficient	.225(**)	.214(**)	.185(**)	.	.150(**)	.126(*)	0.018	0.081	0.042
	Sig. (2-tailed)	0	0	0.001	.	0.007	0.021	0.741	0.109	0.422
	N	364	334	321	0	317	337	345	392	360

Overall Satisfaction	Correlation Coefficient	.361(**)	.277(**)	.312(**)	.	.239(**)	.211(**)	0.062	.182(**)	0.073
	Sig. (2-tailed)	0	0	0	.	0	0	0.252	0	0.169
	N	360	333	318	0	314	337	342	389	356
Prefer internet companies know from high street	Correlation Coefficient	0.069	0.065	.127(*)	.	0.097	0.087	-.118(*)	-.166(**)	-.109(*)
	Sig. (2-tailed)	0.193	0.234	0.023	.	0.087	0.11	0.029	0.001	0.04
	N	362	334	320	0	316	337	344	391	358
Would purchase from company only contactable online	Correlation Coefficient	-0.025	0.02	-.125(*)	.	0.041	0.022	-0.022	.142(**)	-0.015
	Sig. (2-tailed)	0.641	0.712	0.025	.	0.465	0.69	0.68	0.005	0.782
	N	364	336	322	0	318	339	346	393	360
Technoreadiness	Correlation Coefficient	0.028	0.109	-0.04	.	0.06	0.026	0.061	.180(**)	.125(*)
	Sig. (2-tailed)	0.617	0.053	0.491	.	0.303	0.637	0.274	0.001	0.023
	N	326	313	303	0	296	320	320	352	329
Time Capacity	Correlation Coefficient	-0.034	-0.032	-0.05	.	-0.028	-0.08	-0.025	-0.011	-0.009
	Sig. (2-tailed)	0.536	0.566	0.385	.	0.622	0.15	0.648	0.827	0.874
	N	337	324	307	0	301	326	325	362	338
Products Purchased Online	Correlation Coefficient	0.019	0.023	0.03	.	0.077	.108(*)	-0.057	0.078	0
	Sig. (2-tailed)	0.721	0.679	0.587	.	0.169	0.046	0.286	0.122	0.999
	N	364	336	322	0	318	339	346	393	360
Online Activities	Correlation Coefficient	-0.014	0.073	-0.038	.	0.039	0.017	-0.091	.108(*)	0.072
	Sig. (2-tailed)	0.796	0.181	0.501	.	0.485	0.754	0.091	0.033	0.17
	N	364	336	322	0	318	339	346	393	360

SERVCO		Purchase Involvement	Money saved by finding lower price is not worth the effort	Price is a good indicator of quality	no time to fully research products so rely on name trust	Importance of low price	Importance of high quality service	Online History	Company History (for ServCo no purchase measure)
Purchase Involvement	Correlation Coefficient	1	-.265(**)	0.015	-.159(**)	-0.015	.124(**)	.121(*)	.106(*)
	Sig. (2-tailed)	.	0	0.744	0.001	0.748	0.008	0.011	0.029
	N	453	452	452	451	453	452	440	426
Money saved by finding lower price is not worth the effort	Correlation Coefficient	-.265(**)	1	0	.189(**)	-.135(**)	0.029	-.113(*)	-.116(*)
	Sig. (2-tailed)	0	.	0.997	0	0.004	0.539	0.017	0.016
	N	452	458	456	456	458	457	445	431
Price is a good indicator of quality	Correlation Coefficient	0.015	0	1	.133(**)	0.076	0.002	-0.077	0.066
	Sig. (2-tailed)	0.744	0.997	.	0.004	0.107	0.964	0.105	0.169
	N	452	456	457	455	457	456	444	430
no time to fully research products so rely on name trust	Correlation Coefficient	-.159(**)	.189(**)	.133(**)	1	-0.082	0.067	-.149(**)	-.110(*)
	Sig. (2-tailed)	0.001	0	0.004	.	0.079	0.152	0.002	0.022
	N	451	456	455	457	457	456	444	431
Importance of low price	Correlation Coefficient	-0.015	-.135(**)	0.076	-0.082	1	.129(**)	0.022	0.01
	Sig. (2-tailed)	0.748	0.004	0.107	0.079	.	0.006	0.64	0.839
	N	453	458	457	457	459	458	446	432
Importance of high quality service	Correlation Coefficient	.124(**)	0.029	0.002	0.067	.129(**)	1	-0.078	-0.012
	Sig. (2-tailed)	0.008	0.539	0.964	0.152	0.006	.	0.098	0.811
	N	452	457	456	456	458	458	445	431
Online History	Correlation Coefficient	.121(*)	-.113(*)	-0.077	-.149(**)	0.022	-0.078	1	.146(**)
	Sig. (2-tailed)	0.011	0.017	0.105	0.002	0.64	0.098	.	0.003
	N	440	445	444	444	446	445	446	421
Company History (for ServCo no purchase measure)	Correlation Coefficient	.106(*)	-.116(*)	0.066	-.110(*)	0.01	-0.012	.146(**)	1
	Sig. (2-tailed)	0.029	0.016	0.169	0.022	0.839	0.811	0.003	.
	N	426	431	430	431	432	431	421	432
Behavioural Loyalty	Correlation Coefficient	-.116(*)	0.067	.127(**)	.174(**)	-0.066	-0.02	-.118(*)	0.054
	Sig. (2-tailed)	0.014	0.15	0.007	0	0.158	0.666	0.013	0.266
	N	452	457	456	456	458	457	445	432
Attitudinal Loyalty	Correlation Coefficient	.280(**)	-.149(**)	0.017	-0.041	-0.028	0.092	0.037	0.065
	Sig. (2-tailed)	0	0.001	0.724	0.383	0.545	0.05	0.436	0.18
	N	451	456	455	455	457	456	444	430
Overall Satisfaction	Correlation Coefficient	.277(**)	-.269(**)	-0.055	-0.074	-0.078	0.017	0.014	.102(*)
	Sig. (2-tailed)	0	0	0.24	0.117	0.098	0.715	0.777	0.040
	N	449	454	453	453	455	454	442	428

Prefer internet companies know from high street	Correlation Coefficient	0.015	.100(*)	.212(**)	.150(**)	0.007	0.076	-.109(*)	0.065
	Sig. (2-tailed)	0.749	0.032	0	0.001	0.884	0.104	0.022	0.176
	N	451	456	455	456	457	456	444	431
Would purchase from company only contactable online	Correlation Coefficient	-0.013	0.036	-0.038	-0.058	.105(*)	-.095(*)	.242(**)	0.076
	Sig. (2-tailed)	0.777	0.438	0.424	0.236	0.025	0.042	0	0.116
	N	453	458	457	457	459	458	446	432
Technoreadiness	Correlation Coefficient	0.075	-0.085	-0.089	-.150(**)	.157(**)	-0.059	.412(**)	0.001
	Sig. (2-tailed)	0.133	0.091	0.076	0.003	0.002	0.235	0	0.988
	N	398	401	400	400	402	401	392	378
Time Capacity	Correlation Coefficient	0.025	0.018	0.01	.109(*)	0.06	0.053	0.057	0.019
	Sig. (2-tailed)	0.612	0.709	0.839	0.025	0.223	0.282	0.247	0.7
	N	415	420	419	419	421	420	411	397
Products Purchased Online	Correlation Coefficient	.188(**)	-0.075	-0.047	-.117(*)	0.034	0.023	.470(**)	.139(**)
	Sig. (2-tailed)	0	0.111	0.319	0.012	0.473	0.631	0	0.004
	N	453	458	457	457	459	458	446	432
Online Activities	Correlation Coefficient	0.029	-0.007	-0.008	-0.037	-0.012	-0.058	.298(**)	0.079
	Sig. (2-tailed)	0.537	0.878	0.868	0.432	0.794	0.217	0	0.102
	N	453	458	457	457	459	458	446	432

SERVCO		Behavioural Loyalty	Attitudinal Loyalty	Overall Satisfaction	Prefer internet companies know from high street	Would purchase from company only contactable online	Technoreadiness	Time Capacity	Products Purchased Online	Online Activities
Purchase Involvement	Correlation Coefficient	-.116(*)	.280(**)	.277(**)	0.015	-0.013	0.075	0.025	.166(**)	0.029
	Sig. (2-tailed)	0.014	0	0	0.749	0.777	0.133	0.612	0	0.537
	N	452	451	449	451	453	398	415	453	453
Money saved by finding lower price is not worth the effort	Correlation Coefficient	0.067	-.149(**)	-.269(**)	.100(*)	0.036	-0.085	0.018	-0.075	-0.007
	Sig. (2-tailed)	0.15	0.001	0	0.032	0.438	0.091	0.709	0.111	0.878
	N	457	456	454	456	458	401	420	458	458
Price is a good indicator of quality	Correlation Coefficient	.127(**)	0.017	-0.055	.212(**)	-0.038	-0.089	0.01	-0.047	-0.008
	Sig. (2-tailed)	0.007	0.724	0.24	0	0.424	0.076	0.839	0.319	0.868
	N	456	455	453	455	457	400	419	457	457
no time to fully research products so rely on name trust	Correlation Coefficient	.174(**)	-0.041	-0.074	.150(**)	-0.056	-.150(**)	.109(*)	-.117(*)	-0.037
	Sig. (2-tailed)	0	0.383	0.117	0.001	0.236	0.003	0.025	0.012	0.432
	N	456	455	453	456	457	400	419	457	457
Importance of low price	Correlation Coefficient	-0.066	-0.028	-0.078	0.007	.105(*)	.157(**)	0.06	0.034	-0.012
	Sig. (2-tailed)	0.158	0.545	0.098	0.884	0.025	0.002	0.223	0.473	0.794
	N	458	457	455	457	459	402	421	459	459
Importance of high quality service	Correlation Coefficient	-0.02	0.092	0.017	0.076	-.095(*)	-0.059	0.053	0.023	-0.058
	Sig. (2-tailed)	0.666	0.05	0.715	0.104	0.042	0.235	0.282	0.631	0.217
	N	457	456	454	456	458	401	420	458	458
Online History	Correlation Coefficient	-.118(*)	0.037	0.014	-.109(*)	.242(**)	-.412(**)	0.057	.470(**)	.298(**)
	Sig. (2-tailed)	0.013	0.436	0.777	0.022	0	0	0.247	0	0
	N	445	444	442	444	446	392	411	446	446
Company History (for ServCo no purchase measure)	Correlation Coefficient	0.054	0.065	.102(*)	0.065	0.076	0.001	0.019	.139(**)	0.079
	Sig. (2-tailed)	0.266	0.18	0.036	0.176	0.116	0.988	0.7	0.004	0.102
	N	432	430	428	431	432	378	397	432	432
Behavioural Loyalty	Correlation Coefficient	1	-.202(**)	0.089	.125(**)	0.057	-.133(**)	0.014	-0.003	-0.029
	Sig. (2-tailed)	.	0	0.057	0.008	0.222	0.008	0.781	0.952	0.537
	N	458	458	454	458	458	401	420	458	458
Attitudinal Loyalty	Correlation Coefficient	-.202(**)	1	.410(**)	0.011	-0.013	-.289(**)	0.018	-.006	0.024
	Sig. (2-tailed)	0.001	0	0	0.953	0.953	0.001	0.953	0.953	0.953
	N	458	458	454	458	458	401	420	458	458

	Sig. (2-tailed)	0	.	0	0.818	0.778	0.007	0.7	0.057	0.609
	N	456	457	453	455	457	401	419	457	457
Overall Satisfaction	Correlation Coefficient	0.089	.410(**)	1	0.037	0.019	0.089	0.023	0.091	0.003
	Sig. (2-tailed)	0.057	0	.	0.43	0.68	0.076	0.637	0.053	0.955
	N	454	453	455	453	455	399	418	455	455
Prefer internet companies know from high street	Correlation Coefficient	.125(**)	0.011	0.037	1	-0.061	-.158(**)	0.072	-0.076	-0.068
	Sig. (2-tailed)	0.008	0.818	0.43	.	0.19	0.001	0.143	0.105	0.145
	N	456	455	453	457	457	401	419	457	457
Would purchase from company only contactable online	Correlation Coefficient	0.057	-0.013	0.019	-0.061	1	.198(**)	0.089	.151(**)	0.078
	Sig. (2-tailed)	0.222	0.778	0.68	0.19	.	0	0.068	0.001	0.095
	N	458	457	455	457	459	402	421	459	459
Technoreadiness	Correlation Coefficient	-.133(**)	.135(**)	0.089	-.158(**)	.198(**)	1	.116(*)	.424(**)	.275(**)
	Sig. (2-tailed)	0.008	0.007	0.076	0.001	0	.	0.021	0	0
	N	401	401	399	401	402	402	394	402	402
Time Capacity	Correlation Coefficient	0.014	-0.019	0.023	0.072	0.089	.116(*)	1	0.014	0.006
	Sig. (2-tailed)	0.781	0.7	0.637	0.143	0.068	0.021	.	0.773	0.905
	N	420	419	418	419	421	394	421	421	421
Products Purchased Online	Correlation Coefficient	-0.003	0.089	0.091	-0.076	.151(**)	.424(**)	0.014	1	.475(**)
	Sig. (2-tailed)	0.952	0.057	0.053	0.105	0.001	0	0.773	.	0
	N	458	457	455	457	459	402	421	460	460
Online Activities	Correlation Coefficient	-0.029	0.024	0.003	-0.068	0.078	.275(**)	0.006	.475(**)	1
	Sig. (2-tailed)	0.537	0.609	0.955	0.145	0.095	0	0.905	0	.
	N	458	457	455	457	459	402	421	460	460

Descriptive Statistics(a) – ServCo

	N	Minimum	Maximum	Mean	Std. Deviation
website importance	405	1	7	6.1034	0.932
trust importance	405	1	7	6.5638	0.8944
customer service importance	389	1	7	6.1371	0.9736
information importance	0				
contactability importance	399	1	7	6.0664	1.2466
no ads importance	414	1	7	6.2488	1.1575
personalisation importance	399	1	7	3.8684	1.5057
company image importance	431	1	7	4.5963	1.3023
product availability importance	399	1	7	4.9248	1.4037
website performance	373	1	7	5.5985	1.0708
trust performance	344	1	7	5.8527	1.1562
customer service performance	327	1	7	5.4067	1.2624
information performance	0				
contactability performance	325	1	7	4.9846	1.2649
no ads performance	340	1	7	5.6	1.2054
personalisation performance	350	1	7	4.3843	1.2083
company image performance	395	1	7	5.2025	1.0463
product availability performance	362	1	7	5.1616	1.1199
website gap	364	-5	4.375	-0.4955	1.0307
trust gap	336	-6	6	-0.6548	1.108
customer service gap	322	-6	5	-0.6843	1.2445
information gap	0				
contactability gap	318	-6	5.5	-1.0031	1.4358
no ads gap	339	-4	5.5	-0.6047	1.2493
personalisation gap	346	-5.5	6	0.4118	1.2798
company image gap	393	-4	6	0.5662	1.28
product availability gap	360	-3.5	5	0.2097	1.1435
Purchase Involvement	453	3	15	12.896	1.8638
Money saved by finding lower price is not worth the effort	458	1	5	1.9127	0.9885
Price is a good indicator of quality	457	1	5	2.7243	0.8727
no time to fully research products so rely on name trust	457	1	5	2.7002	1.0616
Importance of low price	459	1	5	4.0784	1.101
Importance of high quality service	458	1	5	4.0306	1.0455
Online History	446	3	14	11.547	2.3148
Company History (for ServCo no purchase measure)	432	1	5	1.6875	1.1066

Valid N (listwise)

0

a

Company = ServCo

COMPANY BY COMPANY – SITUATIONAL VS SQ DIFFERENCES – CONTINUOUS VARIABLES

TOOLCO

** Correlation is significant at the 0.01 level (2-tailed).
 * Correlation is significant at the 0.05 level (2-tailed).
 spearman's rho nonparametric correlation, missing values exc pairwise

TOOLCO		website importance	trust importance	customer service importance	information importance	contactability importance	no ads importance	personalisati on importance	company image importance	product availabiltiy importance
Purchase Involvement	Correlation									
	Coefficient	.260(**)	.211(**)	.236(**)	.214(**)	.254(**)	.181(**)	.177(**)	.181(**)	.200(**)
	Sig. (2-tailed)	0	0	0	0	0	0	0	0	0
Money saved by finding lower price is not worth the effort	N	422	418	405	393	450	420	423	450	422
	Correlation									
	Coefficient	-0.093	-0.002	-0.06	-0.001	-0.031	0.036	0.083	0.069	.096(*)
Price is a good indicator of quality	Sig. (2-tailed)	0.056	0.971	0.225	0.985	0.505	0.456	0.088	0.144	0.047
	N	427	424	409	397	455	425	427	455	427
	Correlation									
no time to fully research products so rely on name trust	Coefficient	0.004	-0.027	0.001	0.006	0.016	0.017	0.091	.211(**)	0.053
	Sig. (2-tailed)	0.932	0.584	0.988	0.9	0.738	0.729	0.059	0	0.277
	N	427	422	409	397	454	425	427	455	428
Importance of low price	Correlation									
	Coefficient	-0.038	-.105(*)	-0.065	-.132(**)	-0.038	0.01	0.042	0.081	0.005
	Sig. (2-tailed)	0.43	0.03	0.193	0.008	0.424	0.84	0.388	0.084	0.918
Importance of high quality service	N	427	424	409	398	455	426	427	455	427
	Correlation									
	Coefficient	.096(*)	0.057	0.011	0.069	0.07	0.012	-0.08	-0.088	0.022
Online History	Sig. (2-tailed)	0.046	0.244	0.825	0.167	0.135	0.812	0.099	0.06	0.644
	N	430	425	411	398	458	428	429	458	430
	Correlation									
Company History (for ServCo no purchase measure)	Coefficient	.154(**)	.113(*)	.158(**)	.151(**)	.194(**)	.105(*)	-0.024	0.046	-0.002
	Sig. (2-tailed)	0.001	0.019	0.001	0.002	0	0.03	0.626	0.331	0.968
	N	430	425	411	398	458	428	429	458	430
Importance of low price	Correlation									
	Coefficient	.126(*)	.120(*)	.134(*)	0.059	0.024	-0.013	-.177(**)	-.149(**)	-0.029
	Sig. (2-tailed)	0.022	0.03	0.018	0.298	0.651	0.82	0.001	0.005	0.607
Company History (for ServCo no purchase measure)	N	331	326	313	310	346	325	330	348	328
	Correlation									
	Coefficient	-0.044	-0.047	0.018	0.028	0.036	0.058	0.014	0.006	0.009
Online History	Sig. (2-tailed)	0.371	0.343	0.717	0.588	0.46	0.247	0.78	0.903	0.864
	N	406	404	392	378	432	405	405	432	406

Behavioural Loyalty	Correlation Coefficient	-0.032	-0.079	-0.049	-0.021	0.006	-0.04	-0.035	-0.02	-0.027
	Sig. (2-tailed)	0.507	0.104	0.324	0.679	0.903	0.404	0.464	0.669	0.572
	N	429	425	411	398	458	428	429	459	430
Attitudinal Loyalty	Correlation Coefficient	.193(**)	.225(**)	.199(**)	.117(*)	.107(*)	.184(**)	.121(*)	.165(**)	.195(**)
	Sig. (2-tailed)	0	0	0	0.02	0.022	0	0.012	0	0
	N	431	426	412	399	459	429	430	459	432
Overall Satisfaction	Correlation Coefficient	.190(**)	.207(**)	.146(**)	.151(**)	.096(*)	.131(**)	0.082	.100(*)	.125(**)
	Sig. (2-tailed)	0	0	0.003	0.003	0.04	0.007	0.089	0.032	0.01
	N	429	425	411	399	458	428	429	458	430
Prefer internet companies know from high street	Correlation Coefficient	0.062	0.069	0.084	.114(*)	0.035	.128(**)	.217(**)	.357(**)	.189(**)
	Sig. (2-tailed)	0.204	0.156	0.089	0.023	0.457	0.009	0	0	0
	N	421	421	407	396	450	423	423	449	423
Would purchase from company only contactable online	Correlation Coefficient	-0.088	-0.028	-0.073	0.005	-0.083	-0.091	-0.075	-0.008	-0.031
	Sig. (2-tailed)	0.072	0.573	0.143	0.921	0.081	0.06	0.122	0.859	0.519
	N	421	420	406	396	448	423	423	449	422
Technoreadiness	Correlation Coefficient	.103(*)	.154(**)	0.099	0.097	0.082	0.068	-.150(**)	-.105(*)	-0.068
	Sig. (2-tailed)	0.044	0.002	0.054	0.061	0.098	0.176	0.003	0.035	0.185
	N	383	396	378	373	410	403	389	406	384
Time Capacity	Correlation Coefficient	.179(**)	.163(**)	.112(*)	.166(**)	.182(**)	.105(*)	0.034	0.026	0.058
	Sig. (2-tailed)	0	0.001	0.025	0.001	0	0.031	0.497	0.595	0.243
	N	403	418	400	393	437	423	411	429	405
Products Purchased Online	Correlation Coefficient	.158(**)	.160(**)	.154(**)	.110(*)	0.066	0.09	-0.059	-0.011	0.019
	Sig. (2-tailed)	0.001	0.001	0.002	0.028	0.156	0.062	0.223	0.81	0.697
	N	432	428	414	401	461	431	432	461	433
Online Activities	Correlation Coefficient	0.054	.096(*)	0.076	0.09	0.035	0.042	-0.017	0.011	-0.01
	Sig. (2-tailed)	0.267	0.048	0.121	0.072	0.454	0.382	0.719	0.806	0.839
	N	432	428	414	401	461	431	432	461	433

TOOLCO		website performance	trust performance	customer service performance	information performance	contactability performance	no ads performance	personalisation performance	company image performance	product availability performance
Purchase Involvement	Correlation Coefficient	.154(**)	.183(**)	.128(*)	0.102	.140(**)	0.098	.127(**)	.148(**)	.194(**)
	Sig. (2-tailed)	0.002	0	0.016	0.059	0.005	0.062	0.014	0.003	0
	N	390	372	354	341	406	360	374	426	391
Money saved by finding lower price is not worth the effort	Correlation Coefficient	0.001	0	0.053	0.041	0.007	-0.012	0.06	-0.023	0.044
	Sig. (2-tailed)	0.985	0.995	0.318	0.445	0.883	0.815	0.244	0.639	0.384
	N	396	375	356	342	412	363	377	432	396
Price is a good indicator of quality	Correlation Coefficient	0.081	0.064	0.065	.145(**)	0.093	0.096	.111(*)	0.083	.109(*)
	Sig. (2-tailed)	0.108	0.218	0.224	0.007	0.059	0.068	0.031	0.085	0.03
	N	396	374	355	341	411	363	377	431	397
no time to fully research products so rely on name trust	Correlation Coefficient	0.028	-0.045	-0.02	0.018	-0.021	-0.006	0.009	0.013	0.053
	Sig. (2-tailed)	0.575	0.384	0.703	0.733	0.663	0.912	0.868	0.793	0.292
	N	397	377	358	344	413	365	378	433	397
Importance of low price	Correlation Coefficient	-0.045	-0.09	-0.075	-0.065	-0.048	-0.085	-0.041	-0.049	-0.05
	Sig. (2-tailed)	0.375	0.082	0.155	0.23	0.325	0.106	0.424	0.308	0.322
	N	399	377	358	344	415	365	379	435	399
Importance of high quality service	Correlation Coefficient	0.045	-0.031	-0.017	0.012	-0.006	-0.008	0.03	0.042	0.052
	Sig. (2-tailed)	0.37	0.552	0.744	0.829	0.896	0.878	0.559	0.379	0.296
	N	400	377	358	344	415	365	379	435	400
Online History	Correlation Coefficient	-.146(*)	-0.052	-.145(*)	-.147(*)	-0.06	-.125(*)	-.137(*)	-0.022	0.003
	Sig. (2-tailed)	0.01	0.372	0.016	0.016	0.292	0.034	0.019	0.694	0.952
	N	308	292	278	270	315	286	294	331	307
Company History (for ServCo no purchase measure)	Correlation Coefficient	-.107(*)	-0.084	-0.081	-0.06	-0.063	-0.021	-0.053	-0.025	-.142(**)
	Sig. (2-tailed)	0.038	0.114	0.136	0.282	0.213	0.692	0.317	0.613	0.006
	N	379	358	342	326	392	347	359	410	375
Behavioural Loyalty	Correlation Coefficient	-0.088	-0.091	-.110(*)	-0.067	-0.079	-0.092	-0.041	-0.064	.099(*)
	Sig. (2-tailed)	0.08	0.077	0.038	0.216	0.11	0.08	0.429	0.181	0.048
	N	399	377	358	344	415	365	379	436	399
Attitudinal Loyalty	Correlation Coefficient	.362(**)	.281(**)	.327(**)	.278(**)	.295(**)	.215(**)	.169(**)	.258(**)	.277(**)

	Sig. (2-tailed)	0	0	0	0	0	0	0.001	0	0
	N	400	378	359	345	416	366	380	436	400
Overall Satisfaction	Correlation Coefficient	.465(**)	.385(**)	.462(**)	.387(**)	.375(**)	.336(**)	.219(**)	.326(**)	.284(**)
	Sig. (2-tailed)	0	0	0	0	0	0	0	0	0
	N	399	377	358	344	415	365	379	435	399
Prefer internet companies know from high street	Correlation Coefficient	.134(**)	0.033	.177(**)	.144(**)	.117(*)	0.092	.168(**)	.139(**)	.163(**)
	Sig. (2-tailed)	0.008	0.522	0.001	0.008	0.018	0.08	0.001	0.004	0.001
	N	392	374	357	342	410	363	374	428	393
Would purchase from company only contactable online	Correlation Coefficient	-0.006	0.048	0.009	-0.013	-0.025	-0.024	-0.054	-0.03	0.03
	Sig. (2-tailed)	0.902	0.353	0.869	0.807	0.616	0.644	0.297	0.531	0.556
	N	392	374	355	342	408	363	374	426	392
Technoreadiness	Correlation Coefficient	0.094	.229(**)	0.063	0.01	.127(*)	.138(*)	-.126(*)	.160(**)	0.074
	Sig. (2-tailed)	0.076	0	0.254	0.861	0.014	0.01	0.019	0.002	0.166
	N	359	353	335	324	373	345	347	386	353
Time Capacity	Correlation Coefficient	0.057	0.08	0.07	0.065	0.032	0.077	.127(*)	0.072	0.081
	Sig. (2-tailed)	0.268	0.123	0.19	0.23	0.528	0.143	0.015	0.145	0.119
	N	376	372	351	340	396	361	364	409	375
Products Purchased Online	Correlation Coefficient	0.03	.106(*)	0.014	-0.043	0.028	0.064	-0.1	0.049	0.041
	Sig. (2-tailed)	0.554	0.039	0.796	0.42	0.561	0.217	0.052	0.306	0.416
	N	402	380	361	347	418	368	382	438	402
Online Activities	Correlation Coefficient	0.019	.117(*)	0.062	0.011	0.08	0.036	-0.087	0.069	0.058
	Sig. (2-tailed)	0.699	0.022	0.239	0.836	0.101	0.488	0.091	0.147	0.25
	N	402	380	361	347	418	368	382	438	402

TOOLCO		website gap	trust gap	customer service gap	information gap	contactability gap	no ads gap	personalisation gap	company image gap	product availability gap
Purchase Involvement	Correlation Coefficient	-0.064	0.046	-0.059	-0.082	-0.049	-0.037	-0.087	-0.075	0.017
	Sig. (2-tailed)	0.216	0.378	0.268	0.138	0.326	0.483	0.094	0.124	0.738
	N	378	366	350	333	403	358	370	419	381
Money saved by finding lower price is not worth the effort	Correlation Coefficient	.120(*)	0.067	0.088	0.061	0.05	0.005	-0.055	-0.077	-0.069
	Sig. (2-tailed)	0.019	0.201	0.101	0.263	0.319	0.923	0.286	0.113	0.18
	N	382	370	352	334	407	361	373	423	384
Price is a good indicator of quality	Correlation Coefficient	.101(*)	.107(*)	0.064	.128(*)	0.078	0.062	0.015	-.137(**)	0.007
	Sig. (2-tailed)	0.048	0.039	0.234	0.02	0.119	0.237	0.777	0.005	0.89
	N	382	368	352	334	406	361	373	423	385
no time to fully research products so rely on name trust	Correlation Coefficient	0.026	0.049	0.017	0.101	-0.018	0.004	-0.056	-0.092	-0.01
	Sig. (2-tailed)	0.617	0.348	0.753	0.064	0.719	0.934	0.282	0.057	0.839
	N	383	371	354	336	408	363	374	424	385
Importance of low price	Correlation Coefficient	-0.099	-0.082	-0.064	-.127(*)	-.101(*)	-0.061	0.049	0.038	0.024
	Sig. (2-tailed)	0.052	0.117	0.229	0.02	0.041	0.247	0.341	0.434	0.634
	N	385	371	354	335	410	363	375	426	387
Importance of high quality service	Correlation Coefficient	-0.077	-0.089	-.111(*)	-0.104	-.164(**)	-0.05	0.034	-0.051	0.022
	Sig. (2-tailed)	0.129	0.088	0.037	0.056	0.001	0.341	0.507	0.293	0.671
	N	386	371	354	335	410	363	375	426	388
Online History	Correlation Coefficient	-.271(**)	-.138(*)	-.244(**)	-.178(**)	-0.098	-0.099	0.057	.134(*)	-0.009
	Sig. (2-tailed)	0	0.021	0	0.004	0.083	0.095	0.334	0.015	0.877
	N	300	287	276	265	314	286	293	328	299
Company History (for ServCo no purchase measure)	Correlation Coefficient	-0.051	-0.101	-0.089	-0.072	-0.085	-0.047	-0.043	-0.039	-0.095
	Sig. (2-tailed)	0.328	0.059	0.101	0.203	0.095	0.383	0.421	0.433	0.069
	N	367	352	339	317	389	345	355	403	366
Behavioural Loyalty	Correlation Coefficient	-0.081	0.013	-0.04	-0.015	-0.097	-0.088	0.018	-0.042	0.059
	Sig. (2-tailed)	0.114	0.809	0.449	0.778	0.05	0.094	0.732	0.382	0.251
	N	384	371	354	335	410	363	375	427	387
Attitudinal Loyalty	Correlation Coefficient	.179(**)	.127(*)	.142(**)	.134(*)	.162(**)	0.058	-0.046	0.002	0.011
	Sig. (2-tailed)	0	0.014	0.008	0.014	0.001	0.271	0.375	0.96	0.822
	N	386	372	355	336	411	364	376	427	389
Overall Satisfaction	Correlation	.308(**)	.258(**)	.290(**)	.199(**)	.263(**)	.188(**)	0.06	.130(**)	.127(*)

	Coefficient									
	Sig. (2-tailed)	0	0	0	0	0	0	0.243	0.007	0.012
	N	384	371	354	336	410	363	375	426	387
Prefer internet companies know from high street	Correlation Coefficient	0.078	-0.034	0.1	0.018	0.057	-0.006	-.110(*)	-.263(**)	-0.09
	Sig. (2-tailed)	0.129	0.519	0.06	0.738	0.252	0.91	0.034	0	0.08
	N	377	368	353	333	405	361	370	419	381
Would purchase from company only contactable online	Correlation Coefficient	0.03	0.059	0.071	-0.025	0.021	0.015	0.054	-0.002	0.029
	Sig. (2-tailed)	0.555	0.258	0.182	0.645	0.67	0.774	0.3	0.971	0.576
	N	377	368	352	334	403	361	370	419	380
Technoreadiness	Correlation Coefficient	-.107(*)	0.016	-0.086	-.156(**)	0.018	0.008	0.047	.235(**)	.106(*)
	Sig. (2-tailed)	0.048	0.765	0.12	0.005	0.738	0.883	0.381	0	0.049
	N	345	347	331	315	369	343	343	380	345
Time Capacity	Correlation Coefficient	-0.067	-0.03	-0.027	-0.104	-.114(*)	-0.013	0.006	0.007	0.009
	Sig. (2-tailed)	0.203	0.573	0.612	0.059	0.024	0.806	0.909	0.896	0.866
	N	361	366	347	331	392	359	360	400	364
Products Purchased Online	Correlation Coefficient	-.142(**)	-0.075	-.122(*)	-.169(**)	-0.065	-0.02	0.016	0.091	0.043
	Sig. (2-tailed)	0.005	0.146	0.021	0.002	0.189	0.697	0.755	0.06	0.399
	N	387	374	357	338	413	366	378	429	390
Online Activities	Correlation Coefficient	-0.077	0	-0.056	-.117(*)	-0.012	-0.023	-0.018	0.056	0.054
	Sig. (2-tailed)	0.131	0.995	0.292	0.031	0.809	0.664	0.729	0.174	0.29
	N	387	374	357	338	413	366	378	429	390

	TOOLCO	Purchase Involvement	Money saved by finding lower price is not worth the effort	Price is a good indicator of quality	no time to fully research products so rely on name trust	Importance of low price	Importance of high quality service	Online History	Company History (for ServCo no purchase measure)
Purchase Involvement	Correlation Coefficient	1	-.166(**)	-0.015	-.127(**)	0.007	.191(**)	0.047	0.063
	Sig. (2-tailed)	.	0	0.739	0.005	0.872	0	0.371	0.178
	N	493	491	490	491	491	492	362	463
Money saved by finding lower price is not worth the effort	Correlation Coefficient	-.166(**)	1	.174(**)	.281(**)	-.250(**)	-0.04	-0.039	0.07
	Sig. (2-tailed)	0	.	0	0	0	0.373	0.456	0.13
	N	491	502	499	500	500	501	364	470
Price is a good indicator of quality	Correlation Coefficient	-0.015	.174(**)	1	.215(**)	-.109(*)	0.002	-0.066	-0.066
	Sig. (2-tailed)	0.739	0	.	0	0.015	0.964	0.207	0.151
	N	490	499	501	499	499	500	364	469
no time to fully research products so rely on name trust	Correlation Coefficient	-.127(**)	.281(**)	.215(**)	1	-.131(**)	0.031	-.158(**)	.143(**)
	Sig. (2-tailed)	0.005	0	0	.	0.003	0.487	0.003	0.002
	N	491	500	499	502	500	501	364	470
Importance of low price	Correlation Coefficient	0.007	-.250(**)	-.109(*)	-.131(**)	1	.350(**)	.141(**)	-.120(**)
	Sig. (2-tailed)	0.872	0	0.015	0.003	.	0	0.007	0.009
	N	491	500	499	500	505	504	365	473
Importance of high quality service	Correlation Coefficient	.191(**)	-0.04	0.002	0.031	.350(**)	1	0.078	0.032
	Sig. (2-tailed)	0	0.373	0.964	0.487	0	.	0.135	0.486
	N	492	501	500	501	504	506	365	473
Online History	Correlation Coefficient	0.047	-0.039	-0.066	-.158(**)	.141(**)	0.078	1	0.003
	Sig. (2-tailed)	0.371	0.456	0.207	0.003	0.007	0.135	.	0.955
	N	362	364	364	364	365	365	367	347
Company History (for ServCo no purchase measure)	Correlation Coefficient	0.063	0.07	-0.066	.143(**)	-.120(**)	0.032	0.003	1
	Sig. (2-tailed)	0.178	0.13	0.151	0.002	0.009	0.486	0.955	.
	N	463	470	469	470	473	473	347	477
Behavioural Loyalty	Correlation Coefficient	-0.055	0.014	.169(**)	0.043	0.056	-0.039	0.044	-0.071
	Sig. (2-tailed)	0.224	0.753	0	0.336	0.209	0.382	0.397	0.121
	N	490	499	498	499	502	503	365	474

Attitudinal Loyalty	Correlation Coefficient	.172(**)	0.069	.106(*)	.121(**)	-0.028	0.009	-0.058	-0.057
	Sig. (2-tailed)	0	0.124	0.018	0.007	0.529	0.835	0.27	0.211
	N	491	500	499	500	503	504	365	475
Overall Satisfaction	Correlation Coefficient	.148(**)	0.086	.103(*)	.098(*)	-.106(*)	-0.02	-.130(*)	-0.03
	Sig. (2-tailed)	0.001	0.054	0.021	0.029	0.017	0.652	0.013	0.51
	N	491	500	499	500	502	503	365	474
Prefer internet companies know from high street	Correlation Coefficient	0.003	.099(*)	.133(**)	.175(**)	-0.009	0.025	-.190(**)	-0.047
	Sig. (2-tailed)	0.944	0.029	0.003	0	0.836	0.583	0	0.314
	N	479	487	486	487	490	490	366	462
Would purchase from company only contactable online	Correlation Coefficient	-.121(**)	.128(**)	.109(*)	0.081	-0.01	-0.032	.148(**)	-.107(*)
	Sig. (2-tailed)	0.008	0.005	0.017	0.074	0.823	0.48	0.005	0.021
	N	477	485	485	485	488	488	366	460
Technoreadiness	Correlation Coefficient	0.046	-0.076	-0.046	-.247(**)	0.047	-0.038	.346(**)	-.110(*)
	Sig. (2-tailed)	0.352	0.12	0.342	0	0.336	0.436	0	0.027
	N	418	424	423	425	427	427	316	405
Time Capacity	Correlation Coefficient	0.044	-0.01	-0.04	0.038	0.032	0.038	0.031	0.048
	Sig. (2-tailed)	0.347	0.832	0.392	0.413	0.497	0.42	0.571	0.321
	N	449	456	455	457	460	460	337	435
Products Purchased Online	Correlation Coefficient	0.041	-0.069	0.037	-0.07	0.025	-0.032	.315(**)	-.153(**)
	Sig. (2-tailed)	0.367	0.122	0.403	0.115	0.577	0.476	0	0.001
	N	493	502	501	502	505	506	367	477
Online Activities	Correlation Coefficient	-0.013	-0.071	0.026	-.092(*)	0.027	-0.03	.141(**)	-.150(**)
	Sig. (2-tailed)	0.77	0.11	0.559	0.039	0.544	0.507	0.007	0.001
	N	493	502	501	502	505	506	367	477

	TOOLCO	Behavioural Loyalty	Attitudinal Loyalty	Overall Satisfaction	Prefer internet companies know from high street	Would purchase from company only contactable online	Techno readiness	Time Capacity	Products Purchased Online	Online Activities
Purchase Involvement	Correlation									
	Coefficient	-0.055	.172(**)	.148(**)	0.003	-.121(**)	0.046	0.044	0.041	-0.013
	Sig. (2-tailed)	0.224	0	0.001	0.944	0.008	0.352	0.347	0.367	0.77
	N	490	491	491	479	477	418	449	493	493
Money saved by finding lower price is not worth the effort	Correlation									
	Coefficient	0.014	0.069	0.086	.099(*)	.128(**)	-0.076	-0.01	-0.069	-0.071
	Sig. (2-tailed)	0.753	0.124	0.054	0.029	0.005	0.12	0.832	0.122	0.11
	N	499	500	500	487	485	424	456	502	502
Price is a good indicator of quality	Correlation									
	Coefficient	.169(**)	.106(*)	.103(*)	.133(**)	.109(*)	-0.046	-0.04	0.037	0.026
	Sig. (2-tailed)	0	0.018	0.021	0.003	0.017	0.342	0.392	0.403	0.559
	N	498	499	499	486	485	423	455	501	501
no time to fully research products so rely on name trust	Correlation									
	Coefficient	0.043	.121(**)	.098(*)	.175(**)	0.081	-.247(**)	0.038	-0.07	-.092(*)
	Sig. (2-tailed)	0.336	0.007	0.029	0	0.074	0	0.413	0.115	0.039
	N	499	500	500	487	485	425	457	502	502
Importance of low price	Correlation									
	Coefficient	0.056	-0.028	-.106(*)	-0.009	-0.01	0.047	0.032	0.025	0.027
	Sig. (2-tailed)	0.209	0.529	0.017	0.836	0.823	0.336	0.497	0.577	0.544
	N	502	503	502	490	488	427	460	505	505
Importance of high quality service	Correlation									
	Coefficient	-0.039	0.009	-0.02	0.025	-0.032	-0.038	0.038	-0.032	-0.03
	Sig. (2-tailed)	0.382	0.835	0.652	0.583	0.48	0.436	0.42	0.476	0.507
	N	503	504	503	490	488	427	460	506	506
Online History	Correlation									
	Coefficient	0.044	-0.058	-.130(*)	-.190(**)	.148(**)	.346(**)	0.031	.315(**)	.141(**)
	Sig. (2-tailed)	0.397	0.27	0.013	0	0.005	0	0.571	0	0.007
	N	365	365	365	366	366	316	337	367	367
Company History (for ServCo no purchase measure)	Correlation									
	Coefficient	-0.071	-0.057	-0.03	-0.047	-.107(*)	-.110(*)	0.048	-.153(**)	-.150(**)
	Sig. (2-tailed)	0.121	0.211	0.51	0.314	0.021	0.027	0.321	0.001	0.001
	N	474	475	474	462	460	405	435	477	477
Behavioural Loyalty	Correlation									
	Coefficient	1	-0.024	-0.07	0.02	.184(**)	-0.08	0.009	0.009	-0.009
	Sig. (2-tailed)		0.585	0.115	0.661	0	0.101	0.855	0.843	0.835
	N	507	505	505	490	488	427	461	507	507
Attitudinal Loyalty	Correlation									
	Coefficient	-0.024	1	.496(**)	.202(**)	-0.045	0.006	0.005	0.015	0.031
	Sig. (2-tailed)	0.585		0	0	0.321	0.901	0.915	0.739	0.8236

	N	505	508	505	491	489	429	462	508	508
Overall Satisfaction	Correlation Coefficient	-0.07	.496(**)	1	.089(*)	-0.078	0.01	.107(*)	-0.02	0.009
	Sig. (2-tailed)	0.115	0	.	0.05	0.084	0.834	0.021	0.658	0.835
	N	505	505	507	490	488	427	461	507	507
Prefer internet companies know from high street	Correlation Coefficient	0.02	.202(**)	.089(*)	1	0.034	-0.089	0.024	-0.01	0.059
	Sig. (2-tailed)	0.661	0	0.05	.	0.45	0.067	0.604	0.824	0.191
	N	490	491	490	493	490	423	454	493	493
Would purchase from company only contactable online	Correlation Coefficient	.184(**)	-0.045	-0.078	0.034	1	.181(**)	0.013	.228(**)	.145(**)
	Sig. (2-tailed)	0	0.321	0.084	0.45	.	0	0.782	0	0.001
	N	488	489	488	490	491	422	452	491	491
Technoreadiness	Correlation Coefficient	-0.08	0.006	0.01	-0.089	.181(**)	1	0.064	.435(**)	.391(**)
	Sig. (2-tailed)	0.101	0.901	0.834	0.067	0	.	0.186	0	0
	N	427	429	427	423	422	430	425	430	430
Time Capacity	Correlation Coefficient	0.009	0.005	.107(*)	0.024	0.013	0.064	1	0.011	0.018
	Sig. (2-tailed)	0.855	0.915	0.021	0.604	0.782	0.186	.	0.805	0.695
	N	461	462	461	454	452	425	464	464	464
Products Purchased Online	Correlation Coefficient	0.009	0.015	-0.02	-0.01	.228(**)	.435(**)	0.011	1	.616(**)
	Sig. (2-tailed)	0.843	0.739	0.658	0.824	0	0	0.805	.	0
	N	507	508	507	493	491	430	464	510	510
Online Activities	Correlation Coefficient	-0.009	0.031	0.009	0.059	.145(**)	.391(**)	0.018	.616(**)	1
	Sig. (2-tailed)	0.835	0.48	0.835	0.191	0.001	0	0.695	0	.
	N	507	508	507	493	491	430	464	510	510

Descriptive Statistics(a) – ToolCo

	N		Minimum	Maximum	Mean	Std. Deviation
website importance	432		1	7	5.9595	1.1434
trust importance	428		1	7	6.2835	1.1909
customer service importance	414		1	7	5.9887	1.1375
information importance	401		1	7	5.9576	1.0906
contactability importance	461		1	7	6.1117	1.2001
no ads importance	431		1	7	6.2343	1.2317
personalisation importance	432		1	7	3.6343	1.5893
company image importance	461		1	7	4.6085	1.3961
product availability importance	433		1	7	4.7933	1.5182
website performance	402		1	7	5.1474	1.0408
trust performance	380		1	7	5.5482	1.1462
customer service performance	361		1	7	5.121	1.2726
information performance	347		1	7	4.9532	1.2345
contactability performance	418		1	7	5.3565	1.3034
no ads performance	368		1	7	5.5367	1.1826
personalisation performance	382		1	7	4.1126	1.1746
company image performance	438		1	7	5.6233	1.0236
product availability performance	402		1	7	4.709	1.1561
website gap	387		-6	6	-0.829	1.285
trust gap	374		-6	6	-0.766	1.3734
customer service gap	357		-6	6	-0.864	1.5093
information gap	338		-6	6	-0.982	1.4868
contactability gap	413		-6	6	-0.742	1.5326
no ads gap	366		-6	6	-0.684	1.4654
personalisation gap	378		-4	6	0.3624	1.4098
company image gap	429		-3	6	0.9662	1.4439
product availability gap	390		-6	6	-0.071	1.4845
Purchase Involvement	493		3	15	10.955	2.269
Money saved by finding lower price is not worth the effort	502		1	5	2.4761	1.1644
Price is a good indicator of quality	501		1	5	3.022	0.9495
no time to fully research products so rely on name trust	502		1	5	3.0179	1.0543
Importance of low price	505		1	5	3.6812	1.0017
Importance of high quality service	506		1	5	3.9328	1.288
Online History	367		4	15	11.414	2.5709
Company History (for ServCo no purchase measure)	477		1.3333	5.3333	3.1516	0.8817
Valid N (listwise)	186					

COMPANY BY COMPANY – SITUATIONAL VS SQ DIFFERENCES – CONTINUOUS VARIABLES

SPORTCO

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

spearman's rho nonparametric correlation, missing values exc pairwise

SPORTCO		website importance	trust importance	customer service importance	information importance	contactability importance	no ads importance	personalisation importance	company image importance	product availability importance
Purchase Involvement	Correlation Coefficient	.235(**)	.166(**)	.222(**)	.238(**)	.127(**)	.156(**)	.088(*)	.123(**)	.147(**)
	Sig. (2-tailed)	0	0	0	0	0.003	0	0.046	0.004	0.001
	N	517	523	526	492	539	516	516	554	536
Money saved by finding lower price is not worth the effort	Correlation Coefficient	-0.036	-0.027	-0.038	-0.05	0.006	0.006	0.048	0.037	-0.027
	Sig. (2-tailed)	0.418	0.532	0.383	0.268	0.894	0.887	0.273	0.388	0.523
	N	523	527	530	495	543	520	521	558	541
Price is a good indicator of quality	Correlation Coefficient	-0.019	-0.052	-0.005	0.013	0.058	0.004	.100(*)	.167(**)	0.002
	Sig. (2-tailed)	0.658	0.229	0.915	0.767	0.174	0.923	0.023	0	0.971
	N	522	528	531	497	544	521	522	559	542
no time to fully research products so rely on name trust	Correlation Coefficient	0.009	-0.049	0.002	-0.008	0.014	0.028	0.07	.163(**)	-0.007
	Sig. (2-tailed)	0.836	0.257	0.971	0.857	0.744	0.524	0.108	0	0.877
	N	523	529	532	497	545	522	523	560	543
Importance of low price	Correlation Coefficient	0.038	0.078	-0.019	0.055	0	-0.037	-0.05	0.015	0.016
	Sig. (2-tailed)	0.38	0.074	0.667	0.221	0.997	0.402	0.255	0.717	0.712
	N	524	531	534	499	547	524	525	562	544
Importance of high quality service	Correlation Coefficient	.145(**)	.121(**)	.134(**)	.112(*)	.180(**)	0.037	0.048	.091(*)	0.018
	Sig. (2-tailed)	0.001	0.005	0.002	0.013	0	0.402	0.277	0.032	0.668
	N	523	530	533	498	546	523	524	561	544
Online History	Correlation Coefficient	0.06	.128(**)	.118(**)	0.035	.109(*)	0.086	-.190(**)	-.173(**)	-0.001
	Sig. (2-tailed)	0.174	0.003	0.007	0.435	0.012	0.051	0	0	0.982
	N	517	522	525	493	537	515	518	552	536
Company History (for ServCo no purchase measure)	Correlation Coefficient	0.07	0.059	.086(*)	-0.025	.094(*)	-0.003	-0.054	-0.037	0.006
	Sig. (2-tailed)	0.112	0.179	0.05	0.584	0.03	0.955	0.226	0.39	0.889
	N	511	516	519	487	533	509	512	546	526

Behavioural Loyalty	Correlation Coefficient	-.114(**)	-.114(**)	-.094(*)	-0.041	-.099(*)	-0.03	0.077	0.066	.093(*)
	Sig. (2-tailed)	0.009	0.009	0.03	0.357	0.021	0.5	0.076	0.117	0.029
	N	524	530	534	499	546	523	525	562	544
Attitudinal Loyalty	Correlation Coefficient	.150(**)	.143(**)	.188(**)	0.068	.105(*)	0.03	0.007	0.061	.098(*)
	Sig. (2-tailed)	0.001	0.001	0	0.129	0.014	0.497	0.867	0.147	0.022
	N	524	531	535	500	547	524	526	562	544
Overall Satisfaction	Correlation Coefficient	.205(**)	.206(**)	.204(**)	.119(**)	.169(**)	0.08	0.077	.111(**)	.094(*)
	Sig. (2-tailed)	0	0	0	0.008	0	0.068	0.078	0.009	0.029
	N	525	531	535	500	547	524	526	563	545
Prefer internet companies know from high street	Correlation Coefficient	0.013	0.035	-0.03	0.07	0.004	0.059	.182(**)	.250(**)	-.090(*)
	Sig. (2-tailed)	0.768	0.422	0.494	0.12	0.925	0.179	0	0	0.035
	N	527	532	535	501	547	524	527	563	546
Would purchase from company only contactable online	Correlation Coefficient	0.044	-0.018	-0.066	-0.042	-0.056	-0.033	0.033	-0.038	0.041
	Sig. (2-tailed)	0.316	0.679	0.129	0.346	0.192	0.451	0.444	0.369	0.335
	N	527	532	535	501	546	524	527	562	546
Technoreadiness	Correlation Coefficient	0.059	.093(*)	0.054	0.015	-0.063	0.064	-.154(**)	-.152(**)	-0.015
	Sig. (2-tailed)	0.201	0.037	0.226	0.736	0.16	0.152	0.001	0.001	0.744
	N	479	503	501	480	497	499	482	509	499
Time Capacity	Correlation Coefficient	.128(**)	.166(**)	.188(**)	.101(*)	.130(**)	.152(**)	0.017	0.023	.093(*)
	Sig. (2-tailed)	0.004	0	0	0.025	0.003	0.001	0.707	0.593	0.033
	N	503	525	522	496	525	521	505	538	522
Products Purchased Online	Correlation Coefficient	.095(*)	.138(**)	.126(**)	0.077	0.029	0.069	-.144(**)	-.149(**)	0.039
	Sig. (2-tailed)	0.029	0.001	0.003	0.083	0.495	0.115	0.001	0	0.356
	N	528	535	538	504	551	528	530	567	548
Online Activities	Correlation Coefficient	.094(*)	0.056	0.058	0.061	0.014	-0.038	0.027	-0.032	0.013
	Sig. (2-tailed)	0.031	0.2	0.178	0.171	0.747	0.379	0.538	0.44	0.758
	N	528	535	538	504	551	528	530	567	548

SPORTCO		website performance	trust performance	customer service performance	information performance	contactability performance	no ads performance	personalisation performance	company image performance	product availability performance
Purchase Involvement	Correlation Coefficient	.101(**)	.104(*)	.134(**)	0.041	.152(**)	0.081	0.043	.139(**)	0.085
	Sig. (2-tailed)	0.023	0.019	0.003	0.386	0.001	0.075	0.349	0.001	0.053
	N	503	504	491	456	507	480	470	546	518
Money saved by finding lower price is not worth the effort	Correlation Coefficient	0.013	-0.055	-0.027	-0.047	-0.017	-0.016	0.025	-0.038	0.021
	Sig. (2-tailed)	0.776	0.217	0.552	0.316	0.704	0.723	0.585	0.377	0.636
	N	508	508	494	459	510	484	473	550	523
Price is a good indicator of quality	Correlation Coefficient	.114(*)	0.024	0.052	0.052	0.086	0.038	0.053	.126(**)	0.076
	Sig. (2-tailed)	0.01	0.594	0.246	0.267	0.051	0.403	0.253	0.003	0.084
	N	507	509	495	462	512	485	475	551	524
no time to fully research products so rely on name trust	Correlation Coefficient	0.043	0	-0.01	-0.011	-0.044	-0.005	0.022	.092(*)	0.045
	Sig. (2-tailed)	0.335	0.995	0.825	0.814	0.317	0.906	0.625	0.031	0.305
	N	508	510	496	462	513	486	476	552	525
Importance of low price	Correlation Coefficient	-.096(*)	0.007	-0.032	-0.023	-0.054	-0.042	-0.077	-0.083	-0.078
	Sig. (2-tailed)	0.031	0.881	0.479	0.618	0.226	0.356	0.093	0.051	0.075
	N	509	511	497	462	513	487	476	553	526
Importance of high quality service	Correlation Coefficient	0.032	.131(**)	0.08	0.049	.106(*)	.092(*)	0.031	0.04	-0.045
	Sig. (2-tailed)	0.473	0.003	0.074	0.291	0.016	0.043	0.507	0.349	0.306
	N	508	510	496	461	512	486	475	553	526
Online History	Correlation Coefficient	-0.023	0.02	-0.043	-.146(**)	0.015	-0.033	-.149(**)	-0.046	-0.035
	Sig. (2-tailed)	0.605	0.652	0.345	0.002	0.737	0.476	0.001	0.281	0.431
	N	502	502	487	455	503	479	469	544	518
Company History (for ServCo no purchase measure)	Correlation Coefficient	0.078	0.064	.104(*)	-0.085	.149(**)	-0.03	-0.025	.128(**)	0.023
	Sig. (2-tailed)	0.083	0.151	0.022	0.07	0.001	0.515	0.594	0.003	0.602
	N	497	501	486	457	503	477	468	539	511
Behavioural Loyalty	Correlation Coefficient	-.140(**)	-.149(**)	-.246(**)	-0.076	-.155(**)	-.090(*)	0.052	-.133(**)	0.064
	Sig. (2-tailed)	0.001	0.001	0	0.102	0	0.047	0.257	0.002	0.14
	N	510	513	490	464	514	488	478	555	526
Attitudinal Loyalty	Correlation Coefficient	.308(**)	.235(**)	.309(**)	.189(**)	.266(**)	.189(**)	.186(**)	.196(**)	.280(**)

	Sig. (2-tailed)	0	0	0	0	0	0	0	0	0
	N	510	514	500	465	515	489	479	555	526
Overall Satisfaction	Correlation Coefficient	.482(**)	.348(**)	.461(**)	.308(**)	.431(**)	.290(**)	.195(**)	.428(**)	.322(**)
	Sig. (2-tailed)	0	0	0	0	0	0	0	0	0
	N	511	514	500	465	515	489	479	556	527
Prefer internet companies know from high street	Correlation Coefficient	.105(*)	0.037	0.033	.119(*)	0.04	-0.031	.152(**)	.143(**)	-0.073
	Sig. (2-tailed)	0.018	0.399	0.459	0.01	0.369	0.499	0.001	0.001	0.093
	N	512	513	498	464	513	487	479	556	528
Would purchase from company only contactable online	Correlation Coefficient	-0.01	0.007	-0.009	0.013	-0.022	0.01	0.033	-.087(*)	0.016
	Sig. (2-tailed)	0.827	0.871	0.837	0.788	0.622	0.824	0.477	0.041	0.721
	N	512	513	498	464	512	487	479	555	528
Technoreadiness	Correlation Coefficient	0.069	.127(**)	0.064	-0.053	0.011	.130(**)	-0.085	0.036	0.08
	Sig. (2-tailed)	0.135	0.005	0.167	0.262	0.815	0.005	0.074	0.417	0.077
	N	469	489	473	447	473	469	444	505	486
Time Capacity	Correlation Coefficient	0.071	.156(**)	0.079	0.049	0.035	.121(**)	-0.02	.127(**)	0.053
	Sig. (2-tailed)	0.119	0	0.081	0.291	0.434	0.007	0.671	0.003	0.232
	N	489	509	491	462	495	487	461	532	507
Products Purchased Online	Correlation Coefficient	-0.034	-0.012	0.01	-.093(*)	0.012	0.036	-.134(**)	-.090(*)	-0.032
	Sig. (2-tailed)	0.446	0.777	0.817	0.045	0.791	0.425	0.003	0.033	0.468
	N	513	515	500	466	516	490	481	558	529
Online Activities	Correlation Coefficient	-0.021	-0.026	-0.027	-0.02	0.006	-0.003	-0.003	-0.075	-0.07
	Sig. (2-tailed)	0.643	0.556	0.552	0.67	0.888	0.955	0.955	0.076	0.11
	N	513	515	500	466	516	490	481	558	529

SPORTCO		website gap	trust gap	customer service gap	information gap	contactability gap	no ads gap	personalisation gap	company image gap	product availability gap
Purchase Involvement	Correlation Coefficient	-.091(*)	0	0.001	-.099(*)	0.033	-0.047	-0.078	-0.06	-0.053
	Sig. (2-tailed)	0.044	0.992	0.975	0.037	0.464	0.31	0.091	0.163	0.227
	N	494	499	488	446	501	478	467	540	513
Money saved by finding lower price is not worth the effort	Correlation Coefficient	0.042	-0.035	-0.007	-0.005	-0.022	-0.019	-0.04	-0.065	0.007
	Sig. (2-tailed)	0.353	0.438	0.871	0.915	0.625	0.679	0.381	0.128	0.868
	N	499	503	491	449	504	482	470	543	518
Price is a good indicator of quality	Correlation Coefficient	.100(*)	0.041	0.07	0.055	0.049	0.039	-0.057	-0.075	0.045
	Sig. (2-tailed)	0.025	0.354	0.12	0.243	0.267	0.389	0.22	0.07	0.306
	N	498	504	492	452	506	483	472	544	519
no time to fully research products so rely on name trust	Correlation Coefficient	0.015	0.006	0.013	0.005	-0.054	-0.02	-0.079	-0.08	0.004
	Sig. (2-tailed)	0.742	0.887	0.773	0.914	0.227	0.668	0.087	0.062	0.923
	N	499	505	493	452	507	484	473	545	520
Importance of low price	Correlation Coefficient	-.129(**)	-0.042	-0.023	-0.071	-0.023	-0.026	-0.017	-0.076	-0.029
	Sig. (2-tailed)	0.004	0.349	0.611	0.133	0.599	0.572	0.713	0.078	0.505
	N	500	506	494	452	507	485	473	546	521
Importance of high quality service	Correlation Coefficient	-0.048	0.053	-0.004	-0.006	-0.046	0.035	-0.029	-0.053	-0.036
	Sig. (2-tailed)	0.285	0.231	0.937	0.904	0.3	0.441	0.531	0.214	0.407
	N	499	505	493	451	506	484	472	546	521
Online History	Correlation Coefficient	-0.078	-0.039	-.111(*)	-.203(**)	-0.067	-0.076	.109(*)	.151(**)	-0.001
	Sig. (2-tailed)	0.083	0.388	0.015	0	0.135	0.097	0.019	0	0.986
	N	493	496	484	446	497	477	466	537	513
Company History (for ServCo no purchase measure)	Correlation Coefficient	0.012	0.056	0.027	-0.091	0.051	-0.023	0.025	.112(*)	0.041
	Sig. (2-tailed)	0.789	0.214	0.548	0.055	0.261	0.615	0.591	0.01	0.359
	N	489	495	483	447	497	476	465	532	506
Behavioural Loyalty	Correlation Coefficient	-0.058	-0.086	-.145(**)	-0.028	-0.075	-0.033	-0.036	-.155(**)	-0.06
	Sig. (2-tailed)	0.198	0.052	0.001	0.557	0.09	0.471	0.429	0	0.17
	N	501	507	496	454	508	486	475	548	521
Attitudinal Loyalty	Correlation Coefficient	.173(**)	.178(**)	.206(**)	.140(**)	.188(**)	.147(**)	.123(**)	0.073	.145(**)
	Sig. (2-tailed)	0	0	0	0.003	0	0.001	0.007	0.09	0.001
	N	501	508	497	455	509	487	476	548	521

Overall Satisfaction	Correlation Coefficient	.320(**)	.212(**)	.313(**)	.192(**)	.277(**)	.186(**)	0.062	.178(**)	.181(**)
	Sig. (2-tailed)	0	0	0	0	0	0	0.18	0	0
	N	502	508	497	455	509	487	476	549	522
Prefer internet companies know from high street	Correlation Coefficient	.089(*)	-0.017	0.034	0.053	0.045	-0.077	-0.052	-.138(**)	0.015
	Sig. (2-tailed)	0.047	0.707	0.457	0.261	0.307	0.092	0.256	0.001	0.74
	N	503	507	495	454	507	485	476	549	523
Would purchase from company only contactable online	Correlation Coefficient	-0.053	0.01	0.024	0.029	-0.004	0.012	0.01	0.01	-0.024
	Sig. (2-tailed)	0.233	0.825	0.594	0.531	0.937	0.79	0.829	0.81	0.591
	N	503	507	495	454	506	485	476	548	523
Technoreadiness	Correlation Coefficient	0.003	0.085	0.008	-0.058	0.039	0.075	0.092	.226(**)	.103(*)
	Sig. (2-tailed)	0.95	0.062	0.868	0.229	0.402	0.104	0.053	0	0.024
	N	462	484	470	437	467	467	441	500	482
Time Capacity	Correlation Coefficient	-0.047	0.041	-0.045	-0.028	-0.064	0.015	-0.046	0.059	-0.029
	Sig. (2-tailed)	0.305	0.359	0.326	0.546	0.161	0.735	0.326	0.176	0.518
	N	482	503	488	452	489	485	458	527	503
Products Purchased Online	Correlation Coefficient	-1.10(*)	-.125(**)	-.101(*)	-.175(**)	-0.035	-0.021	0.024	.130(**)	-0.029
	Sig. (2-tailed)	0.013	0.005	0.024	0	0.415	0.639	0.596	0.002	0.509
	N	504	509	497	456	510	488	478	551	524
Online Activities	Correlation Coefficient	-0.094(*)	-0.084(*)	-0.096(*)	-0.088	-0.035	0.027	-0.036	-0.007	-0.06
	Sig. (2-tailed)	0.035	0.034	0.032	0.062	0.433	0.551	0.427	0.872	0.171
	N	504	509	497	456	510	488	478	551	524

SPORTCO		Purchase Involvement	Money saved by finding lower price is not worth the effort	Price is a good indicator of quality	no time to fully research products so rely on name trust	Importance of low price	Importance of high quality service	Online History	Company History (for ServCo no purchase measure)
Purchase Involvement	Correlation Coefficient	1	-.157(**)	.119(**)	-0.068	.099(*)	0.078	0.038	.200(**)
	Sig. (2-tailed)	.	0	0.005	0.107	0.018	0.065	0.369	0
	N	568	565	566	567	568	567	553	552
Money saved by finding lower price is not worth the effort	Correlation Coefficient	-.157(**)	1	.193(**)	.232(**)	-.183(**)	0.018	-0.022	0.02
	Sig. (2-tailed)	0	.	0	0	0	0.665	0.598	0.64
	N	565	573	571	572	573	572	558	555
Price is a good indicator of quality	Correlation Coefficient	.119(**)	.193(**)	1	.219(**)	-.128(**)	0.053	-.093(*)	.087(*)
	Sig. (2-tailed)	0.005	0	.	0	0.002	0.208	0.028	0.04
	N	566	571	574	574	574	573	559	556
no time to fully research products so rely on name trust	Correlation Coefficient	-0.068	.232(**)	.219(**)	1	-.118(**)	0.017	-.179(**)	0.062
	Sig. (2-tailed)	0.107	0	0	.	0.005	0.692	0	0.144
	N	567	572	574	575	575	574	560	557
Importance of low price	Correlation Coefficient	.099(*)	-.183(**)	-.128(**)	-.118(**)	1	.188(**)	0.052	-.095(*)
	Sig. (2-tailed)	0.018	0	0.002	0.005	.	0	0.219	0.024
	N	568	573	574	575	577	576	562	558
Importance of high quality service	Correlation Coefficient	0.078	0.018	0.053	0.017	.188(**)	1	0.065	0.046
	Sig. (2-tailed)	0.065	0.665	0.208	0.692	0	.	0.122	0.281
	N	567	572	573	574	576	576	561	557
Online History	Correlation Coefficient	0.038	-0.022	-.093(*)	-.179(**)	0.052	0.065	1	.249(**)
	Sig. (2-tailed)	0.369	0.598	0.028	0	0.219	0.122	.	0
	N	553	558	559	560	562	561	568	548
Company History (for ServCo no purchase measure)	Correlation Coefficient	.200(**)	0.02	.087(*)	0.062	-.095(*)	0.046	.249(**)	1
	Sig. (2-tailed)	0	0.64	0.04	0.144	0.024	0.281	0	.
	N	552	555	556	557	558	557	548	560
Behavioural Loyalty	Correlation Coefficient	-0.043	.117(**)	.087(*)	0.069	-0.068	-0.075	-.136(**)	-.098(*)
	Sig. (2-tailed)	0.303	0.005	0.037	0.097	0.105	0.073	0.001	0.021
	N	566	571	572	573	574	573	562	559
Attitudinal Loyalty	Correlation Coefficient	.148(**)	-0.014	0.069	0.063	0.034	0.011	.091(*)	.152(**)
	Sig. (2-tailed)	0.001	0.747	0.097	0.13	0.416	0.786	0.03	0
	N	566	571	572	573	574	573	562	559
Overall Satisfaction	Correlation Coefficient	.140(**)	0.015	.111(**)	0.024	-.097(*)	0.061	0.023	.197(**)
	Sig. (2-tailed)	0.001	0.714	0.008	0.669	0.019	0.145	0.585	0
	N	567	572	573	574	575	574	563	560

Prefer internet companies know from high street	Correlation Coefficient	0.023	.172(**)	.138(**)	.180(**)	-0.045	-0.001	-.160(**)	0.037
	Sig. (2-tailed)	0.583	0	0.001	0	0.278	0.974	0	0.378
	N	565	570	571	572	573	572	566	557
Would purchase from company only contactable online	Correlation Coefficient	0.027	-0.033	0.001	-0.023	.091(*)	-0.064	.162(**)	0.004
	Sig. (2-tailed)	0.516	0.431	0.977	0.586	0.03	0.125	0	0.927
	N	564	569	570	571	572	571	566	556
Technoreadiness	Correlation Coefficient	.087(*)	-0.049	-0.016	-.112(*)	0.063	0.064	.256(**)	.091(*)
	Sig. (2-tailed)	0.05	0.272	0.713	0.011	0.152	0.147	0	0.043
	N	507	511	512	513	515	514	506	497
Time Capacity	Correlation Coefficient	.138(**)	0.037	-0.052	.103(*)	0.031	0.067	.110(*)	.099(*)
	Sig. (2-tailed)	0.001	0.396	0.225	0.017	0.473	0.117	0.011	0.023
	N	537	541	542	543	545	544	536	527
Products Purchased Online	Correlation Coefficient	0.059	-0.085(*)	-0.072	-.117(**)	0.052	0.07	.428(**)	0.043
	Sig. (2-tailed)	0.158	0.042	0.083	0.005	0.215	0.091	0	0.315
	N	568	573	574	575	577	576	568	560
Online Activities	Correlation Coefficient	.084(*)	-0.02	-0.013	-0.077	.119(**)	.100(*)	.120(**)	-0.027
	Sig. (2-tailed)	0.045	0.639	0.763	0.064	0.004	0.016	0.004	0.52
	N	568	573	574	575	577	576	568	560

SPORTCO		Behavioural Loyalty	Attitudinal Loyalty	Overall Satisfaction	Prefer internet companies know from high street	Would purchase from company only contactable online	Techno readiness	Time Capacity	Products Purchased Online	Online Activities
Purchase Involvement	Correlation Coefficient	-0.043	.146(**)	.140(**)	0.023	0.027	.087(*)	.138(**)	0.059	.084(*)
	Sig. (2-tailed)	0.303	0.001	0.001	0.583	0.516	0.05	0.001	0.158	0.045
	N	566	566	567	565	564	507	537	568	568
Money saved by finding lower price is not worth the effort	Correlation Coefficient	.117(**)	-0.014	0.015	.172(**)	-0.033	-0.049	0.037	-.085(*)	-0.02
	Sig. (2-tailed)	0.005	0.747	0.714	0	0.431	0.272	0.396	0.042	0.639
	N	571	571	572	570	569	511	541	573	573
Price is a good indicator of quality	Correlation Coefficient	.087(*)	0.069	.111(**)	.138(**)	0.001	-0.016	-0.052	-0.072	-0.013
	Sig. (2-tailed)	0.037	0.097	0.008	0.001	0.977	0.713	0.225	0.083	0.763
	N	572	572	573	571	570	512	542	574	574
no time to fully research products so rely on name trust	Correlation Coefficient	0.069	0.063	0.024	.180(**)	-0.023	-.112(*)	.103(*)	-.117(**)	-0.077
	Sig. (2-tailed)	0.097	0.13	0.569	0	0.586	0.011	0.017	0.005	0.064
	N	573	573	574	572	571	513	543	575	575
Importance of low price	Correlation Coefficient	-0.068	0.034	-.097(*)	-0.045	.091(*)	0.063	0.031	0.052	.119(**)
	Sig. (2-tailed)	0.105	0.416	0.019	0.278	0.03	0.152	0.473	0.215	0.004
	N	574	574	575	573	572	515	545	577	577
Importance of high quality service	Correlation Coefficient	-0.075	0.011	0.061	-0.001	-0.064	0.064	0.067	0.07	.100(*)
	Sig. (2-tailed)	0.073	0.786	0.145	0.974	0.125	0.147	0.117	0.091	0.016
	N	573	573	574	572	571	514	544	576	576
Online History	Correlation Coefficient	-.136(**)	.091(*)	0.023	-.160(**)	.162(**)	.256(**)	.110(*)	.428(**)	.120(**)
	Sig. (2-tailed)	0.001	0.03	0.585	0	0	0	0.011	0	0.004
	N	562	562	563	566	566	506	536	568	568
Company History (for ServCo no purchase measure)	Correlation Coefficient	-.098(*)	.152(**)	.197(**)	0.037	0.004	.091(*)	.099(*)	0.043	-0.027
	Sig. (2-tailed)	0.021	0	0	0.378	0.927	0.043	0.023	0.315	0.52
	N	559	559	560	557	556	497	527	560	560
Behavioural Loyalty	Correlation Coefficient	1	-0.066	-.177(**)	.088(*)	0.013	-0.049	-0.044	-.106(*)	-0.008
	Sig. (2-tailed)	.	0.114	0	0.035	0.747	0.269	0.304	0.011	0.847
	N	577	576	577	574	573	514	544	577	577
Attitudinal Loyalty	Correlation Coefficient	-0.066	1	.433(**)	0.000	0.012	.143(**)	.109(*)	.091(*)	0.062
	Sig. (2-tailed)	0.114	.	0	0.828	0.774	0.001	0.011	0.029	0.135
	N	576	577	577	574	573	515	545	577	577
Overall Satisfaction	Correlation Coefficient	.177(**)	.433(**)	1	0.034	-0.074	.089(*)	0.075	0.03	.082(*)
	Sig. (2-tailed)	0.001	0.001	0	0.583	0.516	0.05	0.001	0.158	0.045
	N	566	566	567	565	564	507	537	568	568

	Sig. (2-tailed)	0	0	.	0.414	0.076	0.044	0.082	0.475	0.622
	N	577	577	578	575	574	515	545	578	578
Prefer Internet companies know from high street	Correlation Coefficient	.088(*)	0.009	0.034	1	-0.057	-.169(**)	-0.023	-.163(**)	-.097(*)
	Sig. (2-tailed)	0.035	0.828	0.414	.	0.169	0	0.588	0	0.02
	N	574	574	575	578	577	516	545	578	578
Would purchase from company only contactable online	Correlation Coefficient	0.013	0.012	-0.074	-0.057	1	.151(**)	0.017	.201(**)	.107(**)
	Sig. (2-tailed)	0.747	0.774	0.076	0.169	.	0.001	0.684	0	0.01
	N	573	573	574	577	577	516	545	577	577
Technoreadiness	Correlation Coefficient	-0.049	.143(**)	.089(*)	-.169(**)	.151(**)	1	.121(**)	.296(**)	.205(**)
	Sig. (2-tailed)	0.269	0.001	0.044	0	0.001	.	0.006	0	0
	N	514	515	515	516	516	519	517	519	519
Time Capacity	Correlation Coefficient	-0.044	.109(*)	0.075	-0.023	0.017	.121(**)	1	.085(*)	-0.017
	Sig. (2-tailed)	0.304	0.011	0.082	0.588	0.684	0.006	.	0.047	0.688
	N	544	545	545	545	545	517	550	550	550
Products Purchased Online	Correlation Coefficient	-.106(*)	-.091(*)	0.03	-.163(**)	.201(**)	.296(**)	.085(*)	1	.403(**)
	Sig. (2-tailed)	0.011	0.029	0.475	0	0	0	0.047	.	0
	N	577	577	578	578	577	519	550	583	583
Online Activities	Correlation Coefficient	-0.008	0.062	0.021	-.097(*)	.107(**)	.205(**)	-0.017	.403(**)	1
	Sig. (2-tailed)	0.847	0.135	0.622	0.02	0.01	0	0.688	0	.
	N	577	577	578	578	577	519	550	583	583

Descriptive Statistics(a) - SportCo

	N	Minimum	Maximum	Mean	Std. Deviation
website importance	528	1	7	6.3314	0.791
trust importance	535	1	7	6.729	0.724
customer service importance	538	1	7	6.5359	0.7677
information importance	504	1	7	6.1612	0.9486
contactability importance	551	1	7	6.4782	0.8931
no ads importance	528	1	7	6.3703	0.9826
personalisation importance	530	1	7	4.0057	1.657
company image importance	567	1	7	5.0794	1.3842
product availability importance	548	1	7	5.4626	1.3835
website performance	513	2.375	7	5.797	0.971
trust performance	515	2	7	6.3133	0.8734
customer service performance	500	1	7	5.886	1.1225
information performance	466	1	7	5.0595	1.3829
contactability performance	516	2	7	5.9816	1.0595
no ads performance	490	1	7	6.05	1.0711
personalisation performance	481	1	7	4.236	1.37
company image performance	558	2	7	6.1066	0.933
product availability performance	529	1	7	5.3299	1.2941
website gap	504	-4.125	6	-0.5389	1.0121
trust gap	509	-4	6	-0.4198	0.9152
customer service gap	497	-6	5.6667	-0.6633	1.1683
information gap	456	-5.5	6	-1.125	1.5127
contactability gap	510	-5	6	-0.4941	1.1685
no ads gap	488	-6	6	-0.3197	1.1831
personalisation gap	478	-6	6	0.1684	1.4466
company image gap	551	-3	6	1.0018	1.3514
product availability gap	524	-5	6	-0.1508	1.4301
Purchase Involvement	568	3	15	12.19	2.1238
Money saved by finding lower price is not worth the effort	573	1	5	2.4991	1.1968
Price is a good indicator of quality	574	1	5	3.3624	1.0221
no time to fully research products so rely on name trust	575	1	5	3.2261	1.1064
Importance of low price	577	1	5	3.3605	0.9602
Importance of high quality service	576	1	5	4.1476	1.209
Online History	568	4	14	11.623	2.0182
Company History (for ServCo no purchase measure)	560	1	4.6667	3.0762	0.917

Company

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SportCo

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APPENDIX 8.3 CORRELATIONS OF CONVERTED CATEGORICALS

		website	impctrust	importanc	customer ser	information in	contactability	no ads impor	personalisati	company ime	product avail
S2 Approximately how much did you spend on this personalisation of purchase	Correlation C	-0.037	-0.027	-0.022	-0.006	-0.02	0.008	-0.03	-0.009	-0.006	
	Sig. (2-tailed)	0.122	0.261	0.367	0.804	0.425	0.729	0.221	0.693	0.79	
	N	1735	1794	1749	1738	1637	1770	1717	1786	1775	
purchase spontaneity	Correlation C	-0.027	-0.021	-0.026	-.059(*)	-.124(**)	-0.013	0.004	-0.025	0.018	
	Sig. (2-tailed)	0.258	0.381	0.281	0.013	0	0.592	0.875	0.301	0.5	
	N	1731	1791	1747	1734	1633	1768	1715	1783	1772	
S5 How often do you purchase this type of product	Correlation C	-0.029	-0.002	-0.032	-0.033	-0.047	-0.012	0.009	0.018	-0.018	
	Sig. (2-tailed)	0.224	0.934	0.177	0.173	0.058	0.623	0.704	0.45	0.44	
	N	1731	1791	1746	1734	1634	1767	1716	1783	1772	
S6 Research product prior to purchase	Correlation C	0.061(*)	0.048	0.034	-0.002	-0.041	0.01	0.018	0.005	0.051(*)	
	Sig. (2-tailed)	0.011	0.054	0.153	0.936	0.095	0.662	0.451	0.829	0.032	
	N	1723	1782	1736	1724	1623	1757	1706	1774	1763	
S15 When purchasing the type of product you intend to purchase	Correlation C	-0.018	-0.021	-0.002	0.04	0.003	-0.033	0.019	0.019	-0.002	
	Sig. (2-tailed)	0.465	0.37	0.936	0.094	0.91	0.167	0.421	0.421	0.931	
	N	1735	1795	1750	1738	1637	1771	1718	1787	1776	
S16 Have you ever returned products to the company	Correlation C	-0.112(**)	-.064(**)	-.095(**)	-.103(**)	-0.043	-.059(*)	-.138(**)	-.151(**)	-.080(**)	
	Sig. (2-tailed)	0	0.007	0	0	0.081	0.013	0	0	0.001	
	N	1731	1790	1746	1733	1632	1766	1713	1782	1771	
S26 connection speed (where multiple answers, first)	Correlation C	0.014	-0.008	-0.018	-.058(*)	-0.021	-0.009	-0.023	-0.018	0.031	
	Sig. (2-tailed)	0.567	0.723	0.447	0.015	0.387	0.69	0.34	0.449	0.187	
	N	1735	1795	1750	1738	1637	1771	1718	1787	1776	
D1 Gender:	Correlation C	-.088(**)	-.091(**)	-.057(*)	-.100(**)	-0.029	-0.029	-.059(*)	-.076(**)	-.101(**)	
	Sig. (2-tailed)	0.007	0	0.022	0	0.261	0.238	0.019	0.002	0	
	N	1589	1654	1611	1601	1504	1639	1583	1637	1628	
D2 Age group:	Correlation C	0.087(**)	0.053(*)	0.089(**)	0.110(**)	0.096(**)	0.055(*)	0.072(**)	0.04	0.101(**)	
	Sig. (2-tailed)	0	0.024	0	0	0	0.021	0.003	0.089	0	
	N	1718	1785	1742	1728	1622	1765	1702	1769	1758	
CLASS (occupation based)	Correlation C	0.128(**)	0.064(**)	0.088(**)	0.088(**)	0.057(*)	0.087(**)	0.04	0.113(**)	0.022	
	Sig. (2-tailed)	0	0.007	0	0	0.023	0	0.1	0	0.346	
	N	1719	1787	1742	1729	1623	1766	1703	1770	1759	
D4 What is the highest educational qualification you have achieved	Correlation C	0.016	0.002	-0.003	0.063(*)	0.012	-0.001	0.078(**)	0.054(*)	0.050(*)	
	Sig. (2-tailed)	0.522	0.923	0.901	0.013	0.648	0.971	0.002	0.033	0.046	
	N	1539	1591	1551	1545	1451	1573	1520	1579	1565	
D5 Roughly what is your annual household income	Correlation C	-0.129(**)	-0.04	-.123(**)	-.136(**)	-.111(**)	-0.017	-.175(**)	-.201(**)	-0.033	
	Sig. (2-tailed)	0	0.091	0	0	0	0.492	0	0	0.169	
	N	1684	1749	1706	1694	1596	1730	1671	1736	1726	
D5 Roughly what is your annual household income	Correlation C	-0.106(**)	-0.037	-.060(*)	-.134(**)	-.072(**)	-0.047	-.178(**)	-.151(**)	-.112(**)	
	Sig. (2-tailed)	0	0.137	0.016	0	0.006	0.059	0	0	0	
	N	1568	1634	1599	1582	1488	1614	1566	1622	1607	

Correlation is significant at the 0.05 level (2-tailed).

Correlation is significant at the 0.01 level (2-tailed).

Company = EntzCo

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S2 Approximately how much did you spend on thi:	Correlation C	0	0	0	0	0	0	0	0	
	Sig. (2-tailed)									
	N									
personalization of purchase	Correlation C	0,053	0,035	0,086	0,051	0,047	0,003	-0,017	0,053	0,018
	Sig. (2-tailed)	0,29	0,474	0,093	0,314	0,351	0,958	0,735	0,271	0,716
	N	403	402	386	388	397	411	397	429	396
purchase spontaneity	Correlation C	-0,07	-0,057	0,009	-0,052	0,069	-0,008	,125(*)	,118(*)	-0,007
	Sig. (2-tailed)	0,161	0,255	0,867	0,302	0,169	0,875	0,013	0,014	0,892
	N	405	405	389	391	399	414	399	431	399
S5 How often do you purchase this type of produc	Correlation C	0,048	-0,023	0,006	-0,021	-0,048	0,02	0,034	-0,022	0,095
	Sig. (2-tailed)	0,337	0,648	0,9	0,677	0,344	0,689	0,497	0,648	0,06
	N	401	401	385	388	395	410	394	426	394
S6 Research product prior to purchase	Correlation C	0,048	-0,053	-0,003	0,037	-0,021	0,049	-0,042	-0,007	0,005
	Sig. (2-tailed)	0,331	0,287	0,952	0,46	0,674	0,317	0,401	0,884	0,914
	N	405	405	389	391	399	414	399	431	399
S15 When purchasing the type of product you indi	Correlation C	-0,058	-0,057	-0,017	-0,087	0,002	-0,001	0,034	-0,035	,114(*)
	Sig. (2-tailed)	0,245	0,254	0,732	0,085	0,966	0,977	0,493	0,47	0,024
	N	402	402	388	389	397	412	399	428	397
S26 connection speed (where multiple answers, fr	Correlation C	-0,022	-0,015	0,046	0,069	0,038	0,086	0,042	-0,024	-0,059
	Sig. (2-tailed)	0,676	0,775	0,391	0,193	0,469	0,093	0,427	0,632	0,261
	N	366	374	355	361	365	383	363	389	363
D1 Gender:	Correlation C	0,048	-0,019	0,053	-0,006	0,043	0,056	0,038	-0,029	-0,012
	Sig. (2-tailed)	0,344	0,703	0,303	0,9	0,4	0,258	0,452	0,553	0,808
	N	394	399	380	385	390	408	390	420	389
D2 Age group:	Correlation C	0,006	0,072	0,017	0,051	0,012	0,054	-0,02	,127(**)	0,065
	Sig. (2-tailed)	0,909	0,15	0,747	0,32	0,818	0,09	0,692	0,009	0,201
	N	395	400	381	386	391	409	390	421	390
CLASS (occupation based)	Correlation C	0,031	-0,101	-0,042	-0,044	-0,048	-0,006	0,04	-0,028	0,019
	Sig. (2-tailed)	0,585	0,071	0,46	0,438	0,399	0,916	0,481	0,609	0,735
	N	318	319	306	312	312	323	312	331	312
D4 What is the highest educational qualification yc	Correlation C	-,132(**)	-0,064	,114(*)	-0,097	,125(*)	-0,034	,156(**)	,124(*)	-0,032
	Sig. (2-tailed)	0,009	0,205	0,027	0,059	0,014	0,5	0,002	0,011	0,531
	N	389	394	375	380	385	403	384	414	384
D5 Roughly what is your annual household incom	Correlation C	-0,081	0,06	0,001	0,013	0,02	-0,024	-0,031	0,04	0,028
	Sig. (2-tailed)	0,122	0,251	0,987	0,806	0,704	0,639	0,56	0,431	0,6
	N	366	371	354	359	359	378	362	389	364

Correlation is significant at the 0,05 level (2-tailed).

Correlation is significant at the 0,01 level (2-tailed).

Company = ServCo

		website	impc	trust	importa	customer	ser	information	ir	contactability	no	ads	impor	personalisati	company	ime	product	avail
S2 Approximately how much did you spend on this purchase	Correlation C	-0.021	0.052	.126(*)		0.093	0.058	0.065	0.013	0.023	0.042							
	Sig. (2-tailed)	0.864	0.29		0.012	0.069	0.222	0.184	0.795	0.622	0.393							
	N	416	410	399	385	443	413	414	444	416								
personalisation of purchase	Correlation C	.102(*)	.135(**)		0.093	0.093	0.069	0.046	0.01	0.035	-0.003							
	Sig. (2-tailed)	0.043	0.008	0.073	0.077	0.156	0.363	0.839	0.474	0.945								
	N	393	388	375	362	418	391	392	418	390								
purchase spontaneity	Correlation C	-0.05	-0.04	0.002	-0.053	-0.024	-0.002	0.051	0.028	-0.027								
	Sig. (2-tailed)	0.306	0.409	0.964	0.296	0.603	0.201	0.295	0.547	0.577								
	N	428	422	410	397	455	426	427	456	428								
S5 How often do you purchase this type of product	Correlation C	-.113(*)	-0.027	-0.039	0.008	-0.019	0.049	0.051	0.045	0.053								
	Sig. (2-tailed)	0.02	0.587	0.431	0.873	0.684	0.313	0.299	0.342	0.28								
	N	425	420	407	394	453	423	424	452	425								
S6 Research product prior to purchase	Correlation C	0.08	0.037	0.037	0.079	0.061	0.091	.108(*)	0.062	0.076								
	Sig. (2-tailed)	0.098	0.449	0.455	0.116	0.191	0.058	0.025	0.186	0.115								
	N	432	428	414	401	461	431	432	461	433								
S15 When purchasing the type of product, you used	Correlation C	-0.086	-0.067	-0.065	-0.041	-0.05	-0.063	-0.024	-.095(*)	-0.031								
	Sig. (2-tailed)	0.078	0.174	0.194	0.413	0.289	0.194	0.62	0.044	0.526								
	N	420	417	403	392	449	421	422	450	421								
S26 connecting speed (where multiple answers, fr	Correlation C	0.012	0.001	0.049	0.091	0.037	0.023	-0.034	-0.044	-0.002								
	Sig. (2-tailed)	0.818	0.99	0.35	0.083	0.461	0.648	0.509	0.386	0.974								
	N	375	382	369	362	401	386	378	395	374								
S28 Used a retail store to purchase from the com	Correlation C	0.005	-0.02	-0.045	-0.045	0.007	-0.05	0.024	-0.046	-0.074								
	Sig. (2-tailed)	0.917	0.681	0.359	0.37	0.888	0.297	0.616	0.33	0.125								
	N	432	428	414	401	461	431	432	461	433								
D1 Gender	Correlation C	.195(**)	.148(**)	.099(*)	0.087	.131(**)	.114(*)	-0.073	-0.07	0.023								
	Sig. (2-tailed)	0	0.002	0.047	0.082	0.005	0.019	0.136	0.141	0.639								
	N	416	422	407	397	448	427	422	443	419								
D2 Age group	Correlation C	-0.049	0.007	-0.031	-0.034	-0.038	-0.093	0.058	0.04	0.081								
	Sig. (2-tailed)	0.323	0.886	0.534	0.494	0.428	0.055	0.234	0.401	0.097								
	N	416	422	407	397	448	427	422	443	419								
CLASS (occupation based)	Correlation C	-0.079	0.025	0.003	0.021	-0.033	0.01	0.075	0.049	0.004								
	Sig. (2-tailed)	0.118	0.614	0.955	0.681	0.493	0.839	0.133	0.318	0.932								
	N	396	404	389	380	425	408	402	423	400								
D4 What is the highest educational qualification yo	Correlation C	-0.017	-0.05	-0.012	-0.03	0.019	-0.022	-.098(*)	-.096(*)	-0.052								
	Sig. (2-tailed)	0.729	0.304	0.817	0.555	0.687	0.649	0.045	0.044	0.289								
	N	413	419	404	394	445	424	419	440	416								
D5 Roughly what is your annual household incom	Correlation C	-0.074	-.109(*)	-0.05	-0.042	-0.031	-0.019	-.114(*)	-0.077	-0.073								
	Sig. (2-tailed)	0.147	0.031	0.334	0.418	0.526	0.703	0.024	0.119	0.15								
	N	388	393	377	374	417	399	394	414	392								

Correlation is significant at the 0.01 level (2-tailed).

Correlation is significant at the 0.05 level (2-tailed).

Company = ToolCo

website impo trust importa customer ser information Ir contactability no ads impor personalisati company ims product avail:

S2 Approximately how much did you spend on this purchase	Correlation C	0.07	0.002	0.074	0.053	0.022	0.084	-0.009	0.059	0.043
	Sig. (2-tailed)	0.112	0.959	0.089	0.241	0.614	0.056	0.846	0.167	0.323
	N	515	521	525	490	537	514	515	553	536
personalisation of purchase	Correlation C	-0.022	-0.02	-0.027	-0.031	0	-0.041	0.006	-0.004	-0.048
	Sig. (2-tailed)	0.611	0.652	0.529	0.496	1	0.346	0.885	0.92	0.27
	N	518	526	528	495	540	519	519	556	539
purchase spontaneity	Correlation C	-0.061	-0.014	0.006	-0.007	-0.033	-0.054	0.01	0.061	-0.059
	Sig. (2-tailed)	0.162	0.747	0.899	0.885	0.437	0.216	0.815	0.153	0.215
	N	520	527	530	495	542	519	521	558	540
S5 How often do you purchase this type of product	Correlation C	-0.008	0.043	-0.02	0.001	-0.03	-0.014	-0.069	-0.029	-0.022
	Sig. (2-tailed)	0.863	0.332	0.651	0.978	0.486	0.755	0.116	0.497	0.614
	N	516	521	524	490	538	514	517	552	535
S6 Research product prior to purchase	Correlation C	.142(**)	.122(**)	.104(*)	0.022	.115(**)	.098(*)	-0.002	-0.011	.124(**)
	Sig. (2-tailed)	0.001	0.005	0.016	0.622	0.007	0.025	0.963	0.8	0.004
	N	528	535	538	504	551	528	530	567	548
S15 When purchasing the type of product you intend to purchase	Correlation C	0.067	.143(**)	.090(*)	0.036	.085(*)	-0.019	-.124(**)	-0.049	0.035
	Sig. (2-tailed)	0.124	0.001	0.038	0.428	0.048	0.659	0.005	0.251	0.423
	N	520	524	528	494	541	518	520	556	540
S26 connection speed (where multiple answers, first answer)	Correlation C	-0.046	-0.002	-0.039	-0.071	0	0.011	-0.067	-0.051	-0.051
	Sig. (2-tailed)	0.339	0.969	0.408	0.14	0.995	0.819	0.16	0.27	0.279
	N	440	453	453	428	461	449	442	471	453
S28 Used a retail store to purchase from the company	Correlation C	0.012	0.051	0.026	-0.059	0.045	-0.031	-0.037	0.022	-0.077
	Sig. (2-tailed)	0.787	0.235	0.546	0.188	0.295	0.477	0.39	0.598	0.072
	N	528	535	538	504	551	528	530	567	548
D1 Gender:	Correlation C	-0.04	0.048	0.035	-0.01	-0.025	.103(*)	-0.063	-0.022	-0.001
	Sig. (2-tailed)	0.369	0.273	0.423	0.824	0.556	0.019	0.152	0.611	0.973
	N	514	529	529	499	538	523	517	553	533
D2 Age group:	Correlation C	.126(**)	0.011	.116(**)	0.024	.090(*)	0.05	-0.078	-0.006	.111(**)
	Sig. (2-tailed)	0.004	0.801	0.007	0.595	0.036	0.25	0.075	0.886	0.01
	N	518	533	533	502	542	527	521	557	537
CLASS (occupation based)	Correlation C	-0.065	-0.008	-0.073	-0.009	-0.066	-0.014	.111(*)	.114(**)	0.003
	Sig. (2-tailed)	0.152	0.853	0.105	0.847	0.14	0.764	0.015	0.01	0.938
	N	484	495	496	470	503	490	482	516	500
D4 What is the highest educational qualification you have	Correlation C	0.026	0.052	-0.008	0.021	-0.004	.092(*)	-.132(**)	-.199(**)	0.023
	Sig. (2-tailed)	0.58	0.232	0.861	0.64	0.918	0.036	0.003	0	0.602
	N	509	524	524	495	531	520	512	546	528
D5 Roughly what is your annual household income	Correlation C	-0.013	0.028	0.017	-.142(**)	0	-0.051	-.160(**)	-.146(**)	-0.062
	Sig. (2-tailed)	0.772	0.543	0.716	0.002	0.993	0.269	0	0.001	0.074
	N	466	480	480	454	481	475	468	494	481

Correlation is significant at the 0.01 level (2-tailed).

Correlation is significant at the 0.05 level (2-tailed).

Company = SportCo

website perf trust perform customer ser information p contactability no ads perfo personalisati company line product avail.

S2 Approximately how much did you spend	Correlation C	-0.02	-0.018	0.032	0	0.024	-0.002	0.033	-0.019	0.017
	Sig. (2-tailed)	0.409	0.452	0.195	0.988	0.365	0.931	0.186	0.42	0.482
	N	1707	1768	1671	1693	1413	1697	1639	1749	1734
personalisation of purchase	Correlation C	-0.043	-0.03	0.003	-.088(**)	-.053(*)	0.028	-0.024	-0.013	-0.017
	Sig. (2-tailed)	0.076	0.201	0.909	0	0.048	0.248	0.325	0.574	0.469
	N	1703	1765	1669	1690	1409	1695	1637	1746	1731
purchase spontaneity	Correlation C	-0.01	-0.004	0.006	-0.028	-0.019	-0.022	0.018	-0.01	-0.013
	Sig. (2-tailed)	0.681	0.851	0.805	0.249	0.475	0.36	0.527	0.678	0.591
	N	1704	1765	1668	1689	1410	1695	1638	1746	1731
S5 How often do you purchase this type of product	Correlation C	.058(*)	.054(**)	0.02	-0.036	0.027	.084(**)	-0.003	0.045	0.032
	Sig. (2-tailed)	0.02	0.007	0.42	0.137	0.314	0.001	0.91	0.059	0.191
	N	1695	1756	1658	1679	1400	1685	1629	1737	1722
S6 Research product prior to purchase	Correlation C	-.074(**)	-.070(**)	-.069(**)	-.067(**)	-.086(**)	-.057(*)	-0.027	-0.034	-0.046
	Sig. (2-tailed)	0.002	0.003	0.005	0.006	0.001	0.018	0.269	0.155	0.056
	N	1707	1769	1672	1693	1413	1698	1640	1750	1735
S15 When purchasing the type of product	Correlation C	-.187(**)	-.134(**)	-.177(**)	-.184(**)	-.145(**)	-.137(**)	-.181(**)	-.184(**)	-.135(**)
	Sig. (2-tailed)	0	0	0	0	0	0	0	0	0
	N	1702	1764	1668	1688	1408	1693	1635	1745	1730
S16 Have you ever returned products to the store	Correlation C	0.033	0.015	0.043	-0.04	0.049	.073(**)	-.051(*)	0.018	.066(**)
	Sig. (2-tailed)	0.173	0.518	0.077	0.098	0.067	0.003	0.039	0.444	0.006
	N	1707	1769	1672	1693	1413	1698	1640	1750	1735
S26 connection speed (where multiple antennas are used)	Correlation C	-0.032	-0.009	-0.033	-.057(*)	-0.035	-0.005	-.106(**)	-.057(*)	-.085(**)
	Sig. (2-tailed)	0.201	0.72	0.201	0.025	0.213	0.848	0	0.023	0.001
	N	1571	1632	1538	1559	1304	1572	1514	1604	1590
D1 Gender:	Correlation C	.124(**)	.071(**)	.109(**)	.167(**)	.090(**)	0.026	.143(**)	.065(**)	.127(**)
	Sig. (2-tailed)	0	0.003	0	0	0.001	0.286	0	0.007	0
	N	1693	1759	1665	1683	1402	1692	1626	1736	1720
D2 Age group:	Correlation C	.072(**)	.058(*)	.122(**)	.079(**)	.069(**)	.077(**)	.069(**)	.095(**)	0.043
	Sig. (2-tailed)	0.003	0.015	0	0.001	0.01	0.001	0.006	0	0.074
	N	1695	1760	1665	1684	1404	1693	1628	1738	1722
CLASS (occupation based)	Correlation C	.058(*)	.082(**)	.061(*)	.082(**)	0.048	.077(**)	.077(**)	.107(**)	.063(*)
	Sig. (2-tailed)	0.024	0.001	0.018	0.002	0.086	0.003	0.003	0	0.013
	N	1508	1564	1485	1501	1266	1512	1452	1552	1528
D4 What is the highest educational qualification	Correlation C	-.223(**)	-.137(**)	-.151(**)	-.202(**)	-.204(**)	-.145(**)	-.212(**)	-.233(**)	-.101(**)
	Sig. (2-tailed)	0	0	0	0	0	0	0	0	0
	N	1659	1723	1631	1652	1386	1662	1600	1706	1689
D5 Roughly what is your annual household income	Correlation C	-.114(**)	-.054(*)	-.086(**)	-.148(**)	-.093(**)	-.087(**)	-.175(**)	-.175(**)	-.112(**)
	Sig. (2-tailed)	0	0.03	0.001	0	0.001	0.001	0	0	0
	N	1546	1609	1528	1545	1303	1553	1503	1592	1573

Correlation is significant at the 0.05 level (2-tailed).

Correlation is significant at the 0.01 level (2-tailed).

Company = EntzCo

website perf trust perform customer ser information p contactability no ads perfor personalisati company ime product avail

S2 Approximately how much did you spend on this purchase	Correlation C	0	0	0	0	0	0	0	0	0
	Sig. (2-tailed)									
	N									
personalization of purchase	Correlation C	0.002	0.073	0.088	0.041	0.049	0.012	0.006	0.085	-0.03
	Sig. (2-tailed)	0.964	0.176	0.114	0.458	0.377	0.827	0.913	0.092	0.569
	N	371	343	325	325	324	337	348	393	359
purchase spontaneity	Correlation C	-0.042	-0.01	-0.032	-0.036	0.005	0	0.077	.138(**)	0.006
	Sig. (2-tailed)	0.414	0.847	0.56	0.515	0.878	0.997	0.151	0.006	0.914
	N	373	344	327	326	325	340	350	395	362
S5 How often do you purchase this type of product	Correlation C	0.009	0.019	0.011	0.016	0.025	0.073	0.082	0.051	.108(*)
	Sig. (2-tailed)	0.868	0.724	0.842	0.778	0.656	0.179	0.13	0.314	0.042
	N	368	341	323	322	322	336	345	390	357
S6 Research product prior to purchase	Correlation C	-0.04	0.007	0.032	0.047	0.013	0.036	-0.051	0.035	-0.01
	Sig. (2-tailed)	0.439	0.904	0.565	0.398	0.814	0.513	0.34	0.482	0.848
	N	373	344	327	326	325	340	350	395	362
S15 When purchasing the type of product	Correlation C	-.138(**)	-.128(*)	-.122(*)	-0.084	-0.052	-0.1	-0.064	-.123(*)	-.105(*)
	Sig. (2-tailed)	0.009	0.017	0.027	0.133	0.349	0.067	0.23	0.015	0.046
	N	371	342	326	324	322	338	349	391	360
S26 connection speed (where multiple answers are possible)	Correlation C	-0.068	-0.066	-0.057	0.021	-.118(*)	-0.028	-0.017	-0.04	-.120(*)
	Sig. (2-tailed)	0.214	0.24	0.333	0.713	0.042	0.628	0.761	0.449	0.029
	N	335	316	296	297	296	311	318	355	330
D1 Gender:	Correlation C	0.058	0.038	-0.025	0.001	0.018	-0.029	0.083	0.024	-0.007
	Sig. (2-tailed)	0.288	0.492	0.662	0.986	0.748	0.594	0.126	0.643	0.891
	N	362	338	319	320	317	334	340	385	351
D2 Age group:	Correlation C	0.046	0.069	.140(*)	0.106	0.077	.153(**)	0.047	.118(*)	0.052
	Sig. (2-tailed)	0.386	0.206	0.012	0.057	0.173	0.005	0.388	0.02	0.329
	N	363	339	320	321	318	335	341	386	352
CLASS (occupation based)	Correlation C	0.02	0.024	0.06	0.07	.153(*)	0.064	0.035	-0.027	-0.031
	Sig. (2-tailed)	0.735	0.693	0.337	0.262	0.013	0.269	0.561	0.637	0.599
	N	293	275	258	261	261	273	276	306	284
D4 What is the highest educational qualification you have attained	Correlation C	-0.078	-0.054	-.185(**)	-0.106	-.146(**)	-.147(**)	-.109(*)	-0.082	0.03
	Sig. (2-tailed)	0.141	0.326	0.001	0.059	0.01	0.007	0.046	0.112	0.578
	N	357	334	316	316	313	331	335	379	346
D5 Roughly what is your annual household income	Correlation C	-0.106	-.123(*)	-.158(**)	-.154(**)	-.118(*)	-.141(*)	-0.06	-0.038	0.001
	Sig. (2-tailed)	0.05	0.028	0.006	0.007	0.042	0.012	0.281	0.467	0.99
	N	340	322	301	303	297	317	322	360	330

Correlation is significant at the 0.05 level (2-tailed).

Correlation is significant at the 0.01 level (2-tailed).

Company = ServCo

	website	perf	trust	perform	customer	ser	information	p	contactability	no	ads	perfor	personalisati	company	ims	product	avail:
S2 Approximately how much did you spend	Correlation C	-0.025	-0.036	0.042	-0.022	-0.007	0.052	0.009	0.052	0.009	0.052	0.009	0.052	0.009	0.052	0.009	0.052
	Sig. (2-tailed)	0.622	0.49	0.436	0.686	0.889	0.329	0.858	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993
	N	386	363	347	333	401	351	366	422	386							
personalisation of purchase	Correlation C	.144(**)	.162(**)	0.086	0.023	.119(*)	0.067	0.019	0.094	.170(**)							
	Sig. (2-tailed)	0.006	0.003	0.123	0.683	0.021	0.224	0.729	0.063	0.001							
	N	363	340	324	311	376	330	345	396	362							
purchase spontaneity	Correlation C	-0.002	-.126(**)	-0.048	-.145(**)	0.003	-.159(**)	-0.019	-.133(**)	-0.04							
	Sig. (2-tailed)	0.971	0.014	0.365	0.007	0.958	0.002	0.72	0.006	0.421							
	N	397	374	356	342	412	363	377	432	397							
S5 How often do you purchase this type of	Correlation C	-0.058	-0.067	0.055	0.021	-0.005	0.003	0.072	0.007	-0.052							
	Sig. (2-tailed)	0.25	0.199	0.305	0.695	0.924	0.952	0.162	0.888	0.303							
	N	395	374	355	341	411	361	375	431	396							
S6 Research product prior to purchase	Correlation C	0.033	0.06	0.023	0.104	0.083	0.068	0.089	0.065	0.05							
	Sig. (2-tailed)	0.51	0.247	0.661	0.053	0.089	0.191	0.082	0.173	0.32							
	N	402	380	361	347	418	368	382	438	402							
S15 When purchasing the type of product	Correlation C	-.241(**)	-.260(**)	-.246(**)	-.182(**)	-.160(**)	-.161(**)	-.126(**)	-.212(**)	-.222(**)							
	Sig. (2-tailed)	0	0	0	0.001	0.001	0.002	0.015	0	0							
	N	391	372	353	341	408	361	374	429	391							
S26 connection speed (where multiple ans	Correlation C	-0.049	0.002	-0.08	-0.076	-0.083	-0.016	-.184(**)	-0.087	-0.08							
	Sig. (2-tailed)	0.364	0.974	0.149	0.178	0.115	0.768	0	0.091	0.136							
	N	348	342	326	317	363	333	335	377	347							
S25 Used a retail store to purchase from th	Correlation C	-0.026	0.017	-0.071	-0.036	0.023	-0.039	-0.011	0.003	-0.095							
	Sig. (2-tailed)	0.6	0.74	0.18	0.507	0.641	0.457	0.835	0.943	0.058							
	N	402	380	361	347	418	368	382	438	402							
D1 Gender:	Correlation C	.183(**)	.108(*)	0.059	0.08	0.071	.111(*)	0.085	.216(**)	.102(*)							
	Sig. (2-tailed)	0	0.036	0.268	0.137	0.153	0.035	0.102	0	0.045							
	N	386	376	357	344	405	365	374	420	386							
D2 Age group:	Correlation C	-0.088	-0.056	-0.016	0	0.003	0.027	-0.039	-.087(*)	-0.047							
	Sig. (2-tailed)	0.084	0.281	0.764	0.996	0.951	0.603	0.457	0.046	0.36							
	N	386	376	357	344	405	365	374	420	386							
CLASS (occupation based)	Correlation C	0.052	0.079	0.074	0.079	0.078	0.061	.118(*)	0.038	-0.008							
	Sig. (2-tailed)	0.321	0.136	0.172	0.153	0.125	0.252	0.026	0.444	0.878							
	N	368	358	341	329	385	349	357	400	367							
D4 What is the highest educational qualifi	Correlation C	-0.098	-.109(*)	-0.081	-0.06	-0.073	-0.09	-.167(**)	-.114(*)	-0.044							
	Sig. (2-tailed)	0.055	0.035	0.128	0.272	0.144	0.088	0.001	0.02	0.39							
	N	384	374	355	342	404	363	372	418	384							
D5 Roughly what is your annual household	Correlation C	-0.057	-0.053	-0.104	-.160(**)	-.141(**)	-0.104	-.165(**)	-0.077	-0.048							
	Sig. (2-tailed)	0.277	0.238	0.059	0.004	0.006	0.055	0.002	0.129	0.364							
	N	362	352	333	324	378	343	349	392	360							

Correlation is significant at the 0.01 level (2-tailed).

Correlation is significant at the 0.05 level (2-tailed).

Company = ToolCo

website perf trust perform customer ser information p contactability no ads perfor personalisati company imz product avail:

S2 Approximately how much did you open	Correlation C	0.028	0.018	-0.008	-0.059	0.048	-0.019	-0.019	.089(*)	0.021
	Sig. (2-tailed)	0.534	0.694	0.858	0.211	0.28	0.676	0.688	0.039	0.641
	N	502	504	491	459	508	481	469	546	519
personalization of purchase	Correlation C	0.036	-0.007	0.022	-0.034	-0.027	-0.06	-0.008	0.006	0.017
	Sig. (2-tailed)	0.425	0.879	0.625	0.463	0.546	0.188	0.859	0.883	0.694
	N	504	508	495	461	509	486	473	549	520
purchase spontaneity	Correlation C	0.029	0.001	0.014	0.019	0.011	0.004	-0.014	-0.001	-0.048
	Sig. (2-tailed)	0.521	0.983	0.754	0.688	0.807	0.929	0.782	0.973	0.293
	N	506	509	496	461	511	486	474	551	522
S5 How often do you purchase this type of	Correlation C	0.003	0.045	0.021	-0.011	0.026	0.001	-0.058	0.007	-0.017
	Sig. (2-tailed)	0.947	0.319	0.65	0.82	0.555	0.977	0.062	0.874	0.695
	N	501	502	489	457	508	481	470	544	516
S6 Research product prior to purchase	Correlation C	.110(**)	.116(**)	.093(*)	0.057	.159(**)	.111(*)	-0.025	0.071	0.018
	Sig. (2-tailed)	0.013	0.008	0.037	0.22	0	0.014	0.581	0.092	0.682
	N	513	515	500	466	516	490	481	558	529
S15 When purchasing the type of product	Correlation C	-.094(*)	0.035	-0.014	-0.071	0.012	0.047	.123(**)	0.007	-0.046
	Sig. (2-tailed)	0.035	0.432	0.763	0.128	0.782	0.306	0.007	0.879	0.297
	N	505	508	493	459	509	484	472	548	522
S26 connection speed (where multiple an	Correlation C	-0.074	0.001	-0.017	-.114(*)	0.019	0.044	-0.058	-0.042	-0.008
	Sig. (2-tailed)	0.124	0.975	0.73	0.023	0.689	0.371	0.175	0.368	0.844
	N	431	441	426	398	431	418	398	466	440
S28 Used a retail store to purchase from	Correlation C	-.091(*)	-0.088	-.098(*)	-0.059	-0.068	-0.077	-0.03	0.069	-.134(**)
	Sig. (2-tailed)	0.039	0.142	0.028	0.135	0.125	0.09	0.511	0.104	0.002
	N	513	515	500	466	516	490	481	558	529
D1 Gender	Correlation C	0.048	0.038	0.055	0.054	0.06	.092(*)	-0.005	.109(*)	.114(**)
	Sig. (2-tailed)	0.288	0.385	0.224	0.244	0.176	0.042	0.908	0.011	0.009
	N	501	511	494	463	504	486	470	545	516
D2 Age group	Correlation C	0.062	-0.019	0.024	-0.041	0.087	-0.018	-0.068	-0.034	.102(*)
	Sig. (2-tailed)	0.185	0.662	0.592	0.383	0.051	0.691	0.138	0.424	0.02
	N	505	515	498	466	508	490	474	549	520
CLASS (occupation based)	Correlation C	0.043	0.051	0.04	.126(**)	-0.036	.105(**)	.101(*)	.093(*)	-0.028
	Sig. (2-tailed)	0.35	0.075	0.389	0.008	0.43	0.022	0.033	0.035	0.542
	N	473	481	465	440	475	463	445	511	484
D4 What is the highest educational qualifi	Correlation C	-.181(**)	-.087(*)	-.193(**)	-.149(**)	-.107(*)	-.119(**)	-.208(**)	-.180(**)	-0.026
	Sig. (2-tailed)	0	0.049	0	0.001	0.017	0.009	0	0	0.521
	N	496	508	489	458	497	483	465	538	511
D5 Roughly what is your annual household	Correlation C	-0.073	-0.067	-.093(*)	-.174(**)	-0.014	-0.055	-.188(**)	-0.036	-0.069
	Sig. (2-tailed)	0.119	0.149	0.049	0	0.773	0.246	0	0.43	0.134
	N	455	466	450	422	455	448	428	490	467

Correlation is significant at the 0.01 level (2-tailed).

Correlation is significant at the 0.05 level (2-tailed).

Company = SportCo

8.4 Demographic Regression Results

EntzCo	1. Website Imp Ref Log			2. Trust Imp Ref Log			3. Customer Service Imp Ref Log			4. Information Imp Ref Log		
	d			d			d			d		
	Beta	t	Sig.	Beta	t	Sig.	Beta	t	Sig.	Beta	t	Sig.
constant		5.826	0.000		3.395	0.001		4.705	0.000		6.680	0.000
D1 Gender	-0.065	-2.534	0.011	-0.031	-1.201	0.230	-0.068	-2.644	0.008	-0.095	-3.712	0.000
D2 Age group	-0.115	-4.245	0.000	-0.075	-2.712	0.007	-0.090	-3.303	0.001	-0.108	-3.989	0.000
D3 class	0.004	0.128	0.898	0.003	0.101	0.919	0.015	0.479	0.632	-0.042	-1.397	0.163
D4 Education	0.070	2.493	0.013	-0.004	-0.154	0.878	0.079	2.813	0.005	0.059	2.110	0.035
D5 Income	0.090	3.165	0.002	0.032	1.099	0.272	0.029	1.006	0.314	0.097	3.426	0.001
	F	Sig.	R Square	F	Sig.	R Square	F	Sig.	R Square	F	Sig.	R Square
	10.659	0.000	0.034	2.134	0.059	0.007	6.954	0.000	0.023	12.900	0.000	0.041

ServCo	1. Website Imp Ref Log			2. Trust Imp Ref Log			3. Customer Service Imp Ref Log			4. Information Imp Ref Log		
	d			d			d			d		
	Beta	t	Sig.	Beta	t	Sig.	Beta	t	Sig.	Beta	t	Sig.
constant		1.206	0.229		0.556	0.579		1.208	0.228		1.763	0.079
D1 Gender	-0.043	-0.667	0.505	-0.027	-0.431	0.667	-0.078	-1.188	0.236	-0.036	-0.558	0.577
D2 Age group	-0.003	-0.047	0.962	-0.060	-0.924	0.356	-0.014	-0.214	0.831	-0.058	-0.870	0.385
D3 class	0.073	1.053	0.293	0.142	2.044	0.042	0.101	1.416	0.158	0.040	0.572	0.568
D4 Education	0.135	2.149	0.032	0.127	2.045	0.042	0.164	2.575	0.011	0.125	1.963	0.051
D5 Income	0.080	1.206	0.229	-0.031	-0.473	0.637	0.003	0.039	0.969	-0.038	-0.570	0.569
	F	Sig.	R Square	F	Sig.	R Square	F	Sig.	R Square	F	Sig.	R Square
	1.539	0.177	0.024	1.973	0.082	0.031	1.688	0.137	0.027	1.066	0.379	0.017

ToolCo	1. Website Imp Ref Log			2. Trust Imp Ref Log			3. Customer Service Imp Ref Log			4. Information Imp Ref Log		
	d			d			d			d		
	Beta	t	Sig.	Beta	t	Sig.	Beta	t	Sig.	Beta	t	Sig.
constant		2.034	0.043		1.993	0.047		2.362	0.019		2.508	0.013
D1 Gender	-0.175	-3.410	0.001	-0.162	-3.148	0.002	-0.100	-1.879	0.061	-0.098	-1.826	0.069
D2 Age group	0.033	0.631	0.529	-0.030	-0.554	0.580	0.013	0.236	0.814	0.012	0.213	0.831
D3 class	0.140	2.522	0.012	0.045	0.810	0.418	0.020	0.354	0.724	0.016	0.279	0.780
D4 Education	0.002	0.029	0.977	-0.011	-0.193	0.847	-0.027	-0.474	0.636	0.008	0.141	0.888
D5 Income	0.127	2.293	0.022	0.105	1.879	0.061	0.084	1.460	0.145	0.069	1.193	0.234
	F	Sig.	R Square	F	Sig.	R Square	F	Sig.	R Square	F	Sig.	R Square
	4.566	0.000	0.056	2.874	0.015	0.036	1.306	0.261	0.017	1.143	0.337	0.015

SportCo	1. Website Imp Ref Log			2. Trust Imp Ref Log			3. Customer Service Imp Ref Log			4. Information Imp Ref Log		
	d			d			d			d		
	Beta	t	Sig.	Beta	t	Sig.	Beta	t	Sig.	Beta	t	Sig.
constant		2.865	0.004		2.749	0.006		2.864	0.004		1.919	0.056
D1 Gender	0.024	0.526	0.599	-0.041	-0.884	0.377	-0.038	-0.821	0.412	0.006	0.134	0.894
D2 Age group	-0.149	-2.782	0.006	-0.033	-0.623	0.533	-0.124	-2.326	0.020	-0.046	-0.855	0.393
D3 class	-0.031	-0.541	0.589	-0.080	-1.399	0.163	-0.009	-0.154	0.877	0.001	0.013	0.990
D4 Education	-0.048	-0.994	0.321	-0.109	-2.262	0.024	-0.008	-0.157	0.875	-0.071	-1.441	0.150
D5 Income	0.033	0.664	0.507	-0.003	-0.054	0.957	0.006	0.120	0.904	0.158	3.162	0.002
	F	Sig.	R Square	F	Sig.	R Square	F	Sig.	R Square	F	Sig.	R Square
	2.129	0.061	0.023	1.357	0.239	0.014	1.407	0.220	0.015	2.421	0.035	0.026

5. Contact Imp Ref Log			6. No Ads Imp Ref Log			7. Personalisation Imp Ref Log			8. Company Image Imp Ref Log			9. Product Availability Imp Ref Log		
d			d			d			d			d		
Beta	t	Sig.	Beta	t	Sig.	Beta	t	Sig.	Beta	t	Sig.	Beta	t	Sig.
	5.253	0.000		5.105	0.000		10.469	0.000		9.451	0.000		7.290	0.000
-0.085	-3.234	0.001	-0.043	-1.643	0.101	-0.055	-2.186	0.029	-0.022	-0.860	0.390	-0.096	-3.737	0.000
-0.048	-1.721	0.086	-0.082	-3.003	0.003	-0.053	-1.994	0.046	-0.126	-4.741	0.000	-0.049	-1.790	0.074
0.015	0.490	0.624	-0.019	-0.615	0.539	-0.004	-0.125	0.900	-0.001	-0.026	0.980	-0.029	-0.955	0.340
0.085	2.962	0.003	-0.021	-0.745	0.456	0.150	5.470	0.000	0.180	6.590	0.000	-0.004	-0.146	0.884
0.051	1.772	0.077	0.056	1.981	0.050	0.155	5.590	0.000	0.125	4.525	0.000	0.100	3.522	0.000
F	Sig.	R Square	F	Sig.	R Square	F	Sig.	R Square	F	Sig.	R Square	F	Sig.	R Square
6.673	0.000	0.023	3.175	0.007	0.011	21.816	0.000	0.068	25.679	0.000	0.079	7.332	0.000	0.024

5. Contact Imp Ref Log			6. No Ads Imp Ref Log			7. Personalisation Imp Ref Log			8. Company Image Imp Ref Log			9. Product Availability Imp Ref Log		
d			d			d			d			d		
Beta	t	Sig.	Beta	t	Sig.	Beta	t	Sig.	Beta	t	Sig.	Beta	t	Sig.
	0.848	0.397		2.312	0.021		4.003	0.000		4.967	0.000		4.702	0.000
-0.068	-1.052	0.294	-0.108	-1.695	0.091	-0.012	-0.181	0.857	-0.026	-0.418	0.876	-0.045	-0.683	0.495
-0.003	-0.048	0.962	-0.128	-1.953	0.052	0.050	0.755	0.451	-0.125	-1.946	0.052	-0.079	-1.175	0.241
0.106	1.502	0.134	0.023	0.338	0.735	0.078	1.121	0.263	0.065	0.954	0.341	-0.085	-1.195	0.233
0.174	2.761	0.006	0.082	0.989	0.323	0.200	3.176	0.002	0.171	2.787	0.006	0.021	0.327	0.744
-0.025	-0.369	0.713	0.008	0.123	0.902	0.047	0.710	0.478	-0.036	-0.560	0.576	-0.076	-1.124	0.262
F	Sig.	R Square	F	Sig.	R Square	F	Sig.	R Square	F	Sig.	R Square	F	Sig.	R Square
1.833	0.106	0.029	1.345	0.245	0.021	2.311	0.044	0.036	2.927	0.013	0.044	0.614	0.669	0.010

5. Contact Imp Ref Log			6. No Ads Imp Ref Log			7. Personalisation Imp Ref Log			8. Company Image Imp Ref Log			9. Product Availability Imp Ref Log		
d			d			d			d			d		
Beta	t	Sig.	Beta	t	Sig.	Beta	t	Sig.	Beta	t	Sig.	Beta	t	Sig.
	2.073	0.039		1.019	0.309		5.482	0.000		4.631	0.000		4.196	0.000
-0.120	-2.384	0.018	-0.098	-1.902	0.058	0.049	0.956	0.340	0.041	0.811	0.418	-0.058	-1.123	0.262
0.026	0.501	0.617	0.091	1.713	0.087	-0.031	-0.581	0.562	-0.027	-0.511	0.610	-0.077	-1.432	0.153
0.062	1.147	0.252	0.031	0.562	0.574	-0.026	-0.472	0.637	-0.046	-0.835	0.404	0.016	0.284	0.777
-0.047	-0.877	0.381	0.008	0.138	0.890	0.042	0.762	0.447	0.041	0.755	0.451	0.047	0.839	0.402
0.083	1.516	0.130	0.046	0.824	0.411	0.149	2.681	0.008	0.076	1.380	0.168	0.075	1.331	0.184
F	Sig.	R Square	F	Sig.	R Square	F	Sig.	R Square	F	Sig.	R Square	F	Sig.	R Square
2.126	0.081	0.025	1.889	0.095	0.023	2.914	0.013	0.036	1.474	0.197	0.018	1.454	0.204	0.018

5. Contact Imp Ref Log			6. No Ads Imp Ref Log			7. Personalisation Imp Ref Log			8. Company Image Imp Ref Log			9. Product Availability Imp Ref Log		
d			d			d			d			d		
Beta	t	Sig.	Beta	t	Sig.	Beta	t	Sig.	Beta	t	Sig.	Beta	t	Sig.
	1.855	0.099		4.150	0.000		2.763	0.006		2.292	0.022		3.864	0.000
0.018	0.389	0.698	-0.102	-2.231	0.026	0.055	1.202	0.230	0.017	0.369	0.713	-0.012	-0.258	0.797
-0.100	-1.867	0.063	-0.080	-1.125	0.261	-0.001	-0.024	0.981	-0.068	-1.312	0.190	-0.156	-2.956	0.003
0.006	0.107	0.915	-0.035	-0.813	0.540	-0.033	-0.583	0.560	-0.076	-1.361	0.174	-0.088	-1.194	0.233
-0.016	-0.375	0.708	-0.124	-2.577	0.010	0.085	1.988	0.047	0.174	3.701	0.000	-0.036	-0.744	0.457
0.019	0.304	0.694	0.096	1.152	0.250	0.166	3.406	0.001	0.117	2.450	0.016	0.092	1.869	0.062
F	Sig.	R Square	F	Sig.	R Square	F	Sig.	R Square	F	Sig.	R Square	F	Sig.	R Square
1.109	0.355	0.012	2.622	0.024	0.027	5.025	0.000	0.052	6.550	0.000	0.065	2.493	0.030	0.026

EntzCo	1. Website Imp Ref Log			2. Trust Imp Ref Log			3. Customer Service Imp Ref Log			4. Information Imp Ref Log		
	ed Beta	t	Sig.	ed Beta	t	Sig.	ed Beta	t	Sig.	ed Beta	t	Sig.
no s28 used a retail store												
(Constant)		6.812	0.000		3.802	0.000		4.989	0.000		5.759	0.000
S2 Approximately how much did you spend on this product?	0.025	1.025	0.306	0.007	0.279	0.780	0.020	0.803	0.422	-0.002	-0.073	0.942
S3a personalisation	0.009	0.350	0.727	0.004	0.156	0.876	0.006	0.253	0.800	0.025	0.977	0.329
S4a spontaneity	0.009	0.350	0.727	-0.012	-0.462	0.644	0.014	0.576	0.563	0.011	0.443	0.658
S5 How often do you purchase this type of product? (recode so higher=more freq purchase)	-0.070	-2.522	0.012	-0.047	-1.645	0.100	-0.062	-2.195	0.028	-0.043	-1.536	0.125
S6 Research product prior to purchase	0.041	1.562	0.118	0.013	0.496	0.620	0.014	0.527	0.598	-0.002	-0.095	0.948
S7 Purchase Involvement	-0.173	-6.579	0.000	-0.081	-3.017	0.003	-0.126	-4.760	0.000	-0.176	-6.752	0.000
S8 The money saved by finding lower prices is usually not worth the time and effort	0.065	2.406	0.016	0.064	2.312	0.021	0.064	2.340	0.019	0.058	2.541	0.011
S9 The price of a product is a good indicator of its quality	0.021	0.825	0.410	0.039	1.469	0.142	0.045	1.711	0.087	0.016	0.625	0.532
S10 I do not have time to fully research products so rely on names I trust	-0.045	-1.660	0.097	-0.062	-2.235	0.026	-0.045	-1.644	0.100	-0.016	-0.567	0.555
S11 When purchasing the type of product you have, how important is low price	0.003	0.111	0.912	-0.028	-0.949	0.343	0.003	0.104	0.917	0.015	0.512	0.609
S12 When purchasing the type of product you have, how important is high quality service	-0.036	-1.266	0.208	-0.016	-0.557	0.578	-0.046	-1.625	0.104	-0.020	-0.702	0.483
S13 Online History	0.023	0.714	0.475	0.008	0.257	0.797	0.053	1.652	0.099	0.071	2.225	0.026
S14a Company History (for ServCo no purchase measure)	-0.036	-1.143	0.253	-0.030	-0.934	0.350	-0.033	-1.039	0.299	-0.031	-0.983	0.326
S15 When purchasing the type of product you indicated at the start, how many companies do you	0.076	2.764	0.006	0.043	1.511	0.131	0.053	1.907	0.057	0.070	2.535	0.011
S16 Have you ever returned products to the company (faulty or unwanted)?	0.005	0.209	0.835	0.012	0.447	0.655	0.006	0.229	0.819	0.038	1.448	0.148
S17 I shop with the company because there are no alternatives for the products I require	0.003	0.136	0.892	0.007	0.253	0.800	-0.003	-0.098	0.922	-0.028	-1.086	0.277
S18 I shop with this company out of choice because their offering best matches my needs	-0.160	-6.359	0.000	-0.119	-4.649	0.000	-0.143	-5.656	0.000	-0.116	-4.623	0.000
S20 I prefer to purchase from internet companies that I know from the high street	-0.010	-0.379	0.704	0.018	0.686	0.493	-0.035	-1.352	0.177	-0.076	-2.978	0.003
S21 I would purchase from a company that is only reachable via the internet or email	0.061	2.474	0.013	0.035	1.371	0.171	0.053	2.103	0.036	0.033	1.309	0.191
S22 Technoreadiness	-0.068	-2.481	0.013	-0.098	-3.501	0.000	-0.038	-1.374	0.170	-0.035	-1.283	0.200
S23 Time Capacity	-0.053	-2.191	0.029	-0.037	-1.483	0.138	-0.052	-2.115	0.035	-0.082	-3.346	0.001
S24 Products Purchased Online	0.026	0.903	0.367	-0.022	-0.770	0.441	-0.025	-0.862	0.389	-0.015	-0.509	0.611
S25 Online Activities	0.071	2.685	0.007	0.082	3.034	0.002	0.095	3.575	0.000	0.025	0.950	0.342
S26 connection speed (where multiple answers, fastest home connection taken)	0.028	1.126	0.260	0.055	2.152	0.032	0.030	1.201	0.230	0.005	2.619	0.009
R-squared	F	Sig.	R Square	F	Sig.	R Square	F	Sig.	R Square	F	Sig.	R Square
F=	7.747	0.000	0.106	4.352	0.000	0.062	6.008	0.000	0.084	7.283	0.000	0.100

ServCo	1. Website Imp Ref Log			2. Trust Imp Ref Log			3. Customer Service Imp Ref Log			4. Information Imp Ref Log		
	ed Beta	t	Sig.	ed Beta	t	Sig.	ed Beta	t	Sig.	ed Beta	t	Sig.
no S2 (spend), no S16 ever returned items, no s28 used retail store												
(Constant)		3.461	0.001		1.924	0.055		4.195	0.000		2.534	0.012
S3a personalisation	-0.090	-1.716	0.087	-0.035	-0.665	0.507	-0.101	-1.869	0.063	-0.060	-1.106	0.269
S4a spontaneity	0.068	1.267	0.206	0.077	1.434	0.153	0.003	0.063	0.950	0.059	1.069	0.286
S5 How often do you purchase this type of product? (recode so higher=more freq purchase)	-0.025	-0.439	0.661	0.004	0.068	0.946	0.013	0.216	0.829	-0.005	-0.082	0.935
S6 Research product prior to purchase	0.004	0.080	0.936	0.069	1.263	0.208	0.049	0.875	0.382	-0.024	-0.422	0.673
S7 Purchase Involvement	-0.102	-1.797	0.073	-0.115	-2.042	0.042	-0.167	-2.875	0.004	-0.099	-1.703	0.089
S8 The money saved by finding lower prices is usually not worth the time and effort	0.068	1.212	0.226	-0.021	-0.378	0.706	-0.025	-0.426	0.670	-0.005	-0.079	0.937
S9 The price of a product is a good indicator of its quality	0.040	0.734	0.464	0.010	0.190	0.850	-0.007	-0.116	0.907	-0.035	-0.619	0.536
S10 I do not have time to fully research products so rely on names I trust	0.005	0.092	0.926	-0.081	-1.418	0.157	-0.052	-0.879	0.380	-0.023	-0.392	0.695
S11 When purchasing the type of product you have, how important is low price	0.000	-0.003	0.997	0.034	0.549	0.583	0.063	0.992	0.322	0.048	0.754	0.451
S12 When purchasing the type of product you have, how important is high quality service	-0.031	-0.523	0.601	-0.023	-0.388	0.698	-0.044	-0.727	0.468	-0.035	-0.572	0.568
S13 Online History	-0.048	-0.756	0.450	-0.109	-1.731	0.084	-0.095	-1.473	0.142	-0.007	-0.105	0.916
S14a Company History (for ServCo no purchase measure)	-0.054	-0.917	0.360	0.012	0.206	0.837	-0.039	-0.640	0.522	0.049	0.817	0.414
S15 When purchasing the type of product you indicated at the start, how many companies do you	0.053	0.961	0.337	0.012	0.226	0.821	0.002	0.027	0.978	0.079	1.384	0.167
S17 I shop with the company because there are no alternatives for the products I require	0.102	1.796	0.073	0.034	0.598	0.550	0.059	1.013	0.312	0.058	0.994	0.321
S18 I shop with this company out of choice because their offering best matches my needs	-0.075	-1.358	0.175	-0.021	-0.374	0.709	-0.029	-0.503	0.616	-0.025	-0.440	0.660
S20 I prefer to purchase from internet companies that I know from the high street	-0.058	-1.049	0.295	-0.022	-0.403	0.687	-0.023	-0.400	0.690	0.002	0.039	0.969
S21 I would purchase from a company that is only reachable via the internet or email	0.005	0.096	0.924	0.074	1.357	0.176	0.076	1.351	0.178	0.031	0.559	0.577
S22 Technoreadiness	-0.115	-1.853	0.065	-0.191	-3.064	0.002	-0.045	-0.704	0.482	-0.095	-1.486	0.138
S23 Time Capacity	-0.013	-0.246	0.806	-0.024	-0.457	0.648	-0.053	-0.971	0.332	-0.059	-1.081	0.281
S24 Products Purchased Online	-0.030	-0.457	0.648	0.081	1.238	0.217	-0.002	-0.033	0.974	-0.023	-0.346	0.729
S25 Online Activities	0.002	0.032	0.975	0.098	1.679	0.094	0.003	0.044	0.985	0.065	1.085	0.279
S26 connection speed (where multiple answers, fastest home connection taken)	0.032	0.584	0.559	-0.017	-0.312	0.755	-0.062	-1.099	0.272	-0.081	-1.426	0.155
R-squared	F	Sig.	R Square	F	Sig.	R Square	F	Sig.	R Square	F	Sig.	R Square
F=	1.782	0.017	0.103	1.394	0.113	0.080	1.276	0.184	0.078	0.966	0.508	0.059

ToolCo	1. Website Imp Ref Log			2. Trust Imp Ref Log			3. Customer Service Imp Ref Log			4. Information Imp Ref Log		
	ed		Sig.	ed		Sig.	ed		Sig.	ed		Sig.
	Beta	t		Beta	t		Beta	t		Beta	t	
no s16 ever returned items												
(Constant)		5.279	0.000		5.263	0.000		6.214	0.000		6.012	0.000
S2 Approximately how much did you spend on this product?	0.003	0.045	0.984	-0.132	-2.001	0.048	-0.177	-2.661	0.008	-0.129	-1.913	0.057
S3a personalisation	-0.073	-1.002	0.317	-0.167	-2.308	0.022	-0.173	-2.368	0.019	-0.158	-2.122	0.038
S4a spontaneity	0.019	0.336	0.737	0.012	0.212	0.832	-0.026	-0.472	0.637	0.034	0.595	0.552
S5 How often do you purchase this type of product? (recode so higher=more freq purchase)	0.105	1.558	0.120	0.018	0.235	0.814	0.020	0.300	0.765	0.016	0.234	0.815
S6 Research product prior to purchase	-0.063	-1.055	0.292	-0.009	-0.158	0.875	0.018	0.279	0.781	0.011	0.190	0.850
S7 Purchase Involvement	-0.134	-2.207	0.028	-0.099	-1.647	0.101	-0.136	-2.254	0.028	-0.122	-1.990	0.048
S8 The money saved by finding lower prices is usually not worth the time and effort	-0.021	-0.351	0.726	-0.069	-1.187	0.236	-0.014	-0.235	0.814	-0.103	-1.710	0.088
S9 The price of a product is a good indicator of its quality	0.004	0.074	0.941	0.020	0.351	0.726	0.007	0.114	0.910	-0.009	-0.145	0.885
S10 I do not have time to fully research products so rely on names I trust	-0.010	-0.159	0.874	0.084	1.378	0.169	0.055	0.885	0.377	0.176	2.818	0.005
S11 When purchasing the type of product you have, how important is low price	-0.084	-1.301	0.194	-0.072	-1.132	0.259	0.026	0.410	0.682	-0.071	-1.080	0.281
S12 When purchasing the type of product you have, how important is high quality service	0.018	0.287	0.775	0.032	0.517	0.606	-0.060	-0.975	0.330	-0.016	-0.261	0.795
S13 Online History	-0.176	-2.736	0.007	-0.140	-2.208	0.028	-0.166	-2.618	0.008	-0.067	-1.021	0.308
S14a Company History (for ServCo no purchase measure)	-0.046	-0.625	0.533	-0.010	-0.136	0.892	-0.042	-0.582	0.561	-0.098	-1.322	0.187
S15 When purchasing the type of product you indicated at the start, how many companies do you	0.056	0.947	0.345	0.017	0.297	0.766	0.031	0.517	0.606	0.018	0.300	0.767
S17 I shop with the company because there are no alternatives for the products I require	0.032	0.551	0.582	0.088	1.554	0.121	0.032	0.564	0.574	0.012	0.198	0.843
S18 I shop with this company out of choice because their offering best matches my needs	-0.114	-1.965	0.050	-0.178	-3.116	0.002	-0.153	-2.853	0.008	-0.087	-1.487	0.138
S20 I prefer to purchase from internet companies that I know from the high street	-0.053	-0.922	0.357	-0.069	-1.219	0.224	-0.085	-1.477	0.141	-0.097	-1.666	0.097
S21 I would purchase from a company that is only reachable via the internet or email	0.099	1.645	0.101	0.061	1.026	0.306	0.101	1.674	0.099	0.010	0.160	0.873
S22 Technoreadiness	-0.026	-0.389	0.698	-0.072	-1.100	0.272	-0.020	-0.307	0.759	-0.005	-0.068	0.945
S23 Time Capacity	-0.132	-2.419	0.018	-0.132	-2.443	0.018	-0.090	-1.753	0.081	-0.154	-2.769	0.008
S24 Products Purchased Online	-0.074	-1.053	0.289	-0.042	-0.610	0.542	-0.037	-0.535	0.593	0.014	0.191	0.848
S25 Online Activities	0.012	0.192	0.848	-0.010	-0.158	0.874	-0.012	-0.178	0.859	-0.048	-0.728	0.467
S26 connection speed (where multiple answers, fastest home connection taken)	0.005	0.092	0.927	-0.002	-0.031	0.975	-0.048	-0.840	0.401	-0.084	-1.443	0.150
S28 Used a retail store to purchase from the company	-0.025	-0.448	0.655	-0.025	-0.430	0.646	0.003	0.052	0.959	0.029	0.509	0.611
R-squared	F	Sig.	R Square	F	Sig.	R Square	F	Sig.	R Square	F	Sig.	R Square
	2.249	0.001	0.150	2.575	0.000	0.175	2.407	0.000	0.167	2.068	0.003	0.148

SportCo	1. Website Imp Ref Log			2. Trust Imp Ref Log			3. Customer Service Imp Ref Log			4. Information Imp Ref Log		
	ed		Sig.	ed		Sig.	ed		Sig.	ed		Sig.
	Beta	t		Beta	t		Beta	t		Beta	t	
no s16 - ever returned items												
(Constant)		4.745	0.000		4.998	0.000		4.896	0.000		3.420	0.001
S2 Approximately how much did you spend on this product?	-0.013	-0.245	0.807	0.019	0.359	0.729	-0.020	-0.373	0.709	-0.034	-0.627	0.531
S3a personalisation	-0.013	-0.265	0.791	-0.008	-0.175	0.861	0.011	0.234	0.815	0.019	0.311	0.756
S4a spontaneity	0.038	0.741	0.459	-0.019	-0.402	0.688	-0.025	-0.522	0.602	-0.004	-0.071	0.943
S5 How often do you purchase this type of product? (recode so higher=more freq purchase)	0.063	1.272	0.204	0.037	0.750	0.454	0.098	2.008	0.043	0.009	0.175	0.861
S6 Research product prior to purchase	-0.112	-2.234	0.028	-0.086	-1.728	0.085	-0.098	-1.986	0.048	0.024	0.465	0.642
S7 Purchase Involvement	-0.142	-2.700	0.007	-0.079	-1.514	0.131	-0.097	-1.871	0.062	-0.161	-3.339	0.001
S8 The money saved by finding lower prices is usually not worth the time and effort	0.001	0.023	0.982	-0.012	-0.236	0.814	0.002	0.051	0.960	0.030	0.572	0.567
S9 The price of a product is a good indicator of its quality	0.068	1.347	0.179	0.047	0.923	0.357	0.015	0.297	0.766	0.034	0.644	0.520
S10 I do not have time to fully research products so rely on names I trust	-0.051	-1.001	0.317	0.020	0.393	0.695	-0.023	-0.461	0.645	0.004	0.072	0.943
S11 When purchasing the type of product you have, how important is low price	0.016	0.310	0.756	-0.040	-0.762	0.435	0.053	1.039	0.299	-0.023	-0.433	0.665
S12 When purchasing the type of product you have, how important is high quality service	-0.069	-1.361	0.174	-0.072	-1.440	0.150	-0.098	-1.321	0.187	-0.012	-0.228	0.820
S13 Online History	-0.023	-0.409	0.683	-0.083	-1.458	0.146	-0.109	-1.925	0.055	-0.029	-0.330	0.741
S14a Company History (for ServCo no purchase measure)	-0.015	-0.259	0.796	-0.023	-0.411	0.681	-0.019	-0.333	0.740	0.062	1.084	0.294
S15 When purchasing the type of product you indicated at the start, how many companies do you	0.013	0.256	0.798	-0.089	-1.798	0.073	-0.062	-1.265	0.207	0.005	0.095	0.924
S17 I shop with the company because there are no alternatives for the products I require	0.052	1.076	0.283	-0.002	-0.032	0.975	0.022	0.469	0.640	-0.010	-0.165	0.846
S18 I shop with this company out of choice because their offering best matches my needs	-0.113	-2.336	0.020	-0.102	-2.122	0.034	-0.115	-2.420	0.016	-0.039	-0.781	0.435
S20 I prefer to purchase from internet companies that I know from the high street	-0.008	-0.159	0.874	-0.068	-1.384	0.167	-0.009	-0.178	0.859	-0.106	-1.972	0.049
S21 I would purchase from a company that is only reachable via the internet or email	-0.021	-0.425	0.671	0.038	0.790	0.436	0.078	1.570	0.117	0.082	1.230	0.220
S22 Technoreadiness	-0.020	-0.395	0.693	-0.017	-0.336	0.737	0.008	0.151	0.880	-0.005	-0.091	0.927
S23 Time Capacity	-0.064	-1.325	0.186	-0.104	-2.167	0.031	-0.140	-2.945	0.003	-0.057	-1.152	0.250
S24 Products Purchased Online	-0.064	-1.149	0.251	-0.066	-1.193	0.234	-0.057	-1.026	0.305	-0.093	-1.818	0.107
S25 Online Activities	-0.066	-1.289	0.198	-0.018	-0.354	0.724	-0.048	-0.967	0.334	-0.046	-0.928	0.354
S26 connection speed (where multiple answers, fastest home connection taken)	0.064	1.284	0.200	-0.005	-0.108	0.915	0.073	1.492	0.130	0.089	1.747	0.081
S28 Used a retail store to purchase from the company	-0.022	-0.452	0.652	-0.034	-0.695	0.487	-0.005	-0.101	0.919	0.045	0.887	0.373
R-squared	F	Sig.	R Square	F	Sig.	R Square	F	Sig.	R Square	F	Sig.	R Square
	2.097	0.002	0.108	2.081	0.003	0.104	2.421	0.000	0.121	1.404	0.090	0.077

5. Contact Imp Ref Log			6. No Ads Imp Ref Log			7. Personalisation Imp Ref Log			8. Company Image Imp Ref Log			9. Product Availability Imp Ref Log		
ed			ed			ed			ed			ed		
Beta	t	Sig.	Beta	t	Sig.	Beta	t	Sig.	Beta	t	Sig.	Beta	t	Sig.
	2.365	0.018		3.642	0.000		10.817	0.000		9.424	0.000		7.297	0.000
-0.009	-0.336	0.737	-0.013	-0.514	0.607	0.037	1.524	0.128	0.000	0.014	0.989	0.011	0.455	0.649
0.077	2.903	0.004	0.012	0.442	0.659	-0.010	-0.408	0.683	0.012	0.475	0.635	-0.010	-0.394	0.694
0.038	1.462	0.144	0.003	0.127	0.899	-0.017	-0.712	0.476	-0.025	-1.041	0.298	-0.007	-0.297	0.768
-0.043	-1.484	0.143	-0.009	-0.298	0.765	-0.075	-2.775	0.006	-0.038	-1.389	0.165	-0.048	-1.699	0.030
0.023	0.829	0.407	0.029	1.056	0.291	0.013	0.510	0.810	0.001	0.039	0.989	0.022	0.813	0.416
-0.077	-2.806	0.005	-0.047	-1.726	0.089	-0.138	-5.396	0.000	-0.151	-5.893	0.000	-0.087	-3.260	0.001
0.033	1.170	0.242	0.030	1.072	0.284	-0.018	-0.671	0.503	0.014	0.518	0.605	0.014	0.521	0.603
0.012	0.427	0.670	0.048	1.770	0.077	-0.120	-4.766	0.000	-0.119	-4.711	0.000	0.015	0.579	0.562
-0.008	-0.285	0.776	-0.019	-0.676	0.499	0.013	0.479	0.832	-0.049	-1.842	0.066	0.005	0.188	0.851
-0.005	-0.182	0.871	-0.035	-1.168	0.243	0.007	0.236	0.814	0.025	0.884	0.377	0.030	1.038	0.300
-0.040	-1.376	0.169	0.014	0.474	0.636	-0.008	-0.284	0.776	0.018	0.662	0.508	-0.039	-1.360	0.174
0.000	0.008	0.993	-0.002	-0.052	0.959	0.144	4.828	0.000	0.019	0.597	0.551	-0.008	-0.177	0.860
0.127	3.847	0.000	-0.040	-1.230	0.219	-0.078	-2.525	0.012	-0.023	-0.757	0.449	-0.056	-1.740	0.082
0.070	2.422	0.016	0.038	1.316	0.188	0.072	2.663	0.008	0.095	3.510	0.000	0.030	1.071	0.284
-0.029	-1.062	0.289	0.021	0.798	0.425	0.041	1.631	0.103	0.017	0.683	0.495	-0.013	-0.496	0.620
0.024	0.900	0.368	0.002	0.092	0.927	-0.104	-4.171	0.000	-0.053	-2.129	0.033	-0.132	-5.100	0.000
-0.067	-2.545	0.011	-0.066	-2.522	0.012	-0.049	-1.995	0.046	-0.079	-3.242	0.001	-0.113	-4.429	0.000
-0.034	-1.268	0.205	-0.030	-1.132	0.258	-0.150	-8.050	0.000	-0.159	-6.363	0.000	-0.045	-1.744	0.081
0.113	4.361	0.000	0.021	0.825	0.409	0.001	0.030	0.976	0.051	2.113	0.038	0.002	0.086	0.931
0.068	2.362	0.018	-0.074	-2.611	0.008	-0.002	-0.076	0.940	0.015	0.555	0.579	0.009	0.323	0.747
-0.043	-1.685	0.092	-0.071	-2.795	0.005	-0.065	-2.731	0.008	0.020	0.831	0.406	-0.069	-2.783	0.008
-0.070	-2.357	0.019	0.018	0.542	0.588	0.053	1.914	0.056	0.058	1.996	0.048	0.055	1.914	0.056
0.004	0.159	0.873	0.053	1.954	0.051	-0.040	-1.570	0.117	0.032	1.235	0.217	0.037	1.375	0.169
0.010	0.394	0.694	0.018	0.699	0.485	0.032	1.321	0.187	0.040	1.638	0.102	0.069	2.754	0.008
F	Sig.	R Square	F	Sig.	R Square	F	Sig.	R Square	F	Sig.	R Square	F	Sig.	R Square
4.817	0.000	0.073	2.126	0.001	0.032	11.932	0.000	0.155	11.201	0.000	0.146	5.407	0.000	0.078

ServCo

5. Contact Imp Ref Log			6. No Ads Imp Ref Log			7. Personalisation Imp Ref Log			8. Company Image Imp Ref Log			9. Product Availability Imp Ref Log		
ed			ed			ed			ed			ed		
Beta	t	Sig.	Beta	t	Sig.	Beta	t	Sig.	Beta	t	Sig.	Beta	t	Sig.
	2.094	0.037		1.502	0.134		5.511	0.000		6.171	0.000		3.390	0.001
-0.042	-0.796	0.426	-0.009	-0.172	0.864	-0.025	-0.474	0.636	-0.075	-1.515	0.131	-0.054	-1.014	0.311
-0.070	-1.299	0.195	0.036	0.660	0.509	-0.102	-1.905	0.058	-0.089	-1.763	0.079	0.019	0.353	0.724
0.059	1.009	0.314	0.005	0.089	0.929	0.028	0.479	0.633	0.029	0.538	0.591	-0.032	-0.548	0.584
0.043	0.786	0.444	-0.037	-0.662	0.509	0.111	2.021	0.044	0.020	0.377	0.706	0.035	0.633	0.527
-0.068	-1.152	0.250	-0.021	-0.366	0.714	-0.058	-1.018	0.309	-0.148	-2.765	0.006	0.035	0.616	0.539
-0.042	-0.729	0.467	0.017	0.307	0.759	0.013	0.234	0.815	0.024	0.447	0.655	0.103	1.812	0.071
0.100	1.803	0.072	-0.091	-1.661	0.098	-0.073	-1.346	0.179	-0.110	-2.138	0.033	-0.028	-0.472	0.637
-0.033	-0.577	0.564	-0.084	-1.464	0.144	0.089	1.554	0.121	-0.072	-1.330	0.184	0.007	0.118	0.907
0.044	0.709	0.479	0.096	1.540	0.124	0.089	1.114	0.266	0.119	2.034	0.043	0.060	0.960	0.338
-0.044	-0.730	0.466	-0.043	-0.714	0.476	-0.031	-0.529	0.597	-0.108	-1.927	0.055	-0.100	-1.670	0.096
-0.031	-0.486	0.627	-0.059	-0.935	0.350	-0.061	-0.969	0.333	0.010	0.166	0.889	-0.057	-0.898	0.370
-0.035	-0.582	0.561	-0.038	-0.644	0.520	-0.089	-1.524	0.128	-0.027	-0.484	0.629	-0.128	-2.163	0.031
-0.019	-0.343	0.732	0.007	0.131	0.895	-0.065	-1.181	0.238	0.023	0.436	0.663	0.085	1.528	0.128
0.093	1.615	0.107	0.041	0.724	0.470	-0.041	-0.726	0.469	0.018	0.344	0.731	-0.059	-1.037	0.300
-0.046	-0.820	0.413	-0.008	-0.142	0.888	-0.139	-2.502	0.013	-0.087	-1.872	0.095	-0.072	-1.296	0.196
-0.098	-1.759	0.080	0.021	0.376	0.707	-0.167	-3.017	0.003	-0.244	-4.686	0.000	-0.105	-1.894	0.059
0.135	2.456	0.015	0.127	2.322	0.021	0.033	0.609	0.543	0.053	1.037	0.301	-0.059	-1.071	0.285
0.015	0.239	0.812	-0.055	-0.873	0.383	0.079	1.271	0.205	-0.003	-0.050	0.980	-0.026	-0.407	0.684
-0.039	-0.737	0.462	-0.082	-1.544	0.124	-0.055	-1.043	0.298	0.022	0.435	0.664	-0.042	-0.797	0.428
0.027	0.404	0.686	0.008	0.128	0.899	0.027	0.408	0.683	-0.027	-0.441	0.659	0.050	0.752	0.452
0.045	0.758	0.449	0.015	0.262	0.794	-0.033	-0.560	0.576	0.016	0.294	0.789	0.035	0.601	0.548
-0.083	-1.488	0.138	-0.047	-0.849	0.397	-0.075	-1.351	0.178	-0.012	-0.234	0.815	0.008	0.148	0.882
F	Sig.	R Square	F	Sig.	R Square	F	Sig.	R Square	F	Sig.	R Square	F	Sig.	R Square
1.335	0.145	0.079	0.994	0.471	0.058	1.860	0.012	0.107	3.369	0.000	0.173	1.591	0.046	0.093

5. Contact Imp Ref Log			6. No Ads Imp Ref Log			7. Personalisation Imp Ref Log			8. Company Image Imp Ref Log			9. Product Availability Imp Ref Log			
ed			ed			ed			ed			ed			
Beta	t	Sig.	Beta	t	Sig.	Beta	t	Sig.	Beta	t	Sig.	Beta	t	Sig.	
-0.085	5.291	0.000	-0.093	4.088	0.000	-0.033	6.508	0.000	-0.060	6.104	0.000	-0.039	5.101	0.000	
-0.099	-1.253	0.211	-0.136	-0.920	0.359	-0.071	-0.495	0.621	-0.081	-0.944	0.346	-0.045	-0.585	0.559	
-0.005	-1.319	0.188	0.061	-1.815	0.071	-0.055	-0.979	0.329	-0.046	-1.152	0.250	0.023	-0.812	0.411	
0.038	-0.083	0.934	0.081	1.068	0.287	-0.064	-1.000	0.318	-0.089	-0.867	0.386	-0.008	0.405	0.686	
0.016	0.556	0.578	-0.033	-0.481	0.631	-0.043	-0.960	0.338	-0.089	-1.364	0.167	-0.012	-0.112	0.911	
-0.200	0.273	0.785	-0.062	-1.014	0.311	-0.043	-0.737	0.462	-0.007	-0.117	0.907	-0.012	-0.203	0.839	
-0.050	-3.231	0.001	-0.095	-1.523	0.129	-0.209	-3.481	0.001	-0.182	-3.142	0.002	-0.150	-2.443	0.019	
-0.008	-0.823	0.411	-0.082	-1.359	0.175	-0.109	-1.868	0.063	-0.027	-0.481	0.631	-0.157	-2.632	0.009	
0.030	-0.134	0.894	0.036	0.602	0.548	-0.014	-0.234	0.819	-0.145	-2.563	0.011	-0.029	-0.492	0.623	
-0.069	0.469	0.639	0.007	0.111	0.912	0.043	0.707	0.480	0.062	1.052	0.294	0.112	1.803	0.072	
-0.066	-1.053	0.293	-0.020	-0.305	0.760	-0.030	-0.469	0.639	0.041	0.685	0.506	-0.119	-1.770	0.078	
-0.026	-0.066	0.924	0.003	0.043	0.965	0.103	1.681	0.094	0.003	0.046	0.963	0.136	2.181	0.030	
-0.073	-0.397	0.692	-0.014	-0.218	0.827	0.087	1.373	0.171	0.063	1.021	0.308	-0.062	-0.949	0.343	
0.021	-0.984	0.326	-0.075	-1.003	0.317	-0.002	-0.023	0.981	-0.003	-0.037	0.971	-0.003	-0.041	0.967	
-0.034	0.727	0.469	0.020	0.326	0.744	0.041	0.699	0.485	0.053	0.940	0.348	0.022	0.372	0.710	
-0.053	-0.589	0.556	-0.003	-0.044	0.965	0.050	0.885	0.377	0.027	0.494	0.622	0.046	0.797	0.426	
-0.019	-0.908	0.368	-0.134	-2.253	0.025	-0.095	-1.492	0.137	-0.048	-0.866	0.387	-0.108	-1.850	0.068	
0.088	-0.330	0.742	-0.098	-1.624	0.106	-0.193	-3.404	0.001	-0.314	-5.703	0.000	-0.160	-2.866	0.004	
-0.067	1.421	0.157	0.134	2.156	0.032	0.037	0.623	0.534	0.047	0.816	0.415	0.039	0.636	0.525	
-0.145	-0.999	0.319	-0.081	-0.907	0.365	0.102	1.570	0.118	0.044	0.693	0.489	0.122	1.836	0.067	
0.000	-2.604	0.010	-0.074	-1.312	0.191	-0.071	-1.312	0.190	-0.040	-0.759	0.448	-0.096	-1.734	0.084	
-0.011	-0.008	0.995	-0.075	-1.048	0.295	-0.017	-0.250	0.803	-0.073	-1.069	0.277	-0.038	-0.540	0.589	
-0.045	-0.160	0.873	0.016	0.244	0.808	-0.037	-0.574	0.567	0.014	0.225	0.822	0.022	0.329	0.743	
-0.018	-0.776	0.439	-0.023	-0.390	0.697	0.072	1.273	0.204	0.063	1.152	0.250	0.025	0.440	0.661	
F	1.668	0.028	F	1.533	0.056	F	2.557	0.000	F	3.517	0.000	F	1.968	0.005	
R Square	0.121	R Square	0.121	R Square	0.112	R Square	0.174	R Square	0.225	R Square	0.225	R Square	0.140	R Square	0.140

SportCo

5. Contact Imp Ref Log			6. No Ads Imp Ref Log			7. Personalisation Imp Ref Log			8. Company Image Imp Ref Log			9. Product Availability Imp Ref Log			
ed			ed			ed			ed			ed			
Beta	t	Sig.	Beta	t	Sig.	Beta	t	Sig.	Beta	t	Sig.	Beta	t	Sig.	
0.026	4.701	0.000	-0.023	3.146	0.002	-0.053	3.864	0.000	-0.093	4.154	0.000	-0.015	3.404	0.001	
-0.010	0.489	0.625	0.000	-0.425	0.671	-0.022	-0.696	0.479	-0.007	-1.774	0.077	0.024	-0.280	0.780	
0.022	-0.213	0.831	0.044	0.903	0.367	-0.028	-0.472	0.637	-0.045	-0.139	0.889	0.024	0.497	0.620	
0.094	0.456	0.649	0.044	0.894	0.372	0.010	-0.583	0.560	-0.002	-1.780	0.078	0.032	0.657	0.512	
-0.111	1.904	0.058	0.030	0.589	0.556	0.014	0.200	0.841	-0.002	-0.033	0.973	0.048	0.949	0.343	
-0.063	-1.111	0.264	-0.062	-1.609	0.108	0.014	0.275	0.783	0.032	0.659	0.514	-0.087	-1.716	0.087	
-0.009	-1.203	0.230	-0.102	-1.908	0.067	-0.056	-1.096	0.274	-0.075	-1.450	0.149	-0.059	-1.856	0.064	
-0.047	-0.166	0.881	-0.005	-0.103	0.918	-0.059	-1.188	0.236	-0.005	-0.094	0.926	-0.009	-0.181	0.857	
-0.006	-0.941	0.347	0.019	0.370	0.712	-0.015	-0.288	0.774	-0.008	-1.929	0.054	0.017	0.332	0.740	
0.052	-0.006	0.902	-0.046	-0.897	0.370	0.023	0.459	0.646	-0.038	-0.757	0.449	0.003	0.050	0.966	
-0.153	0.052	0.309	0.033	0.639	0.523	0.053	1.028	0.304	-0.019	-0.371	0.711	0.002	0.044	0.965	
-0.102	-3.054	0.002	-0.011	-0.211	0.833	0.006	0.128	0.898	0.014	0.277	0.782	0.015	0.289	0.773	
-0.048	-1.02	0.311	-0.081	-1.396	0.163	0.163	2.848	0.006	0.120	2.130	0.034	0.028	0.482	0.638	
-0.072	-0.838	0.402	0.068	1.173	0.242	0.020	0.342	0.733	0.062	1.087	0.278	-0.026	-0.440	0.660	
0.054	-1.457	0.146	0.064	1.260	0.208	0.032	0.841	0.522	-0.002	-0.036	0.972	-0.043	-0.851	0.395	
-0.075	0.122	0.262	0.007	0.141	0.888	-0.027	-0.550	0.582	-0.033	-0.688	0.492	-0.131	-2.687	0.007	
0.007	-1.564	0.119	0.028	0.580	0.562	-0.023	-0.474	0.636	-0.039	-0.813	0.417	-0.083	-1.705	0.088	
0.045	0.142	0.887	-0.084	-1.674	0.095	-0.123	-2.488	0.013	-0.173	-3.563	0.000	0.092	1.839	0.047	
0.122	0.937	0.349	0.030	0.603	0.547	-0.097	-1.988	0.047	-0.024	-0.507	0.612	-0.022	-0.443	0.658	
-0.120	2.378	0.018	-0.066	-1.282	0.208	0.104	2.009	0.045	0.098	1.880	0.060	0.052	0.992	0.322	
-0.001	-2.513	0.012	-0.122	-2.487	0.013	-0.032	-0.668	0.505	-0.007	-0.143	0.887	-0.073	-1.500	0.134	
-0.012	-0.001	0.990	-0.037	-0.650	0.516	0.060	1.069	0.286	0.024	0.443	0.658	-0.029	-0.555	0.513	
-0.002	-0.235	0.814	0.028	0.528	0.598	-0.102	-1.980	0.048	-0.033	-0.662	0.508	0.020	0.394	0.694	
-0.028	-0.033	0.974	-0.021	-0.426	0.670	0.015	0.301	0.764	-0.005	-0.096	0.923	0.034	0.682	0.498	
F	-0.586	0.558	0.046	0.813	0.417	0.053	1.077	0.282	-0.027	-0.570	0.589	0.059	1.198	0.232	
R Square	0.061	R Square	0.110	R Square	0.191	R Square	0.067	R Square	0.107	R Square	0.121	R Square	0.071	R Square	0.077

EntzCo no s28 used a retail store	1. Website Imp Ref Log			2. Trust Imp Ref Log			3. Customer Service Imp Ref Log			4. Information Imp Ref Log		
	d	t	Sig.	d	t	Sig.	d	t	Sig.	d	t	Sig.
(Constant)		6.788	0.000		3.908	0.000		4.802	0.000		6.554	0.000
S2 Approximately how much did you spend on this product?	0.010	0.402	0.687	0.032	0.942	0.349	0.013	0.518	0.604	-0.021	-0.631	0.525
S3a personalisation of purchase	0.068	0.317	0.751	0.098	0.263	0.779	0.001	0.051	0.959	0.022	0.848	0.395
S4a purchase spontaneously	0.012	0.457	0.641	-0.011	-0.431	0.667	0.018	0.705	0.481	0.013	0.530	0.595
S5 How often do you purchase this type of product? (recode so higher=more freq purchase)	-0.078	-2.713	0.007	-0.094	-1.831	0.067	-0.067	-2.293	0.022	-0.049	-1.674	0.090
S6 Research product prior to purchase	0.045	1.625	0.068	0.021	0.755	0.453	0.016	0.593	0.553	0.009	0.353	0.724
S7 Purchase Involvement	-0.162	-6.017	0.000	-0.075	-2.705	0.007	-0.119	-4.338	0.000	-0.170	-6.316	0.000
S8 The money saved by finding lower prices is usually not worth the time and effort	0.063	2.296	0.028	0.067	2.342	0.018	0.063	2.319	0.021	0.063	2.286	0.022
S9 The price of a product is a good indicator of its quality	0.024	0.912	0.362	0.032	1.415	0.157	0.050	1.861	0.063	0.016	0.568	0.576
S10 I do not have time to fully research products so rely on names I trust	-0.042	-1.526	0.127	-0.059	-2.055	0.039	-0.045	-1.591	0.112	-0.011	-0.397	0.691
S11 When purchasing the type of product you have, how important is low price	-0.012	-0.412	0.681	-0.039	-1.271	0.204	-0.067	-0.243	0.809	0.001	0.018	0.985
S12 When purchasing the type of product you have, how important is high quality service	-0.038	-1.325	0.185	-0.016	-0.551	0.582	-0.048	-1.633	0.103	-0.023	-0.796	0.425
S13 Online History	0.056	0.186	0.853	0.006	0.176	0.859	0.043	1.286	0.199	0.051	1.551	0.121
S14a Company History (for ServCo no purchase measure)	-0.029	-0.902	0.367	-0.026	-0.774	0.439	-0.030	-0.904	0.366	-0.026	-0.815	0.415
S15 When purchasing the type of product you indicated at the start, how many companies do you	0.067	2.368	0.018	0.041	1.409	0.159	0.044	1.537	0.125	0.061	2.154	0.031
S16 Have you ever returned products to the company (faulty or unwanted)?	-0.053	-0.165	0.876	0.009	0.332	0.740	0.000	0.005	0.980	0.028	1.067	0.285
S17 I shop with the company because there are no alternatives for the products I require	0.039	0.335	0.738	0.006	0.306	0.760	0.000	0.003	0.998	-0.022	-0.843	0.399
S18 I shop with this company out of choice because their offering best matches my needs	-0.140	-5.405	0.000	-0.110	-4.101	0.000	-0.129	-4.885	0.000	-0.095	-3.658	0.000
S20 I prefer to purchase from internet companies that I know from the high street	0.003	0.102	0.919	0.022	0.817	0.414	-0.028	-1.066	0.287	-0.069	-2.399	0.017
S21 I would purchase from a company that is only reachable via the internet or email	0.059	2.334	0.020	0.037	1.393	0.164	0.049	1.898	0.058	0.033	1.258	0.184
S22 Technoreadiness	-0.098	-3.449	0.001	-0.114	-3.868	0.000	-0.058	-1.991	0.047	-0.066	-2.327	0.020
S23 Time Capacity	-0.085	-3.303	0.001	-0.053	-1.994	0.048	-0.069	-2.812	0.009	-0.120	-4.653	0.000
S24 Products Purchased Online	0.025	0.842	0.400	-0.022	-0.712	0.476	-0.018	-0.583	0.560	-0.023	-0.764	0.445
S25 Online Activities	0.043	1.464	0.143	0.069	2.314	0.021	0.074	2.619	0.009	-0.006	-0.234	0.815
S26 connection speed (where multiple answers, fastest home connection taken)	0.031	1.228	0.229	0.055	2.115	0.033	0.033	1.294	0.196	0.068	2.705	0.007
D1 Gender:	-0.038	-1.345	0.178	-0.006	-0.230	0.818	-0.026	-0.950	0.342	-0.056	-2.095	0.036
D2 Age group:	-0.130	-4.667	0.000	-0.093	-3.220	0.001	-0.089	-3.123	0.002	-0.121	-4.312	0.000
CLASS (occupation based)	-0.030	-0.998	0.316	-0.021	-0.670	0.503	-0.005	-0.207	0.836	-0.081	-2.711	0.007
D4 What is the highest educational qualification you hold?	0.053	1.901	0.057	-0.008	-0.296	0.772	0.063	2.214	0.027	0.038	1.364	0.173
D5 Roughly what is your annual household income?	0.089	3.147	0.002	0.041	1.413	0.158	0.021	0.723	0.470	0.095	3.385	0.001
	F	Sig.	R Square	F	Sig.	R Square	F	Sig.	R Square	F	Sig.	R Square
	7.688	0.000	0.132	3.805	0.000	0.070	5.381	0.000	0.096	7.582	0.000	0.131

ServCo no S2 (spend), no S16 ever returned items, no s28 used retail store	1. Website Imp Ref Log			2. Trust Imp Ref Log			3. Customer Service Imp Ref Log			4. Information Imp Ref Log		
	d	t	Sig.	d	t	Sig.	d	t	Sig.	d	t	Sig.
(Constant)		2.464	0.014		1.501	0.134		3.222	0.001		2.158	0.032
S3a personalisation of purchase	-0.087	-1.552	0.123	-0.039	-0.999	0.314	-0.100	-1.713	0.088	-0.059	-1.016	0.310
S4a purchase spontaneously	0.066	1.485	0.139	0.087	1.880	0.140	0.023	0.388	0.698	0.067	1.122	0.263
S5 How often do you purchase this type of product? (recode so higher=more freq purchase)	-0.027	-0.438	0.661	0.011	0.178	0.868	0.014	0.216	0.829	0.003	0.041	0.967
S6 Research product prior to purchase	-0.062	-0.042	0.967	0.053	0.874	0.383	0.036	0.579	0.565	-0.033	-0.535	0.593
S7 Purchase Involvement	-0.099	-1.630	0.104	-0.109	-1.767	0.078	-0.164	-2.619	0.009	-0.094	-1.488	0.135
S8 The money saved by finding lower prices is usually not worth the time and effort	0.080	0.988	0.324	-0.028	-0.414	0.679	-0.031	-0.491	0.624	-0.016	-0.245	0.807
S9 The price of a product is a good indicator of its quality	0.046	0.791	0.430	0.024	0.409	0.683	0.002	0.033	0.974	-0.024	-0.396	0.693
S10 I do not have time to fully research products so rely on names I trust	-0.002	-0.032	0.975	-0.078	-1.238	0.217	-0.056	-0.865	0.388	-0.017	-0.260	0.795
S11 When purchasing the type of product you have, how important is low price	-0.011	-0.171	0.864	0.022	0.320	0.749	0.051	0.742	0.459	0.031	0.454	0.650
S12 When purchasing the type of product you have, how important is high quality service	-0.031	-0.481	0.631	-0.014	-0.221	0.826	-0.039	-0.597	0.551	-0.030	-0.460	0.646
S13 Online History	-0.043	-0.628	0.530	-0.094	-1.359	0.175	-0.087	-1.238	0.217	0.003	0.049	0.961
S14a Company History (for ServCo no purchase measure)	-0.037	-0.592	0.554	0.013	0.197	0.844	-0.028	-0.428	0.670	0.053	0.813	0.417
S15 When purchasing the type of product you indicated at the start, how many companies do you	0.042	0.707	0.480	0.004	0.070	0.944	-0.012	-0.197	0.844	0.075	1.222	0.223
S17 I shop with the company because there are no alternatives for the products I require	0.099	1.611	0.108	0.026	0.426	0.671	0.090	0.780	0.436	0.057	0.903	0.367
S18 I shop with this company out of choice because their offering best matches my needs	-0.062	-1.022	0.308	-0.028	-0.457	0.648	-0.020	-0.318	0.751	-0.026	-0.413	0.680
S20 I prefer to purchase from internet companies that I know from the high street	-0.052	-0.876	0.382	-0.014	-0.228	0.820	-0.019	-0.308	0.760	0.018	0.296	0.768
S21 I would purchase from a company that is only reachable via the internet or email	-0.015	-0.248	0.804	0.055	0.922	0.357	0.057	0.945	0.346	0.019	0.213	0.830
S22 Technoreadiness	-0.144	-2.130	0.034	-0.201	-2.918	0.004	-0.068	-0.967	0.334	-0.118	-1.678	0.094
S23 Time Capacity	-0.039	-0.622	0.535	-0.065	-1.031	0.303	-0.070	-1.084	0.279	-0.104	-1.603	0.110
S24 Products Purchased Online	-0.036	-0.508	0.612	0.083	1.142	0.255	-0.002	-0.028	0.979	-0.018	-0.246	0.808
S25 Online Activities	-0.029	-0.448	0.655	0.078	1.209	0.228	-0.029	-0.433	0.666	0.041	0.621	0.535
S26 connection speed (where multiple answers, fastest home connection taken)	0.026	0.436	0.663	-0.020	-0.335	0.738	-0.067	-1.088	0.276	-0.062	-1.335	0.183
D1 Gender:	-0.042	-0.824	0.533	-0.013	-0.184	0.854	-0.088	-0.965	0.336	-0.020	-0.287	0.774
D2 Age group:	-0.024	-0.339	0.735	-0.097	-1.368	0.172	-0.043	-0.591	0.555	-0.103	-1.417	0.157
CLASS (occupation based)	0.074	1.047	0.296	0.119	1.661	0.098	0.099	1.350	0.178	0.033	0.453	0.651
D4 What is the highest educational qualification you hold?	0.174	2.705	0.007	0.124	1.894	0.059	0.154	2.311	0.022	0.138	2.078	0.038
D5 Roughly what is your annual household income?	0.095	1.342	0.181	0.005	0.073	0.942	0.082	0.848	0.397	0.001	0.014	0.989
	F	Sig.	R Square	F	Sig.	R Square	F	Sig.	R Square	F	Sig.	R Square
	1.688	0.020	0.137	1.292	0.156	0.108	1.194	0.237	0.104	0.957	0.530	0.083

ToolCo no s16 - ever returned items	1. Website Imp Ref Log			2. Trust Imp Ref Log			3. Customer Service Imp Ref Log			4. Information Imp Ref Log		
	d	t	Sig	d	t	Sig	d	t	Sig	d	t	Sig
	Beta			Beta			Beta			Beta		
(Constant)		4.023	0.000		4.758	0.000		5.156	0.000		4.990	0.000
S2 Approximately how much did you spend on this product?	-0.001	-0.008	0.994	-0.149	-2.307	0.022	-0.181	-2.719	0.007	-0.137	-2.017	0.045
personalization of purchase	-0.114	-1.556	0.121	-0.216	-2.979	0.003	-0.190	-2.530	0.012	-0.149	-2.494	0.013
purchase spontaneity	0.047	0.866	0.387	0.040	0.734	0.464	-0.010	-0.172	0.803	0.421	0.900	0.369
S5 How often do you purchase this type of product? (recode so higher=more freq purchase)	0.107	1.623	0.105	0.004	0.065	0.948	0.019	0.285	0.775	0.014	0.199	0.843
S6 Research product prior to purchase	-0.058	-1.022	0.307	-0.016	-0.271	0.787	0.015	0.256	0.795	0.426	0.102	0.919
S7 Purchase Involvement	-0.120	-2.016	0.045	-0.071	-1.199	0.231	-0.125	-2.039	0.042	-0.104	-1.681	0.094
S8 The money saved by finding lower prices is usually not worth the time and effort	-0.007	-0.113	0.910	-0.053	-0.866	0.387	0.003	-0.005	0.996	-0.091	-1.512	0.132
S9 The price of a product is a good indicator of its quality	-0.003	-0.048	0.962	0.019	0.329	0.743	0.005	0.091	0.929	-0.006	-0.106	0.913
S10 I do not have time to fully research products so rely on names I trust	-0.030	-0.501	0.617	0.057	0.948	0.344	0.036	0.573	0.563	0.161	2.549	0.011
S11 When purchasing the type of product you have, how important is low price	-0.089	-1.399	0.163	-0.082	-1.301	0.194	0.028	0.422	0.671	-0.075	-1.264	0.229
S12 When purchasing the type of product you have, how important is high quality service	0.013	0.218	0.829	0.032	0.527	0.598	-0.083	-1.029	0.309	-0.020	-0.323	0.747
S13 Online History	-0.162	-2.572	0.011	-0.137	-2.156	0.029	-0.171	-2.636	0.009	-0.078	-1.088	0.290
S14a Company History (for ServCo no purchase measure)	-0.066	-0.915	0.361	-0.012	-0.170	0.865	-0.059	-0.790	0.430	-0.108	-1.432	0.153
S15 When purchasing the type of product you indicated at the start, how many companies do you	0.035	0.600	0.549	0.001	0.013	0.990	0.021	0.351	0.726	0.006	0.107	0.915
S17 I shop with the company because there are no alternatives for the products I require	0.034	0.616	0.539	0.096	1.734	0.084	0.040	0.692	0.485	0.015	0.252	0.801
S18 I shop with this company out of choice because their offering best matches my needs	-0.107	-1.895	0.059	-0.164	-2.933	0.004	-0.147	-2.533	0.012	-0.082	-1.369	0.172
S20 I prefer to purchase from internet companies that I know from the high street	-0.052	-0.988	0.324	-0.073	-1.317	0.189	-0.086	-1.506	0.134	-0.102	-1.727	0.088
S21 I would purchase from a company that is only reachable via the internet or email	0.095	1.611	0.108	0.063	1.021	0.308	0.099	1.636	0.103	0.095	0.095	0.922
S22 Technoreadiness	-0.060	-0.919	0.359	-0.103	-1.646	0.101	-0.036	-0.645	0.585	-0.030	-0.443	0.658
S23 Time Capacity	-0.118	-2.150	0.032	-0.143	-2.629	0.009	-0.094	-1.662	0.098	-0.158	-2.734	0.007
S24 Products Purchased Online	-0.081	-1.188	0.236	-0.064	-0.937	0.350	-0.045	-0.641	0.522	0.004	0.004	0.997
S25 Online Activities	-0.028	-0.455	0.649	-0.053	-0.827	0.409	-0.036	-0.539	0.593	-0.067	-1.001	0.318
S26 connection speed (where multiple answers, fastest home connection taken)	0.066	0.111	0.912	-0.001	-0.011	0.991	-0.048	-0.840	0.390	-0.082	-1.428	0.156
S28 Used a retail store to purchase from the company	-0.012	-0.213	0.832	-0.023	-0.439	0.663	0.005	0.087	0.931	0.034	0.598	0.551
D1 Gender:	-0.153	-2.706	0.007	-0.151	-2.680	0.008	-0.083	-1.375	0.169	-0.075	-1.265	0.207
D2 Age group:	-0.022	-0.365	0.715	-0.116	-1.917	0.058	-0.024	-0.384	0.701	-0.048	-0.596	0.552
CLASS5 (occupation based)	0.163	2.669	0.008	0.069	1.094	0.275	0.025	0.395	0.690	0.048	0.723	0.470
D4 What is the highest educational qualification you hold?	0.069	1.109	0.272	0.072	1.157	0.248	0.095	0.073	0.942	0.068	1.044	0.297
D5 Roughly what is your annual household income?	0.178	2.936	0.004	0.169	2.652	0.009	0.130	2.092	0.037	0.115	1.827	0.069
	F	Sig	R Square	F	Sig	R Square	F	Sig	R Square	F	Sig	R Square
	2.741	0.000	0.217	2.963	0.000	0.231	2.249	0.000	0.187	1.985	0.002	0.171

SportCo no s16 - ever returned items	1. Website Imp Ref Log			2. Trust Imp Ref Log			3. Customer Service Imp Ref Log			4. Information Imp Ref Log		
	d	t	Sig	d	t	Sig	d	t	Sig	d	t	Sig
	Beta			Beta			Beta			Beta		
(Constant)		4.116	0.000		5.024	0.000		4.554	0.000		2.653	0.008
S2 Approximately how much did you spend on this product?	-0.008	-0.149	0.881	0.022	0.414	0.679	-0.023	-0.418	0.676	-0.030	-0.540	0.589
personalization of purchase	-0.016	-0.329	0.745	0.006	0.120	0.905	0.015	0.305	0.761	0.021	0.419	0.675
purchase spontaneity	0.036	0.717	0.474	-0.011	-0.217	0.828	-0.021	-0.422	0.673	-0.022	-0.337	0.971
S5 How often do you purchase this type of product? (recode so higher=more freq purchase)	0.058	1.158	0.248	0.038	0.763	0.448	0.098	1.941	0.053	0.093	0.058	0.953
S6 Research product prior to purchase	-0.110	-2.139	0.033	-0.093	-1.813	0.071	-0.092	-1.808	0.071	0.012	0.232	0.817
S7 Purchase Involvement	-0.135	-2.519	0.012	-0.074	-1.379	0.169	-0.092	-1.731	0.084	-0.173	-3.181	0.002
S8 The money saved by finding lower prices is usually not worth the time and effort	0.004	0.072	0.943	-0.001	-0.000	0.999	-0.003	-0.060	0.952	0.021	0.511	0.609
S9 The price of a product is a good indicator of its quality	0.059	1.146	0.252	0.038	0.773	0.444	0.016	0.319	0.746	0.024	0.448	0.654
S10 I do not have time to fully research products so rely on names I trust	-0.052	-0.997	0.319	0.025	0.488	0.632	-0.020	-0.395	0.693	0.012	0.233	0.818
S11 When purchasing the type of product you have, how important is low price	0.022	0.428	0.670	-0.028	-0.549	0.583	0.055	1.048	0.290	-0.018	-0.192	0.848
S12 When purchasing the type of product you have, how important is high quality service	-0.071	-1.491	0.137	-0.065	-1.299	0.195	-0.068	-1.328	0.186	-0.010	-0.199	0.842
S13 Online History	-0.029	-0.431	0.667	-0.117	-1.958	0.051	-0.116	-1.991	0.047	-0.045	-0.734	0.463
S14a Company History (for ServCo no purchase measure)	-0.017	-0.286	0.775	-0.042	-0.707	0.480	-0.024	-0.402	0.688	0.052	0.869	0.385
S15 When purchasing the type of product you indicated at the start, how many companies do you	0.015	0.298	0.767	-0.087	-1.716	0.087	-0.063	-1.217	0.217	0.000	0.008	0.994
S17 I shop with the company because there are no alternatives for the products I require	0.070	1.401	0.162	0.008	0.174	0.862	0.037	0.754	0.451	0.000	0.008	0.993
S18 I shop with this company out of choice because their offering best matches my needs	-0.100	-1.994	0.047	-0.129	-2.191	0.029	-0.108	-2.182	0.030	-0.039	-0.775	0.439
S20 I prefer to purchase from internet companies that I know from the high street	-0.011	-0.214	0.831	-0.056	-1.109	0.268	-0.005	-0.097	0.923	-0.095	-1.852	0.065
S21 I would purchase from a company that is only reachable via the internet or email	-0.010	-0.202	0.840	0.048	0.965	0.333	0.083	1.681	0.094	0.073	1.453	0.147
S22 Technoreadiness	-0.030	-0.565	0.573	-0.068	-1.154	0.251	0.093	0.021	0.983	-0.009	-0.181	0.867
S23 Time Capacity	-0.088	-1.705	0.089	-0.136	-2.655	0.008	-0.182	-3.180	0.002	-0.084	-1.220	0.222
S24 Products Purchased Online	-0.052	-0.953	0.341	-0.071	-1.337	0.175	-0.058	-1.007	0.315	-0.105	-1.801	0.072
S25 Online Activities	-0.062	-1.173	0.243	-0.012	-0.223	0.820	-0.044	-0.843	0.400	-0.049	-0.918	0.358
S26 connection speed (where multiple answers, fastest home connection taken)	0.038	0.736	0.462	0.011	0.240	0.814	0.054	1.053	0.293	0.080	1.250	0.210
S28 Used a retail store to purchase from the company	-0.017	-0.318	0.730	-0.077	-1.537	0.121	-0.005	-0.099	0.921	0.040	0.881	0.376
D1 Gender:	0.038	0.766	0.444	-0.021	-0.420	0.670	-0.014	-0.289	0.773	0.014	0.281	0.774
D2 Age group:	-0.123	-2.089	0.038	-0.006	-0.108	0.915	-0.095	-1.605	0.108	-0.019	-0.308	0.758
CLASS5 (occupation based)	-0.078	-1.222	0.223	-0.157	-2.419	0.014	-0.087	-1.508	0.132	-0.011	-0.260	0.795
D4 What is the highest educational qualification you hold?	-0.032	-0.623	0.534	-0.085	-1.673	0.093	0.025	0.396	0.624	-0.048	-0.874	0.381
D5 Roughly what is your annual household income?	0.050	0.945	0.341	0.041	0.768	0.443	0.032	0.631	0.510	0.164	0.054	0.960
	F	Sig	R Square	F	Sig	R Square	F	Sig	R Square	F	Sig	R Square
	1.904	0.000	0.173	3.914	0.000	0.310	3.094	0.000	0.131	3.130	0.000	0.188

6. Contact Imp Ref Log			6. No Ads Imp Ref Log			7. Personalisation Imp Ref Log			8. Company Image Imp Ref Log			9. Product Availability Imp Ref Log		
d	t	Sig.	d	t	Sig.	d	t	Sig.	d	t	Sig.	d	t	Sig.
Beta			Beta			Beta			Beta			Beta		
-0.021	2.407	0.016	-0.024	4.336	0.000	0.015	9.448	0.000	-0.014	7.751	0.000	-0.005	7.352	0.000
0.074	-0.809	0.419	-0.024	-0.888	0.375	0.015	0.898	0.375	-0.014	-0.574	0.569	-0.005	-0.188	0.851
0.040	2.718	0.007	0.015	0.549	0.589	-0.013	-0.516	0.606	0.014	0.951	0.332	-0.017	-0.648	0.517
-0.048	1.534	0.125	0.003	0.113	0.910	-0.013	-0.596	0.592	-0.019	-0.774	0.439	-0.008	-0.322	0.747
0.028	-1.489	0.134	-0.015	-0.656	0.545	-0.071	-2.560	0.010	-0.039	-1.196	0.232	-0.009	-1.677	0.081
0.028	0.003	0.987	0.041	1.443	0.149	0.015	0.575	0.565	0.001	0.046	0.963	0.029	1.000	0.289
-0.070	-2.499	0.013	-0.041	-1.457	0.145	-0.129	-4.976	0.000	-0.139	-5.324	0.000	-0.084	-3.073	0.002
0.028	0.974	0.333	0.031	1.071	0.285	-0.069	-1.141	0.254	0.058	0.296	0.767	0.006	0.227	0.620
0.014	0.488	0.611	0.045	1.602	0.109	-0.118	-4.591	0.000	-0.111	-4.289	0.000	0.016	0.351	0.725
-0.007	-0.252	0.801	-0.014	-5.477	0.000	0.013	0.493	0.622	-0.051	-1.694	0.058	0.016	0.366	0.714
-0.012	-0.380	0.704	-0.048	-1.955	0.126	0.001	0.015	0.984	0.015	0.510	0.610	0.026	0.842	0.400
-0.042	-1.423	0.153	0.014	0.452	0.652	-0.013	-0.467	0.641	0.011	0.401	0.688	-0.037	-1.272	0.203
-0.016	-0.459	0.646	-0.008	-0.217	0.828	0.115	3.602	0.000	-0.006	-0.191	0.848	-0.019	-0.574	0.569
0.192	3.627	0.000	-0.035	-1.041	0.288	-0.073	-2.335	0.020	-0.018	-0.568	0.570	-0.053	-1.588	0.112
0.062	2.111	0.035	0.036	1.223	0.222	0.059	2.139	0.033	0.081	2.935	0.003	0.020	0.903	0.362
-0.035	-1.270	0.204	0.017	0.612	0.541	0.032	1.235	0.217	0.009	0.365	0.715	-0.020	-0.726	0.468
0.029	1.055	0.292	0.005	0.184	0.846	-0.096	-3.817	0.000	-0.047	-1.849	0.065	-0.128	-4.801	0.000
-0.065	-2.030	0.043	-0.053	-1.945	0.052	-0.032	-1.262	0.200	-0.063	-2.493	0.013	-0.161	-3.609	0.000
-0.024	-0.877	0.380	-0.024	-0.868	0.386	-0.133	-5.249	0.000	-0.141	-5.549	0.000	-0.039	-1.461	0.144
0.110	4.151	0.000	0.029	0.941	0.347	-0.005	-0.223	0.824	0.043	1.757	0.078	0.004	0.139	0.889
0.048	1.674	0.094	-0.095	-3.196	0.001	-0.028	-1.012	0.312	-0.012	-0.451	0.652	-0.000	-0.220	0.826
-0.081	-2.336	0.020	-0.095	-3.496	0.000	-0.099	-3.991	0.000	-0.017	-0.682	0.493	-0.083	-3.136	0.002
-0.074	-2.404	0.016	0.012	0.387	0.699	0.041	1.436	0.151	0.052	1.807	0.071	0.047	1.551	0.121
-0.014	-0.494	0.621	0.032	1.088	0.277	-0.063	-2.366	0.018	0.012	0.434	0.664	0.015	0.522	0.602
0.012	0.465	0.642	0.019	0.702	0.483	0.038	1.486	0.143	0.046	1.854	0.064	0.068	2.847	0.000
-0.033	-1.189	0.235	-0.028	-0.986	0.324	-0.046	-1.776	0.076	0.005	0.199	0.842	-0.085	-3.069	0.002
-0.057	-1.959	0.050	-0.113	-3.842	0.000	-0.049	-1.821	0.069	-0.086	-3.158	0.002	-0.040	-1.411	0.159
-0.009	-0.290	0.772	-0.051	-1.619	0.106	-0.034	-1.163	0.245	-0.007	-0.253	0.800	-0.049	-1.589	0.112
0.056	1.623	0.055	-0.025	-0.853	0.394	0.105	3.930	0.000	0.135	5.013	0.000	-0.015	-0.510	0.605
0.074	2.525	0.012	0.069	2.336	0.020	0.120	4.433	0.000	0.091	3.336	0.001	0.078	2.706	0.007
F	Sig.	R Square	F	Sig.	R Square	F	Sig.	R Square	F	Sig.	R Square	F	Sig.	R Square
4.673	0.000	0.085	2.404	0.000	0.085	11.883	0.000	0.191	11.177	0.000	0.182	5.067	0.000	0.091

5. Contact Imp Ref Log			6. No Ads Imp Ref Log			7. Personalisation Imp Ref Log			8. Company Image Imp Ref Log			9. Product Availability Imp Ref Log		
d	t	Sig.	d	t	Sig.	d	t	Sig.	d	t	Sig.	d	t	Sig.
Beta			Beta			Beta			Beta			Beta		
-0.039	1.360	0.175	-0.016	1.816	0.070	-0.017	3.650	0.000	-0.074	4.869	0.000	-0.055	3.245	0.001
-0.055	-0.672	0.502	-0.016	-0.285	0.778	-0.017	-0.305	0.760	-0.074	-1.361	0.175	-0.055	-0.953	0.341
0.058	0.697	0.487	0.047	0.761	0.435	-0.089	-1.526	0.128	-0.069	-1.516	0.131	0.014	0.228	0.820
0.025	0.697	0.487	0.021	0.520	0.749	0.016	0.257	0.797	0.038	0.574	0.567	-0.024	-0.373	0.710
-0.062	0.404	0.687	-0.041	-0.675	0.500	0.106	1.784	0.079	0.011	0.190	0.849	0.035	0.568	0.572
-0.062	-0.995	0.321	-0.020	-0.322	0.747	-0.054	-0.881	0.379	-0.141	-2.411	0.017	0.036	0.578	0.563
-0.039	-0.628	0.532	-0.004	-0.050	0.958	0.018	0.297	0.768	0.020	0.336	0.735	0.098	1.527	0.128
0.108	1.769	0.075	-0.062	-1.368	0.172	-0.070	-1.191	0.235	-0.098	-1.743	0.088	-0.024	-0.398	0.695
-0.033	-0.513	0.609	-0.082	-1.286	0.199	0.077	1.296	0.217	-0.071	-1.183	0.238	0.021	0.324	0.746
0.032	0.461	0.645	0.086	1.285	0.200	0.063	0.937	0.349	0.110	1.703	0.090	0.050	0.728	0.467
-0.035	-0.930	0.357	-0.042	-0.645	0.520	-0.031	-0.486	0.627	-0.104	-1.680	0.094	-0.098	-1.489	0.137
-0.018	-0.229	0.819	-0.063	-0.904	0.367	-0.052	-0.763	0.446	0.022	0.334	0.739	-0.054	-0.780	0.436
-0.031	-0.473	0.636	-0.031	-0.511	0.610	-0.074	-1.184	0.245	-0.025	-0.407	0.684	-0.135	-2.062	0.038
-0.032	-0.521	0.603	0.003	0.055	0.956	-0.075	-1.253	0.211	0.020	0.341	0.733	0.092	1.505	0.134
0.085	1.350	0.176	0.031	0.471	0.638	-0.037	-0.602	0.548	0.016	0.308	0.758	-0.055	-0.877	0.381
-0.052	-0.830	0.407	0.011	0.177	0.860	-0.137	-2.250	0.025	-0.095	-1.623	0.104	-0.079	-1.268	0.207
-0.093	-1.504	0.134	0.026	0.415	0.676	-0.166	-2.739	0.001	-0.235	-4.072	0.000	-0.091	-1.473	0.142
0.121	1.997	0.047	0.115	1.915	0.058	0.017	0.284	0.776	0.036	0.638	0.524	-0.059	-0.982	0.327
0.006	0.111	0.911	-0.086	-1.241	0.216	0.069	1.010	0.313	-0.011	-0.175	0.861	-0.032	-0.488	0.646
-0.040	-0.620	0.536	-0.130	-2.022	0.044	-0.063	-0.595	0.550	-0.027	-0.453	0.651	-0.058	-0.900	0.369
0.031	0.421	0.674	0.019	0.206	0.835	0.011	0.152	0.879	-0.032	-0.454	0.643	0.064	0.859	0.385
0.023	0.355	0.723	-0.014	-0.210	0.833	-0.046	-0.710	0.478	0.005	0.089	0.929	0.031	0.480	0.632
-0.081	-1.323	0.187	-0.057	-0.939	0.349	-0.077	-1.291	0.198	-0.016	-0.281	0.779	0.014	0.230	0.819
-0.039	-0.552	0.582	-0.095	-1.353	0.177	0.030	0.434	0.664	0.031	0.480	0.631	-0.008	-0.114	0.910
-0.005	-0.072	0.943	-0.167	-2.327	0.021	0.072	1.022	0.307	-0.079	-1.176	0.241	-0.072	-1.004	0.316
0.088	1.350	0.176	0.026	0.358	0.721	0.092	1.359	0.176	0.092	1.353	0.177	-0.082	-1.128	0.260
0.138	2.092	0.037	0.052	0.780	0.435	0.162	2.497	0.013	0.108	1.736	0.084	0.003	0.049	0.961
-0.008	-0.104	0.918	0.070	0.957	0.335	0.075	1.066	0.278	0.018	0.259	0.796	-0.060	-1.086	0.274
F	Sig.	R Square	F	Sig.	R Square	F	Sig.	R Square	F	Sig.	R Square	F	Sig.	R Square
1.111	0.325	0.096	1.003	0.484	0.086	1.616	0.030	0.133	2.595	0.000	0.195	1.187	0.244	0.101

EntzCo	Overall Service Importance			Overall Service Performance			Overall Service Gap		
	d			d			d		
	Beta	t	Sig.	Beta	t	Sig.	Beta	t	Sig.
no s28 used a retail store									
(Constant)		16.782	0.000		18.036	0.000		0.740	0.459
S2 Approximately how much did you spend on this product?	-0.017	-0.604	0.546	0.006	0.223	0.823	0.034	1.091	0.276
S3a personalisation	-0.017	-0.603	0.547	-0.019	-0.654	0.513	0.003	0.099	0.921
S4a spontaneity	0.015	0.525	0.600	0.008	0.270	0.787	-0.038	-1.227	0.220
S5 How often do you purchase this type of product? (recode so higher=more freq purchase)	0.087	2.776	0.006	0.046	1.453	0.146	-0.058	-1.600	0.110
S6 Research product prior to purchase	-0.019	-0.636	0.525	-0.066	-2.206	0.028	-0.059	-1.799	0.072
S7 Purchase Involvement	0.158	5.372	0.000	0.127	4.212	0.000	-0.015	-0.438	0.662
S8 The money saved by finding lower prices is usually not worth the time and effort	-0.038	-1.269	0.206	-0.032	-1.033	0.302	-0.009	-0.155	0.877
S9 The price of a product is a good indicator of its quality	0.032	1.120	0.263	0.052	1.763	0.078	0.000	-0.004	0.997
S10 I do not have time to fully research products so rely on names I trust	0.042	1.397	0.163	0.012	0.397	0.692	-0.020	-0.592	0.554
S11 When purchasing the type of product you have, how important is low price	0.033	1.066	0.315	-0.093	-2.812	0.005	-0.107	-2.931	0.003
S12 When purchasing the type of product you have, how important is high quality service	0.015	0.490	0.624	0.022	0.685	0.494	0.003	0.065	0.933
S13 Online History	-0.034	-0.942	0.347	-0.135	-3.675	0.000	-0.079	-1.940	0.053
S14a Company History (for ServCo no purchase measure)	0.035	0.999	0.318	0.159	4.409	0.000	0.135	3.373	0.001
S15 When purchasing the type of product you indicated at the start, how many companies do you	-0.068	-2.849	0.004	-0.100	-3.166	0.002	-0.010	-0.285	0.775
S16 Have you ever returned products to the company (faulty or unwanted)?	-0.014	-0.476	0.634	-0.026	-0.893	0.372	-0.010	-0.307	0.759
S17 I shop with the company because there are no alternatives for the products I require	0.078	2.712	0.007	0.051	1.728	0.084	-0.013	-0.416	0.677
S18 I shop with this company out of choice because their offering best matches my needs	0.133	4.748	0.000	0.246	8.572	0.000	0.120	3.785	0.000
S20 I prefer to purchase from internet companies that I know from the high street	0.097	3.394	0.001	0.030	1.237	0.218	-0.057	-1.776	0.078
S21 I would purchase from a company that is only reachable via the internet or email	-0.058	-2.136	0.033	-0.073	-0.808	0.419	0.043	1.354	0.176
S22 Technoreadiness	0.018	0.573	0.567	0.139	4.426	0.000	0.148	4.258	0.000
S23 Time Capacity	0.057	2.087	0.037	0.008	0.285	0.776	-0.059	-1.905	0.057
S24 Products Purchased Online	0.004	0.136	0.892	-0.008	-0.235	0.814	-0.013	-0.358	0.722
S25 Online Activities	-0.062	-2.086	0.037	-0.091	-3.027	0.003	-0.015	-0.437	0.663
S26 connection speed (where multiple answers, fastest home connection taken)	-0.057	-2.038	0.042	-0.030	-1.064	0.287	0.036	1.148	0.251
R-squared	F	Sig.	R Square	F	Sig.	R Square	F	Sig.	R Square
F=	6.856	0.000	0.118	11.214	0.000	0.202	4.174	0.000	0.092

ServCo	d			d			d		
	Beta			Beta			Beta		
	t	Sig.		t	Sig.		t	Sig.	
no S2 (spend), no S16 ever returned items, no s28 used retail store									
(Constant)		2.876	0.004		1.718	0.087		-0.144	0.886
S3a personalisation	0.090	1.500	0.135	0.044	0.710	0.479	-0.008	-0.120	0.904
S4a spontaneity	0.049	0.801	0.424	0.093	1.464	0.145	-0.069	-1.000	0.319
S5 How often do you purchase this type of product? (recode so higher=more freq purchase)	0.056	0.844	0.400	0.026	0.386	0.700	-0.031	-0.411	0.681
S6 Research product prior to purchase	-0.035	-0.554	0.580	-0.039	-0.607	0.544	-0.115	-1.626	0.106
S7 Purchase Involvement	0.118	1.818	0.070	0.072	1.078	0.283	-0.069	-0.947	0.345
S8 The money saved by finding lower prices is usually not worth the time and effort	0.024	0.372	0.710	-0.178	-2.668	0.008	-0.157	-2.148	0.033
S9 The price of a product is a good indicator of its quality	0.062	0.997	0.320	0.001	0.012	0.991	-0.021	-0.303	0.762
S10 I do not have time to fully research products so rely on names I trust	0.055	0.833	0.408	-0.057	-0.840	0.402	-0.094	-1.270	0.208
S11 When purchasing the type of product you have, how important is low price	-0.113	-1.598	0.112	0.007	0.095	0.925	0.111	1.387	0.167
S12 When purchasing the type of product you have, how important is high quality service	0.145	2.143	0.033	-0.047	-0.666	0.506	-0.268	-3.460	0.001
S13 Online History	0.104	1.441	0.151	0.069	0.928	0.355	0.013	0.156	0.876
S14a Company History (for ServCo no purchase measure)	0.073	1.095	0.274	-0.018	-0.234	0.815	-0.023	-0.309	0.758
S15 When purchasing the type of product you indicated at the start, how many companies do you	-0.010	-0.160	0.873	-0.065	-0.994	0.321	-0.037	-0.519	0.604
S17 I shop with the company because there are no alternatives for the products I require	-0.058	-0.884	0.388	0.120	1.788	0.075	0.159	2.177	0.031
S18 I shop with this company out of choice because their offering best matches my needs	0.062	0.982	0.327	0.383	5.837	0.000	0.287	4.005	0.000
S20 I prefer to purchase from internet companies that I know from the high street	0.108	1.705	0.089	0.153	2.336	0.021	0.095	1.326	0.187
S21 I would purchase from a company that is only reachable via the internet or email	-0.092	-1.486	0.138	-0.051	-0.799	0.425	-0.067	-0.954	0.341
S22 Technoreadiness	0.063	0.891	0.374	0.138	1.851	0.068	0.102	1.265	0.207
S23 Time Capacity	0.104	1.736	0.084	0.037	0.586	0.559	-0.032	-0.471	0.639
S24 Products Purchased Online	-0.050	-0.673	0.502	-0.021	-0.267	0.789	0.096	1.135	0.258
S25 Online Activities	-0.023	-0.350	0.726	-0.057	-0.830	0.408	0.041	0.543	0.588
S26 connection speed (where multiple answers, fastest home connection taken (information factor for ServCo excludes item S8, track shipping))	0.004	0.067	0.947	0.027	0.407	0.684	-0.051	-0.720	0.472
R-squared	F	Sig.	R Square	F	Sig.	R Square	F	Sig.	R Square
F=	1.827	0.041	0.123	3.742	0.000	0.302	2.593	0.000	0.250

ToolCo

no s16 ever returned items	d			d			d		
	Beta	t	Sig.	Beta	t	Sig.	Beta	t	Sig.
(Constant)		1.860	0.051		5.265	0.000		3.533	0.001
S2 Approximately how much did you spend on this product?	0.125	1.776	0.077	0.089	1.168	0.244	-0.049	-0.578	0.564
S3a personalisation	0.193	2.491	0.013	0.043	0.513	0.608	-0.227	-2.440	0.010
S4a spontaneity	-0.028	-0.477	0.634	-0.034	-0.535	0.593	-0.067	-0.946	0.349
S5 How often do you purchase this type of product? (recode so higher=more freq purchase)	-0.022	-0.317	0.751	0.059	0.773	0.441	0.035	0.413	0.680
S6 Research product prior to purchase	0.047	0.753	0.452	0.035	0.512	0.609	-0.003	-0.044	0.965
S7 Purchase involvement	0.196	3.067	0.002	0.112	1.612	0.108	-0.078	-1.025	0.307
S8 The money saved by finding lower prices is usually not worth the time and effort	0.120	1.924	0.056	0.049	0.729	0.467	-0.083	-1.110	0.268
S9 The price of a product is a good indicator of its quality	0.036	0.571	0.568	0.117	1.730	0.088	0.094	1.254	0.212
S10 I do not have time to fully research products so rely on names I trust	-0.082	-1.253	0.211	-0.068	-0.967	0.335	-0.022	-0.282	0.778
S11 When purchasing the type of product you have, how important is low price	0.034	0.494	0.622	0.010	0.142	0.887	0.007	0.082	0.935
S12 When purchasing the type of product you have, how important is high quality service	-0.045	-0.688	0.493	-0.077	-1.084	0.280	-0.063	-0.796	0.427
S13 Online History	0.091	1.336	0.183	-0.102	-1.390	0.166	-0.107	-1.316	0.190
S14a Company History (for ServCo no purchase measure)	0.079	1.024	0.307	-0.021	-0.252	0.801	-0.119	-1.284	0.201
S15 When purchasing the type of product you indicated at the start, how many companies do you	0.023	0.364	0.716	-0.172	-2.543	0.012	-0.189	-2.240	0.028
S17 I shop with the company because there are no alternatives for the products I require	-0.007	-0.118	0.908	-0.101	-1.544	0.124	-0.123	-1.658	0.092
S18 I shop with this company out of choice because their offering best matches my needs	0.148	2.428	0.016	0.261	3.948	0.000	0.068	0.930	0.354
S20 I prefer to purchase from internet companies that I know from the high street	0.211	3.486	0.001	0.090	1.364	0.174	-0.132	-1.804	0.073
S21 I would purchase from a company that is only reachable via the internet or email	-0.099	-1.560	0.120	0.026	0.377	0.706	0.088	1.148	0.253
S22 Technoreadiness	-0.068	-0.946	0.345	0.144	1.911	0.067	0.122	1.482	0.146
S23 Time Capacity	0.153	2.653	0.009	0.070	1.117	0.265	-0.069	-0.994	0.321
S24 Products Purchased Online	0.068	0.889	0.375	0.004	0.044	0.965	-0.028	-0.292	0.771
S25 Online Activities	0.052	0.761	0.447	-0.016	-0.211	0.833	-0.081	-0.745	0.460
S26 connection speed (where multiple answers, fastest home connection taken)	0.041	0.678	0.499	-0.168	-2.571	0.011	-0.203	-2.803	0.006
S28 Used a retail store to purchase from the company	0.037	0.622	0.534	-0.036	-0.564	0.573	-0.028	-0.389	0.697
R-squared	F	Sig.	R Square	F	Sig.	R Square	F	Sig.	R Square
	3.065	0.000	0.238	3.018	0.000	0.275	1.687	0.030	0.199

SpotCo

no s16 - ever returned items	d			d			d		
	Beta	t	Sig.	Beta	t	Sig.	Beta	t	Sig.
(Constant)		7.731	0.000		6.024	0.000		1.075	0.281
S2 Approximately how much did you spend on this product?	-0.013	-0.211	0.833	-0.014	-0.219	0.827	0.040	0.606	0.545
S3a personalisation	0.015	0.277	0.782	-0.052	-0.929	0.354	-0.071	-1.291	0.231
S4a spontaneity	-0.019	-0.341	0.734	0.020	0.351	0.726	-0.009	-0.154	0.878
S5 How often do you purchase this type of product? (recode so higher=more freq purchase)	-0.024	-0.430	0.668	-0.035	-0.601	0.549	0.008	0.124	0.902
S6 Research product prior to purchase	0.052	0.921	0.358	0.093	1.582	0.118	0.008	0.098	0.922
S7 Purchase involvement	0.176	2.934	0.004	-0.008	-0.136	0.892	-0.206	-3.125	0.002
S8 The money saved by finding lower prices is usually not worth the time and effort	-0.016	-0.288	0.774	-0.045	-0.758	0.450	-0.088	-1.084	0.279
S9 The price of a product is a good indicator of its quality	-0.020	-0.347	0.729	0.080	1.322	0.187	0.123	1.932	0.055
S10 I do not have time to fully research products so rely on names I trust	0.027	0.473	0.637	-0.003	-0.042	0.967	-0.034	-0.529	0.597
S11 When purchasing the type of product you have, how important is low price	-0.045	-0.766	0.444	-0.039	-0.631	0.529	-0.068	-0.992	0.326
S12 When purchasing the type of product you have, how important is high quality service	0.096	1.660	0.098	0.016	0.272	0.786	-0.076	-1.197	0.232
S13 Online History	-0.075	-1.150	0.251	-0.067	-0.992	0.322	-0.007	-0.103	0.918
S14a Company History (for ServCo no purchase measure)	0.021	0.320	0.749	0.071	1.042	0.298	0.026	0.358	0.720
S15 When purchasing the type of product you indicated at the start, how many companies do you	-0.016	-0.275	0.784	0.004	0.069	0.945	0.058	0.799	0.425
S17 I shop with the company because there are no alternatives for the products I require	0.041	0.745	0.454	-0.107	-1.865	0.063	-0.171	-2.852	0.005
S18 I shop with this company out of choice because their offering best matches my needs	0.120	2.171	0.031	0.292	5.100	0.000	0.198	3.128	0.002
S20 I prefer to purchase from internet companies that I know from the high street	0.100	1.789	0.075	0.108	1.852	0.065	0.007	0.111	0.907
S21 I would purchase from a company that is only reachable via the internet or email	0.023	0.420	0.675	0.001	0.010	0.992	-0.003	-0.061	0.959
S22 Technoreadiness	-0.048	-0.776	0.438	0.091	1.476	0.141	0.141	2.187	0.031
S23 Time Capacity	0.077	1.409	0.160	0.093	1.623	0.106	0.025	0.420	0.675
S24 Products Purchased Online	0.042	0.664	0.509	-0.122	-1.845	0.066	-0.165	-2.438	0.017
S25 Online Activities	0.049	0.843	0.400	-0.020	-0.333	0.738	-0.043	-1.296	0.198
S26 connection speed (where multiple answers, fastest home connection taken)	-0.068	-1.068	0.287	-0.027	-0.488	0.625	-0.043	-0.605	0.545
S28 Used a retail store to purchase from the company	-0.047	-0.842	0.400	-0.164	-2.831	0.005	-0.091	-1.482	0.139
R-squared	F	Sig.	R Square	F	Sig.	R Square	F	Sig.	R Square
F=	1.550	0.050	0.104	2.738	0.002	0.198	2.029	0.004	0.164

EntzCo									
no s28 used a retail store									
Overall Service Importance			Overall Service Performance			Overall Service Gap			
	d			d			d		
	Beta	t	Sig.	Beta	t	Sig.	Beta	t	Sig.
(Constant)		37.875	0.000		38.001	0.000		0.701	0.484
D1 Gender:	0.065	2.296	0.022	0.106	3.994	0.000	0.046	1.425	0.154
D2 Age group:	0.095	3.194	0.001	0.096	3.114	0.002	-0.032	-0.935	0.350
CLASS (occupation based)	0.021	0.619	0.536	0.034	0.972	0.331	0.010	0.253	0.800
D4 What is the highest educational qualification you	-0.095	-3.100	0.002	-0.186	-5.758	0.000	-0.086	-2.458	0.014
D5 Roughly what is your annual household income?	-0.138	-4.456	0.000	-0.115	-3.514	0.000	0.033	0.943	0.346
	F	Sig.	R Square	F	Sig.	R Square	F	Sig.	R Square
	13.503	0.000	0.053	21.298	0.000	0.092	1.963	0.082	0.010

ServCo									
no S2 (spend), no S16 ever returned items, no s									
	d			d			d		
	Beta	t	Sig.	Beta	t	Sig.	Beta	t	Sig.
(Constant)		12.969	0.000		8.057	0.000		-0.583	0.561
D1 Gender:	0.075	1.033	0.303	0.084	1.033	0.303	-0.078	-0.909	0.365
D2 Age group:	0.059	0.795	0.428	0.092	1.096	0.273	-0.007	-0.084	0.933
CLASS (occupation based)	-0.146	-1.859	0.064	0.036	0.400	0.690	0.140	1.504	0.134
D4 What is the highest educational qualification you	-0.203	-2.871	0.004	-0.041	-0.513	0.608	0.132	1.585	0.115
D5 Roughly what is your annual household income?	0.039	0.518	0.605	-0.118	-1.373	0.171	-0.139	-1.568	0.119
	F	Sig.	R Square	F	Sig.	R Square	F	Sig.	R Square
	2.365	0.041	0.047	1.451	0.208	0.037	1.796	0.116	0.050

ToolCo									
no s16 ever returned items									
	d			d			d		
	Beta	t	Sig.	Beta	t	Sig.	Beta	t	Sig.
(Constant)		13.495	0.000		11.164	0.000		-0.597	0.551
D1 Gender:	0.091	1.567	0.118	0.068	1.068	0.287	-0.021	-0.307	0.759
D2 Age group:	-0.011	-0.182	0.856	0.016	0.243	0.808	0.024	0.337	0.736
CLASS (occupation based)	-0.059	-0.934	0.351	0.055	0.809	0.420	0.029	0.392	0.698
D4 What is the highest educational qualification you	-0.007	-0.108	0.914	-0.075	-1.088	0.277	-0.078	-1.070	0.288
D5 Roughly what is your annual household income?	-0.129	-2.043	0.042	-0.103	-1.494	0.136	0.012	0.165	0.869
	F	Sig.	R Square	F	Sig.	R Square	F	Sig.	R Square
	1.545	0.176	0.025	1.923	0.091	0.036	0.420	0.835	0.009

SportCo									
no s18 - ever returned items									
	d			d			d		
	Beta	t	Sig.	Beta	t	Sig.	Beta	t	Sig.
(Constant)		14.550	0.000		10.048	0.000		-0.784	0.434
D1 Gender:	0.011	0.205	0.838	0.109	1.944	0.053	0.106	1.821	0.070
D2 Age group:	0.155	2.590	0.010	0.117	1.811	0.071	-0.012	-0.181	0.857
CLASS (occupation based)	0.161	2.497	0.013	0.047	0.675	0.500	-0.081	-1.126	0.261
D4 What is the highest educational qualification you	0.054	0.994	0.321	-0.109	-1.866	0.063	-0.146	-2.433	0.018
D5 Roughly what is your annual household income?	-0.108	-1.962	0.051	-0.118	-1.980	0.049	-0.020	-0.330	0.741
	F	Sig.	R Square	F	Sig.	R Square	F	Sig.	R Square
	3.065	0.010	0.040	3.246	0.007	0.050	1.927	0.090	0.032

EntzCo	Overall Service Importance			Overall Service Performance			Overall Service Gap		
	d	t	Sig.	d	t	Sig.	d	t	Sig.
no s28 used a retail store									
	Beta			Beta			Beta		
(Constant)		13.323	0.000		14.438	0.000		0.476	0.635
S2 Approximately how much did you spend on this product?	0.004	0.128	0.898	0.033	1.198	0.231	0.042	1.306	0.192
S3a personalisation	-0.021	-0.727	0.465	-0.006	-0.272	0.786	0.022	0.859	0.510
S4a spontaneity	0.012	0.431	0.667	0.001	0.036	0.971	-0.042	-1.336	0.181
S5 How often do you purchase this type of product? (recode so higher=more freq purchase)	0.087	2.768	0.006	0.043	1.374	0.170	-0.081	-1.699	0.090
S6 Research product prior to purchase	-0.027	-0.917	0.355	-0.068	-2.310	0.021	-0.051	-1.527	0.127
S7 Purchase Involvement	0.148	5.054	0.000	0.116	3.935	0.000	-0.014	-0.406	0.685
S8 The money saved by finding lower prices is usually not worth the time and effort	-0.030	-0.983	0.329	-0.017	-0.582	0.574	0.003	0.098	0.922
S9 The price of a product is a good indicator of its quality	0.033	1.121	0.263	0.047	1.618	0.106	-0.003	-0.143	0.886
S10 I do not have time to fully research products so rely on names I trust	0.039	1.303	0.193	0.012	0.380	0.704	-0.018	-0.512	0.609
S11 When purchasing the type of product you have, how important is low price	0.044	1.357	0.175	-0.084	-2.566	0.010	-0.112	-3.032	0.002
S12 When purchasing the type of product you have, how important is high quality service	0.020	0.648	0.517	0.028	0.904	0.366	0.004	0.113	0.910
S13 Online History	-0.010	-0.285	0.776	-0.096	-2.647	0.008	-0.062	-1.498	0.134
S14a Company History (for ServCo no purchase measure)	0.029	0.820	0.407	0.155	4.370	0.000	0.138	3.409	0.001
S15 When purchasing the type of product you indicated at the start, how many companies do you	-0.079	-2.558	0.011	-0.080	-2.576	0.010	0.002	0.045	0.964
S16 Have you ever returned products to the company (faulty or unwanted)?	-0.006	-0.195	0.848	-0.012	-0.428	0.669	-0.004	-0.118	0.905
S17 I shop with the company because there are no alternatives for the products I require	-0.071	-2.481	0.013	0.041	1.440	0.150	-0.018	-0.487	0.628
S18 I shop with this company out of choice because their offering best matches my needs	0.116	4.111	0.000	0.220	7.724	0.000	0.112	3.453	0.001
S20 I prefer to purchase from internet companies that I know from the high street	0.080	2.801	0.005	0.015	0.512	0.606	-0.061	-1.866	0.062
S21 I would purchase from a company that is only reachable via the internet or email	-0.058	-2.075	0.038	-0.014	-0.518	0.606	0.060	1.575	0.116
S22 Technoreadiness	0.046	1.488	0.137	0.175	5.611	0.000	0.152	4.282	0.000
S23 Time Capacity	0.098	3.463	0.001	0.052	1.834	0.067	-0.060	-1.862	0.063
S24 Products Purchased Online	0.018	0.558	0.577	0.002	0.054	0.957	-0.016	-0.447	0.655
S25 Online Activities	-0.037	-1.234	0.218	-0.058	-1.840	0.068	-0.002	-0.144	0.885
S26 connection speed (where multiple answers, fastest home connection taken)	-0.060	-2.189	0.030	-0.037	-1.321	0.187	0.033	1.050	0.294
D1 Gender:	0.027	0.911	0.361	0.080	2.724	0.007	0.068	2.034	0.042
D2 Age group:	0.085	3.101	0.002	0.078	2.551	0.011	-0.045	-1.278	0.201
CLASS (occupation based)	0.057	1.742	0.082	0.055	1.788	0.074	0.000	0.012	0.990
D4 What is the highest educational qualification you hold?	-0.060	-1.967	0.049	-0.153	-4.991	0.000	-0.097	-2.776	0.006
D5 Roughly what is your annual household income?	-0.128	-4.163	0.000	-0.116	-3.823	0.000	0.017	0.491	0.623
	F	Sig.	R Square	F	Sig.	R Square	F	Sig.	R Square
	7.342	0.000	0.151	12.570	0.000	0.262	3.880	0.000	0.105

ServCo	Overall Service Importance			Overall Service Performance			Overall Service Gap		
	d			d			d		
	Beta	t	Sig.	Beta	t	Sig.	Beta	t	Sig.
no S2 (spend), no S16 ever returned items, no s28 used retail store									
(Constant)		2.667	0.008		1.330	0.185		-0.184	0.854
S3a personalisation	0.088	1.380	0.169	0.047	0.718	0.474	-0.007	-0.092	0.927
S4a spontaneity	0.033	0.505	0.614	0.090	1.345	0.181	-0.051	-0.697	0.487
S5 How often do you purchase this type of product? (recode so higher=more freq purchase)	0.052	0.731	0.465	0.022	0.301	0.764	-0.028	-0.349	0.726
S6 Research product prior to purchase	-0.015	-0.229	0.819	-0.051	-0.732	0.465	-0.149	-1.979	0.080
S7 Purchase Involvement	0.110	1.607	0.110	0.073	1.034	0.303	-0.065	-0.847	0.399
S8 The money saved by finding lower prices is usually not worth the time and effort	0.027	0.389	0.698	-0.162	-2.291	0.023	-0.148	-1.920	0.057
S9 The price of a product is a good indicator of its quality	0.048	0.717	0.474	0.000	0.001	0.999	-0.009	-0.125	0.901
S10 I do not have time to fully research products so rely on names I trust	0.054	0.769	0.443	-0.051	-0.710	0.479	-0.082	-1.049	0.296
S11 When purchasing the type of product you have, how important is low price	-0.098	-1.298	0.196	0.007	0.094	0.925	0.093	1.105	0.271
S12 When purchasing the type of product you have, how important is high quality service	0.136	1.875	0.062	-0.038	-0.509	0.611	-0.245	-3.034	0.003
S13 Online History	0.086	1.117	0.265	0.040	1.018	0.310	0.036	0.443	0.656
S14a Company History (for ServCo no purchase measure)	0.069	0.960	0.338	-0.028	-0.369	0.698	-0.033	-0.416	0.677
S15 When purchasing the type of product you indicated at the start, how many companies do you	0.002	0.034	0.973	-0.069	-0.989	0.324	-0.055	-0.730	0.466
S17 I shop with the company because there are no alternatives for the products I require	-0.048	-0.685	0.494	0.116	1.635	0.104	0.140	1.811	0.072
S18 I shop with this company out of choice because their offering best matches my needs	0.068	0.992	0.322	0.361	5.161	0.000	0.266	3.484	0.001
S20 I prefer to purchase from internet companies that I know from the high street	0.100	1.463	0.145	0.150	2.159	0.032	0.101	1.331	0.185
S21 I would purchase from a company that is only reachable via the internet or email	-0.070	-1.047	0.298	-0.044	-0.646	0.519	-0.078	-1.051	0.295
S22 Technoreadiness	0.077	0.999	0.319	0.165	2.098	0.037	0.110	1.286	0.201
S23 Time Capacity	0.141	1.996	0.047	0.080	1.108	0.269	-0.005	-0.069	0.945
S24 Products Purchased Online	-0.050	-0.620	0.536	-0.012	-0.143	0.886	0.118	1.312	0.192
S25 Online Activities	0.002	0.027	0.978	-0.044	-0.592	0.555	0.018	0.227	0.820
S26 connection speed (where multiple answers, fastest home connection taken)	0.007	0.109	0.913	0.037	0.543	0.588	-0.041	-0.544	0.587
D1 Gender:	0.022	0.281	0.779	0.013	0.162	0.872	-0.088	-1.028	0.307
D2 Age group:	0.075	0.942	0.347	0.071	0.880	0.380	-0.026	-0.300	0.765
CLASS (occupation based)	-0.145	-1.804	0.073	0.028	0.343	0.732	0.128	1.429	0.155
D4 What is the highest educational qualification you hold?	-0.168	-2.300	0.022	-0.039	-0.524	0.601	0.108	1.335	0.184
D5 Roughly what is your annual household income?	-0.022	-0.278	0.781	-0.110	-1.344	0.181	-0.116	-1.294	0.198
	F	Sig.	R Square	F	Sig.	R Square	F	Sig.	R Square
(information factor for ServCo excludes item 58, track shipping)	1.503	0.059	0.157	2.966	0.000	0.323	2.191	0.002	0.284

ToolCo	Overall Service Importance			Overall Service Performance			Overall Service Gap		
	d	t	Sig.	d	t	Sig.	d	t	Sig.
no s16 ever returned items									
(Constant)		1,911	0.057		4,462	0.000		2,920	0.004
S2 Approximately how much did you spend on this product?	0.133	1,900	0.085	0.102	1,335	0.183	-0.045	-0.519	0.604
S3a personalisation	0.226	2,871	0.004	0.082	0.964	0.336	-0.215	-2,215	0.028
S4a spontaneity	-0.051	-0,864	0.388	-0.051	-0,800	0.425	-0.064	-0,889	0.376
S5 How often do you purchase this type of product? (recode so higher=more freq purchase)	-0.021	-0,293	0.770	0.066	0,867	0.387	0.038	0,440	0.661
S6 Research product prior to purchase	0.048	0,774	0.440	0.048	0,713	0.477	0.004	0,051	0.959
S7 Purchase involvement	0.179	2,797	0.008	0.084	1,203	0.231	-0.087	-1,104	0.271
S8 The money saved by finding lower prices is usually not worth the time and effort	0.104	1,672	0.096	0.036	0,532	0.595	-0.081	-1,053	0.294
S9 The price of a product is a good indicator of its quality	0.037	0,600	0.549	0.106	1,609	0.110	0.087	1,140	0.256
S10 I do not have time to fully research products so rely on names I trust	-0.083	-0,904	0.339	-0.049	-0,685	0.494	-0.026	-0,319	0.750
S11 When purchasing the type of product you have, how important is low price	0.036	0,557	0.578	0.025	0,342	0.733	0.016	0,211	0.833
S12 When purchasing the type of product you have, how important is high quality service	-0.041	-0,631	0.529	-0.073	-1,032	0.303	-0.062	-0,772	0.441
S13 Online History	0.088	1,304	0.193	-0.088	-1,195	0.234	-0.101	-1,206	0.230
S14a Company History (for ServCo no purchase measure)	0.092	1,186	0.237	-0.015	-0,177	0.859	-0.128	-1,335	0.184
S15 When purchasing the type of product you indicated at the start, how many companies do you	0.034	0,543	0.587	-0.160	-2,364	0.019	-0.170	-2,201	0.029
S17 I shop with the company because there are no alternatives for the products I require	-0.012	-0,204	0.839	-0.108	-1,621	0.107	-0.120	-1,613	0.109
S18 I shop with this company out of choice because their offering best matches my needs	0.140	2,308	0.022	0.251	3,823	0.000	0.068	0,908	0.365
S20 I prefer to purchase from internet companies that I know from the high street	0.213	3,555	0.000	0.095	1,453	0.148	-0.130	-1,754	0.081
S21 I would purchase from a company that is only reachable via the internet or email	-0.096	-1,525	0.129	0.031	0,480	0.653	0.090	1,151	0.251
S22 Technoreadiness	-0.041	-0,590	0.556	0.175	2,310	0.022	0.129	1,507	0.134
S23 Time Capacity	0.154	2,601	0.010	0.083	1,298	0.196	-0.059	-0,817	0.419
S24 Products Purchased Online	0.077	1,054	0.293	0.026	0,322	0.748	-0.016	-0,199	0.842
S25 Online Activities	0.084	1,201	0.231	-0.003	-0,038	0.970	-0.073	-0,856	0.393
S26 connection speed (where multiple answers, fastest home connection taken)	0.041	0,685	0.494	-0.170	-2,637	0.009	-0.205	-2,796	0.006
S28 Used a retail store to purchase from the company	0.030	0,517	0.606	-0.037	-0,587	0.558	-0.028	-0,385	0.700
D1 Gender:	0.095	1,554	0.122	0.085	0,988	0.326	-0.028	-0,378	0.706
D2 Age group:	0.047	0,714	0.476	0.063	0,887	0.376	0.016	0,203	0.835
CLASS (occupation based)	-0.078	-1,189	0.236	0.013	0,187	0.852	0.022	0,275	0.784
D4 What is the highest educational qualification you hold?	-0.036	-0,530	0.596	-0.103	-1,401	0.163	-0.068	-0,791	0.430
D5 Roughly what is your annual household income?	-0.161	-2,460	0.015	-0.109	-1,540	0.125	0.035	0,437	0.662
R-squared	F	Sig.	R Square	F	Sig.	R Square	F	Sig.	R Square
	2,953	0.000	0.270	2,856	0.000	0.308	1,494	0.096	0.195

SportCo	Overall Service Importance			Overall Service Performance			Overall Service Gap		
	d	t	Sig.	d	t	Sig.	d	t	Sig.
no s16 - ever returned items	Beta			Beta			Beta		
(Constant)		5.565	0.000		4.428	0.000		0.904	0.367
S2 Approximately how much did you spend on this product?	-0.017	-0.278	0.783	0.002	0.028	0.978	0.080	0.903	0.367
S3a personalisation	0.006	0.118	0.908	-0.084	-1.152	0.250	-0.077	-1.288	0.199
S4a spontaneity	-0.027	-0.488	0.627	0.009	0.168	0.868	-0.014	-0.230	0.818
S5 How often do you purchase this type of product? (recode so higher=more freq purchase)	-0.021	-0.383	0.702	-0.037	-0.630	0.528	0.003	0.052	0.959
S6 Research product prior to purchase	0.052	0.926	0.355	0.081	1.385	0.167	-0.006	-0.103	0.918
S7 Purchase Involvement	0.165	2.780	0.008	-0.013	-0.218	0.827	-0.201	-3.059	0.002
S8 The money saved by finding lower prices is usually not worth the time and effort	-0.003	-0.061	0.951	-0.032	-0.548	0.584	-0.065	-1.035	0.302
S9 The price of a product is a good indicator of its quality	-0.008	-0.107	0.915	0.082	1.371	0.172	0.112	1.765	0.079
S10 I do not have time to fully research products so rely on names I trust	0.023	0.394	0.694	-0.015	-0.253	0.801	-0.042	-0.680	0.510
S11 When purchasing the type of product you have, how important is low price	-0.058	-0.989	0.323	-0.037	-0.607	0.545	0.008	0.118	0.905
S12 When purchasing the type of product you have, how important is high quality service	0.098	1.713	0.088	0.015	0.247	0.809	-0.080	-1.261	0.208
S13 Online History	-0.045	-0.678	0.498	-0.041	-0.591	0.555	-0.008	-0.087	0.931
S14a Company History (for ServCo no purchase measure)	0.037	0.570	0.569	0.081	1.199	0.232	0.022	0.366	0.760
S15 When purchasing the type of product you indicated at the start, how many companies do you	-0.017	-0.305	0.761	0.014	0.240	0.811	0.061	0.976	0.330
S17 I shop with the company because there are no alternatives for the products I require	0.014	0.260	0.795	-0.128	-2.257	0.025	-0.170	-2.792	0.006
S18 I shop with this company out of choice because their offering best matches my needs	0.111	2.020	0.044	0.288	5.037	0.000	0.192	3.145	0.002
S20 I prefer to purchase from internet companies that I know from the high street	0.092	1.647	0.101	0.094	1.621	0.106	-0.001	-0.009	0.993
S21 I would purchase from a company that is only reachable via the internet or email	0.005	0.088	0.930	-0.011	-0.197	0.844	0.001	0.024	0.981
S22 Technoreadiness	-0.041	-0.693	0.489	0.109	1.733	0.084	0.151	2.313	0.022
S23 Time Capacity	0.125	2.197	0.029	0.114	1.929	0.055	0.007	0.111	0.912
S24 Products Purchased Online	0.045	0.698	0.488	-0.102	-1.543	0.124	-0.151	-2.129	0.034
S25 Online Activities	0.039	0.667	0.505	-0.027	-0.444	0.654	-0.082	-1.283	0.208
S26 connection speed (where multiple answers, fastest home connection taken)	-0.024	-0.424	0.672	0.001	0.018	0.985	-0.047	-0.744	0.458
S28 Used a retail store to purchase from the company	-0.049	-0.890	0.374	-0.159	-2.783	0.006	-0.084	-1.385	0.173
D1 Gender	-0.012	-0.215	0.830	0.064	1.144	0.254	0.081	1.354	0.177
D2 Age group	0.138	2.112	0.035	0.121	1.783	0.076	0.004	0.052	0.959
CLASS (occupation based)	0.198	2.798	0.008	0.109	1.487	0.138	-0.050	-0.828	0.524
D4 What is the highest educational qualification you hold?	0.068	1.153	0.250	-0.092	-1.584	0.119	-0.152	-2.405	0.017
D5 Roughly what is your annual household income?	-0.090	-1.527	0.128	-0.113	-1.857	0.064	-0.023	-0.354	0.724
	F	Sig.	R Square	F	Sig.	R Square	F	Sig.	R Square
	1.785	0.009	0.140	2.849	0.000	0.240	1.969	0.003	0.190

SENDIT			
R-Square	Overall Service Importance	Overall Service Performance	Overall Service Gap
Situations	0.118	0.202	0.092
Demographics	0.053	0.092	0.01
Situations and Demographics	0.151	0.262	0.105
ServCo			
R-Square	Overall Service Importance	Overall Service Performance	Overall Service Gap
Situations	0.123	0.302	0.25
Demographics	0.047	0.037	0.05
Situations and Demographics	0.157	0.323	0.284
ToolCo			
R-Square	Overall Service Importance	Overall Service Performance	Overall Service Gap
Situations	0.238	0.275	0.19
Demographics	0.025	0.036	0.009
Situations and Demographics	0.27	0.308	0.195
SportCo			
R-Square	Overall Service Importance	Overall Service Performance	Overall Service Gap
Situations	0.104	0.198	0.164
Demographics	0.04	0.05	0.032
Situations and Demographics	0.14	0.24	0.19

APPENDIX 8.8 Factor by Factor Findings

	EntzCo		ServCo		ToolCo		SportCo	
	Website		Website		Website		Website	
	U	M	U	M	U	M	U	M
D1 Gender:	.087(**)	xx			.195(**)	0.007		
D2 Age group:	.128(**)	0.000					.126(**)	0.038
D3 occup / class (occupation)						0.008		
D4 What is the highest educ.	-.129(**)	0.057	-.132(**)	0.007				
D5 Roughly what is your ann	-.106(**)	0.002				0.004		
S02 Approximately how muc								
S03 personalisation					x .102(*)			
S04 purchase spontaneity								
S05 How often do you purch	.061(*)	0.007			-.113(*)	0.105		
S06 Research product prior t		0.068					.142(**)	0.033
S07 Purchase Involvement	.208(**)	0.000	.306(**)	0.104	.260(**)	0.045	.235(**)	0.012
S08 Money saved by finding	-.104(**)	0.022	-.187(**)					
S09 Price is a good indicator								
S10 no time to fully research			x -.100(*)					
S11 Importance of low price			-.103(*)		.096(*)			
S12 Importance of high quali	.171(**)				.154(**)		.145(**)	
S13 Online History			.141(**)		.126(*)	0.011		
S14 company History (for us	.062(*)							
S15 When purchasing the ty	-.112(**)	0.018						
S16 Have you ever returned								
S17 Behavioural Loyalty	-.056(*)		-.119(*)	0.108			-.114(**)	
S18 Attitudinal Loyalty	.253(**)	0.000	.193(**)		.193(**)	0.059	.150(**)	0.047
S20 prefer internet companie								
S21 would purchase from cc	-.055(*)	0.020				0.108		
S22 Technoreadiness		0.001	.154(**)	0.034	.103(*)			
S23 Time Capacity	.108(**)	0.001			.179(**)	0.032	.128(**)	0.089
S24 Products Purchased On	-.058(*)		.102(*)		.158(**)		.095(*)	
S25 Online Activities	-.099(**)	xx					.094(*)	
S26 connection speed (wher	-.068(**)							
S28 Used Retail Company								

U - Univariate (spearman's rho regression analysis)

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

M - Multivariate Regression (normalised importance measure)

xx better than .05 relationship indicated when situations / demographics regressed separately

x .10 to .05 relationship indicated when situations / demographics regressed separately

	EntzCo		ServCo		ToolCo		SportCo	
	Trust		Trust		Trust		Trust	
	U	M	U	M	U	M	U	M
D1 Gender:	.053(*)				.148(**)	0.008		
D2 Age group:	.064(**)	0.001				0.056		
D3 occup / class (occupation)				0.098				0.014
D4 What is the highest educ				0.059				0.095
D5 Roughly what is your ann					-.109(*)	0.006		
S02 Approximately how muc						0.022		
S03 personalisation					.135(**)	0.003		
S04 purchase spontaneity								
S05 How often do you purch		0.067						
S06 Research product prior							.122(**)	0.071
S07 Purchase Involvement	.114(**)	0.007	.171(**)	0.078	.211(**)		.166(**)	
S08 Money saved by finding	-.105(**)	0.019						
S09 Price is a good indicato	-.061(**)							
S10 no time to fully research		0.039			-.105(*)			
S11 Importance of low price								
S12 Importance of high quali	.142(**)				.113(*)		.121(**)	
S13 Online History					x .120(*)	0.029	.128(**)	0.051
S14 company History (for us								
S15 When purchasing the ty	-.064(**)						.143(**)	0.087
S16 Have you ever returned								
S17 Behavioural Loyalty	-.090(**)					0.084	-.114(**)	
S18 Attitudinal Loyalty	.169(**)	0.000	.127(*)		.225(**)	0.004	.143(**)	0.029
S20 prefer internet companie								
S21 would purchase from co								
S22 Technoreadiness	.057(*)	0.000	.137(**)	0.004	.154(**)	0.101	.093(*)	
S23 Time Capacity	.082(**)	0.046			.163(**)	0.009	.166(**)	0.008
S24 Products Purchased Onl					.160(**)		.138(**)	
S25 Online Activities	-.074(**)	0.021			x .096(*)			
S26 connection speed (wher	-.091(**)	0.035						
S28 Used Retail Company								

	EntzCo		ServCo		ToolCo		SportCo	
	Information		Information		Information		Information	
	U	M	U	M	U	M	U	M
D1 Gender:	.110(**)	0.036				x		
D2 Age group:	.088(**)	0.000						
D3 occup / class (occupation)	.063(*)	0.007						
D4 What is the highest educa	-.136(**)	xx		0.039				
D5 Roughly what is your ann	-.134(**)	0.001				0.069	-.142(**)	0.002
S02 Approximately how muc						0.045		
S03 personalisation	-.059(*)					0.013		
S04 purchase spontaneity								
S05 How often do you purch		0.090						
S06 Research product prior t								
S07 Purchase Involvement	.225(**)	0.000	.229(**)		x .214(**)	0.094	.238(**)	0.002
S08 Money saved by finding	-.102(**)	0.022					x	
S09 Price is a good indicator								
S10 no time to fully research						-.132(**)	0.011	
S11 Importance of low price								
S12 Importance of high quali	.142(**)					.151(**)	.112(*)	
S13 Online History	-.097(**)	xx						
S14 company History (for us								
S15 When purchasing the ty	-.103(**)	0.031						
S16 Have you ever returned	-.058(*)							
S17 Behavioural Loyalty								
S18 Attitudinal Loyalty	.205(**)	0.000	.130(*)			.117(*)		
S20 prefer internet companie	.100(**)	0.017				.114(*)	0.086	0.065
S21 would purchase from cc								
S22 Technoreadiness		0.020		0.094				
S23 Time Capacity	.127(**)	0.000				.166(**)	0.007	.101(*)
S24 Products Purchased On						.110(*)		0.072
S25 Online Activities	-.064(**)							
S26 connection speed (wher	-.100(**)	0.007						x
S28 Used Retail Company								

	EntzCo		ServCo		ToolCo		SportCo	
	No Adverts		No Adverts		No Adverts		No Adverts	
	U	M	U	M	U	M	U	M
D1 Gender:	.055(*)	x		x	.114(*)	0.085	.103(*)	0.078
D2 Age group:	.087(**)	0.000		0.021		x		
D3 occup / class (occupation)		0.106						
D4 What is the highest educa.							.092(*)	0.008
D5 Roughly what is your ann.		0.020						
S02 Approximately how muc.								
S03 personalisation						0.085		
S04 purchase spontaneity								
S05 How often do you purch.								
S06 Research product prior t.							.098(*)	0.077
S07 Purchase Involvement	.074(**)	x	.109(*)		.101(**)		.156(**)	0.100
S08 Money saved by finding	-.051(*)							
S09 Price is a good indicator		0.109		x				
S10 no time to fully research								
S11 Importance of low price								
S12 Importance of high quali.	.095(**)				.105(*)			
S13 Online History								
S14 company History (for us	.053(*)							
S15 When purchasing the ty	-.059(*)							
S16 Have you ever returned								
S17 Behavioural Loyalty								
S18 Attitudinal Loyalty	.114(**)	0.052			.184(**)	0.023		
S20 prefer internet companie					.128(**)	0.098		0.085
S21 would purchase from cd			-.119(*)	0.056		0.038		
S22 Technoreadiness		0.001						
S23 Time Capacity	.103(**)	0.000		0.044	.105(*)		.152(**)	0.008
S24 Products Purchased On								
S25 Online Activities	-.048(*)	x						
S26 connection speed (wher								
S28 Used Retail Company								

	EntzCo		ServCo		ToolCo		SportCo	
	Company Image		Company Image		Company Image		Company Image	
	U	M	U	M	U	M	U	M
D1 Gender:								
D2 Age group:	.113(**)	0.002	.127(**)		x			
D3 occup / class (occupation)	.054(*)						.114(**)	
D4 What is the highest educ:	-.201(**)	0.000	-.124(*)	0.084	-.096(*)		-.199(**)	0.005
D5 Roughly what is your ann:	-.151(**)	0.001					-.148(**)	xx
S02 Approximately how muc:								0.048
S03 personalisation								
S04 purchase spontaneity			.118(*)		x			
S05 How often do you purch:								
S06 Research product prior								
S07 Purchase Involvement	.154(**)	0.000	.177(**)	0.017	.181(**)	0.005	.123(**)	
S08 Money saved by finding								
S09 Price is a good indicator	.186(**)	0.000	.178(**)	0.082	.211(**)	0.017	.167(**)	0.075
S10 no time to fully research	.125(**)	0.058	.168(**)				.163(**)	
S11 Importance of low price				0.090				
S12 Importance of high quali	.066(**)		.144(**)	0.094			.091(*)	
S13 Online History	-.094(**)				-.149(**)		-.173(**)	0.083
S14 company History (for us								
S15 When purchasing the ty:	-.151(**)	0.003			-.095(*)			
S16 Have you ever returned								
S17 Behavioural Loyalty	.128(**)	0.065						
S18 Attitudinal Loyalty	.110(**)	0.013	.131(**)	0.104	.165(**)			
S20 prefer internet companie	.248(**)	0.000	.295(**)	0.000	.357(**)	0.000	.250(**)	0.001
S21 would purchase from cc		0.078						
S22 Technoreadiness	-.133(**)		-.104(*)		-.105(*)		-.152(**)	x
S23 Time Capacity								
S24 Products Purchased Onl	-.134(**)	0.071					-.149(**)	
S25 Online Activities	-.117(**)							
S26 connection speed (when	-.076(**)	0.064						
S28 Used Retail Company								

	EntzCo		ServCo		ToolCo		SportCo	
	Customer Service		Customer Service		Customer Service		Customer Service	
	U	M	U	M	U	M	U	M
D1 Gender:	.089(**)	xx			.099(*)	x		
D2 Age group:	.098(**)	0.002					.116(**)	0.108
D3 occup / class (occu								
D4 What is the highest	-.123(**)	0.027	-.114(*)	0.022				
D5 Roughly what is yo	-.060(*)					0.037		
S02 Approximately ho					.126(*)	0.007		
S03 personalisation				0.088		0.012		
S04 purchase spontan								
S05 How often do you		0.022						0.053
S06 Research product							.104(*)	0.071
S07 Purchase Involvement	.170(**)	0.000	.261(**)	0.009	.236(**)	0.042	.222(**)	0.084
S08 Money saved by	-.100(**)	0.021						
S09 Price is a good in		0.063						
S10 no time to fully re								
S11 Importance of low								
S12 Importance of hig	.188(**)	0.103			.158(**)		.134(**)	
S13 Online History	-.067(**)	x			.134(*)	0.009	.118(**)	0.047
S14 company History							.086(*)	
S15 When purchasing	-.095(**)	x					.090(*)	
S16 Have you ever re								
S17 Behavioural Loyal							-.094(*)	
S18 Attitudinal Loyal	.226(**)	0.000	.126(*)		.199(**)	0.012	.188(**)	0.030
S20 prefer internet con	.048(*)							
S21 would purchase fr	-.050(*)	0.058				0.103		0.094
S22 Technoreadiness		0.047						
S23 Time Capacity	-.101(**)	0.009			.112(*)	0.098	.188(**)	0.002
S24 Products Purchas					.154(**)		.126(**)	
S25 Online Activities	-.113(**)	0.009						
S26 connection speed	-.057(*)							
S28 Used Retail Com								

		EntzCo		ServCo		ToolCo		SportCo	
		Contactability		Contactability		Contactability		Contactability	
		U	M	U	M	U	M	U	M
D1 Gender:		.096(**)	x			.131(**)	0.082		
D2 Age group:		.057(*)	0.050					.090(*)	0.070
D3 occup / class (occu									
D4 What is the highes		-.111(**)	x	-.125(*)	0.037				
D5 Roughly what is yo		-.072(**)	0.012				0.075		
S02 Approximately ho									
S03 personalisation		-.124(**)	0.007						
S04 purchase spontar									
S05 How often do you									0.077
S06 Research produc								.115(**)	0.033
S07 Purchase Involve		.110(**)	0.013	.143(**)		.254(**)	0.002	.127(**)	
S08 Money saved by f		-.084(**)							
S09 Price is a good in					0.075				
S10 no time to fully re									
S11 Importance of low		.082(**)							
S12 Importance of hig		.131(**)		.119(*)		.194(**)		.180(**)	0.002
S13 Online History		-.069(**)						.109(*)	0.080
S14 company History		-.117(**)	0.000					.094(*)	
S15 When purchasing			0.035					.085(*)	
S16 Have you ever ref									
S17 Behavioural Loya						x		-.099(*)	
S18 Attitudinal Loyal		.120(**)	0.043	.116(*)		.107(*)		.105(*)	
S20 prefer internet cor						x			
S21 would purchase fr		-.119(**)	0.000	-.143(**)	0.047				
S22 Technoreadiness		.090(**)	0.094						0.031
S23 Time Capacity		.076(**)	0.020			.182(**)	0.024	.130(**)	0.005
S24 Products Purchas			0.016						
S25 Online Activities									
S26 connection speed									
S28 Used Retail Comp									

	EntzCo		ServCo		ToolCo		SportCo	
	Personalisation		Personalisation		Personalisation		Personalisation	
	U	M	U	M	U	M	U	M
D1 Gender:	.072(**)	0.076						
D2 Age group:		0.069						
D3 occup / class (occu)	.078(**)						.111(*)	
D4 What is the highest	-.175(**)	0.000	-.156(**)	0.013	-.098(*)		-.132(**)	xx
D5 Roughly what is your	-.178(**)	0.000			-.114(*)	0.055	-.160(**)	0.027
S02 Approximately how								
S03 personalisation								
S04 purchase spontane			.125(*)	x				
S05 How often do you		0.010						
S06 Research product				0.079	.108(*)			
S07 Purchase involve	.139(**)	0.000	.172(**)		.177(**)	0.002	.088(*)	
S08 Money saved by fir	.067(**)					0.109		
S09 Price is a good in	.166(**)	0.000	.135(**)				.100(*)	
S10 no time to fully rel	.089(**)							
S11 Importance of low								
S12 Importance of hig	.069(**)		.117(*)				x	
S13 Online History	-.129(**)	0.000			-.177(**)		-.190(**)	0.022
S14 company History		0.020	.102(*)					
S15 When purchasing	-.138(**)	0.033					-.124(**)	
S16 Have you ever rel								
S17 Behavioural Loyal	.176(**)	0.000						
S18 Attitudinal Loyal	.083(**)	xxx	.140(**)	0.025	.121(*)			
S20 prefer internet con	.241(**)	0.000	.183(**)	0.007	.217(**)	0.001	.182(**)	0.029
S21 would purchase fr								0.081
S22 Technoreadiness	-.108(**)				-.150(**)		-.154(**)	0.067
S23 Time Capacity	.077(**)	0.000				0.103		
S24 Products Purchas	-.139(**)	x					-.144(**)	
S25 Online Activities	-.051(*)	0.018						0.084
S26 connection speed	-.059(*)							
S28 Used Retail Com								

	EntzCo		ServCo		ToolCo		SportCo	
	Product Range		Product Range		Product Range		Product Range	
	U	M	U	M	U	M	U	M
D1 Gender:	.101(**)	0.002						
D2 Age group:		x					.111(**)	0.095
D3 occup / class (occu	.050(*)							
D4 What is the highest								
D5 Roughly what is your	-.112(**)	0.007						0.105
S02 Approximately how								
S03 personalisation								
S04 purchase spontane								
S05 How often do you	.051(*)	0.061						
S06 Research product							.124(**)	0.099
S07 Purchase Involvement	.103(**)	0.002			.200(**)	0.037	.147(**)	0.097
S08 Money saved by					x .096(*)	0.015		
S09 Price is a good in								
S10 no time to fully rel							0.100	
S11 Importance of low							0.054	
S12 Importance of high	.094(**)		.113(*)	x			0.030	
S13 Online History								
S14 company History	.080(**)	x	.118(*)	0.038				
S15 When purchasing	-.080(**)		-.114(*)					
S16 Have you ever rel								
S17 Behavioural Loyalty	.116(**)	0.000	.105(*)				.093(*)	0.026
S18 Attitudinal Loyalty	.147(**)	0.000			.195(**)	0.091	.098(**)	x
S20 prefer internet con	.092(**)	x	.123(*)	x	.189(**)	0.004	-.090(*)	0.064
S21 would purchase fr								
S22 Technoreadiness	-.048(*)						x	
S23 Time Capacity	.083(**)	0.002				0.046	.093(*)	0.063
S24 Products Purchas	-.098(**)	x						
S25 Online Activities	-.086(**)							
S26 connection speed	-.101(**)	0.008						
S28 Used Retail Com								

APPENDIX 8.9

Univariate and Multivariate Findings for Situational Impacts on Service Importance

P1. Product type will impact customer service quality requirements online.

This issue was investigated in the previous chapter, where significantly different results were found by each company, thus requiring all further questions be addressed by company individually, rather than across the data as a whole.

P2. Demographics will have an impact on customers online service quality requirements.

Five standard demographics measures were included in the final survey (gender, age, education, class and income).

Gender

(i) Univariate Analysis

At EntzCo all importance (except image) and all performance (except no-advertisements) varied by gender. In general women placed greater importance on items but also report greater performance (hence there was only one gap score where women report larger negative gap). At ServCo however no differences emerged by gender. At ToolCo website, trust, customer service, contact, no adverts importance varied as did website, trust, no-adverts, image, product range performance. At ToolCo, as with EntzCo, woman stated higher importance scores but also higher importance scores with larger positive gap scores for two items. At SportCo, gender resulted in different no adverts importance and no adverts, company image and performance scores. At SportCo women stated higher importance on one item but also higher performance on three. Overall there is no discernible pattern of differences across the companies (that woman were stating higher importance on some issues), highlighting the need for the use of more concise demographic or other situational measures for segmentation purposes.

(ii) Multivariate Regression

At EntzCo regression showed significant impacts (.05 level or better) or lesser major impacts (.10 to .05 level) for all but the company image importance factor and trust factor which was highlighted as a having a significant impact (at the .05 level). The only factor showing a highly significant relationship (.01 level) was the product range factor. At ToolCo, regression showed gender impacted all but personalisation, company image and product range factors, although impact on information and customer service only emerged when demographics were considered in isolation to situations. At both SportCo and ServCo, the only impact of gender in regression was a weak (.1 to .05) relationship with the no adverts factor, at ServCo, even that only showed when demographics were considered in isolation from the situational issues. These results would suggest that gender is playing a role at only some companies and not universally across all situations. The exact nature of the impact of gender, as with all other demographics and situations will be confirmed in structural equation modelling in the next section.

Age

(i) Univariate Analysis

At EntzCo there were few differences between youngest and bar one (18-24, 25-34) groups and oldest and oldest bar one (55-64 v over 65) groups, not many more for youngest and

youngest bar one (18-24, 25-34) versus oldest group (over 65), however many more differences between middle groups (25-34 and 35-44) versus older groups (55-64) with the general pattern that older groups are placing greater importance on issues but also reporting greater performance. At ServCo there were far fewer differences between groups overall, with the middle-young age group (25-34) versus the oldest (over 65) showing most differences, with older groups generally reporting higher importance scores on some factors (such as company image and customer service) but also higher performance scores, although the differences were far less pronounced as with EntzCo. At ToolCo there few differences emerged, with some differences following the opposite pattern to the previous two companies, with younger groups placing greater importance on factors than older groups. At SportCo almost all differences emerged in comparison to the under eighteen age group, reporting lower importance scores on issues such as website, customer service or contact but greater importance on company image.

(ii) Multivariate Regression

At EntzCo, age had highlight significant (.01 level) impacts on all factors except contactability (which registered a .05 level impact) while personalisation and product range showed minor relationships (.1 to .05 level) suggesting age is having an impact on all factors and a greater impact than the gender demographic. At ToolCo age showed weak links to trust and no adverts factors while at SportCo, weak relationships were also reported with website, customer service, contactability and product range factors. As with gender, this would suggest age is playing only a weak role in impacting behaviour.

Occupation

(i) Univariate Analysis

An occupation based class measurement system was utilised (as described in chapter three). At EntzCo while the top two groups (higher and intermediate managerial) very similar, there were many differences highlighted across the occupational spectrum, with the retired group, higher managerial and housewife/husband groups all differing from the other groups, stating variations of higher and lower importance across a range of items with no conceptual pattern. This lack of pattern suggests that greater insight than that derived by simple class based division is needed. At ServCo far fewer differences emerged, the intermediate managerial group stood apart as the most distinct (stating less importance) while the remainder of groups reported largely similar behaviour. At ToolCo few occupation groups were represented in significant numbers (higher, intermediate, supervisor, (un)skilled labour) with some difference emergent between the labourer group versus all others, with labour stating higher importance for image and personalisation factors. At SportCo few significant differences emerged across the groups considered, with no difference between the labour group versus others as in ToolCo with the 'casually employed' as the only group showing differences on several factors, generally placing greater importance on personalisation and image.

(ii) Multivariate Regression

At EntzCo, occupation/class showed a highly significant link to 'information', a weak relationship to 'no adverts' but no relationships to any other factor with the relationships suggested by univariate analysis with personalisation, company image and product range not supported. At ServCo, class/occupation had only a minor (.09) impact on trust while ToolCo only reported a significant relationship with website and SportCo one with trust. The minor impact of occupation/class suggests it is playing less of a role in shaping behaviour than previous demographic factors which themselves played marginal roles.

Education

(i) Univariate Analysis

At EntzCo a very high number of differences emerged between the different educational groups, with across all importance issues, the greater the education level, the less importance was placed on all items but also the less performance was reported resulting in greater gap scores for higher educational groups. At ServCo although less significant differences emerged, the pattern in EntzCo was repeated in ServCo, with the higher the educational level, the less importance was placed on service factors and the lower performance reported. Unlike EntzCo, gap scores were however broadly even across all educational groups. At ToolCo a similar although less prominent pattern was seen in ToolCo, with higher educational groups reporting lower scores for importance items and also lower performance with gap scores broadly even. At SportCo the final company replicated the pattern above, with higher educated groups reporting less importance but also less performance and smaller and larger gap scores dependent on the specific factor.

(ii) Multivariate Regression

At EntzCo, education had major impacts on personalisation and company image (.01 level), significant impacts on customer service and information as well as lesser impacts on contactability and website. As with univariate statistics, no relationship was found with trust, no adverts or product range factors. At ServCo, education was the only demographic showed by regression to have any meaningful impact, showing links to all but no adverts and product range factors, confirming the negative relationships found in univariate analysis. At ToolCo, age played no significant role while at SportCo, strong relationships between education and the no adverts, personalisation and company image factors were shown as well as a very weak link to trust. The different significance findings from different companies highlights the different behaviour at work in each company with education playing a different role in different situations.

Income

(i) Univariate Analysis

EntzCo and SportCo both replicated the pattern seen in education when considering income – significant differences emerged, with higher income groups stating lower importance but also lower performance on the majority of items. At ServCo however reported very few differences across all income groups while in ToolCo, the lowest income group (£15-19,000 per year) did report higher importance ratings for several but not all factors following the general pattern seen above.

(ii) Multivariate Regression

At EntzCo, income was significantly related to website, information, contact, no adverts, personalisation company image and product range factors, however, unlike the univariate analysis, no relationship was found with customer service but one did appear for the no adverts factor. Such discrepancies highlight the need for multiple investigative methods to confirm the impact of various influences on purchase behaviour. ToolCo reported significant links of income with website, trust, customer service and weaker links to information, contact and personalisation while SportCo partially echoed these showing impact on information, personalisation, company image and product range. Conversely, regression showed no impact for income on any service factor at ServCo. The generally decreasing importance of personalisation and company image as income rises and importance of other factors increasing dependent on company suggests income is playing a role in behaviour and is a

clearer indicator of demographic variance than other measures such as occupation/class or gender.

P3. Information overload or brand dependence will impact customer service quality requirements online.

(i) Univariate Analysis

For EntzCo, significant positive relationships were observed for this issue and personalisation and most importantly company image (as anticipated), highlighting as brand dependence increases, so too does the importance of company image. ServCo shows a significant negative relationship for this issue with website but positive with company image. The latter finding supports the linkage between image and brand dependence. ToolCo only shows a negative relationship for this issue with trust and information importance, suggesting a counter indicated relationship where customers dependent on trusted names places less importance on the trust importance factor. SportCo showed a positive relationship between this issue and company image importance, echoing the findings at EntzCo and ServCo that brand dependence may be predominantly linked to company image.

(ii) Multivariate Regression

At EntzCo, while regression matched univariate findings for a relationship with company image this was only weak (.058 level), the link to personalisation found earlier was not supported while weak impacts were suggested for website and trust factors. At ToolCo, very weak relationships were found with information and product range while at SportCo and ServCo, regression showed no relationship between this situation and any factor. The inconsistent findings for this factor suggest it is having a minor and not significant role on service importance demands.

P4. People buying for business, personal or gift purposes will have different service quality requirements.

(i) Univariate Analysis

Initial investigation of this results provided disappointing results. No analysis was available for ServCo as there were no gift and only four business purchasers. For Sportco, while there were results for all categories, no difference in performance and importance was reported. For ToolCo only personal and business comparison was possible, where personal users reported higher scores for website and trust importance and performance. For EntzCo full comparisons were possible where gift purchasers placed more importance on information and contactability than personal or business users and differences emerged for almost all performance factors, with business users reporting lower performance.

While the finding of some relationships between planning and service factors requires this issue be included in later regression analysis, the weak finding here suggests a weak finding in multivariate analysis would support the removal of this issue from consideration as a key situational variable. The four companies analysed here are predominantly consumer companies, thus those business purchasers using them are doing so in the manner of consumers (for example, not using key-account-management facilities or electronic-data-interchange or customised ordering) as would be the case for business-to-business websites that may well operate with different user requirements.

(ii) Multivariate Regression

At EntzCo, non-parametric correlations finding of a weak link between personalisation and information was not supported by regression however a highly significant link to

contactability was shown although no other factors were related. At ServCo, regression indicated very weak relationships with personalisation, website and customer service factors. ToolCo showed good relationships for trust, customer service and information as well as a weak link to the no adverts factor. No relationships were observed for SportCo. While customer service was linked to personalisation in two companies there was no wide ranging impact of this situation in any company despite both SportCo and ToolCo showing a good mix of business and consumer purchasers.

P.5. Familiarity ('techno-readiness') influences online service quality demands.

(i) Univariate Analysis

For EntzCo, a positive relationship was found with trust, but negative relationships with contact, personalisation, image and availability importance while positive relationships were seen for website, trust, no adverts but a negative relationship for personalisation performance. For ServCo, a positive relationship was found with website and trust and a negative relationship with image importance, partially supporting the findings at EntzCo. For ToolCo, a positive relationship was found with website and trust importance and a negative relationship with personalisation and image importance, while positive relationships were seen with trust, contact, no adverts and image performance factors. For SportCo, a positive relationship was seen for trust and negative relationship with personalisation and image importance, again reinforcing the finding that the most techno-ready customers do not seem to value personalisation or company image, the opposite of those who have been identified as retail dependent (and therefore least techno-ready), who value these factors.

(ii) Multivariate Regression

At EntzCo, techno-readiness had highly significant impacts on all but the 'company image' factor, suggesting this as an important purchase situation. ToolCo showed weak links to product range and trust while SportCo showed good links to contact and weak links to personalisation and company image. At ServCo, This situation showed relationships with website and trust as well as a far weaker link to information factors. The decreasing role of company image and increasing role of trust as techno-readiness increased is the only consistent finding across companies and this consistency is largely provided by very weak regression significance or univariate correlations.

P.6. Familiarity (online experience) influences online service quality demands.

Online History (Spend, Purchase Frequency and Length of Purchasing Online)

(i) Univariate Analysis

For EntzCo this issue was negatively related to all factors although only significantly for customer service, information, contact, personalisation and company image. This suggests as the length and amount of time shopping increases, the importance placed on all service issues decreases, perhaps as customers become accustomed to the level of service provided online and adjust their expectations accordingly. A negative relationship between online history and performance factors was also observed, significantly for customer service, information, contact, personalisation and company image, suggesting that reported performance is lower for more experienced online customers which would support the idea that customers reduce the importance placed on service issues in line with experience.

At ServCo, while this issue was negatively related to several factors, the only significant relationship was a positive one with website issues importance. At ToolCo, this situation is weakly but positively related to website, trust and customer service importance and negatively

related to personalisation and company image importance as well as negatively related to several performance factors. At SportCo, online history was positively related to trust, customer service and contactability importance as well as negatively related to personalisation and company image importance; negative relationships were also seen for performance factors. The findings at EntzCo suggested a general decreases in all importance as online history increased, although this finding was only some factors followed this trend at other companies with several showing increased importance on certain issues as online history increased. On the whole, for all companies, company image importance was negatively related to online history, suggesting that as user experience of the internet increased, image alone was of less importance than other key service requirements, which dependent on the company increased in importance. Further analysis of this issue is indicated.

(ii) Multivariate Regression

At EntzCo, univariate finding of links to company image and contactability were not supported by regression while links to personalisation and information were highly supported and the link to customer service weakly supported. At ToolCo, links were found between online history and website, trust and customer service while at SportCo links to trust, customer service, personalisation and more weakly contactability and company image. At ServCo, the only impact of this situation was a minor link to trust. Across companies, online history played generally consistent impacts on trust and customer service with increasing importance on these factors clear as online history increased, suggesting people having shopped online may be demanding more than those new to the internet, perhaps as new users have low expectations of the new medium.

Number of Products Purchased Online

(i) Univariate Analysis

For EntzCo, this issue was negatively related with website, personalisation, image and availability importance and for the latter three also performance, suggesting as the number of products purchased online increases, the importance placed on various service factors decreases. At ServCo, the only significant importance relationship was a positive one with website while no significant negative relationships were found. At ToolCo, this situation was significantly related to website, trust, customer service and information importance. At SportCo, this situation was positively related to website, trust and customer service but negatively to image and personalisation. This findings provide no conclusive evidence across the companies as a whole, suggesting that at each company, this variable has a different influence.

(ii) Multivariate Regression

This issue while similar in concept to the techno-readiness issue above and online activities measure below produced somewhat different results. At EntzCo, regression showed only weak relationships (.05 to .10 level) with product range, company image and personalisation and a stronger link to contactability, not previously suggested by univariate analysis. At ToolCo and ServCo, this situation showed no impact on any factor in regression while at SportCo, a very weak relationship was shown with information. These findings suggest that this situational measures provides little predictive value and that other conceptually related measures of online purchasing (online history, techno-readiness, online activities) will be superior predictors.

Number of Online Activities Conducted

(i) Univariate Analysis

For EntzCo, negative relationships were observed for all service factors importance and performance (although not significantly for contactability) supporting the idea that as online familiarity increases, customers adjust their importance requirements downwards in light of poor service delivery. At ServCo, no significant relationships with importance or performance factors and time capacity were found. At ToolCo, the only significant relationship seen was a weak one with trust importance and performance. At SportCo, the only significant relationship seen was with website importance. While this situation provided good relationships at EntzCo, at the other three companies no pattern of behaviour or impact emerges.

(ii) Multivariate Regression

At EntzCo, regression failed to show this issue as important for several factors suggested by univariate measures – information, company image and product range impacts all failed to be confirmed while impacts on all other factors were shown to be present. At ServCo, a minor relationship between this situation and trust was noted but none others were found while at SportCo a minor relationship with personalisation as found. Toolco reported no impacts with this factor. While this variable proved useful at EntzCo, it was not supported in any other of the three companies examined.

P7. Familiarity (company experience) influences online service quality demands.

(i) Univariate Analysis

For EntzCo, company history was positively related to website, no adverts and product range importance, but negatively related to contactability importance, suggesting that this last issue of less importance to regular customers (who if they are repeat customers are presumably satisfied, have always received products when expected and therefore are unconcerned about how to contact the company as they see no need), but who also place greater importance on website, product range issues, which would suggest the company should perform well on these to keep these customers loyal and reusing the company. Inspection of performance relationships supports this with positive relationships seen between company history and all factors (bar personalisation), stating as company usage increases so too does perceived performance, suggesting the company is adept at meeting its customers requirements, hence keeping them as customers. At ServCo company history was positively related to personalisation and availability importance and performance, suggesting that the longer term users only valued certain factors, and it was those which the company was delivering on. At SportCo this situation was positively related to customer service and contactability importance, as well as service, contact and image performance, supporting the trend seen at ServCo. At ToolCo, no significant relationships were observed with any importance factors, although a counter-indicated finding was seen on performance with increased company history leading to lower website and availability performance.

(ii) Multivariate Regression

At EntzCo, a highly significant link between company experience and contactability was shown while the only other links were to personalisation and to a lesser extent product range. At ServCo, the only impact of this situation was with the product range factor while at ToolCo and SportCo, company history had no significant impact on any service factor. Overall the impact of company image was surprisingly small across all companies and factors.

P8. Familiarity (of product type purchase) will influence online service quality demands.

(i) Univariate Analysis

EntzCo – first time purchasers placed less importance on website, trust and product range and more importance on personalisation than most other groups with a general trend that more frequent purchasers placed more emphasis on website and product range and less on company image, reporting better performance for website and trust issues. For ServCo, first time users placed less importance on instant availability but no other significant results were observed. For ToolCo, more frequent purchasers placed less importance on website and trust and reported better performance on almost all factors. At SportCo, only the two lowest usage categories were present, with first time users placing greater importance and reporting better performance on personalisation. This variable was not measured at ServCo as they facilitate purchase from other companies rather than selling directly themselves, company management were unwilling to make this measurement.

(ii) Multivariate Regression

At EntzCo, non-parametric correlations showed an overall relationship for this issue with website and product range factors, however, regression also noted impacts with trust, customer service, information and personalisation factors, suggesting a greater impact for this issue. At other companies, very weak (.10) impact on website at ToolCo and a marginal (.05 level) impact on customer service at SportCo. Despite these disappointing findings, the mixed results at EntzCo supports further insight into what issues are co-varying with product type purchase to lead to these results.

P9. Online ability (connection speed) influences online service quality demands

(i) Univariate Analysis

The measure of online connection speed was reduced to a dichotomous variable, with modem connection versus high speed (cable, ADSL or ISDN) connection. For EntzCo, those with slower connections reported significantly higher importance and performance for the majority of items than those with higher speed connections. At ServCo, ToolCo and SportCo one factor was reported as significantly higher performing for low speed customers (contact, personalisation and information in turn). The result for EntzCo may be indicative of low speed customers being new to the internet and thus expecting more than longer term customers with higher connection speeds although this will be better investigated through online and company history measures. The possible covariance with this issue requires its inclusion in regression analysis, however, as three companies showed no real variance by connection speed in terms of online demands, if regression shows little effect of this issue it will be removed from the final path analysis.

(ii) Multivariate Regression

At EntzCo, several impacts suggested by univariate were not supported by regression (website, customer service, personalisation) although all other relationships were supported. At ServCo, ToolCo and SportCo this situation showed no impact on any factor in regression. As with the previous situation, the significant impact on several factors at EntzCo suggest this situation plays a role in that company if not in the others.

P10. Retail dependent customers will exhibit different service quality requirements to those who do not.

The issue of retail dependence was examined with multiple variables – for EntzCo a measure of ever having returned products was included as this relates to the ability of online

companies to handle returns in the same way as retail companies. For ToolCo and SportCo, as both operate retail chains in addition to online stores, measures were also taken to see if customers had ever used the retail stores as well as the internet site. Across all companies a measure of preference for high street names in general when shopping online was taken.

Returns

(i) Univariate Analysis

Considering the issue of returns first (measured only at EntzCo), those who had not returned placed more importance on information and reported less performance on no adverts and product range factors, but more on personalisation. The lack of any clear pattern or finding from this variable suggests that if regression fails to show a significant role for this issue it should be removed from consideration.

(ii) Multivariate Regression

At EntzCo, the issue of returns showed no impact at even the 0.1 level and thus is almost certain to be discarded in final analysis.

Use of Retail Stores

(i) Univariate Analysis

Considering the issue of whether customers had used a retail store, ToolCo customers reported no significant differences by this variable, however, SportCo customers who had not used the retail store reported better performance for website, customer service and product range. As with the previous issue, while this measurement will be included in the regression analysis, a lack of support for its variance there will result in removal of the issue from final consideration.

(ii) Multivariate Analysis

Investigating the regression results for this issue, neither of the two companies with retail stores showed online customers reporting any relationship between the use of such stores and any online service factor.

Preference for High Street Names

(i) Univariate Analysis

At EntzCo, this issue was positively related to customer service, information, personalisation, company image and product range importance, all issues related to retail shopping rather than pure online shopping (seeing, identifying products, personal service, reputability and availability) while for these factors (except customer service) a positive performance relationship was observed, suggesting the company is meeting these retail based requirements for retail dependent customers. At ServCo, this situation was positively related to personalisation, image and availability importance as well as customer service, contact and image performance, validating the trends seen at EntzCo. At ToolCo, this situation was positively related to information, no adverts, personalisation, image and product range as well as the majority of performance factors. This supports the earlier suggestion that retail dependent customers are being positively related to retail based factors. At SportCo, this situation was positively related to personalisation and image but negatively related to product range importance while positive relationships were seen with performance and website, information, personalisation and image factors. The trend across companies relates this situation to personalisation and image with other factor relationship varying by company type. This suggests that the key issue for the most retail dependent customers is those issues most

related to the retail situation (personal service) as well as feeling reassured that they are buying from a reputable online company (hence the importance of company image).

(ii) Multivariate Regression

At EntzCo, the weak univariate finding of a link between this issue and customer service was not supported, however, all other earlier findings were supported with personalisation and company image showing highly significant results (.000). ToolCo and SportCo also both reported significant results for personalisation, company image and product range and this situation. ToolCo showed a marginal link to information while SportCo reported slightly better results for the information factor. Despite being an online only company, at ServCo, this situation impacted contactability and product range (when situations were considered in isolation) as well as personalisation and company image very significantly (.01). The consistent findings across the three product companies for links between preference for high street names and personalisation and image suggest these issues are related to the issue of retail dependence for product companies.

Likelihood of Shopping From a Company Only Reachable Online

(i) Univariate Analysis

At EntzCo, a negative relationship was found with this issue and website, customer service and contactability importance, suggesting as retail dependence decreases and customers would shop from online only companies, support issues such as customer service and contactability become less important as they trust the internet to provide these issues. At ServCo, a negative relationship was found with contact and no-adverts factors importance and partially supporting the findings of EntzCo. At ToolCo, no relationship was seen with this issue and any importance or performance factors, although as a retail company, this issue may not be as relevant as for EntzCo and ServCo. At SportCo, no relationship was seen with this situation and any importance or all bar one performance factor, however, as with ToolCo, the retail presence of this company may negate the relevance of this issue in that context.

(ii) Multivariate Regression

At EntzCo, an online only sales company, the issue of high street preference showed negative relationships with several factors in univariate analysis, several of which were supported by regression, however, the impact on trust, no adverts and product range were not supported while a relationship with contactability was found. At ServCo, this situation showed a significant (.05) level link to contactability and no adverts factors. At ToolCo a significant link was found with no adverts and marginal links (.10) to website and customer service. At SportCo, marginal links to customer service and personalisation were also shown. The marginal results for this factor suggest it is playing a very weak role and is not as good an indicator for retail dependence as the preference for high street names measure above.

P11. Impulse purchasers and planned purchasers will have different online service quality demands.

(i) Univariate Analysis

Users were asked to indicate whether their purchase was planned in advance, prompted by an advert or purely an impulse buy. Across all companies the majority of purchases were planned, and for ToolCo no other categories emerged of significant size for testing. For EntzCo, those prompted by an advert placed significantly less importance on product range information while impulse purchases placed less importance on ease of contact. For ServCo impulse buyers placed less emphasis on the website while those prompted by adverts placed

more importance on company image and personalisation. For SportCo the only difference that emerged concerned planned purchasers placing greater emphasis on product range. While the finding of some relationships between planning and service factors requires this issue be included in later regression analysis, the weak finding here suggests a weak finding in multivariate analysis would support the removal of this issue from consideration as a key situational variable.

(ii) Multivariate Regression

At EntzCo, ToolCo and SportCo, regression, as with univariate non-parametric correlations, no link between this situation and any service importance factor was found. At ServCo, the weak correlations between spontaneity with personalisation and company image were paired with weak findings in regression when considering situations separate to demographics. The lack of support for any impact of this situation suggests it is not playing a role on the current customer sample.

P12. The level and nature of loyalty (behavioural versus attitudinal) will influences online service quality demands.

Usage Loyalty

(i) Univariate Analysis

The first measure of loyalty concerned a simple measure of the number of companies used to purchase the product type from (from always the same to multiple different companies). Significant results for importance, performance and gap scores were found for all companies. Although most pronounced for EntzCo, a consistent trend was observed across all companies that those customers shopping with few or always the same company reported higher importance and higher performance across some or all factors than those purchasing with several or many different companies. This finding suggests that those using fewer or only ever the same company choose to do so as that company best meets what is important to them, hence the higher importance and performance scores.

(ii) Multivariate Regression

At EntzCo, regression failed to show any impact previously shown – no linkage with trust, no adverts or product range factors were shown while a new positive relationship with contactability was found. All other relationships were supported. At ToolCo and ServCo, no relationship between this situation and any importance factor was noted in regression while a marginal link (.09) was found with trust at SportCo.

Behavioural loyalty

(i) Univariate Analysis

At EntzCo, behavioural loyalty was negatively related to website and trust but positively related to personalisation, image and product range importance, but negatively related to website, trust, no adverts performance, although positively related to personalisation and product range. This suggests a two-tier service provision – that some factors must be provided for the customer to use the company at all (product range, personalisation), but that for most issues, negative importance and performance is reported as the customer does not rate the company as delivering what it values and uses them as there is no alternative. At ServCo, behavioural loyalty was negatively related to website but positively related to product range importance, with no significant performance relationships found. At ToolCo, no significant relationships were observed with any importance factors although eight of the nine were negatively skewed. A positive relationship was seen with product range performance and

negatively with customer service, suggesting the mixed relationships seen at EntzCo where availability is the qualifier for use, but that other service areas are poorly performing, preventing attitudinal loyalty. At SportCo, negative relationships were seen between this situation and website, trust, customer service and contact importance with other importance factors non-significantly negatively skewed. Almost all performance factors were negatively related to this situation, providing support for the idea that behavioural loyal customers are not satisfied with the level of performance derived from companies as a whole and that frequency behaviour is not sufficient to explain shopping motives.

(ii) Multivariate Regression

At EntzCo, regression showed this situation highly related to personalisation and product range (.000) and to a far lesser extent to company image (.065). No linkages with other factors were found. At ToolCo a marginal link was found with trust (.10 level) and significant link with product range. At ServCo, the only impact of this situation were minor links to website and contact factors. As suggested above, it is likely that for behavioural loyalty a bare minimum of delivery is required on some factors which differ by product type.

Attitudinal loyalty

(i) Univariate Analysis

At EntzCo, the attitude loyalty measure supported the findings for company usage – a positive relationship was found between attitudinal loyalty and all service importance and performance factors, highlighting those customers choosing to reuse the company as it best meets their needs are confirming this in service factor reports – they place the performance of key issues as important and report high levels of performance. At ServCo this was one of the few situations strongly validated, with almost all importance factors and all performance factors being positively related to attitudinal loyalty. At ToolCo, all importance and performance factors were positively related to this situation, further supporting the attitudinal loyalty concept. At SportCo, almost all factors were significantly positively related to this situation while all performance factors were significantly related, further confirming the linkage between attitude and company delivery as the foundations of true loyalty rather than simple behavioural measurement. While the findings on behavioural and attitudinal loyalty both support each other, stronger findings were evident for attitudinal loyalty, suggesting if confirmed by regression analysis this variable may be better included in the final model than behavioural loyalty.

(ii) Multivariate Regression

At EntzCo, regression showed highly significant relationships between attitudinal loyalty and all service factors. At ToolCo and SportCo, significant links were found between attitudinal loyalty and most service importance factors – with website, trust, customer service and product range all showing relationships. At ServCo, despite univariate analysis showing this situation impact a range of service factors, the only confirmed by regression was personalisation and very weakly (.10) company image. These findings suggest a strong relationship between attitudinal loyalty and most service issues in product companies with the different nature of the product being sold reducing the impact of certain issues at ToolCo and SportCo.

P13. High and low involvement customers will have different online service quality demands

Pre-Purchase Research

(i) Univariate Analysis

One measure of involvement concerned a simple dichotomous measure of whether customers had researched the product prior to purchase. At EntzCo there was no difference in importance by this variable, however, given the commodity nature of the product this is not unexpected. For performance however, those who had not researched reported better performance on two thirds of the factors measured. At ServCo no differences emerged while at ToolCo those who had researched reported greater importance of personalisation. At SportCo the findings were closer to what was anticipated, with those researching prior to purchase stating higher importance on all issues as well higher performance on most. While only one company followed the anticipated finding of research leading to greater stated importance, there was clearly variance present by this variable and it will therefore be carried over into regression analysis. However, if this also highlights a lack of general support for the measure across all companies, then as there is a second measure of purchase involvement (described below), this item may be removed from the final path analysis.

(ii) Multivariate Regression

At EntzCo, the only impact of this situation was a very weak one (.068) on the website factor. No other impacts were found suggesting this issue as a non-impact issue for the current customer group. At ServCo, the only impact of pre-purchase research was a weak (.07) link to personalisation with no significant findings at ToolCo observed. At SportCo, several linkages were observed – significantly (.05 level) with website and contactability factors and less significantly (to the .10 level) with trust, customer service, no adverts and product range factors. This finding would suggest that the nature of the products being sold by SportCo, as generally unique or handmade specialist sporting items, has increased the role of research before purchase.

Purchase involvement

(i) Univariate Analysis

As anticipated, EntzCo shows a strong positive relationship between involvement and the level of importance of all factors most notably website and information, highlighting as involvement increases so too does the importance of service issues. EntzCo shows a weaker but still positive relationship between involvement and reported performance. ServCo replicated this finding, where a strong positive relationship between involvement versus importance and performance was also found. At ToolCo and SportCo, as with other companies, a strong positive relationship between involvement and all importance factors was observed, fully validating this measure.

(ii) Multivariate Regression

While conceptually related to pre-purchase research which showed no real impact on any factor, purchase involvement showed major impacts. At EntzCo, it was found to be highly correlated to all factors except no adverts, where a weaker relationship was found (suggesting even not very involved customers expect websites to be advert free). As with univariate analysis, purchase involvement was one of the few factors to have a major impact across all service factors at ServCo, however, previously detected relationships with contactability, no adverts and personalisation were not supported.

ToolCo showed highly significant links with contact, personalisation and company image with less links to product range, customer service and website (.05 level) and a marginal link to information. At SportCo, significant relationships were found with website and information and marginal links to customer service, no adverts and product range factors. Overall these findings indicate purchase involvement playing a major role across most factors and companies.

P14. Customers paying different prices will exhibit different online service quality demands.

(i) Univariate Analysis

As noted in chapter nine, different purchase groups were represented in each company due to the different nature of products under consideration. For EntzCo, the lowest purchase group (under £10), actually placed greater importance on contact, personalisation and product range than higher purchase groups while the anticipated pattern that those spending more would demand more was not observed in practice although the lower purchase groups and higher purchase groups displayed generally greater importance for factors than the middle purchase groups (£21 to £100). This pattern was also non-significantly represented in the ToolCo sample where higher purchase groups were placing greater importance on product range, website and customer service issues than lower purchase groups.

For SportCo, the most significant results concerned the lowest purchase group (under £10) who placed less importance on most items, but greater importance on personalisation than other groups. This measure was not taken at ServCo as noted previously because they do not directly sell themselves but facilitate purchase from other companies. The variable importance across companies by usage suggests that other variables may be influencing the behaviour observed and that this issue should be included in multivariate regression despite the confused issues discovered here.

(ii) Multivariate Regression

At EntzCo, regression did not find this issue related to any factor, at SportCo it was somewhat (.05 level) related to company image while at ToolCo links were seen with trust, customer service and information. The finding that purchase value was not significantly related to service demands was rather unexpected and suggests that one of the few commonly used measures non-demographic measures, purchase value, is of less value than some of the other situations considered here.

P15. Customers exhibiting different levels of each price orientation will exhibit different online service quality demands.

Negative Role of Price - Money saved by finding lower price is not worth effort

(i) Univariate Analysis

For most factors (excluded personalisation, image and availability), EntzCo shows a negative relationship between this issue while for performance a significantly negative relationship is observed for website and information. ServCo shows generally negative relationships but only a significant one for website importance but significant negative relationships between this factor and all performance issues. ToolCo showed a positive relationship with this issue and product range importance, but no significant performance relationships. SportCo showed no significant relationships with this issue and any importance or performance issues. These findings strongly question the validity of including this measure in any completed model,

however, the finding of some significant relationship does necessitate the inclusion in the initial regression model.

(ii) Multivariate Regression

At EntzCo, regression linked this situation to website, trust, customer service and information factors but did not support relationships with other factors suggested by univariate analysis. At ServCo, the only impact of this situation was a minor link with product range when considering situations in isolation from demographics. At ToolCo, a good link (.01) was found with this issue and product range as well as marginal links to personalisation and information. At SportCo no links were found with this and any factor. The mixed findings for this situation suggest once again that the product being purchased alters the customers view points, with range being increased range important at two companies (conceptually appealing as those not viewing finding low prices as worth the effort would also not want to spend time looking for the right product range).

Positive Role of Price - Price is a Quality Indicator

(i) Univariate Analysis

For EntzCo, there is a negative relationship between this issue and trust importance and positive relationship for personalisation and image importance. The conflicting relationship with trust and image is somewhat confusing but suggests price supersedes trust as a quality indicator but that image becomes important beyond trust as a surrogate. At ServCo a positive relationship was also found with personalisation and company image importance, suggesting again that image plays a significant role in price-quality assumptions. At ToolCo, only company image importance was positively related to this price as a quality indicator, while at SportCo, this issue was positively related to image and personalisation importance, echoing the findings in previous companies and underscoring that this issue may be predominantly or possibly exclusively linked to company image. These findings provide the need for greater investigation into this issue in a regression model.

(ii) Multivariate Regression

At EntzCo, this situation was highly related to personalisation and company image (.000) and weakly related to customer service and no adverts factors. A linkage with trust suggested by univariate analysis was not however found to be present. At ServCo, the only impacts of this situation were weak relationships with contactability, no adverts and company image factors while at ToolCo and SportCo both related this situation to company image. Across all companies this situation emerged as linked to company image suggesting a consistent relationship between viewing price as a quality indicator (the measure for positive role of price) and company image as a quality indicator.

Importance of Low Price

(i) Univariate Analysis

For EntzCo, significant positive relationship was observed only for contact importance and no significant negative relationships between low price and importance was found, suggesting as the importance of low price increases there is no corresponding decrease in the level of customers demands. Negative performance relationships were observed with customer service, personalisation, image and product range performance while low price importance was negatively related to almost all factors gap scores. ServCo only shown significant positive relationships with website importance and negative with trust and customer service for this issue. ToolCo also shows a positive relationship with website importance on this issue, but no performance relationships are observed. SportCo showed no significant

relationships with this issue while performance issues were generally negatively related, albeit only website significantly. The indications for this measure of low price importance are weak, possibly due to the complex customer behaviour in this market where customers are demanding low price and high quality service at the same time, making it hard to distinguish trends. The finding of some linkages at some companies does however require this variable be included in regression so that linkages with other situations can be analysed.

(ii) Multivariate Regression

For EntzCo, regression showed no relationships between this situation and any factors, suggesting this issue may not be playing a role. At ServCo, the only impact of this situation was minor (0.09) linkage to company image. At ToolCo this situation was linked to only product range while at SportCo, no relationships were observed. These and inconclusive generally weak findings suggest no clear role for this situation.

Importance of High Quality service

(i) Univariate Analysis

For EntzCo, this issue was positively related to all service importance factors, suggesting as the importance of high quality service increases so too does the stated importance of each service factor. For ServCo, this issue was positively related to contactability, personalisation, company image and product range, suggesting a weaker trend than that seen at EntzCo. For ToolCo, this issue was positively related to all importance issues apart from personalisation, image and availability, supporting the linkages seen in the other two companies between this issue and importance ratings in general. For SportCo, this issue was positively related to all importance issues except no-adverts, personalisation and product range importance as well as several performance issues. The general trend of positive linkages between the importance of high quality service and different factors at different companies supports the idea that high quality service at each company is identified by different key factors.

(ii) Multivariate Regression

At EntzCo, despite this situation showing univariate relationships with almost all factors, the only regression finding supporting this was a very weak link (.103) with customer service. ToolCo showed minor links to personalisation and good links to product range while at SportCo a highly significant link was found to contactability. At ServCo, the only impact of this situation was minor links with company image and product range. The importance of high quality service is likely to mean different things according to the situation and product purchased, explaining the different relationships observed between high quality service and different factors per company.

P16. Customers with different amounts of time available to shop will exhibit different online service quality demands.

(i) Univariate Analysis

At EntzCo, a positive relationship was found between time capacity and all service importance issues (excluded company image), suggesting as peoples lives becomes more hectic and time availability decreases, the importance placed on service issues increases. This is conceptually appealing, as the most hectic people would have the least time to resolve any problems or poor performance and therefore expect more. At ServCo, no significant relationships with importance or performance factors and time capacity were found. At ToolCo, this issue was significantly related to all but personalisation, image and availability importance factors supporting the earlier role of this issue seen at EntzCo but not ServCo. At

SportCo, this situation was positively related to all factors except personalisation and image, adding validation to the findings at both ToolCo and EntzCo, highlighting that as customers lifestyles become more hectic, service issues actually increase in importance.

(ii) Multivariate Regression

At EntzCo, regression, as with univariate analysis, showed time capacity as highly related to all factors except company image. ToolCo significant links were found with website, trust, information, contactability and product range with lesser links to customer service and personalisation. At SportCo, links to all factors except company image, personalisation and information were found. While ServCo showed a link between time and the no-adverts factor only, overall these findings suggest a major situational role for time capacity for online product purchasers as well as a consistent finding of no link between time capacity and company image.

