JOURNAL OF STRATEGIC MARKETING 8 341–362 (2000)

The contribution of marketing to business strategy formation: a perspective on business performance gains

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Recognized as a topic with important implications for executive practice by both the Marketing Science Institute and the American Marketing Association, the contribution of marketing to business strategy formation has now become a fertile, prominent and notable area of contemporary investigation. It remains that little is understood of (1) the relevant contribution and centrality of marketing to business strategy formation, (2) the empirical testing of this contribution in areas of particular strategic relevance and (3) the business performance implications of marketing's contribution to business strategy formation. In an attempt to address these three key issues, this paper presents an empirical investigation of medium and large, high-technology, industrial manufacturing firms. Specifically, the study examines the potential differences between high business performance firms and low business performance firms concerning the contribution of marketing to dimensions of business strategy formation activities while controlling for potential confounding effects. The findings indicate that firms are able to realize significantly greater pay-offs in business performance terms when critical marketing input in all areas of the strategy formation process (from goal setting to strategy selection) is harnessed in comparison with those firms where marketing does not make such a meaningful contribution to strategy formation.

KEYWORDS: Business strategy; marketing strategy; business performance; strategy formation; management functions; marketing function; marketing organization

INTRODUCTION

The corporate, business and functional strategy hierarchy has been established as a useful framework within which to contextualize discussion of strategic issues within companies. Indeed, contemporary pedagogical readings maintain the argument that '... a typical multibusiness company has three main levels of management: the corporate level, the business level and the functional level' (Hill and Jones, 1998, p. 11). The reason underlying the popularity of this schema is its ability to simplify, distil and aggregate complex strategy phenomena into a lucid and workable form for analysis and interpretation. However, as often

Journal of Strategic Marketing
ISSN 0965-254X print/ISSN 1466-4488 online
http://www.tandf.co.uk/journals
DOI: 10.1080/09652540010003672

tends to be the case with such classificatory approaches, the argument for mutual exclusivity among strategy levels is tenuous (Speed, 1993) and, as Varadarajan and Clark (1994) observed, '... a cursory analysis of strategic practice reveals that while some issues do indeed fall unambiguously into the corporate, business or functional area strategic domains, there is also considerable overlap' (p. 93).

The conversation between marketing and business strategy has a documented history tracing back to the early 1980s when it was established that links existed at the theoretical, conceptual and methodological levels (Day and Wind, 1980; Biggadike, 1981; Anderson, 1982). Subsequent research has revealed the fertile symbiosis between planning for organizational strategy and planning for marketing strategy with several accounts heralding the synergies to be gained from integrating planning between hierarchical levels within the firm (Gluck *et al.*, 1980; Day and Wensley, 1983; Wiersema, 1983; Cravens, 1986; Raymond and Barksdale, 1989; Shiner, 1989). However, a damning indictment on the contribution of marketing to the strategy dialogue suggested that much published research work on strategy-related issues has paid little or no attention to the marketing literature (Varadarajan, 1992) despite the assertion from marketing academicians that their function should assume a leading role in determining a firm's strategic direction (Kerin, 1992). Nonetheless, '... the judgement that the strategic role of marketing is declining – albeit from a high starting point – is both controversial and arguable since there is little or no empirical evidence directly relevant to the issue' (Day, 1992, p. 323). Consequently, it remains that little is understood of (1) the relevant contribution and centrality of marketing to business strategy formation, (2) the empirical testing of this contribution in areas of particular strategic relevance and (3) the business performance implications of marketing's contribution to business strategy formation.

In an attempt to address these three key issues, this paper presents an empirical investigation of medium and large, high-technology, industrial manufacturing firms. Specifically, the study examines the potential differences between high business performance firms and low business performance firms concerning the contribution of marketing to dimensions of business strategy formation activities while controlling for key influences potentially affecting this relationship. The paper is respectively organized with an account of the theoretical premises and conceptual framework underlying the study where the focus is upon the changing role of marketing within strategic decision making and a critique of the nature of business strategy formation within firms. Following this, a presentation of the methodology, analysis and study results is given which precedes the discussion of the findings and conclusions and implications.

THEORETICAL PREMISES AND CONCEPTUALIZATION

Strategy formation

At the risk of oversimplifying general interpretations, strategy formation can be considered a conscious process through which a future plan is created and then acted upon (Hart and Banbury, 1994; Slevin and Covin, 1997; McGuinness and Morgan, 2000), which is not to suggest that it is independent of strategy implementation (Mintzberg, 1990; Cespedes and Piercy, 1996). Research has long since recognized that strategy formation is a process founded upon a pattern or stream of decisions (Mintzberg and McHugh, 1985) reflecting an identification phase, development phase and selection phase of strategy (Schwenk, 1995). Most strategy process typologies such as this (for instance, Gerbing *et al.*'s (1994) study assessing management participation in strategy formation) adopt the assumption of decisional rationality where a systematic process is followed in establishing a logical and sequential pattern of decisions, from goal formulation through to strategic choice and strategy implementation – such a concept has been referred to as 'procedural rationality' (Dean and Sharfman, 1993, p. 587). In this study, strategy formation refers to the setting of goals and the analyses that underlie the generation, evaluation and selection of strategies necessary to achieve these organizational goals. Therefore, strategy formation is concerned with both the '... allocation of resources and the development of organizational processes necessary to achieve the long-term goals of the organization' (Vorhies, 1998, pp. 5–6).

Fredrickson (1984) considered strategy formation in terms of the comprehensiveness of the processes involved and described it as the '... extent to which an organization attempts to be exhaustive or inclusive in making and integrating strategic decisions' (p. 447). In his research, Fredrickson (1984) observed a positive relationship between comprehensiveness and firm performance. Similarly, Eisenhardt (1989) reported a significant association between strategy formation comprehensiveness and firm performance in her study of unstable, high-velocity environments. To the same extent, Powell (1992) revealed that formalized planning processes were strongly associated with those firms characterized by high economic outcomes. Miller (1987) also found that high-performing firms were distinguished from low-performing firms on the basis of systematic scanning of the environment, analysis and strategy making rationality. As an extension, Priem *et al.* (1995) specified significant associations between overall firm performance and planning, scanning and analysis. In a meta-analytic review of the planning–performance literature, Capon *et al.* (1994) found that firms employing formal planning processes outperformed those that did not. Consequently, it can be claimed that general evidence supports the assertion that

> ... gathering and processing information is essential to pursuing rationality across strategic activities (e.g., generating alternatives and assessing their potential costs/benefits). Such information processing may be critical when managers grapple with complex issues. Indeed, Chief Executive Officers in high performing firms have been shown to scan the environment more frequently and more broadly in response to strategic uncertainty than their counterparts in low performing firms (Ketchen *et al.*, 1996, p. 233).

Notwithstanding the intuitive relationship and empirical evidence supporting a comprehensive strategy formation–business performance link, a question can be raised as to the methods employed in achieving comprehensive or procedural rationality in the strategy formation process. The extant disciplinary contributions to strategy formation can be sourced to economics, strategic management, organizational behaviour and operations management (Lewis and Gregory, 1996). However, it is the contribution of marketing which is of central interest here and the premise upon which the remaining conceptualization is framed is in line with a tenet provided by Franwick *et al.* (1994):

> Each functional area attempts to move the firm toward what it views as the desired position for long-run survival, subject to the constraints imposed by the objectives and positioning strategies of the other functional units. Thus strategic decision processes often involve the active participation of several interest groups that hold markedly different beliefs regardig organizational means and ends (p. 97).

Market-based organization

The discipline and practice of marketing has been undergoing a period of metamorphosis over the last four decades (Varadarajan, 1999). For instance, Morgan (1996) indicated that during the 1960s the marketing concept was proclaimed as the saviour of companies, the 1970s witnessed a challenge to this because marketing was unresponsive to greater societal issues and during the 1980s marketing cause discontent by over-segmenting markets and overstating the value of consumers' expressed needs, while McKenna (1991) posited that marketing could be considered as 'everything' (p. 65) in the 1990s. Many 'priorities' and 'influences' have been set heralding the new millennium but none has been more timely than Sheth and Sisodia's (1999) assertion that academicians must revisit marketing's law-like generalizations. As theory is developed, knowledge enhances and spawns new questions requiring different explanations demanding even greater advances in knowledge. More than a natural evolution, the field of marketing has been continually reshaped over this period. One implication of this is that the role of the marketing function has changed significantly from its departmental position in the large, bureaucratic hierarchy of traditional design in the 1950s and 1960s to the contemporary over-arching and culture binding function of new forms of structural configuration evident today (Vorhies and Yarbrough, 1998).

Although there is significant diversity in the nature of marketing organization (e.g. bureaucratic, transactional, organic and relational forms) (Ruekert *et al.*, 1985) and even modes of organization-wide structures for marketing (e.g. marketing exchange company and marketing coalition company) (Achrol, 1991), the role of marketing within the firm has changed to become one of key functional entity. Many reasons are considered to account for this: (1) relationships with customers are changing in form based on collaborative partnership through cohesive means (Ganesan, 1994), (2) relationships with channel intermediaries are proliferating through different and innovative methods of distribution and channel parties are mobilizing greater influence and exercising more power in the value stream (Johnson, 1999) and (3) relationships with competitors have changed from direct, open offensive behaviour to selective collaboration and cooperation (Morgan and Hunt, 1994). The importance and value in studying the contribution and influence of marketing within the organization is therefore fundamental (Homburg *et al.*, 1999a) and, as Day (1997) outlined,

> As organizations evolve toward hybrid structures, using self-directed process teams . . . the importance of all functional departments will inevitably be diminished. Nonetheless, some functions will be relatively more powerful than others – that is, they will control more resources and have more influence in the strategy dialogue. Will marketing be the lead function, rather than operations, sales, finance, engineering or technology? (p. 89).

Homburg *et al.* (1999a) indicated that, because there is a lack of empirical research in this area, academicians are at a loss to explain the extent to which marketing exercises its relative influence in key areas of strategy. As a consequence of these characteristics and fundamental shifts in organizational practice, potentially relevant inferences can be made from market orientation studies as suggested by many including Cravens (1998) and Hunt and Lambe (2000): 'If there were any contribution that marketing could make to business strategy that might be considered universally to be uniquely marketing, it would be that of market orientation' (p. 25).

Marketing function – strategic roles

While debate has surrounded the conceptual domain, scope, interpretation and measurement of market orientation (Morgan and Strong, 1998), a corpus of literature has developed for characterizing the market-oriented firm as one that (1) has recognized that, in order to provide superior customer value, an understanding of current and future customer needs is critical, (2) stimulates the generation and dissemination of information regarding current and future customer needs, competitors and other relevant parties and (3) is able to respond on an organization-wide basis in order to exploit opportunities and circumvent threats so as to accommodate fit with emerging customer needs and competitor actions (Kohli and Jaworski, 1990; Narver and Slater, 1990). The study of market orientation has led researchers to develop its role in the context of organizational learning (Sinkula, 1994; Slater and Narver, 1995; Morgan *et al.*, 1998) and encouraged a synthesis towards the bases for market-based organizational learning (Sinkula *et al.*, 1997; Hurley and Hult, 1998). Moreover, market orientation has been recognized as important in determining business performance, product innovation, strategic targeting and strategic advantage (Jaworski and Kohli, 1996; Slater and Narver, 1996; Han *et al.*, 1998).

Information is key to the articulation of market orientation that is, in itself, a central tenet of successful marketing practice: 'Better and effective use of information is viewed as critical to being more market oriented and to succeeding in an intensely competitive business environment' (Menon and Varadarajan, 1992, p. 53). However, the marketing organization literature has expounded upon the relevant constraints imposed upon the effective contribution of marketing to business strategy formation. The following are examples of relevant constructs in the system-structural and structural-cognitive perspectives of organization theory: coerciveness (Gundlach and Cadotte, 1994), dominant coalition (Varadarajan and Clark, 1994), functional conflict (Menon *et al.*, 1996), managerial representations (Day and Nedungadi, 1994), psychological distance (Gupta *et al.*, 1986), subcultures (Dougherty, 1990) and thought worlds (Ruekert and Walker, 1987). The multiple constituency-based theory of the firm explicitly incorporates these phenomena and considers them within the bounds of the conflict and politics of marketing. This literature has developed significantly over the last two decades and many of the intraorganizational issues concerning marketing's relationship with other functions are evident here: general relationships between marketing and other functions (Wind, 1981; Webster, 1992; Menon *et al.*, 1996; Kahn and Mentzer, 1998; Workman *et al.*, 1998), marketing and research and development relations (Gupta and Wilemon, 1991; Griffin and Hauser, 1996) and marketing and engineering exchange (Fisher *et al.*, 1997); among others. However, it remains that

> . . . very limited empirical attention has been given to examining the partisan interplay between marketing and other functional units as strategies are formed, even though the traditional paradigms of marketing are expanding to incorporate negotiated exchanges with internal and external coalitions (Franwick *et al.*, 1994, p. 96).

Various roles of marketing in strategic management have been reported (Gluck *et al.*, 1980; Day and Wensley, 1983; Wiersema, 1983; Cravens, 1986; Raymond and Barksdale, 1989; Shiner, 1989) but Greenley (1993) has argued generally that the theoretical explanations associated with the marketing–business strategy relationship fall into the following themes.

(1) Strategic marketing is marketing's contribution to strategic management – here strategic

marketing represents all in marketing that is 'strategic' while the remainder of the marketing activities, including marketing strategy, are considered as being operational in nature (Kerin and Peterson, 1983; Peattie and Notley, 1989).

(2) Strategic marketing is marketing at the small business unit (SBU) level – thus excludes considerations of corporate and operational levels (Gardner and Thomas, 1985; Berkowitz *et al.*, 1992).

(3) Strategic marketing is the same as marketing strategy – in this case the two are considered synonymous with no clear distinction (Cook, 1983; Jain and Punji, 1987; Hutt *et al.*, 1988).

It should be emphasized that we do not subscribe to the notion that marketing executives are 'lead' strategists and respect the view that strategy is extremely complex and goes well beyond the dominant coalition theme (Zey-Ferrell, 1981) towards collective processes within decision making (e.g. theories of collective action) (Cohen *et al.*, 1972). While considerable literature has been documented on the contribution of marketing to the strategy dialogue (Day, 1992; Varadarajan, 1992), the evolving role of marketing within the firm (Webster, 1992) and the relevance of marketing in the implementation of business strategies (Walker and Ruekert, 1987), the following arguments do not attempt in any way to challenge this notion. Rather an attempt is made here to explain the position adopted in this study.

First, it is commonplace for the marketing function to be charged with many of the activities within the commercial function, which includes the responsibilities and tasks concerned with business development (Menon *et al.*, 1999). Second, given the above position, the marketing function is considered to maintain many boundary spanning responsibilities and is bound to 'inform' the strategic apex of a host of pertinent external influences affecting and likely to affect strategy (Miles, 1980; Floyd and Wooldridge, 1997). Third, the interest of this study indicate, according to Jemison's (1981) stance on the importance of an integrative view in strategic management research, that the marketing paradigm (with its emphasis upon the 'firm as the unit of analysis', the 'content problems addressed', the 'cross-sectional' nature of the investigation and the 'inference patterns' adopted (p. 602)) is the most appropriate approach to be adopted here (in comparison with the 'industrial organization' or the 'administrative science' paradigms). Fourth, it has been found that marketing executives' views typically correspond with other functional executives' attitudes and beliefs regarding key strategic issues in interrater reliability tests (e.g. Hughes and Garrett, 1990; Franwick *et al.*, 1994; Morgan and Piercy, 1998).

Finally, following Miller *et al.* (1997), the relative importance and competence attributed by chief executive officers (CEOs) to a particular functional department over others can be referred to as functional favouritism. These researchers found that

> ... in successful companies, opportunism and superstitious learning may induce top managers to attribute overriding importance and competence to particular functional areas and their activities. We ... argue that this is most likely to take place in uncertain environments where attributional ambiguities and substantial management discretion provide both the scope and the motive for success-based favouritism (Miller *et al.*, 1997, pp. 148–9).

The data generated for this study were sourced to firms in industries that were *a priori* considered to have uncertain environments and, consequently, there was some merit to believing that the head of marketing would be in an appropriate function with the requisite knowledge to respond to the questions posed in the survey instrument. However, no implication is made to suggest that marketing was a dominant function in the firms surveyed (cf. Workman *et al.*, 1998), nor that this function was implicitly more powerful in strategic terms than other functional entities (Salancik and Pfeffer, 1977).

Controlling for other influences

The strategic management and marketing literatures indicate that the nature of marketing's contribution to business strategy formation and its business performance implications can be influenced by a number of factors (Vorhies *et al.*, 1999). In order to construct a robust analysis, account has to be taken of these extraneous influences (Homburg *et al.*, 1999b). These potential influences were identified as planning effectiveness, internal exchange processes, participative policy making, number of employees and sales turnover (Ramanujam and Venkatraman, 1987; Pedler and Bourgoyne, 1991). Such considerations were *a priori* believed to account for heterogeneity within the data generated and suitable controls needed to be made in order to nullify the contribution of these factors to the main research question: are high business performances characterized as those where marketing's contribution to business strategy formation is greater than in those firms exhibiting relatively low levels of business performance? Based upon the preceding argument and the underlying conceptual arguments exemplified in a statement provided by Varadarajan and Jayachandran (1999) ('The marketing function in organizations, besides being responsible for the content, process and implementation of marketing strategy, at the product-market level, plays an important role in the strategy formulation process and the determination of strategy content at the business and corporate levels' (p. 121)), the hypothesis upon which the study is based states that firms exhibiting high levels of business performance will be characterized by a significantly greater contribution of marketing to business strategy formation activities in comparison with firms exhibiting comparatively low levels of business performance.

METHODOLOGY

Data were collected through a survey administered by mail questionnaire. A systematic random sample was generated from the Kompass directory of registered UK firms where 1000 units were identified as medium and large, high-technology, industrial manufacturing firms. It was necessary to control for small firms which were excluded from this study (<100 full-time employees), because of their limited scope in explicit business strategy formation activities and their typical emphasis on operational decision making.

The survey was administered, adopting the key informant technique, with a pre-notification letter, questionnaire package and a series of reminder correspondence, respectively, mailed to each sampling unit. One hundred and eighty-one responses were received but 32 were treated as ineligible with the main explanations being company policy prevented participation in external surveys or studies, respondent organizations reported the number of full-time employees below the medium size threshold, firms had relocated or the questionnaire was inadequately completed. Conventional methods were employed in order to check for response/non-response bias and no significant evidence was found to suggest that the data were unduly biased (Armstrong and Overton, 1977).

Business performance

Given the limitations of data availability and accessibility to generating objective business performance assessments, perceptual performance judgements were used. Studies have indicated that there is validity in this approach where a high correlation has been found between objective and perceptual indicators (Dess and Robinson, 1984; Venkatraman and Ramanujam, 1986). Performance assessment is relative in nature and suitable specification must be made to indicate the referents used for comparison (Lewin and Minton, 1986). Consistent with the high performing systems model and strategic group analysis on competitive space, referents were determined to be those major, direct competitors of respondent firms (Dess and Robinson, 1984; Dess *et al.*, 1997). The investigation of competitor identification and analysis has become more apparent in the recent literature (Clark and Montgomery, 1999) and the strand of this research that was drawn upon here was that of cognitive oligopoly (Porac and Thomas, 1990). This theoretical standpoint views competitor identification as a process of categorization:

> . . . in which the manager of a particular firm, which we call the focal firm, is observing other firms, which we call target firms, to determine which of the target firms are competitors of the focal firm (Clark and Montgomery, 1999, p. 68).

The evidence suggests that firms do not identify competitors individually but they rather associate themselves with a particular competitive category and thereby analyse such target firms as their major, direct competitors (Porac *et al.*, 1995). To endorse this point further, Porac and Thomas (1994) declared that

> Defining a business essentially entails matching a [focal] firm's characteristics to a category feature list and then using this match as a reference point around which competitive boundaries are cognitively constructed . . .. This inferred similarity would then be the basis for subjective competition (p. 55).

Such subjective competition is perceptually grounded and, as such, forms the basis of business performance assessment here. Sourced to the strategic management literature, a synthesis of both accounting-based variables and market-based performance indicators was used as the basis for measurement here after Chakravarthy (1986). The conceptual rationale for this is that sound market-based performance predisposes the firm to improved financial performance by adjusting customer buying behaviour in a favourable manner (Kerin *et al.*, 1990; Szymanski *et al.*, 1993). To respect the turbulent nature of the industrial, high-technology environment in which sample firms operated, the time horizon adopted was 1 year prior to the investigation (Lubatkin and Shrieves, 1986). Although longer time horizons are the ideal in business performance assessment so as to gain an insight into sustainability effects, the massive cyclical variations that have been reported in this sector meant that 3 or 5 year horizons would have introduced distortion into the measurement.

The business performance (BUSPERF) construct was thus operationalized, consistent with the conceptualization, in order to take account of both finance-based indicators (return on investment and sales growth) and market-based variables (market share, customer satisfaction, competitive position and customer retention) with a generic measure of overall firm performance. The purpose of the aggregate scale was based on the premise that composite business performance is achieved through a firm's high market-based success, which thereby improves financial performance (Szymanski *et al.*, 1993).

Contribution of marketing to business strategy formation

A review of the literature revealed no extant batteries available for operationalizing this construct. However, relevant semantic amendments were made in order to adapt the previously validated and reliable items used for measuring management participation in strategy formation by Gerbing *et al.* (1994). This scale has been used to measure each of the five recognized stages of strategy formation: goal setting (GOALSET), environmental scanning (ENVSCAN), generating options (GENOPTNS), evaluating options (EVALOPTNS) and strategy selection (STRATSEL). The statements associated with this operationalization were measured on scales anchored by 'none/not at all' (1) to 'substantial amount' (7) reflecting the extent to which marketing made a contribution to the discrete tasks concerned within each respondent firm.

Five sets of control variables were used in this study. Planning effectiveness (PLANEFF) was measured by the same scale used in Ramanujam and Venkatraman (1987) where each item (see the Appendix) was measured on a scale anchored by 'not at all effective' (1) to 'very effective' (7). The question prompting these responses was 'To what extent is your firm's business planning process/activity effective in terms of . . . ?' the relevant PLANEFF items. Internal exchange (INTEXCH) and participative policy making (PARTPOLM) was operationalized using the Pedler *et al.* (1991) convention (see the Appendix) where survey participants were asked 'To what extent do you agree with the following statements about your firm's organizational style?' Respondents were required to check a scale ranging from 'strongly disagree' (1) to 'strongly agree' (7) with a mid-point of 'neither agree nor disagree' (4). Finally, the number of full-time employees (EMPLEES) and most recent annual scale turnover (SALESTURN) were used as indicators of firm size.

ANALYSIS AND RESULTS

Scale construction

Prior to conducting any statistical analyses, mean summated scores needed to be constructed from the data, subject to certain tests. The item composition of each scale can be found in Table 1 for BUSPERF, GOALSET, ENVSCAN, GENOPTNS, EVALOPTNS and STRATSEL and in the Appendix for the control variables of PLANEFF, INTEXCH and PARTPOLM. From inspection of these data it can be seen that, in all cases, the α coefficient is above the threshold of 0.70 suggesting acceptable internal consistency within these scales. In addition, item–total scale correlation analysis revealed significant bivariate relationships in the anticipated direction, which indicates that all items meaningfully contributed to the respective dimensions.

Given that the aim of the study was to compare firms according to the high–low business performance dichotomy, the BUSPERF scale needed to be suitably transformed. Frequency data revealed that 74 firms exhibited a mean of 1 or less on this scale and could be considered low business performance firms, while 59 firms exhibited a mean rating of 1.29 or more on the $-3/+3$ scale employed and could be considered high business performance firms. The cases falling between ranges ($n = 16$) were removed from further analysis in order to improve discriminant validity between these business performance groups. While this approach is arbitrary in design, the derived classification is conceptually meaningful on the basis that low business performance firms perform, at best, only marginally better than those in their referent

TABLE 1. Scale statistics

Scale	Mean	SD	Item–Total scale correlation[a]	Cronbach's α
Business performance (BUSPERF)				0.89
Market share	1.04	1.27	0.77	
Customer satisfaction	1.09	1.24	0.70	
Competitive position	1.03	1.16	0.76	
Customer retention	1.21	1.21	0.80	
Sales growth	1.11	1.26	0.78	
Return on investment	0.87	1.32	0.73	
Overall firm performance	1.18	1.22	0.86	
Goal setting (GOALSET)	4.98	1.63		0.94
To what extent do you participate in meetings to revise the firm's long-term goals?	4.95	1.72	0.95	
To what extent do you participate in reviews of the firm's performance to determine whether the firm's strategic goals should be changed?	4.91	1.66	0.95	
In general, how much say or influence do you have in deciding the long-term goals of your firm?	4.92	1.63	0.92	
Environmental scanning (ENVSCAN)				0.84
To what extent do you participate in reviewing and analysing your firm's internal strategic capabilities?	4.93	1.46	0.92	
In general, how much say or influence do you have on decisions concerned with monitoring and analysing your firm's competitive strengths and weaknesses?	5.28	1.46	0.92	
Generating options (GENOPTNS)				0.85
In general, how much say or influence do you have in formulating the viable strategic options of your firm?	5.19	1.46	0.93	
To what extent do you participate in scheduled meetings to discuss the potential courses of action (strategic options) available to your firm?	5.28	1.60	0.94	
Evaluating options (EVALOPTNS)				0.92
To what extent do you influence decisions concerned with determining the relative merits of the alternative strategies?	5.13	1.32	0.91	
In general, how much say or influence do you have in evaluating the feasibility of the alternative strategies open to your firm?	5.03	1.39	0.92	
To what extent do you participate in analysing the relative merits (e.g. costs and benefits) of the firm's available strategic options?	5.05	1.34	0.92	
To what extent are you responsible for assessing the costs and benefits associated with each alternative strategy?	4.68	1.55	0.87	

TABLE 1. (*continued*)

Scale	Mean	SD	Item–Total scale correlation[a]	Cronbach's α
Strategy selection (STRATSEL)				0.91
In general, how much say or influence do you have in deciding which strategic option the firm should choose as its grand strategy?	5.02	1.75	0.96	
To what extent do you participate in scheduled meetings to select your firm's grand strategy?	4.74	1.64	0.95	

[a]Pearson's r. All coefficients are statistically significant where $\alpha < 0.0001$.

group while high business performance firms appear to consistently outperform their major direct competitors.

In line with recommended practice, a two-stage approach was adopted for studying business performance group differences between the multiple dependent variables (GOALSET, ENVSCAN, GENOPTNS, EVALOPTNS and STRATSEL) (cf. Spector, 1977; Borgen and Seling, 1978).

First stage analysis

During the first stage of analysis, a multivariate analysis of covariance (MANCOVA) was performed to test the null hypothesis of no simultaneous business performance group differences on the strategy formation dimensions while controlling for the possibility of bias from the potential sources of PLANEFF, INTEXCH, PARTPOLM, EMPLEES and SALESTURN. Table 2 demonstrates the basis for the rejection of this hypothesis (Wilks' $\lambda = 0.65$, $F = 1.92$ and $p = 0.005$) to reveal that significant differences were computed between high business performance firms and low business performance firms while controlling for extraneous variable influences. However, in order to identify the contribution of each strategy formation dimension to business performance group differences, a second stage of analysis was necessary to identify potential univariate and multivariate effects.

TABLE 2. MANCOVA[a], ANOVA[b] and MDA[c] results

Strategy formation dimensions	Mean (SD) Low business performance firms	Mean (SD) High business performance firms	P^b	α^b	Discriminant loadings[c]
GOALSET	4.42 (1.58)	5.58 (1.32)	20.50	0.0000	0.79
ENVSCAN	4.70 (1.45)	5.57 (1.11)	14.20	0.0002	0.66
GENOPTNS	4.81 (1.54)	5.77 (1.06)	16.71	0.0001	0.71
EVALOPTNS	4.48 (1.31)	5.57 (0.96)	28.47	0.0000	0.93
STRATSEL	4.43 (1.66)	5.44 (1.34)	14.08	0.0003	0.65

[a]Covariates: PLANEFF, INTEXCH, PARTPOLM, EMPLEES and SALESTURN.
[a]Wilks' $\lambda = 0.65$, $F = 1.92$ and $\alpha < 0.005$.
[c]Wilks' $\lambda = 0.80$, $\chi^2 = 28.73$, df $= 5$ and $\alpha < 0.0001$.

Second stage analysis

The second stage of analysis incorporated analysis of variance (ANOVA) and multiple discriminant analysis (MDA). ANOVAs were computed to test the independent contribution of each strategy formation dimension to business performance group differences while MDA was used to investigate the multivariate structure of such differences. Table 2 reveals that, across all five dimensions, the contribution of marketing to strategy formation is significantly greater among high performance firms than their low business performance counterparts. Given that strategy formation is composed of all five dimensions simultaneously, it was necessary to introduce MDA so as to account for this.

Due to the large sample size ($n > 100$), the split sample procedure was followed (Hair *et al.*, 1995) with an analysis sample randomly created and a hold-out sample retained for empirical validation. With an eigenvalue of 0.25 and a canonical correlation coefficient of 0.45, the MDA model was evaluated at the group centroids for low business performance firms (-0.44) and high business performance firms (0.56). Although the model did not meet the equality of covariance matrices assumption (Box's $M = 34.09$, $F = 2.18$, df $= 15{,}61983.1$ and $p < 0.0001$), the discriminant function is robust to this violation since the firm groups are similar in size (Sharma, 1996).

In order to assess the predictive validity of the discriminant function, the classification accuracy and discriminatory power attributed to the classification matrix were examined. The approach used for classifying sample and future observations was the statistical decision theory method that is based on Bayesian theory, thus minimizing misclassification errors by considering prior probabilities and misclassification costs. Predictive accuracy was assessed by comparing the percentage of cases correctly classified (83.3%) with both the maximum (50.0%) and proportional (37.7%) chance criteria (Table 3).

On the basis that the percentage of cases correctly classified was 25% greater than both chance criteria the model was considered valid (Hair *et al.*, 1995). Discriminatory power was assessed by calculating Press' Q (10.6) and making a comparison with the critical χ^2 value at 1 degree of freedom where $p < 0.01$. It can be concluded that the predictions in the sample were significantly better than that attributed to chance.

The discriminant function was interpreted by analysis of the standardized discriminant loadings where coefficients greater than $+/-0.30$ were gauged to be statistically significant (Hair *et al.*, 1995). Table 2 reveals that all strategy formation dimensions exhibited standardized discriminant loadings between 0.65 and 0.93 with the rank order being EVALOPTNS (0.93), GOALSET (0.79), GENOPTNS (0.71), ENVSCAN (0.66) and

TABLE 3. MDA classification results

Actual group membership	Predicted group membership: Low business performance firms	Predicted group membership: High business performance firms
Low business performance firms	11 (78.6%)	3 (21.4%)
High business performance firms	1 (10.0%)	9 (90.0%)

Percentage of correctly classified, 83.3%; maximum chance criterion, 58.3%; proportional chance criterion, 37.7%; Press' $Q = 10.6$, df $= 1$ and $\alpha < 0.01$.

STRATSEL (0.65). The magnitude of these loadings reflects their relative importance in distinguishing between the two firm groups and the positive signs indicate that the contribution of marketing to all strategy formation dimensions is significantly greater among high business performance firms as distinct from low business performance firms, thereby providing evidence in support of the study hypothesis.

DISCUSSION

These findings indicate that firms devoting attention to harnessing marketing input in all areas of the strategy formation process are able to realize significantly greater business performance pay-offs than those firms where marketing does not make such a vital contribution. Although intuitive, such evidence reveals that these firms have overcome the barriers to 'collective' planning. As Franwick *et al.* (1994) considered

> Strategic decisions that cut across functional departments or involve issues related to the organization's domain and long-term objectives or the allocation of resources across business units or products are best captured by theories of collective action .... Collective decisions, in turn, often encompass important strategic marketing considerations, such as the choice of customers, product characteristics or distribution channels (p. 97).

In this respect, Anderson (1982) explained the scenario where members of a particular organizational constituency such as marketing attempt to establish highly formalized and sophisticated coalitions that seek to influence business strategy formation. Consequently, business strategy can be conceived as the outcome of formation processes that are considered to be explicitly rational but reflect implicit bargaining processes among these coalitions. A marketing executive made a persuasive remark illustrating this to the Franwick *et al.* (1994) fieldwork team while longitudinally studying the development of a strategic decision in a large organization. The comment reads that

> [Marketing] ... did an extremely effective job of stepping right in the middle of it and strangling it ... basically what Marketing did was force the R&D team into a submissive position where they no longer had the autonomy they once had to go about making decisions – they now get input. And whether it is formal or informal, they definitely get the buy-in of marketing before they move forward on what they are doing right now. So consequently, Marketing has basically taken something that was viewed as a threat to market-based management and a threat to being committed to consumer needs, they've taken that threat and basically made it impotent (Franwick *et al.*, 1994, pp. 105–6).

Our findings do not suggest that these high business performance firms were in any way led or dominated by the marketing function, but rather that the input of the members of this organizational constituency provided insights at all stages of strategy formation in order to enable firms to articulate coherent positions within their competitive domain through their boundary-spanning, information-intensive, customer interface roles. What is suggested here is that marketing is able to facilitate the process of strategy formation by (1) encouraging a comprehensive approach focused on market-place reality, emphasizing the marketing assets and capabilities of the organization, (2) stimulating cross-functional integration even at the expense of 'politicking', (3) improving communication quality throughout the organization by developing internal marketing strategies, (4) developing strategic consensus and commitment by centring the selected business strategy and its antecedent processes on the premises of market-based management, (5) tempering decision making with a view on competitive dynamics and long-term thinking, (6) engendering pro-active thinking and first-mover innovativeness, and (7) testing the business strategy for realism by ensuring appropriate levels of resources and commitment to drive the programme though to successful implementation (Day, 1997; Hurley and Hult, 1998; Kahn and Mentzer, 1998; Morgan and Strong, 1998; Homburg *et al.*, 1999a,b; Menon *et al.*, 1999; Hunt and Lambe, 2000).

While others have suggested that marketing has lost its strategic impact because of its preoccupation with short-term tactical issues at the product or brand level (Day, 1992; Webster, 1992), it appears that marketing does not only make a substantial contribution to business strategy formation in this sample of medium and large, high-technology, industrial manufacturing firms, but that business performance gains can be established as a result. We caution though against interpreting these results in causal terms given that successful firms may in themselves encourage marketing's greater contribution to business strategy formation as a result of enjoying the superior market positions relative to their competitor referents indicating a self-fulfilling relationship. Nonetheless, these data reveal that, in fast-moving, high-technology environments, a significant pattern emerges to support the association between marketing's influence and high levels of business performance. Similarly, it has to be considered that these data were generated using the key informant approach identified as the head of marketing and, despite the fact that certain comparable studies have reported that marketing executives' beliefs and perceptions typically correspond with those of other functional executives' in inter-rater reliability tests (e.g. Hughes and Garrett, 1990; Franwick *et al.*, 1994; Morgan and Piercy, 1998), there is a potential source of bias favouring the extent and direction of the results. However, Homburg *et al.* (1999a) considered this factor in their conclusions based upon a study where marketing was found to be the most influential subunit within their sample. Nonetheless, they established the following:

> Although one reason for this high ranking might be that marketing managers answered the survey, the results from the R&D managers support the marketing managers' perceptions ... Furthermore, when we examine the influence rankings provided by the 15% of our respondents who were presidents, general managers and vice presidents not in marketing or sales (and therefore presumably less likely to be biased toward marketing), we find similar results (Homburg *et al.*, 1999a, p. 11).

CONCLUSIONS AND IMPLICATIONS

In responding to a call from a number of researchers (Homburg *et al.*, 1999a; Menon *et al.*, 1999; Varadarajan and Jayachandran, 1999; Hunt and Lambe, 2000), this study set out to (1) assess the relevant contribution and centrality of marketing to business strategy formation, (2) empirically test this contribution in areas of particular strategic relevance and (3) examine the business performance implications of marketing's contribution to business strategy formation. After controlling for various potentially confounding effects (see the Appendix – planning effectiveness, internal exchange, participative policy making, number of firm employees and sales turnover), a discriminant function was specified which revealed that all strategy formation dimensions (goal setting, environmental scanning, generating options, evaluating options and strategy selection) discriminated between groups of high/low business performance firms (Table 2). These findings indicate that, among this sample of medium and large, high-technology, industrial manufacturing firms, the contribution of marketing to all strategy formation dimensions is significantly greater among high business performance firms as distinct from low business performance firms, providing evidence in support of the study hypothesis.

Implications for managers

There are a number of managerial implications that are derived from this study that can be incorporated into organizational practice. First, on the basis that marketing plays such a key role in the strategy formation processes of organizations, consideration must be give to the decision aids that managers use to analyse and interpret market and competitive situations. Wierenga and Van Bruggen (1997) provided a useful framework here which characterizes the ways in which marketing managers approach problem solving in terms of (1) optimizing, which is described as the quantitative modelling of variables and sourced to marketing science and mathematical approaches used to diagnose marketing problems, (2) reasoning, where managers cognitively process events by manipulating these representations in order to get them to fit the problem, (3) analogizing, the dependence upon experience gained from previous circumstances and bringing this knowledge to bear upon the current problem and (4) creating, the search for novel and innovative approaches to dealing with the problem at hand. This is a framework that characterizes the approaches available to the marketing manager in processing information and providing a decision input to business strategy formation. Awareness of these alternatives and their complementarity is important in realizing the basis of marketing input.

Second, in order to ensure successful strategic change, managers must be aware of the interdependence in strategy formation and strategy implementation processes. This dichotomy has been espoused in well-received textbooks on strategy as well as being considered a useful model with which to frame strategic development, but such a traditional approach does not necessarily reflect optimum practice and can in itself cause a breakdown in strategic processes (for an elaboration see Piercy (1998) for the 'symptoms of strategy formulation/ implementation dichotomy' and 'sources of barriers in the implementation process' (pp. 233–4)). A potentially valuable means of considering strategy in organizations may be to reconceive the logical, synoptic process of planning in favour of 'illogical' (Piercy and Giles, 1991) and emergent methods.

Third, the contribution of marketing to business strategy formation activities is important but it should be considered in context. Market-based management, the ultimate manifestation of the issues described in this paper, is multidimensional and its constituent elements need to be appreciated. Market orientation, internal marketing, organizational culture, structural configuration, internal systems and procedures and environmental factors, to name but a few, all contribute to the properties of market-based management and due recognition needs to be paid to these influences. Although an attempt has been made to develop generalizable conclusions in this paper, marketing managers must appreciate the uniqueness of their particular organizational circumstances and develop contingencies to meet these.

Implications for research

Although replication and extension is frequently recommended following the report of empirical studies, recent interest in the value and importance of these issues has been raised within the business management literatures (in fact a special issue of the *Journal of Business Research* was devoted to this recently) (Easley *et al.*, 2000) with the emphasis based upon type I error – erroneous rejection of the null hypothesis (Hubbard and Armstrong, 1992). Consequently, replicability plays a fundamental role in scrutinizing the worth of research conclusions and we make such a recommendation here. Thus, future extension studies may serve to determine the scope and parameters of these preliminary empirical findings by testing whether they can be generalized to other reference comparisons (e.g. '. . . other populations, time periods, organizations, geographical areas, measurement instruments, contexts and so on' (Hubbard *et al.*, 1998, p. 244)).

There is a need to learn more about the way in which top executives deal with uncertainty and judgement through cognitive perspectives (Schwenk, 1988). While this study adopted a normative viewpoint, other relevant theoretical vehicles which can offer insights include sense making (Weick, 1979) based upon the principles of bounded rationality (Simon, 1957) where decision makers construct simplified models of reality to assist in the interpretation of complex strategic issues. Future research of this kind can build upon advances already made in the strategic management literature founded on the basis of the scanning, interpretation, action and performance linkage (e.g. Thomas *et al.*, 1997).

Viewing organizations as a collection of 'processes' instead of 'functions' provides an alternative view of business. This is both a practical and fundamental distinction in that processes tend not to respect functional boundaries and more accurately represent the work flows in organizations. For instance, order cycles can require inputs from multiple functions such as sales for order transmission, information systems for order processing, warehousing for order selection and logistics for transportation and delivery with marketing providing after-sales service. Such processes can be highly structured which lends itself to process-based analysis (Murphy and Poist, 1996) where similar parallels can be drawn between this and other strategic level responsibilities of functional entities within the organization. The notion described here is characterized in a statement provided by an executive to Workman *et al.* (1998) in their recent study of marketing organization:

> The creation of a functional marketing department leads to other groups thinking they do not have anything to do with customers. Our biggest problem was we made marketing into a function. I was recently on a panel (at University in Germany) titled 'The End of Marketing?' where I argued for this process view of marketing as opposed to a functional group orientation (p. 31).

Insights derived from this stream of research may help to improve understanding of functional coordination and facilitate a more holistic view of decision making based upon discrete information–decision flows. This process-based view of marketing is likely to have a significant influence on the strategic role of 'marketing', in whatever form and researchers have to be aware of these developments and their implications.

Finally, future studies might consider strategy formation as an intrinsic element of (Piercy, 1998) if not a phenomenon simultaneous to (Moorman and Miner, 1998) strategy implementation. Adopting this approach allows both the processual and contextual factors underlying the strategy–business performance relationship to be explored further. Linked to this is the nature of firms' 'planning style' (Pulendran and Speed, 1996, p. 53), which could be incorporated in order to develop a contingency framework in the area of strategic (market) planning and business performance.

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APPENDIX

TABLE A1. Covariates: planning effectiveness, internal exchange and participative policy-making measures

Scale	Mean	SD	Item–Total scale correlation[a]	Cronbach's α
Planning effectiveness (PLANEFF)				0.89
Ability to anticipate surprises and crises	3.73	1.43	0.61	
Flexibility to adapt to unanticipated changes	4.63	1.34	0.49	
As a mechanism for identifying new business opportunities	4.29	1.38	0.59	
Role in identifying key problem areas	4.28	1.22	0.54	
As a tool for managerial motivation	3.70	1.35	0.72	
As a means for generating new ideas	4.05	1.43	0.75	
Ability to communicate top management's expectations down the line	3.92	1.43	0.68	
As a tool for management control	4.13	1.44	0.72	
As a means of fostering organizational learning	3.37	1.28	0.69	
Ability to communicate line management's concerns to top management	3.75	1.47	0.70	
Ability to integrate diverse functions and operations	3.71	1.47	0.71	
As a basis for enhancing innovation	3.59	1.35	0.74	
As a basis for emphasizing creativity among managers	3.64	1.38	0.77	
Internal exchange (INTEXCH)				0.74
Departments see each other as customers and suppliers: discuss and come to agreements on quality, cost and delivery	3.81	1.46	0.78	
Each department strives to 'delight' its internal customers and remains aware of the needs of the company as a whole	3.39	1.36	0.78	
Managers facilitate communication, negotiation and contracting rather than exerting top-down control	3.92	1.41	0.83	
Departments speak freely and candidly with each other, both to challenge and to give help	4.42	1.53	0.80	
Department sections and units are able to act on their own initiatives	4.55	1.44	0.76	
Participative policy making (PARTPOLM)				0.85
All members of the company take part in policy and strategy formation	3.08	1.42	0.77	
Policies are significantly influenced by the views of stakeholders	4.55	1.61	0.49	
Commitment to airing differences and working through conflicts	4.23	1.31	0.72	
Company policies reflect the values of all members, not just those of top management	3.78	1.46	0.78	
Appraisal and career planning discussions often generate vision that contribute to strategy and policy	3.42	1.48	0.76	

[a]Pearson's *r*. All coefficients are statistically significant where $\alpha < 0.001$.