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**Intermediaries in power-laden retail supply chains: An opportunity to improve buyer-supplier relationships and collaboration**

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# **Intermediaries in power-laden retail supply chains: An opportunity to improve buyer-supplier relationships and collaboration**

## **Abstract**

Despite the benefits of buyer and seller collaboration and hence relationships extolled in extensive studies, issues of relationship power inhibit implementation of collaborative and relational approaches, particularly in some parts of the retail sector. Further, most research regards buyer-supplier collaboration and relations as dyadic or focal relationships, or perhaps in a network context, and typically investigates buyer-supplier collaboration and relations from a power-dependency perspective; and within vertical supply integration. Little attention has been given to the potential role of supply chain intermediaries, such as logistics service providers, in objectively and independently determining and managing the course of buyer-supplier collaboration and relations in a business-to-business context. This article appraises the potential role of buyer-supplier collaboration and relations and their relevant opportunities in the power-laden, contentious environment of the retail grocery sector. With an interdisciplinary approach, drawn from supply management, relationship management, and logistics and supply chain management, this article emphasises the importance of horizontal collaboration using fourth-party logistics structures as horizontal intermediary conduits, who act independently between retailers and suppliers to facilitate collaborative and relational activity.

**Keywords:** buyer-supplier relationships, horizontal and vertical collaboration, logistics service providers, intermediary, retail grocery sector.

## **1. Introduction**

Research into business-to-business relationships is not new. On the demand—that is, customer or buyer side—relationship management and relationship marketing have long provided principal theories for understanding dyadic, buyer–supplier relationships (e.g., Håkansson & Snehota, 1982; Morgan & Hunt, 1994; Möller & Halinen, 2000; Lindgreen & Wynstra, 2005). The stream of such literature acts as an umbrella and covers a wide, interlinked set of issues such as interpersonal and inter-organizational relations, power dependence, trust, and collaboration, in a downstream direction of travel from suppliers toward buyers (Wilson, 1995; Frazier, 1983; Jain et al., 2013; Meehan & Wright, 2013).

There is also a large body of work on the supply—that is, supplier side—focusing on supplier assessment, collaboration, and segmentation (e.g., Kraljic, 1983; Ulaga & Eggert, 2006; Roseira, Brito, & Henneberg, 2010). However, the reverse application of relationship management—that is, from buyers to suppliers and key supply relationship development—remains largely lacking. One notable exception is a study by Lindgreen et al. (2013) that develops a novel instrument to measure an organization’s use of transaction purchasing, electronic purchasing, interactive purchasing, and network purchasing.

Further, there is evidence that relationships between buyers and suppliers do not often adhere to notions of good, collaborative relationship practices (Spekman, Kamauff, & Myhr, 1998; Robson & Rawnsley, 2001; Hingley, Lindgreen, & Casswell, 2006). One notable example is the UK retail grocery sector, where retailers have been accused of using predatory practices with suppliers and exercising the power they achieved from suppliers during a transfer from the 1980s onwards (Grant, 2005; Hingley, 2005; Fernie & Grant, 2008). This work supports Cox (2004), who identified supply chain management as the most intensive resource (i.e., cost, requirement for buyers and suppliers), and that supplier development and supply chain management work best in situations where buyers have

dominance or power over suppliers, or where there is interdependence in the power relationships between them.

And yet, distribution efficiencies in grocery retail have improved over the last 30 years to the benefit of both retailers and suppliers (Frankel, Goldsby, & Whipple, 2002; Fernie & McKinnon, 2003; Fernie & Grant, 2008). Many of these efficiency achievements have been predicated on the use of intermediaries such as logistics service providers, who provide transport and storage in food supply chains, to serve as objective, ‘honest brokers’ and who do not wield power in distribution and relationship processes in order to maintain balance and fairness, as well as efficiency and effectiveness, in the grocery supply chain (Mukhopadhyay, 2006; Potter, Mason, & Lalwani, 2006; Mason, Lalwani, & Boughton, 2007).

Thus, there is a conundrum that much current work emphasises relationship-building activities on both the demand and the supply side while other work provides evidence that demonstrates—in, for example, retailing and supply chain management—that the use of power, the existence of asymmetrical relationships, etc. are widespread. In other words, preaching the usage of relationships seems at odds with what is actually being practiced. Logistics service providers work as connectors between the supply and the demand side and are less inclined to use power. This has been observed in Hingley et al. (2011) whose empirical investigation concerned retailer organisations and logistics service providers; it was the logistics service providers who were more open to engagement and were prepared to facilitate connections; whereas retailers were less enthusiastic and feared loss of power and control.

Accordingly, we investigate the collaborative role and related practices of such intermediaries to enhance our understanding of reducing the influence of one-way power in buyer-supplier relationships in vertical supply chain structures, especially in the grocery retail

sector. This article thus contributes to the supply chain and buyer-supplier relationship literature by providing further explanation of dyadic and triadic relations, networks, and the coordination of supply. We first discuss the role of intermediaries as channel moderators, facilitators, and gatekeepers, and then the characteristics and issues related to collaboration that arise from our investigation of retailers, suppliers, and intermediaries in the UK grocery retailing sector. We next propose insights into how intermediaries known as fourth-party logistics service providers (herein after termed 4PLs) might catalyse horizontal collaboration and serve as ‘honest brokers’ in buyer-supplier relationship development and finally conclude with managerial implications, limitations of this article, and suggestions for further research.

## **2. Theoretical background**

### *2.1. Relationship theory: Buyer and supplier perspectives*

Many relationship and network theorists have highlighted the importance of relationships in business network contexts (Anderson, Håkansson, & Johanson, 1994; Håkansson & Snehota, 1995; Becker, 2008), with the contention that individual organisations and dyadic relationships both contribute to networks of inter-relationships, built on trust and commitment, which in turn derives from shared values and information, mutual dependence, communication, and relationship benefits (Morgan & Hunt, 1994; Spekman et al., 1998; Wilson, 1995; Lindgreen, 2003; Jain et al., 2013).

From a buyer’s perspective, supplier selection criteria include the supplier’s internal integration, collaboration, trust, and commitment capabilities. Supplier criteria also focus on information sharing, performance on both product and financial levels, and the supplier’s ability to learn and grow with the buyer (Spekman et al., 1998; Liker & Choi, 2004; Samiee & Walters, 2006). A successful supplier strategy contains four basic operational dimensions: identifying, analyzing, selecting suitable strategies for, and developing operational-level

capabilities to maintain profitable long-term relationships with key accounts (Ojasalo, 2001). These operational dimensions reflect some of the supplier-side selection criteria, reinforcing the notion of collaboration between the two sides in a buyer–supplier dyad.

## *2.2. Power in buyer-supplier relationships*

Power in buyer-seller relationships has been defined as the potential or ability of one channel (or supply chain) member to influence decisions of another channel (or supply chain) member (Frazier, 1983; Kumar, 2005; Meehan & Wright, 2013). The inappropriate or predatory use of power (i.e., where there is an adversarial relationship due to the unequal share of value appropriation in a relationship; Cox [2004]) leads to overall inefficiencies and ineffectiveness in supply chains. For example, buyers may insist on unreasonable delivery times and quantities or provide inaccurate forecasts (Grant & Torgersen, 2006) that lead to demand amplification of upstream orders versus actual sales, or the infamous ‘bullwhip effect’ (Lee, Padmanabhan, & Whang, 1997).

An ideal where power is equally shared is found when both the buyer and the seller have a ‘cooperative orientation:’ where there is social, long-term financial (i.e., shared investment), and confidential information exchange across the dyadic relationship between buyer and seller (Ojansivu, Alajoutsijärvi, & Salo, 2013). However, while retailers have used their power over suppliers in some cases (Spekman et al., 1998; Grant, 2005), competitiveness in the UK grocery retail market has led some retailers but many suppliers and logistics service providers to consider how they can collaborate to keep costs down and retain a competitive advantage (Grant et al., 2008).

## *2.2. Supply chain collaboration and the retail grocery sector*

Fernie & Grant (2008) note there has been considerable change in the past 30 years in retail grocery supply chains, from supplier-led to retailer or buyer-led. In the early 1980s, grocery retailers shifted from direct store delivery to regionally controlled distribution centres; soon after, unprecedented levels of efficiency began to emerge as retailers massively reduced their inventory levels and lead times. Further efficiencies and cost reductions occurred when retailers turned to logistics service providers to handle supply chain services for them on a dedicated basis. In the 1990s, retailers moved away from product-specific warehousing to multi-temperature composite warehousing and distribution, which further reduced supply chain inventory levels through just-in-time collaborative approaches such as efficient consumer response or pilot collaborative, planning, forecasting, and replenishment initiatives (Barratt, 2004).

The collaboration inherent in some of these approaches worked to enhance the innovation and performance of the collaborating firms (Soosay, Hyland, & Ferrer, 2008). But it also demanded a shift in culture, toward one that prioritised not just collaboration but also trust, mutuality, and information exchange, with senior management support and sufficient resources (Barratt, 2004; Lindgreen et al., 2009). Conversely, managerial inertia and a focus on parochial, short-term results negatively affected performance and customer service, thus creating conflicts in the supply chain (Simatupang & Sridharan, 2002). Nor could collaborative frameworks based solely on marginal relationships deliver superior performance (Bailey & Evans, 2006).

Collaboration among supply chain partners also underlies more general supply chain management notions, including the overarching, total systems perspective that includes relationship management across network firms, purchasing, customer service, and cost control, all to attain total supply chain satisfaction (Mason et al., 2007).



### *2.3. Vertical and horizontal collaboration in the retail grocery sector*

In supply chains, collaboration can take two forms: vertical or horizontal (Barratt, 2004; Simatupang & Sridharan, 2002), however vertical collaboration among suppliers, intermediaries, and retailers is more common. Stephens and Wright (2002) and Hingley et al. (2011) both found that food retailers express virtually no interest in wider, deeper, multiple-retailer horizontal collaborations because they fear the loss of their competitive advantage. And yet both forms of collaboration rely on the use of logistics service providers to operate effectively.

For example, Fernie & McKinnon (2003) argue that more efficient collaboration among suppliers would encourage greater collaboration among distributors, and Mason et al. (2007) show how horizontal collaboration increases the flexibility that firms have to combine and share capabilities, such as through centralization, Internet-based tracking systems, shared pallet networks, or regional and central distribution hubs. Thus the profusion of logistics service providers creates vast opportunities for collaboration across the supply chain, implying the promise of improved optimization (Whiteoak, 2004). Some authors also warn of precarious multi-party relationships with primary producers (e.g., Robson & Rawnsley, 2001; Grant, 2005; Hingley, 2005; Kumar, 2005; Aastrup, Grant, & Bjerre, 2007). According to Stephens (2006), collaboration is possible only if external factors, such as resource shortages, legislation, or social and environmental pressures, exert such a strong influence that retailers cannot control the situation. Stephens also concludes that horizontal collaboration is more likely if brokered by a third party.

While modern, global supply chains require a significant amount of vertical collaboration, genuine, two-way, interactive partnerships do not tend to occur naturally (Robson & Rawnsley, 2001). Collins and Burt (1999) assert that risk in vertical supply chains

is asymmetric, so a broad retailing business is likely to survive the loss of a supplier, whereas the consequences for a supplier that loses a key retailer are much more serious.

#### *2.4. The role of the intermediary*

Further support for the foregoing view emerges from vertical chain initiatives such as category management, which moves more risk to a preferred supplier and away from the retailer (Allen, 2001). A preferred supplier takes responsibility for the entire supply chain in a particular product category and aims to maximise sales and profitability by adopting an end-consumer orientation. For its part, the retailer reduces the number of its suppliers and aims to guarantee consistency rather than rely on varying qualities and specifications from different suppliers engaged in continual renegotiations. The benefits of the category management and preferred-reduced supplier cohort approach is exemplified with respect to Tesco's meat supply chain and its enhanced relationships with principal intermediaries discussed in Lindgreen & Hingley (2003); whereby both parties are seen to gain from the relationship. But, critics of category management contend that it reinforces retailer power and control (Dapiran & Hogarth-Scott, 2003; Duffy, Fearne, & Hornibrook, 2003).

However, when responsibilities devolve, such that a preferred or nominated lead supplier dominates a group of products, the benefits can accrue for both the suppliers and the retailer. Previous discussions of 'channel captains' (Fearne & Hughes, 1999) and 'super-middleman' roles (Hingley, 2005) highlight the mutual benefits available through 'partnered' relationships, despite overall imbalances in power. Suppliers engaged in category management roles might actually enjoy positive empowerment (Hingley, 2005), with returns in the form of power and authority when intermediaries perform an enhanced role together with retailers. More generally though, the outcome, as Hingley et al. (2006) reveal, is that

suppliers tend to accept asymmetrical power imbalances, in return for regular retailer business.

What is apparent in the discussion of intermediaries' roles in grocery supply chains and managing grocery sector relationships is that the intermediaries concerned (e.g., super middlemen, category leaders, and so forth) are primarily contract suppliers, and the key interface is the predominant dyadic and vertical structure between that supplier (and its wider lead-intermediary co-ordinated supply network) with the retailer. Despite identification of some benefits of regular and consistent business for suppliers as intermediaries, and thereby subsequent benefits in transaction cost reduction (Hingley, 2005), the emphasis primarily is still on (backward) channel determination from the retailer. Of under-explored interest is the role performed by logisticians and logistics service structures in facilitating intermediary roles. This perhaps may offer a fundamentally more 'independent' one than that operated by supplier-based intermediaries.

### **3. Logistics service providers as enablers of collaboration**

Logistics service providers range from simple hired-transport arrangements to contracts with third-party logistics (3PLs) or fourth-party logistics (4PLs) service providers. The use of 3PLs relates to the phenomena of outsourcing; firms rely on an outsourced logistics provider to manage the entire logistics process neutrally. Logistics outsourcing often involves various forms, including transportation, warehousing, forwarding, brokering, reverse logistics services, and information technology.

A 4PL offers an extension to the third-party logistics concept and differs in several ways (Win, 2008; Papadopoulou, Manthou, & Vlachopoulou, 2013). First, the 4PL is often a separate entity, established as a joint venture or long-term contract between a primary buyer and one or more partners, though it also is possible for a major 3PL to form a 4PL

organisation within its existing structure. Second, the 4PL acts as a single interface between the buyer and multiple logistics service providers; ideally, it manages all aspects of the buyer's supply chain. Third, the 4PL inherently aims to establish a comprehensive supply chain solution rather than just improve the efficiency of physical logistics operations, as a 3PL provider would. Thus, unlike 3PL service provision, 4PL combines process, technology, and management to provide added-value for the hiring firm (Mukhopadhyay, 2006; Win, 2008).

An example of how a 4PL can provide added-value beyond simply organising other 3PLs and managing them is the service provided by Clipper Logistics in the UK for George Clothing, which is the first UK supermarket clothing brand and founded by George Davies in 1990 and purchased by Asda in 1995 (Clipper Logistics, 2014). George has grown to become the largest clothing retailer by volume in the UK today and sells a wide range of fashionable, yet affordable, ladies wear, menswear, kids wear and footwear in Asda stores in the UK and online at [www.george.com](http://www.george.com). The brand is also traded internationally by Asda's owner Wal-Mart.

Clipper receives stock from all of George's 15 different global locations. On arrival at port of entry in the UK stock is unloaded for transportation by road to the Deconsolidation Centers. Stock arriving at Darlington is ready for processing in either hanging or boxed delivery, and is checked against the purchase order for quantity and quality. The stock then goes through a process of de-boxing, processing and picking ready for transportation to George's designated DC or direct to store. Clipper also provides a photography service to post photos of garments on mannequin on the George Clothing website, and offers a specialist returns management process which includes checking quarantine and remedial re-work to meet George's exact needs. The Darlington site provides leading operational standards and innovative solutions for George and handles more than 55 million units per

year. Additionally, Clipper's Leeds site manages enhanced processing within the George network, including flat to hanging processing and additional refurbishment such as applying price labels, swing tickets, care labels, security tags, re-boxing and manual bagging, and steaming and pressing garments to the required standard (Clipper Logistics, 2014).

All parties in a 4PL arrangement usually contribute equity and distribution assets, such as systems capability, strategy development, and process reengineering skills. Physical distribution management staff from the buyer may relocate to the new firm, which represents a strategic rather than tactical partner and supply chain orchestrator. This new firm uses its knowledge to manage and integrate the supply chain and turns to specialist providers of logistics services if it lacks a certain needed expertise or capacity.

In this sense, the nature of a 4PL is similar to a lead logistics partner that organises other third-party logistics partners to outsource logistics functions. However, because a 4PL combines a buyer's in-house resources and capabilities with those of outside agencies, it controls the supply chain for the buyer. The 4PL also can take a lead role in creating value, such as by undertaking the assembly of finished goods on behalf of buyers. Most 4PLs operate nearly virtually and do not own assets, unlike a 3PL. Instead, they make very intense use of technology and software to manage their outsourced and supply chain processes. According to Christopher (2010), such a joint venture likely contains four key components: systems architecture and integration skills; a supply chain control room; the ability to capture and utilize information and knowledge across the network; and access to best-of-breed asset providers.

Existing physical distribution networks operated by individual retailers already incorporate these components, which suggest minimal technical barriers. Electronic communication systems already link 3PL suppliers and retailers through the electronic data interchange that supports efficient consumer response techniques. In addition, the highly

specific nature of assets involved in a joint venture should negate the likelihood of opportunistic behaviour (Bourlakis & Bourlakis, 2005). In an automotive industry setting, Dyer (1997) found that transaction costs fall when firms with high asset specificity enter partnerships. Major grocery retailers have honed such system innovations; car manufacturers even use processes perfected by retailers (Truss et al., 2006).

Because 4PLs produce efficiency, effectiveness, and better economic performance (i.e., profitability), they might further encourage collaboration among retail buyers. One example here is from the industrial sector, in the 4PL relationship managed by steel producer Corus (Tata) and TDG 4PL where TDG were able to provide independent central control of existing hauliers and their relationship with Corus; in order to provide profitable efficiency savings (FBP, 2010). Hence, 4PLs offer independent and objective execution of logistics and supply chain activities which establishes them as ‘honest brokers’ in relation to individual buyers or customers.

Another example related to economic is Clipper Logistics and George of Asda discussed above. The Distribution Director of Asda notes that “the deconsolidation operations at Darlington have created significant efficiencies across the business both in terms of minimising costs and in reducing our environmental impact” (Clipper Logistics, 2014). Further, Clipper’s success with Asda and other retailers such as Tesco has seen them successfully raise £100 million through an initial public offering (IPO) of shares on the London Stock Exchange in late May 2014. The IPO price was around £1.135 per share and in mid-June 2014 shares were trading at £1.385, representing a percentage increase of 22% in almost a month (Hargreaves Lansdown, 2014).

Accordingly, 4PLs might overcome a major stumbling block in the grocery sector to collaboration, namely the retailers’ willingness to engage in such joint ventures (Grant et al., 2008; Hingley et al., 2011), due to parochialism, inter-firm conflicts, or competing interests. Scepticism, however, remains high (Grant et al., 2008; Hingley et al., 2011) despite the

widespread application of some vertical collaboration between retailers and suppliers in mature grocery supply chain systems, retailers continue to resist deeper vertical collaboration, as well as horizontal and network integration.

This resistance may reflect a lack of ability, interest, or determination, or perhaps it simply implies that powerful retailers in a gatekeeper role block collaboration to protect their own self-interest. Notwithstanding, there are some recent examples where collaborative efforts are providing dividends for smaller suppliers of fresh produce (Hingley, Lindgreen & Beverland, 2010; Hingley, 2011) and local food suppliers of regional products (Hingley, 2010); these products are finding more favour with consumers after recent food security and safety issues.

Regardless of the reasons for the aforementioned resistance, we contend it is time to change current physical distribution management structures associated with grocery and wider retail supply chains. In particular, a recent study of supplier–retailer–logistics service provider relationships indicates the potential for increased asset utilization and the marketability of a more environmentally sound approach to physical distribution management (Hingley et al., 2011). These findings resonate with findings regarding the benefits of innovation and collaboration in retail supply chains (Bailey & Evans; 2006; Barratt, 2004; Simatupang & Sridharan, 2002).

Retailer reticence likely relates to power or control issues (Grant, 2005; Hingley, 2005; Kumar, 2005; Spekman et al., 1998), which exert detrimental effects on the retailer-supplier dynamic. Retailers have reached their current positions through significant horizontal mergers and acquisitions rather than friendly collaboration; they also may have reached a point of saturation, especially when legislation aims to ensure competitive markets (Competition Commission, 2000) and activists make claims for consumer welfare (Blythman, 2007; Simms, 2007).

Finally, better physical distribution management can offer far more to retailers than efficiencies and effectiveness (Grant, 2005; Hingley et al., 2011). Grocery retailers value service levels and jealously guard sensitive sales information, so it is difficult to envisage any situation in which they would collaborate so much that they shared physical distribution management with suppliers. Such gatekeepers and their channel captains may be motivated more by safeguards against competition than by collaborative savings; as Hingley et al. (2010) show, powerful channel members can ‘block’ collaborative activity by suppliers to maintain their status quo supply arrangements and thereby retain more channel power and control.

To allay these concerns, retailers might implement collaboration, and by extension appropriate and improve their supplier relationships, by using a 4PL that acts as an ‘honest broker’ and mediates the relationship with suppliers. Retail buyers first would need to consider what type of logistics service provider engagement they need; the typology in Figure 1 (based on work regarding strategic suppliers by Hingley et al. [2011] and Kaufman, Wood, & Theryel [2000]) denotes how collaboration may be considered in terms of axes of intensity (or level) of collaboration and complexity (or level) of collaborative distribution.

**{Take in Figure 1 here}**

In this context, the intensity of collaboration means that from low to high the number and type of relationships become more intense; that is, the logistics service provider is required to become more involved in the retailer’s physical distribution management operations and becomes an ‘order maker’ as opposed to an ‘order taker’ (Holter et al., 2010). The complexity of collaborative distribution means that from low to high the relationship between the logistics service provider and the retailer becomes deeper due to the increased complexity of the physical distribution management network or supply chain (Grant et al., 2008).



At low levels of complexity and collaboration intensity, implying a less mature supply chain, a transactional 3PL may suffice. This Type 1 relationship is transactional in nature and akin to Cox's (2004) non-adversarial arms-length relationship where the current market price and contractual transactions prevail. If distribution complexity increases, a relational 3PL arrangement may be more appropriate. This Type 2 relationship is akin to Cox's (2004) non-adversarial arms-length relationship where there is a transparent operational manner with long-term relationship commitments. However, if there is high intensity, such as in a mature supply chain, a complete 4PL arrangement may be appropriate, whether the 4PL provides physical distribution management on an arm's-length basis for the buyer and solves problems in a minimally collaborative distribution environment (Type 3) or becomes a specialist or consultant (Type 4). These two types of relationships go beyond Cox's (2004) model and represent two new styles of a triadic relationship wherein the 4PL works primarily with the retailer but provides significant value-added services by acting as a 'channel captain' (Ferne & Hughes, 1999) for the retailer's other logistics service providers and suppliers. Thus, the adapted typology in Figure 1 offers a useful methodological process for all logistics service providers, whether 3PL only or 4PL, to determine the nature of their service offering and how they might suggest enhancing collaboration for their customers.

Further, we also present in Figure 2 a model for structuring a physical distribution management system with logistics service providers in a grocery retail supply chain, based on Hingley's (2005) concept of supplier super-middlemen. In this case the logistics service provider collaborates with three retailers (X, Y, and Z) and manages the physical distribution management with three types of suppliers: overseas suppliers, primary producers in the home country, and specialist or local producers, thereby progressing this model as one which represents a more independent and interdependent intermediary role based around logistics service providers, rather than solely suppliers.

**{Take in Figure 2 here}**

In practice, logistics service providers usually provide basic, low-intensity collaborative services, such as transport, storage, and breaking bulk loads or consolidating loads to send to retailer regional distribution centres, especially from primary suppliers in the home country, on a Type 1 basis. They also might attend to activities such as sourcing and qualifying suppliers, particularly overseas suppliers, through the auspices of the British Retail Consortium Global Standards for food, packing and materials, and storage and distribution (BRC, 2011), which implies a Type 2 or Type 3 basis.

However, Figure 2 shows that logistics service providers could coordinate direct deliveries from overseas suppliers to regional distribution centres for retailers X and Y, for products such as fresh produce that do not need to be processed by the logistics service provider and are time-sensitive or perishable. Thus, supply in this context could also follow a Type 4 approach for smaller, local suppliers of regional products for retailer Z; as issues of local supply have become highly relevant in response to quality and environmental concerns (Hingley, 2011), and a counter-trend to national and globalized supply.

#### **4. Conclusions**

We turned to studies in the areas of supply, relationship, and supply chain management as a good foundation for our investigation of the relatively under-researched concept of collaboration and relational activity in UK retail grocery supply chains. Relationships embedded in organizational structures associated with powerful retailer-endorsed intermediaries (whether they serve as preferred suppliers, category leaders, ‘channel captains,’ or ‘super-middlemen’) have been investigated previously, but with a focus primarily on the dyadic interface between supplier or intermediary and the retailer via predominantly vertical co-ordination. The horizontal channel element of these structures is

less understood, relegated to the will of powerful retail buyers. Many such so-called partnering (power-imbalanced) arrangements can deliver an enhanced return to suppliers, but the structures remain resolutely backwardly vertically controlled, with a dyadic interface. Hence, considerably less is known about collaborative and relational implications in a retail grocery supply chain context.

In this article we have contributed to this debate by identifying a special opportunity for collaboration to enable this activity in the retail grocery sector; that is, logistics service providers engaged by the retailers or buyers can be an intermediary to link with suppliers. The intermediary role in category management or super-middleman scenarios is tempered by the retailer's vertical control, but a 4PL is an 'honest broker' and thus offers a framework for co-ordination that is less dominated by channel and network power plays.

The success of this arrangement depends on the influences of supply chain costs and whether retailers are prepared to place the co-ordination of their logistical relationships in the hands of overarching logistics service providers, as in the 4PL scenarios, to save on those costs. The trigger point arises with the rapidly increasing costs for logistics and relationship management, creating the argument for shared supply chain resources. It is an even more likely prospect in an age of rising energy and associated costs to move goods globally. However, caution is necessary when considering the real possibility of channel power plays and blockades of chain and network structural innovations by powerful members who wish to retain authority and control. Still, the distinct possibility of added relationship value, along with cost reduction benefits from shared resources, indicates the promise of a successful relationship outcome from horizontal supply chain structures.

Horizontal collaborative structures have been under-researched, while dyadic relationships and vertical co-ordination have dominated theory and practice. Thus, we call for ongoing practical development of the horizontal dimension of chain and network

relationships through logistics service providers that play coordinating roles with retailers, perhaps in 4PL arrangements. There are several benefits to both retailers and suppliers in doing so. One is that the intermediaries as ‘honest brokers’ can help ensure quality standards are met and maintained in complex food supply chains that are under pressure to reduce costs, particularly in the public or catering sectors. Recent issues regarding sub-standard or poor quality food finding its way into the food supply chain and being sold at retailers (e.g. the ‘horsegate’ scandal of 2013) are due to complex supply chains and indeterminate suppliers in some cases. Another benefit is that an ‘honest broker’ intermediary can provide a holistic view of the retail supply chain from retailer or buyer through tier 1 and possibly tier 2 suppliers in order to enable effective and efficient supply chain activities to reduce costs.

As with all articles there are limitations. This article is primarily conceptual but derives the frameworks presented herein from the few previous empirical studies that have been conducted. Further empirical investigations should be undertaken in the retail grocery sector as well as and wider sectoral contexts to validate or refute our notions and/or frameworks. Having said that, we consider grocery supply collaboration and relationships are typical of other sectors, featuring common issues of communication, relationship coordination, power dependence, and so forth. Finally, it would be helpful to explore the boundaries of the trade-off that retailers (or other predominant chain and network power brokers) make between the advantages of horizontal coordination (relationships, shared facility cost savings) and their existing desire for vertically coordinated control.

## **5. References**

Aastrup, J., Grant, D.B., & Bjerre, M. (2007). Value creation and category management through retailer-supplier relationships. *International Review of Retail, Distribution and Consumer Research*, **17**(5), 523-541.

- Allen, S. (2001). Changes in supply chain structure: The impact of expanding consumer choice. In J. F. Eastham, L. Sharples, & S. D. Ball (Eds.), *Food Supply Chain Management: Issues for the hospitality and retail sectors*. Oxford: Butterworth-Heinemann, 314-323.
- Anderson, J.C., Håkansson, H., & Johanson, J. (1994). Dyadic business relationships within a business network context. *Journal of Marketing*, **58**(October), 1-15.
- Bailey, K. & Evans, B. (2006). Understanding the nature of collaboration within fresh produce value chains. *Working Paper L06/001*, Cardiff Business School, Cardiff.
- Barratt, M. (2004), Research note: Understanding the meaning of collaboration in the supply chain. *Supply Chain Management: An International Journal*, **9**(1), 30-42.
- Becker, J. (2008). *Cooperation in Buyer-Supplier Relationships: A comparison of industries*. Unpublished PhD thesis. Oxford: University of Oxford.
- Blythman, J. (2007). *Shopped: The shocking power of Britain's supermarkets*. London: Harper Perennial.
- Bourlakis, C. & Bourlakis, M. (2005). Information technology safeguard, logistics asset specificity and fourth party logistics network creation in the food retail chain. *Journal of Business and Industrial Marketing*, **20**(2), 88-98.
- BRC (2011). British Retail Consortium Global Standards.  
<http://www.brcglobalstandards.com/> (accessed 13 December 2013).
- Christopher, M. (2010). *Logistics and Supply Chain Management*, 4th ed. Harlow: Pearson Education.
- Clipper Logistics (2014). <http://www.clippergroup.co.uk/case-studies/asda/>, [accessed 15 May 2014].

- Collins, A. & Burt, S. (1999). Dependency in manufacturer–retailer relationships: The potential implications of retail internationalization for indigenous food manufacturers. *Journal of Marketing Management*, **15**(1), 673–693.
- Competition Commission (2000), *Supermarkets: A report on the supply of groceries from multiple stores in the UK*. London: The Stationary Office.
- Cox, A. (2004). The art of the possible: relationship management in power regimes and supply chains. *Supply Chain Management: An International Journal*, **9**(5), 346-356.
- Dapiran, G. P. & Hogarth-Scott, S. (2003). Are co-operation and trust being confused with power? An analysis of food retailing in Australia and the UK. *International Journal of Retail & Distribution Management*, **31**(5), 256-267.
- Duffy, R., Fearne, A., & Hornibrook, S. (2003). Measuring distributive justice and procedural justice: An exploratory investigation of the fairness of retailer–supplier relationships in the UK food industry. *British Food Journal*, **105**(10), 682-694.
- Dyer, H.D. (1997). Effective interfirm collaboration: how firms minimize transaction costs and maximize transaction value. *Strategic Management Journal*, **18**(7), 535-556.
- FBP. (2010). Freight Best Practice. The benefits of central supply chain management: Corus and TDG. FBP1092 © Queens Printer and Controller of HMSO 2010.
- Fearne, A. & Hughes, D. (1999). Insight from industry: success factors in the fresh produce supply chain: Insights from the UK. *Supply Chain Management: An International Journal*, **4**(3), 120-128.
- Fernie, J. & Grant, D.B. (2008). On-shelf availability: The case of a UK grocery retailer. *International Journal of Logistics Management*, **19**(3), 293-308.
- Fernie, J. & McKinnon, A.C. (2003). The grocery supply chain: improving efficiency in the logistics network. *International Review of Retail, Distribution and Consumer Research*, **13**(2), 161-174.

- Frankel, R., Goldsby, T.J., & Whipple, J.M. (2002). Grocery industry collaboration in the wake of ECR. *International Journal of Logistics Management*, **13**(1), 57-72.
- Frazier, G.L. (1983). On the measurement of interfirm power in channels of distribution. *Journal of Marketing Research*, **20**(May), 158-166.
- Grant, D.B. (2005). The transaction–relationship dichotomy in logistics and supply chain management. *Supply Chain Forum: An International Journal*, **6**(2), 38-48.
- Grant, D.B., Fernie, J., Trautrim, A., & El-Adas, R. (2008). Improving service and sustainability in retail supply chains. *Proceedings of the 13th International Symposium on Logistics (ISL) 2008*, Bangkok, July, 257-264.
- Grant, D.B. & Torgersen, M. (2006). Lean manufacturing at Loyds Industri AS. In J.S. Arlbørn, Á. Halldórsson, M. Jahre, K. Spens, & G. Stefansson, G. (Eds.), *Nordic Case Reader in Logistics and Supply Chain Management*. Odense: University Press of Southern Denmark, 91-102.
- Håkansson, H. & Snehota, I. (1982). *Developing Relationships in Business Networks*. Routledge, London.
- Håkansson, H. & Snehota, I. (1995). *Developing Relationships in Business Networks*. Boston: International Thomson Press.
- Hargreaves Lansdown (2014). <http://www.hl.co.uk/shares/shares-search-results/c/clipper-logistics-plc-ordinary-0.05p>, [accessed 18 June 2014].
- Hingley, M.K. (2005). Power to all our friends? Living with imbalance in supplier–retailer relationships. *Industrial Marketing Management*, **34**(8), 848-858.
- Hingley, M. (2010). Networks in the socially embedded local food supply: The case of retailer co-operatives. *Journal of Business Market Management*, **4**(3), 111-128.
- Hingley, M. (2011). Opinion: Independent retailers can flourish in fresh produce. *Fresh Produce Journal*, **116**(15 July), 11.

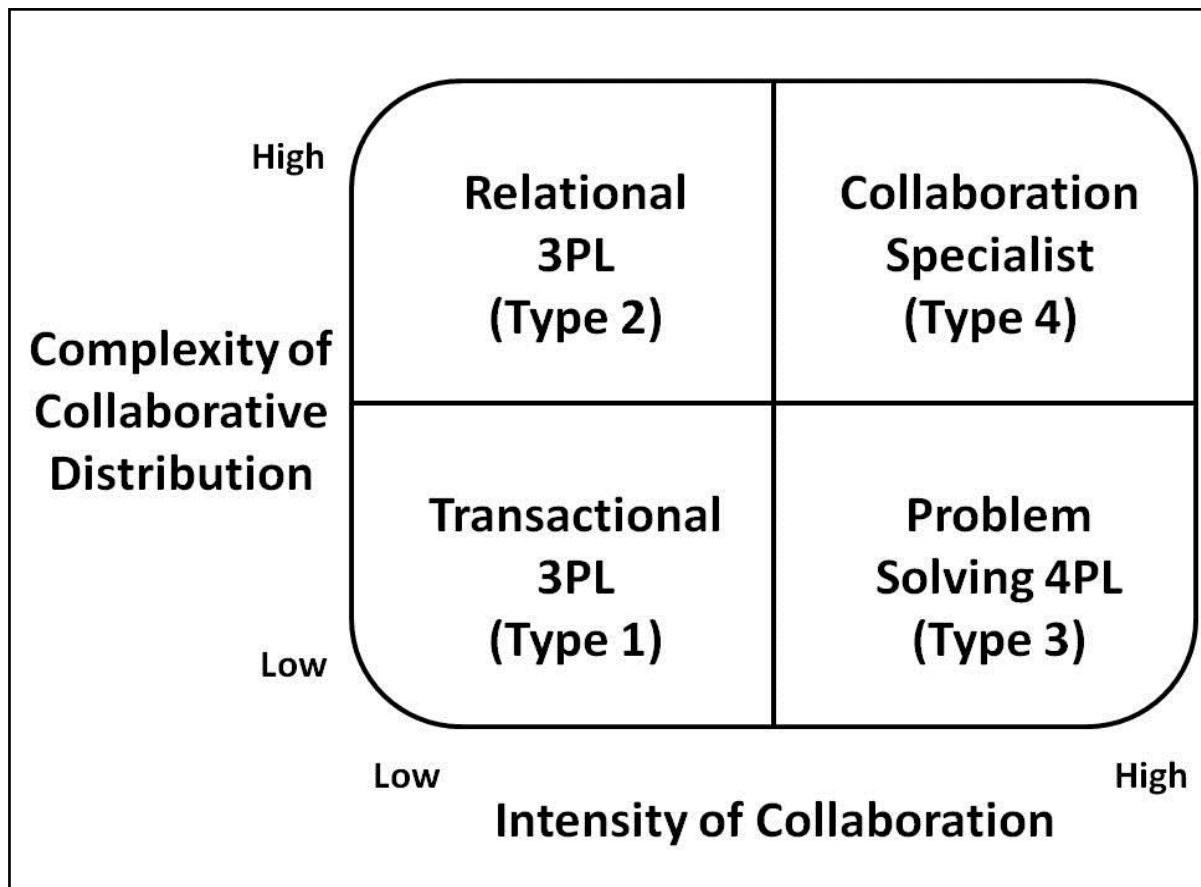
- Hingley, M., Lindgreen, A., & Beverland, M. (2010). Barriers to network innovation in U.K. ethnic fresh produce supply. *Entrepreneurship and Regional Development*, **22**(1), 77-96.
- Hingley, M., Lindgreen, A., & Casswell, B. (2006). Supplier-retailer relationships in the UK fresh produce supply chain. *Journal of International Food and Agribusiness Marketing*, **18**(1/2), 49-86.
- Hingley, M., Lindgreen, A., Grant, D.B., & Kane, C. (2011). Using fourth party logistics management to improve horizontal collaboration among grocery retailers. *Supply Chain Management: An International Journal*, **16**(5), 316-327.
- Holter, A.R., Grant, D.B., Ritchie, J.R., Shaw, W.N. & Towers, N. (2010). Long range transport: Speeding up the cash-to-cash cycle. *International Journal of Logistics: Research & Applications*, **13**(5), 339-347.
- Jain, M., Khalil, S., Johnston, W.J., & Cheung, J.M-S. (2014). The performance implications of power-trust relationship: The moderating role of commitment in the supplier-retailer relationship. *Industrial Marketing Management*, in press.
- Kaufman, A., Wood, C.H., & Theyel, G. (2000). Collaboration and technology linkages: a strategic supplier typology. *Strategic Management Journal*, **21**(6), 649-663.
- Kraljic, P. (1983), Purchasing must become supply management. *Harvard Business Review*, **61**(5), 109-17.
- Kumar, N. (2005). The power of power supplier-retailer relationships. *Industrial Marketing Management*, **34**(8), 863-866.
- Lee, H.L., Padmanabhan, V., & Whang, S. (1997). Information distortion in a supply chain: The bullwhip effect. *Management Science*, **43**(4), 546-558.
- Liker, J.K. & Choi, T.Y. (2004). Building deep supplier relationships. *Harvard Business Review*, **82**(12), 104-113.



- Lindgreen, A. (2003). Trust as a valuable strategic variable in relationship marketing: different types of trust and their implementation. *British Food Journal*, **105**(6), 310-328.
- Lindgreen, A., & Hingley, M. (2003). The impact of food safety and animal welfare policies on supply chain management: the case of the Tesco meat supply chain", *British Food Journal*, **105** (6). 328-349.
- Lindgreen, A., Palmer, R., Wetzels, M.G.M., & Antioco, M.D.J. (2009). Do different marketing practices require different leadership styles? An exploratory study. *Journal of Business and Industrial Marketing*, **24**(1/2), 14-26.
- Lindgreen, A., Vanhamme, J., Raaij, E. van, & Johnston, W.J. (2013). Go configure: The mix of purchasing practices to choose for your supply base. *California Management Review*, **55**(2), 72-96.
- Lindgreen, A. & Wynstra, F. (2005). Value in business markets: what do we know? Where are we going? *Industrial Marketing Management*, **34**(7), 732-748.
- Mason, R., Lalwani, C., & Boughton, R. (2007). Combining vertical and horizontal collaboration for transport optimization. *Supply Chain Management: An International Journal*, **12**(3), 187-199.
- Meehan, J. & Wright, G.H. (2013). Power priorities in buyer-seller relationships: A comparative analysis. *Industrial Marketing Management*, **42**(8), 1245-1254.
- Möller, K. & Halinen, A. (2000). Relationship marketing theory: Its roots and direction. *Journal of Marketing Management*, **16**(1-3), 29-54.
- Morgan, R.M. & Hunt, S.D. (1994). The commitment-trust theory of relationship marketing. *Journal of Marketing*, **58**(3), 20-38.
- Mukhopadhyay, S.K. (2006). The role of 4PL as the reverse logistics integrator: Optimal pricing and return policies. *International Journal of Physical Distribution & Logistics Management*, **36**(9), 716-729.

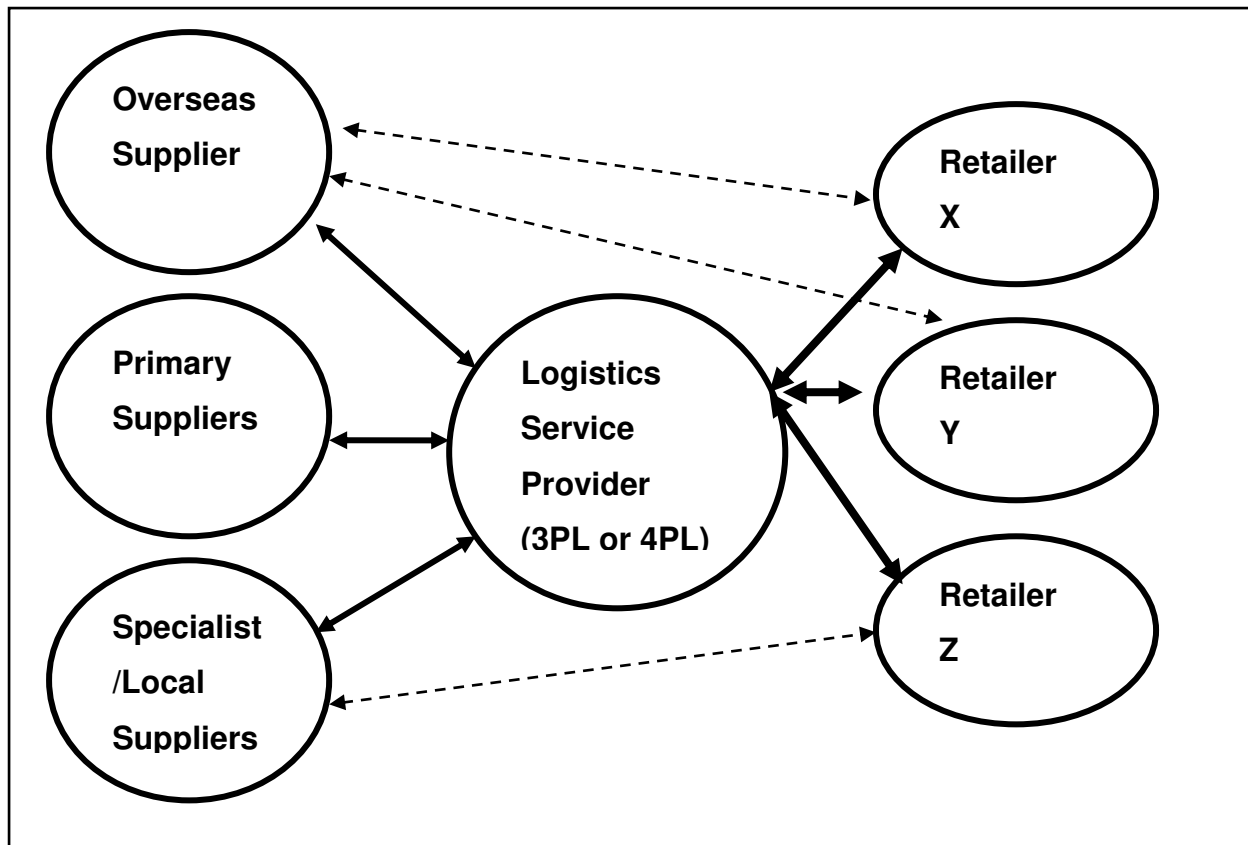
- Ojansivu, I., Alajoutsijärvi, K., & Salo, J. (2014). The development of post-project buyer-seller interaction in service-intensive projects. *Industrial Marketing Management*, in press.
- Ojasalo, J. (2001). Key account management at company and individual levels in business-to-business relationships. *Journal of Business & Industrial Marketing*, **16**(3), 199-220.
- Papadopoulou, E.M., Manthou, V., & Vlachopoulou, M. (2013). 4PL network partnerships: the pre-selection phase. *International Journal of Logistics: Research and Applications*, **16**(3), 175-192.
- Potter, A., Mason, R., & Lalwani, C. (2006). Analysis of factory gate pricing in the UK grocery supply chain. *International Journal of Retail & Distribution Management*, **35**(10), 821-834.
- Robson, I. & Rawnsley, R. (2001). Co-operation or coercion? Supplier networks and relationships in the UK food industry. *Supply Chain Management: An International Journal*, **6**(1), 39-47.
- Roseira, C., Brito, C., & Henneberg, S.C. (2010). Managing interdependencies in supplier networks. *Industrial Marketing Management*, **39**(6), 925-935.
- Samiee, S. & Walters, P.G.P. (2006). Supplier and customer exchange in international industrial markets: An integrative perspective. *Industrial Marketing Management*, **35**(5), 589-599.
- Simatupang, T.M. & Sridharan, R. (2002). The collaborative supply chain. *International Journal of Logistics Management*, **13**(1), 15-30.
- Simms, A. (2007). *Tescopoly: How one shop came out on top and why it matters*. London: Constable.
- Soosay, C.A., Hyland, P.W., & Ferrer, M. (2008). Supply chain collaboration: capabilities for continuous improvement. *Supply Chain Management: An International Journal*, **13**(2), 160–169.

- Spekman, R.E., Kamauff, J.W., & Myhr, N. (1998). An empirical investigation into supply chain management: A perspective on partnerships. *International Journal of Physical Distribution & Logistics Management*, **28**(8), 630-650.
- Stephens, C. (2006). *Enablers and Inhibitors to Horizontal Collaboration between Competitors: An investigation in UK retail supply chains*. Unpublished PhD thesis. Cranfield: Cranfield University.
- Stephens, C. & Wright, D. (2002). The contribution of physical distribution management to the competitive supply chain strategies of major UK food retailers. *International Journal of Logistics: Research and Applications*, **5**(1), 92-108.
- Truss, L.T., Wu, P., Saroop, A., & Sehgal, S.T. (2006). Enterprise demand sensing in the automotive industry. *Journal of Business Forecasting*, **25**(3), 22-30.
- Uлага, W. & Eggert, A. (2006). Value-based differentiation in business relationships: Gaining and sustaining key supplier status. *Journal of Marketing*, **70**(1), 119-136.
- Whiteoak, P. (2004). Rethinking efficient replenishment in the grocery sector. In J. Fernie and L. Sparks (Eds.), *Logistics and Retail Management*, 2nd ed. London: Kogan Page, 138-163.
- Wilson, D.T. (1995). An integrated model of buyer-seller relationships. *Journal of the Academy of Marketing Science*, **23**(4), 335-345.
- Win, A. (2008). The value a 4PL provider can contribute to an organisation. *International Journal of Physical Distribution & Logistics Management*, **38**(9), 674-684.



**Figure 1: Proposed typology for logistics service provider collaboration**

Adapted from Kaufman et al. (2000) and Hingley et al. (2011)



◄---► Denotes direct supplier-retailer connection

◄==► Denotes supplier-logistics service provider connection

◄==► Denotes logistics service provider-retail connection

**Figure 2: Domain of a logistics service provider acting as intermediary**

Adapted from Hingley (2005)