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**SWP 6/00 OUTSOURCING THE LOGISTICS FUNCTION:
THE SUPPLY CHAIN ROLE OF THIRD-PARTY
LOGISTICS SERVICE PROVIDERS IN UK
CONVENIENCE RETAILING**

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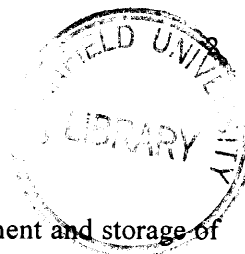


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ABSTRACT

Logistics, defined as the process of strategically managing the procurement, movement and storage of materials; parts; finished inventory and related information flow through the organisation and its marketing channels, is increasingly being recognised as a vital part of an organisation's marketing strategy.

In many organisations, the logistics function is currently facing significant challenges. Pressures from increasing competition and high customer service-level expectations have created a need for more professional and better-equipped logistics services. Confronted with such competitive pressures, these organisations are faced with decisions of the make OR buy kind with regard to the logistics processes of supply and distribution. In addition, the emergence of a need to focus on core capabilities has led many organisations to contract out all, or part of, the logistics function to third-party providers.

This paper explores the challenges of outsourcing logistics in the UK convenience-retailing sector.

Keywords: Logistics Outsourcing, Supply Chain Integration, Third-Party Logistics Service Providers, Case Study

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**OUTSOURCING THE LOGISTICS FUNCTION:
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INTRODUCTION

Traditionally, the management of material flows has centred, and depended, on the internal capabilities of the organisation. This usually led to the development of inventory-driven systems i.e., buying enough goods far enough in advance to ensure steady product supply. Similarly, organisations managed the inbound transportation of raw materials as a separate function from the outbound transportation and distribution of finished products. Typically, each business unit controlled its own logistics activities. However, in today's industries, characterised by constant change and heavy competition, one can argue that this traditional way of developing logistics strategy and structuring supply chain organisations is no longer a valid means for ensuring firms' survival.

This industrial environment - characterised by increased competition and globalisation as well as the need for increased product variety, reduced order cycle times and reduced inventories - has created a need for more responsive organisational procedures based on effective supply chain alliances. These increasingly competitive pressures have encouraged many organisations to re-examine their individual and collective positions within the supply chain. As many of these businesses reconfigure their operations around core competencies, classical corporate structures are giving way to new forms of organisation:

"The classic, vertically integrated, multidivisional organization, so successful in the 20th century, is unlikely to survive in such an environment. The evidence indicates it will be replaced by new forms of network organization consisting of large numbers of functionally specialized firms tied together in cooperative exchange relationships." (Achrol, 1997).

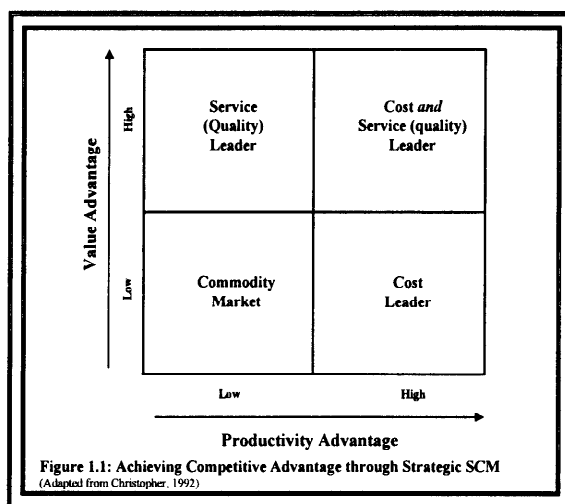
Responding to the increasing pressure posed by such intense competition, leading and innovative organisations are continuously working on improving their market position to achieve sustainable leadership in their field. The supply chain has been acclaimed as a new arena for achieving competitive strength (Christopher, 1992) and within this, the logistics process has been identified as one area that can provide a competitive edge.

Supply chain management (SCM henceforth), through effective logistics operations, has been promoted as a vital source of achieving enduring positions of superiority over competitors especially in terms of customer preference (Ellram & Cooper, 1990; Christopher, 1992). The ongoing competitiveness of organisations is therefore tied to the dynamics of the supply chain in which they participate i.e., the positioning of the supply chain for achieving sustainable competitive advantage represents a major strategic benefit of effective SCM.

In the past, it was thought that the only way organisations could achieve a defensible competitive strategy was if they pursued either a low-cost strategy or one of differentiation (Porter, 1985). The mission of effective SCM however, is to ensure a smooth-running distribution channel whereby customers are provided with relative differentiation through service delivery. At the same time, costs are kept at a minimum through a reduction in inventory (Ellram & Cooper, 1990; Christopher, 1992) and improved capacity utilisation (see Figure 1.1) (Christopher, 1992).

As figure 1.1 shows and with the high rate of changing technologies characterising today's marketplace, successful organisations will be those who recognise and take advantage of these opportunities offered by effective SCM (Lambert & Stock, 1993). The establishment of a highly effective supply chain represents the only way that organisations can maintain a defensible competitive position in today's market. It is supply chains – not organisations- who

compete (Christopher, 1998) and they do so on the basis of virtual, information-based integration.



Similarly, in order to remain competitive, industrial organisations are continually faced with challenges to improve product and service quality, whilst reducing supply chain costs and lead times (Swaminathan *et al*, 1994). One of the ways by which this can be achieved is by adopting a strategy which focuses on identified core, value adding processes within the organisation whilst outsourcing others to competent service providers. In their 1990 paper, Prahalad and Hamel highlight this competence-based approach to seeking competitive advantage in the industrial environment.

Applying this core-competence strategy to SCM, we can see that one of the obvious ways of developing a competitive supply chain is by contracting-out non-core, non-value adding supply chain processes to specialist organisations outside of the supply chain – the principle of outsourcing. This principle represents a viable strategic option for dealing with non-core supply chain processes (Cooke, 1998).

To date, a lot of the research and literature on outsourcing the logistics process have been in, and have focused on, activities within US industry with most of these centred on the

manufacturing sector. Similarly, for a while now, outsourcing has been recognised as a feasible strategic option for dealing with non-core processes within organisations. Within the retail sector however, the logistics processes of purchasing, distribution and order fulfilment are core to organisational strategy and as such outsourcing them may have implications on organisation strategy as well as on the overall supply chain. These issues however, require further investigation. Finally, a great deal of the existing literature on logistics outsourcing focuses on warehousing & transportation and the use of shippers and carriers on a global distribution basis (see for example: Marien, 1996; Gooley, 1997; Cooke, 1998 and Moore & Cunningham, 1999).

Following on from this brief introduction, the objectives of this research are to explore the implications of logistics outsourcing in UK convenience retailing and, by this, to raise awareness of, and facilitate discussion in, the strategic and supply chain implications of outsourcing core, value-adding organisational processes such as logistics. In particular, the research explores issues concerning the influence of logistics outsourcing on the competitive strength of the supply chain. These objectives can be summarised as follows:

“To extend theoretical and practical knowledge of the effect of logistics outsourcing on the supply chain”.

In order to achieve this objective, the research proposes the following:

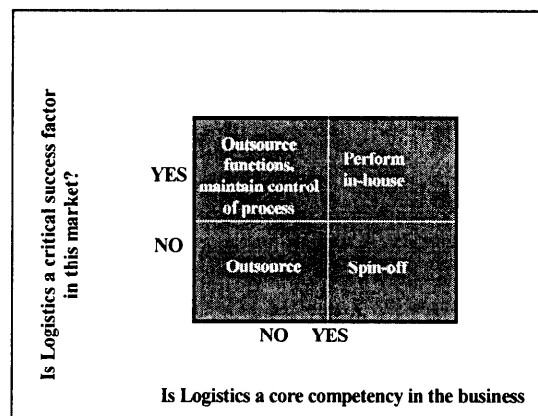
1. To determine the factors that influence logistics outsourcing decisions
2. To determine the role of third party logistics providers (3pl's) in the supply chain
3. To analyse how and to what extent logistics outsourcing influences the supply chain role of 3pl's

These objectives raise such questions as: ‘Why do organisations outsource?’ In particular, ‘Why do organisations outsource logistics or ‘When is it appropriate to outsource such a core

part of organisations' retail strategy?' 'What role do third party logistics providers play in all of these and 'What effect does outsourcing have on the supply chain?

Spears (1997) developed a framework within which he postulated that - under circumstances whereby the outsourced skills are critical for the success of the organisation - organisations are more inclined to adopt a strategy whereby specific functions are outsourced whilst control of the overall process is retained in-house (see figure 1.2).

Figure 1.2: Framework for Logistics Outsourcing Decisions (adapted from Spears, 1997)



A typical example of this scenario is the case of UK convenience retailers outsourcing logistics functions to third party service providers. This however raises questions about the effect of the presence of these third parties on the supply chain. In particular, on the practice of supply chain management for the purpose of creating a seamless network of supply chain processes. As a result, the following research questions were put forward:

- “How and why do convenience retailers facilitate supply chain integration through the use of third party logistics service providers?”
- What is the role of 3pl's in building supply chain competitive advantage through virtual integration?

- When and why is it appropriate (for organisations) to extend the principle of outsourcing to core, value adding processes?

This paper is a part of an ongoing doctoral research project. It represents a summary of findings of the initial (Pilot) case study. The overall objective of the research is to assess the role played by third party logistics service providers (3pl's) in achieving an integrated supply chain as they apply their expertise to the logistics functions of purchasing and distribution in retail supply chains. The aim is to develop a model of supply chain integration through logistics outsourcing applicable - in particular - to the convenience stores' context but generally to retail supply chain issues. In this way, the research will aim to contribute to theory-development in the field of SCM (with particular emphasis to its practical application).

LOGISTICS - A NEW SOURCE OF COMPETITIVE ADVANTAGE

Logistics, defined as the process of strategically managing the procurement, movement and storage of materials, parts and finished inventory and related information flow through the organisation and its marketing channels (Christopher, 1992), is increasingly being recognised as a vital part of organisations' marketing strategy (Sheffi, 1990). Effective engineering and management of the logistics function in many organisations represents an opportunity to improve both profit and service levels (Sheffi, 1990).

With the increasing trend of achieving competitive advantage on the basis of supply chain strength, logistics is becoming increasingly critical as borders between markets dissolve and logistics operations becomes more central to organisations' ability to produce and distribute goods and services. Consequently, organisations have had to streamline their logistics process by focusing on improving logistics in order to remain competitive.

Similarly, on the understanding that logistics processes tend to require proportionately high support costs, many organisations are undertaking improvement strategies to boost their internal processes consequently, logistics planning and control are still being handled in-house for these organisations. Many others however, representing the focus of our discussion henceforth, are employing the assistance of external expertise in a variety of contractual arrangements. One of such arrangements is that of logistics outsourcing. Within these organisations and as more consideration is being given to the planning of logistics functions to maximise competitive advantage, the prominence of third-party logistics providers as a vital part of business strategy has increased.

OUTSOURCING

Outsourcing can be defined as the act of using third parties rather than in-house capability to perform non-core activities (Ellram & Cooper, 1990). It represents a way by which organisations reduce their financial risk whilst maximising the possibilities of developing comparatively higher levels of competitiveness. Outsourcing generally involves the transfer of responsibility and the need for assets to a third party (Ellram & Cooper, 1990) who can then leverage their expertise to provide these services (Spekman, 1988).

The literature on core competencies has brought the importance of outsourcing activities for which expertise cannot be provided in-house within organisations to the forefront of organisation strategy (Quinn, 1992; Prahalad & Hamel, 1990). In particular, cost/service trade-offs and the quality of information systems along the marketing channel are some of the factors, which influence organisations' decision to outsource some or all of their functions to third parties (Rao & Young, 1994). Third party services can include any or all of information technology, administration, transportation management, warehousing, financial service management, inventory management, logistics integration, import/export activities, etc (Copacino, 1997). Of these, interest in logistics outsourcing (sometimes referred to as third-party or contract logistics) has been growing over the past few years as a result of the increasing trend of SCM (Copacino, 1998) and as indicated by the volume of writings on the subject in trade publications and scholarly journals. Regarded as "one of the most widely discussed contemporary topics in the field of business logistics" (Lieb 1992, p. 29), outsourcing of logistics processes represents a specifically defined contractual relationship that is dependent on the 3pl's meeting the buying organisations' defined performance and service goals.

Supply chain partnerships (Ellram, 1991), increased focus on core business processes (Muller, 1992), reduction of overall distribution costs (Arend, 1998), the trend towards centralised distribution systems (Bence, 1995) and effective capital utilisation (Copacino, 1998) have all been cited as the reasons organisations decide to pursue a strategy of outsourcing. Other factors, which prompt many organisations to investigate the use of third party logistics, include:

- The need to establish a wider access into new and existing markets (Cooke, 1998);
- The need to assess present and future market prospects for products and services (Razzaque & Sheng, 1998);
- The need to reduce overall supply chain costs (Cavinato, 1989);
- The need to keep abreast of the latest technological advancements in supply chain logistics without necessarily incurring the costs to time and assets involved in doing so (Cooke, 1998);
- The need to determine the products' competitive advantage in the marketplace; etc.

Of these, globalisation and the consequent development of more complex supply chains are considered to be the most prominent (Byrne, 1993; Sheffi, 1990; Rao *et al*, 1993; Razzaque & Sheng, 1998).

Logistics Outsourcing – The role of third parties in logistics change

“Cost control, ... information technology and inventory management are ... major logistics concerns ... and, ... have resulted in further emphasis on [logistics] outsourcing”

(Razzaque & Sheng, 1998, p. 92)

Third party logistics services refer to situations where a third party (the buyer and seller being the first and second parties) performs logistics activities on behalf of the buyer and/or the seller (McGinnis *et al*, 1995). Such services include transportation management (Sheffi, 1990); warehousing (LaLonde & Maltz, 1992); distribution and procurement (Sparks, 1994).

Third party logistics service providers can offer logistics expertise as well as cost advantages to individual organisations because they provide an opportunity for organisations not to tie up unnecessary capital in costly logistics-related equipment such as warehouses, trucks, sortation equipment, etc. These organisations also provide the added advantage of economies of scale¹ (which becomes apparent as volume increases are handled without a proportionate increase in labour or equipment).

At the heart of all these strategic logistics issues is the fact that supply chain organisations need to reconfigure their operations in order to accommodate the changes inherent in a logistics outsourcing strategy. One of the most common ways of doing this is to adopt a process-oriented approach (Stevens, 1989; Cooper, 1993), placing increased emphasis on business processes that cut across functional barriers. In practice, this requires an integrative approach to SCM i.e., Supply Chain Integration.

In order to achieve this integrative approach in practice, organisations have tended to form logistics alliances with third party service providers (McGinnis *et al*, 1995). This paper explores the supply chain implications of logistics outsourcing and the role of 3pl's in building competitive advantage through the virtual integration of the supply chain.

Logistics Outsourcing – A Retail Perspective

The retail sector is concerned with the structure and management of marketing and physical distribution channels (Sparks, 1994). As an extension of this physical distribution function, the logistics concept in retailing is concerned with the strategic management of the supply chain (Christopher 1986) i.e., the distribution channel is the arena within which organisational

strategy, the marketing function and logistics processes culminate in consumer transactions (Wilkinson, 1996). In these markets, the processes involved in the supply and distribution of products are critical activities through which sustainable competitive strength can be harnessed.

In particular, within the convenience retailing sector, the need for customer-service and Just-in-Time product delivery as a means of differentiation cannot be over-emphasised (Philips, 1996). In this sector, the increasing presence of severe competition for shelf space and continuing pressure on costs and margin - coupled with the emergence of new shop formats and increased industrial consolidation – has led many organisations to seek for new ways to improve their operations and cost effectiveness. This requires the adoption of a radical approach to corporate strategy in order to achieve sustainable competitive advantage. One possible approach is the application of supply chain management (SCM) principles to promote long-term strategic alliances.

Within the UK, many convenience retailer have been working towards the introduction of a “total supply chain” view of operating their retail outlets (Smith, 1998) through the use of direct supplier negotiation, centralised warehousing and distribution systems as well as the use of third parties (IGD, 1994). In particular, third party logistics has become an important issue in grocery retailing so much that it is not unknown for 3pl’s to oversee delivery of the product from the manufacturers right through to the end consumer, thus creating a seamless operation of the supply chain processes. This trend has attracted a surprisingly large amount of interest, considering that the term ‘third party logistics’ did not even exist in retailing vocabulary a little over a decade ago (Davis, 1993).

¹ Some industry experts (see Cooke, 1998) have however challenged this notion.

RESEARCH METHODOLOGY

From the above discussion, the focus of the research is the implications of logistics outsourcing within the UK convenience-retailing sector and on the supply chain role of 3pl's in achieving supply chain integration. Within this focus, the factors that influence logistics outsourcing (in terms of the factors that influence how these organisations decide whether or not to outsource) need to be determined. Secondly, we need to determine the extent to which the logistics process is being outsourced and what role 3pl's play in achieving the 'total supply chain solution' sought after by the retailers employing this strategy.

The unit of analysis, on which the research process is directed, is the relationship that exists between convenience retailers and their corresponding 3pl's. The limitations provided for the research by this unit of analysis is such that data collection and subsequent analysis relates only to *those organisations within the convenience retailing industry who have outsourced part or all of their logistics operations to third party service providers*. Secondly, it refers to a relationship, which - although dyadic in nature - is capable of influencing the nature of other relationships and activities within its immediate supply chain. Within this unit of analysis, the research focuses on five main issues:

- The factors influencing organisations' decisions to outsource
- The extent of logistics outsourcing
- Whether or not logistics outsourcing offers a supply chain solution
- The nature of the relationship between retailers and the corresponding 3pl's
- The role played by 3pl's

Overall, the research seeks to ask why the above issues exist in the way that they do and what prescriptions exist for an ideal scenario. The approach to data collection ensured that all of the managers - from both organisations - responsible for the strategic co-ordination and operation of the outsourcing relationship were interviewed.

The research adopted exploratory methods because the phenomenon of interest is a relatively new one, and because it provides rich, contextual elements to the research findings. These exploratory research strategies, within a case study approach, provide depth and insight into a little known phenomenon such as that presented by the supply chain effect of logistics outsourcing (Yin, 1994; Ellram, 1996).

Following an extensive review of the literature, six unstructured pre-pilot interviews were conducted with various industry experts and practitioners including logistics managers, consultants and retail managers. These interviews had the purpose of clarifying the various issues that emerged from the literature in order to focus the research on an issue relevant to industry. These interviews also helped in the development of new themes that had not been identified in the review of relevant literature. These discussions included an introduction to the research interest, a reality check of the researcher's perception of existing industrial trends and the extent to which some of these trends are researchable or otherwise. Following these discussions, three possible convenience retailers were identified (along with their respective logistics service providers) within the UK for in-depth case studies. This paper reports the findings from the first of these case studies.

The research method for the first case study involved three rounds of in-depth, semi-structured interviews with eight key personnel from both organisations that were actively involved in the day-to-day operation of the logistics outsourcing contract and the consequent centralised distribution system. Issues covered in these interviews included an introduction to the research area and the data collection method to be used. These interviews were all recorded on tape and the transcripts, along with field notes were analysed using manual coding techniques with the aid of a word processing software tool employed at the initial stages to aid data organisation. Other data collection techniques adopted in addition to these

in-depth interviews were observations of the extent of asset-dedication and the analysis of internal documents provided, sector-specific public survey findings as well as press clippings. The purpose of using these multiple sources of data was to create meaning to the information surrounding the nature of the contract and the relationships within the overall supply network. In this research, qualitative research methods were used because they offer a holistic and realistic description and/or explanation of the research phenomenon (Miles & Huberman, 1994; Ellram, 1996).

RESEARCH FINDINGS

This section provides a summary of the findings from the case study and the discussion is centred upon the *five-fold* focus of the research earlier discussed (see section on research methodology).

Drivers of the Outsourcing Decision

These represent the factors that influence organisations' decisions to outsource. From the pilot results, two major issues were apparent:

- An internal focus, i.e., organisations choose outsourcing as a strategic option in order to improve their competitive position even if this means doing so at the expense of overall supply chain profitability.
- There can be an external focus for logistics outsourcing. This external driver of logistics outsourcing represents a strategic option for organisations that want to promote improved supply chain operations.

Secondly, for many retail organisations, the primary purpose for outsourcing is as a means of reducing direct distribution costs. Although the proposed logic in the literature is that outsourcing to third parties should provide the buying organisation with economies of scale, the findings of the research show otherwise. According to the findings, third-party solutions can sometimes be so much tailored to individual customers' requirements, that it is not easily transferable across a large client base. One possible way of limiting this loss in scale economies is if service providers are encouraged by their retail clients to extend these tailored services across an increased number of clients in a *similar* industry.

The Extent of Logistics Outsourcing

Although many organisations today proclaim the advantages of outsourcing entire supply chain processes to third parties, it is more usual to outsource only a part of such processes. This limited extent to outsourcing increases the tendencies for service providers to act as

functional contractors as opposed to encouraging the development of close and trusting relationships, which extend right across the supply chain. Within the organisation involved in this case study however, it appears that the extent of outsourcing is increasing steadily albeit slowly. This was observed from the increasing tendency for the service provider's representative to liaise with the retailer's buyers and suppliers on inventory control and supplier management issues.

This finding implies therefore that the extent of logistics outsourcing appears to be directly proportional to the level of strategic and supply chain involvement by 3pl's which is in turn proportional to the possible role played by these 3pl's on the supply chain. Presently however, the ratio of the logistics activities outsourced to those performed in-house is split somewhat along the lines of operational/strategic.

Logistics Outsourcing – A Supply Chain Solution

Some UK convenience retailers attempt to provide a holistic solution to their supply chain by giving considerable attention to its performance as a single entity with a view to achieving competitive superiority over other retailers. From the research findings, the driving force is the recognition that sub-optimisation occurs if each organisation in a supply chain attempts to optimise its own functions without integrating them with the other supply chain members in order to optimise the performance of the entire supply chain.

For these retailers however, the actual practice of having a *total* supply chain view of operations is limited and so-called 'supply chain solutions' often focus on the next step up- or downstream of their own activities. In particular, the case study found that the outsourcing decision was limited to the distribution process, excluding purchasing. This somewhat reduces the extent to which 3pl's can effectively impact overall supply chain performance. This

characteristic is common in a lot of the research in SCM, which has been limited to interfaces (between buyer and seller, for example) and not the entire supply chain. A probable reason for this is that studying an entire supply chain requires the integrated co-operation of all the members of that chain, and achieving this in practice can be difficult.

Secondly, the research findings show that there are key strategic questions about the impact on supply chain effectiveness when the organisation motivated to outsource (i.e., the retailer) is different from the organisation that is motivated² to integrate the supply chain (i.e., the 3pl's).

Finally, further investigation is required on issues relating to the supply chain effect of a limited extent of outsourcing, e.g., where the service providers are not involved in negotiating purchasing terms with suppliers.

The Nature of the Retailer - Third Party Relationship

Issues of trust and conservation of unique competitive strengths are crucial to achieving the full benefits of collaboration. In this case study, general observations during field visits showed that although both organisations allude to a 'partnership' when asked to describe the nature of their relationship, there are however indications of individuality, which sometimes exists at the expense of the relationship. This was particularly obvious in the retailer side of the relationship. A likely reason for this is that this is an indication of the functional split between strategic/control roles and operational implementation between the retailer and the service provider respectively.

One key issue contributing to the success of this logistics partnership is the continuous evaluation of performance, the measures of which had previously been agreed between the

partners. Rewards are shared, results discussed and performance improvements are regularly targeted and distinct steps taken to attain the targets. In addition, shared distribution and administrative facilities encourage regular face to face meetings and open discussions. Ideally, this should encourage the development of a relationship based on trust, which is essential to the success of this strategy.

The Role of 3pl's

From the data collected in this case study, it appears that the supply chain role of 3pl's is limited to the provision of logistics services, i.e., the service provider represents a pool of logistics expertise, which the retailer currently lacks. This implies that there are implications for the availability of logistics competencies on the extent of logistics outsourcing, i.e., the extent of logistics outsourcing is affected by the extent to which logistics skills and competencies are available in-house.

Research Limitations

Although the preliminary findings of this research have been documented so far, there are some limitations to the research process carried out which need to be highlighted. In the first instance, although the uniqueness of the organisations selected for this research makes it an interesting and thought-provoking issue to explore, the same is responsible for limiting the extent to which the research findings can be generalised across many organisations.

Furthermore, a frequent criticism of the single case study-based methodology is that it is prone to misrepresentations and thus incapable of rendering a generalisable conclusion. However, the general purpose of case studies is to penetrate deeper into a particular issue and ask what is going on in each particular case, why it is going on and what the people involved

² because of overall cost reduction advantages

think. Therefore being representative across a wider population is not necessarily the issue and it is not the relative size of a study that makes its findings valid. Instead, validity is secured when the parameters set out meet the objectives of the study (Yin 1994; Hamel et al 1993). In this case, the objective was to explore the supply chain implications of the strategy of logistics outsourcing by convenience retailers and the research findings have provided a summary of these implications.

CONCLUSIONS

The theory and practice of managing the logistics process has become a rapidly growing area as many organisations begin to realise its impact on supply chain profitability. In these organisations, this involves outsourcing to third party service providers in a bid to reduce costs and increase productivity by focusing on core competencies. Even though financial reasons may often dictate an organisation's decision to employ the use of third-party logistics providers, the determination to outsource should be based on an organisation's distribution competency. For example, when a retailer lacks the expertise to manage its logistics process in-house, then the services of a third-party logistics provider may be required.

The literature on logistics management has many calls for organisations to employ efficient logistics services to facilitate the creation of a seamless supply chain connected from start to finish through effective integration. The questions raised in this research focus attention on whether or not logistics outsourcing can be used as a way of achieving this and if so, what role do the third parties play in achieving this seamless operation?

This paper has shown that the use of third party logistics works especially well when the retailer maintains a strong presence in the contract set-up. Effective communication and information flow are key enablers as they encourage the multi-directional flow of information along the supply chain.

There are many arguments for outsourcing logistics, not the least of which are reduced distribution costs and improving customer service. The key to successful logistics outsourcing is to identify and hire those 3pl's who share a mutual vision with the organisation of the strategic relevance of logistics processes and can contribute to the organisation at a level that goes beyond the achievement of operational excellence. From the results obtained so far in

this research, different approaches to logistics outsourcing can be identified, each one having different implications for the possible role 3pl's play on the supply chain. This conclusion is centred on the afore-mentioned finding that the supply chain role of 3pl's will be largely influenced by organisations' approach to logistics outsourcing and the resulting extent to which the logistics process is being outsourced.

On a final note, Stigler (1951) is credited with promoting the concept of the "functional spin-off" as a means of evaluating the dimensions of distribution channel structure. On a similar issue, Mallen (1973) recommended an approach to improve our understanding of why organisations spin off their marketing functions and the implications this has on the structure of the distribution channel. These arguments represent an interesting linkage to the issue of why organisations outsource logistics services. This issue however requires further research and should therefore form a major part in the focus of logistics research in coming years.

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