SUPPLY CHAIN INTEGRATION: A FORECOURT PERSPECTIVE

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ABSTRACT

This paper involves an analysis of the use of Supply Chain Management as a tool to support changes in the marketing strategy of forecourt convenience-retailing organisations. 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, classical corporate structures are giving way to new forms of organisation such that the classic, vertically integrated organisation is being replaced by new forms of network organisations tied together in co-operative exchange relationships.

A typical example of this is the current practice of logistics outsourcing by many petrol companies within the UK. This paper looks at how and why forecourt convenience retailers – in their adoption of a supply chain solution - are gaining a new source of competitive advantage. In particular, the paper looks at how a number of petrol retail organisations outsource the logistics operations of their new-format forecourt convenience stores to third party logistics service providers and also how these influence or facilitate such a solution through the attainment of supply chain integration.

For this purpose, supply chain integration (SCI) is defined as the structured co-ordination and consolidation of key business processes within and between channel partners with the objective of minimising costs and inventory build-up at supply chain interfaces. It represents one of the ways by which organisations can achieve a sustainable level of competitive advantage.

As part of an ongoing doctoral research focusing on the existing relationship between convenience retailers and their corresponding logistics service provider(s), this paper proposes to provide a forecourt perspective of supply chain management strategies, especially those relating to the task of achieving supply chain integration. In order to do this, the paper will provide further insight into the nature of the challenges encountered by organisations in their attempts to implement SCM concept. This will provide a contribution to the body of knowledge on SCM in general and the issues surrounding its practical application. In particular, it provides a better understanding of the relationship that exists between parties in an outsourcing strategy and the role of logistics service providers in a supply chain integration strategy.
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SUPPLY CHAIN INTEGRATION: A FORECOURT PERSPECTIVE

RESEARCH BACKGROUND

Traditionally, the management of material flows in organisations has centred on inventory-driven systems i.e., buying enough goods far enough in advance to ensure a steady supply of products. Tougher competition however, has brought with it shorter product life cycles and more volatile market situations. Within such an environment, the distribution and purchasing practices of organisations must mirror the shift in marketing paradigms from a short-, to a long-term perspective corresponding with the strategic approach to developing competitive strength for the entire supply chain instead of focusing on single organisations alone (Christopher, 1998; Dyer, 1996). To this end, a service-driven, demand-pull system has become a necessary factor for survival in the manufacturing as well as the retail sectors.

In retail 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 convenience stores, the need for customer-service and Just-in-Time product delivery as a means of differentiation cannot be over-emphasised (Philips, 1996). Within 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. This idea (of SCM) has evolved over the last two and half decades as a means for organisations to cope with the changing demands of
today's markets. It aims to achieve a more cost-effective satisfaction of end-customer requirements through buyer-supplier process integration (Christopher, 1998). As far as theoretical concepts go, SCM is relatively new, first appearing in management literature in the early 1980s (Oliver et al, 1982; Houlihan, 1985; Jones & Riley, 1985). Its recent popularity however, has evolved from a combination of recent and not-so-recent developments in management literature, some of which, include:

- Increasing interest in industrial markets (Ford, 1980; Lamming, 1993),
- Integrated Materials Management (Kathawala & Naou, 1989),
- Systems Integration (Stevens, 1989) and
- The emergence of Channel Relationship Management (Stern et al, 1989).

Generally, the concept of SCM can be said to have evolved from the improvement of total distribution strategies over the past few years. These strategies, like SCM, combine all the individual elements of product distribution, inventory handling, warehousing, transportation, etc. which, have evolved - over time - into a more powerful function called logistics which itself has become an integral component of SCM (Battaglia, 1994; McFadyen, 1987).

This paper looks at the employment of the supply chain management strategy of integration as a tool for achieving competitive advantage within the intensely competitive environment characterising forecourt convenience retailing in the UK. It will analyse how and why certain organisations within this sector are using the SCM concept to support changes in their supply and distribution function. Particular focus will be on how supply chain integration can be achieved in practice through the use of third party logistics service providers. The next section provides an introduction to this concept of SCM.
SUPPLY CHAIN MANAGEMENT

Supply Chain Management is the value-adding, integrative approach to linking business processes across organisational functions from suppliers to end-users. It involves the effective management of complex channel-relationships and differs from traditional transaction-based relationships mainly because it focuses on achieving the long-term survival of the supply chain through the improved co-ordination of its activities. In order to achieve this, SCM requires the formation of partnerships and long-term relationships within and between organisations in the supply chain (Balsmeier & Voisin, 1996). These co-operative relationships allow supply chain participants to enjoy many of the benefits of vertical integration without the commensurate risks of ownership. In addition, SCM involves the development of internal and external processes, systems and technologies which encourage a more integrated approach to the management of logistics\(^1\) - and related internal product supply activities\(^2\).

Definition of Supply Chain Management

Any review of the available literature on Supply Chain Management will reveal that several new words have been introduced and used interchangeably in everyday conversations and publications. Examples of these include terms such as: ‘Logistics Management’ (Lambert & Stock, 1993); ‘Network Sourcing’ (Wijnstra & van Stekelenborg, 1996); ‘Supplier-Base Reduction’ (Balsmeier & Voisin, 1996); ‘Inter-Organisational Integration (Cooper et al, 1997); etc. Within all of these however, few - if any - precise and universally acceptable definition of Supply Chain Management has been provided.

\(^1\) Product, cash and information flows through supply channels.
\(^2\) Internal product supply activities include procurement, market planning, production planning, production, distribution, sales, order servicing, accounts receivable, etc.
As a result, there is generally a lack of consistency (in meaning and clarity) across the diverse definitions of SCM available in the literature. To further compound this problem is the apparent lack of adequate empirical research to support the range of propositions and hypotheses on SCM and its related concepts (Houlihan, 1985; Cooper & Ellram, 1993; Cooper et al, 1997). Any future development of a broadly applicable theory of SCM is thus hindered unless these limitations are addressed.

Generally, the reported definitions of SCM reflect a two-part characteristic approach to its practices and as such can be broadly grouped into two schools of thought. In making this distinction, we observe an overlap of several authors’ definitions across these two schools. This however, only serves to reinforce attempts by many of these writers to portray the ‘two-halves-being-part-of-a whole’ nature of SCM.

*The Integration School*

The first school of thought, the ‘integration’ school, views SCM as a concept involved in linking organisations and their functions beyond their traditionally defined boundaries for the purpose of delivering increased levels of value to the customers (Ellram & Cooper, 1990; Harland, 1996; Cooper et al, 1997). This school defines the supply chain in *functional* terms referring to the blending of the diverse activities involved in bringing goods to the final consumer.

*The Network School*

Dealing with the so-called ‘intangible’ aspects of SCM, this school focuses on the formation of relationships, organisational structures and alliances which are required to support the integration process required by SCM (Ellram & Cooper, 1990; Christopher, 1992; Ellram, 1995; Ford,
1997). This school of thought defines the supply chain and SCM in *structural* terms with a view that the performance of organisations is no longer wholly dependent on what they do internally, but is largely affected by the collective performance of all the firms within connected supply chains (Christopher, 1992). An implication of this (network formation) requirement for many organisations lies in the fact that different organisations’ boundaries might overlap in the process of bringing finished products to the end consumer. These structural and relationship patterns formed across the distribution channel are more complex than previous linear concepts of the supply chain have depicted (Jones & Riley, 1987).

**Consistent Themes**

In spite of the above distinctions, Supply Chain Management can be defined across both schools of thought as an integrative approach to linking business processes across organisational functions, i.e., from suppliers to end-users, in such a way that adds value to all participants of the supply chain. To this end, the supply chain can be better visualised as a network of organisations which interact to deliver value to the end-consumer and competitive advantage to all its members through the efficient “planning, co-ordination and control of [the flow of] material, parts and finished goods from supplier to the customer” (Stevens, 1989).

Owing to this value-adding and interconnected nature of the supply chain, SCM represents a means by which organisations can simultaneously meet their service and quality objectives whilst minimising the build-up of inventory throughout the supply chain (Ellram & Cooper, 1990). Its aim is to satisfy the end-consumers’ requirements through buyer-supplier process integration of the logistics process (Spekman, 1988; A.T. Kearney, 1991) and within this aim - in
spite of the inconsistency and subsequent confusion in respect of a clear definition - some
dominant and common themes seem apparent. These include some of the following.

The Formation of Supply Chain Relationships
SCM requires the formation of partnerships and long-term relationships within and between
organisations on the supply chain (Johnston & Lawrence, 1988; Balsmeier & Voisin, 1996). It
has been defined more broadly as an integrative philosophy to managing the flow of products,
services and information along distribution channels from suppliers through to the ultimate

Structural and Operational Integration
The focus of SCM is typically on the control and management of inventory throughout the
supply chain (Ellram & Cooper, 1990). In order to do this effectively, its implementation within
organisations evolves through several stages of increasing structural and operational integration
within and between these organisations (Stevens, 1989; Hewitt, 1994; New, 1996; Cooper et al,
1997). In this way, its application to the purchasing and distribution functions (through the use of
external and/or third party participation) enables the provision of high customer value, coupled
with the efficient use of resources (New, 1996; Cooper et al, 1997). SCM provides the formal
linkages required among all levels in a marketing channels (Turner, 1993). It offers a philosophy
for managing the organisation’s purchasing and distribution function based on a marketing
perspective and is concerned with processes and techniques involved in managing the flow of
supplies through the supply chain (Saunders, 1997).
From the ongoing discussion, Supply Chain Management can be defined as ‘an integrative approach to linking business processes across organisational functions, from suppliers to end-users in such a way that adds value across all members of the supply chain’. Its successful implementation is characterised by the reduction of inventory build-up at supply chain interfaces (Ellram & Cooper, 1990); improved product availability and service levels as well as process and system integration (Spekman, 1988) across organisational functions. SCM requires the meshing of organisations beyond traditionally defined boundaries in such a way that the supply chain begins to function as a single entity. This blending and effective meshing of processes is referred to as Supply Chain Integration (SCI) and is the focus of discussion in the next section.

**SUPPLY CHAIN INTEGRATION**

Supply Chain Integration (SCI) involves the blending, not only of organisations along the supply chain but also of the activities and processes involved in bringing goods to the final consumers, i.e., the logistics activities. This concept of SCI, originating from the concepts of total cost analysis and total quality control (Ellram, 1993; Lambert & Stock, 1993), aims to minimise costs and the build-up of inventory along the supply chain by integrating the distribution and customer service-improvement activities. Some of these activities include transportation, warehousing, inventory management, order processing, purchasing, etc (Gustin et al, 1995).

Effective integration involves more than just the integration of these individual functions, it encompasses all the boundary-spanning activities of planning and control as well as the support systems involved in providing customers with the desired levels of service at the lowest possible cost. The extent to which this can be achieved depends largely on the nature of the relationships
within and between supply chain participants as well as the status of these organisations prior to the integration. The advantages of SCI may be summarised as follows:

- The minimisation of total supply chain and logistics costs (Christopher, 1992; Turner, 1993; Balsmeier & Voisin, 1996; Dyer, 1996);
- Creation of enhanced supply chain value (Christopher, 1998);
- Improvement of service quality (Hewitt, 1994; Morgan, 1996);
- Improved asset utilisation (Stevens, 1989; Hewitt, 1994);
- Elimination of duplicated efforts along the supply chain (Stevens, 1989; Cooper et al., 1997; Christopher, 1998);
- Increased efficiency of functions and productivity (Cooper et al., 1997); etc.

The potential for exploiting these advantages however depends largely on the ability of supply chain organisations to successfully integrate basic operational processes whilst generating a basis for differentiated product and/or service offering (Bowersox & Daugherty, 1995). One of the ways in which this can be achieved is through the formation of strategic alliances with other supply chain organisations. One of such alliances, which is the focus of the ongoing discussion is that of the logistics alliances between forecourt convenience retailers and third-party logistics service providers.

**CONVENIENCE RETAILING ON THE PETROL FORECOURT**

In the UK, grocery retailing is increasingly becoming the preserve of the large grocery multiples, led by Tesco, Sainsbury's, ASDA and Safeway. Within this sector, convenience retailing (the main form of food retailing to be found throughout the Far East) is making a considerable impact in the UK fuelled by the increasing demand for ready-to-eat and ready-to-cook meals. Other
major operators in this sector are the co-operatives and the discount stores (Keynote, 1993). For many consumers, the convenience store has become an important flexible option - alongside the regular shopping trips to the larger supermarket for most household groceries - offering local access combined with longer opening hours than the larger grocery chains. In the UK, the major convenience store (c-store) chains are Spar (≈2,429 outlets), Happy Shopper (2,000+), Londis (1,500+), Mace (≈1,190), Costcutter (≈640) and Alldays (≈526) (IGD, 1994; Philips, 1996).

The convenience retail industry is characterised by a high frequency of small order deliveries (often on a daily basis), a limited number of suppliers and close relationships between retailers and vendors (suppliers) (Philips, 1996). Within this environment, the key to sustainable competitive advantage is to achieve a balance between limited shelf space availability (in terms of its utility) and the provision of a reasonable level of product variety. Faced with space constraints, a unique product range coupled with ever-increasing competition from larger UK retailers however, many c-store retailers have been forced to minimise costs through innovations which optimise their purchasing and distribution procedures. In order to deal with this, a lot of new formats are springing up coupled with the expansion and/or consolidation of existing players. Independent estimates predict that by 2000, there will be approximately 20,000 convenience stores in the UK with a turnover of £20bn (Independent Retail News, 1997a). Of these, forecourt convenience retailing represents one of the fastest growing sector in UK food retailing (Philips, 1996) (See Table 1) with total sales estimated to be worth about £3bn (IGD, 1998) growing to well over £4bn by the end of 2001 (Forecourt Trader, 1997).

Table 1: Rapid growth in forecourt C-stores, 1990-2001

<table>
<thead>
<tr>
<th>Year</th>
<th>1990</th>
<th>1993</th>
<th>1995</th>
<th>2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Forecourt C-stores</td>
<td>871</td>
<td>2653</td>
<td>3955</td>
<td>5335</td>
</tr>
</tbody>
</table>

Petrol forecourt retailing is a market sector providing a range of fuel and non-fuel products and services. In the UK, this concept of situating small- to medium-sized convenience stores on petrol forecourts is becoming more advanced than in any other country apart from the United States, with the exception - perhaps - of the Netherlands (Rowlands, 1999). Within this sector, the ownership and management of retail sites by the oil companies is becoming increasingly important (Mintel, 1996) as more forecourt outlets are expanding into convenience retailing in response to economic and demographic trends (CTN, 1997).

In spite of these dramatic changes however, this remains a relatively neglected subject area within which academic research and publications have been limited - to a large extent – at a conceptual level. A lot of the literature available on the role, function and performance of forecourt convenience retailing is from market research company publications (Denning & Freathy, 1996), e.g., the works of the Institute of Grocery Distribution (IGD); practitioner journals such as The Grocer and market research company publications such as Mintel and Keynote.

Traditionally, the typical retail format for many petrol companies was the stand-alone service station with a limited facility shop (IGD, 1994; Rowlands, 1999). The mode of operating these outlets was based on the use of a combination of wholesaler agreements, ranging from direct manufacturer deliveries to local arrangements with van salesmen. Recently, however, the industry has experienced low sales growth, moderate profitability and an increasing number of direct competitors (Fernie, 1997), significantly, the intense competition from the supermarkets (Guardian, 1996) and disappearing profit margins (Denning & Freathy, 1996; Grocer, 1996). Changes in consumer lifestyles (Phillips, 1996) and consequent buying habits (EIU, 1991;
Independent Retail News, 1998a; Mcl’adyen, 1987) as well as the availability of convenience store-space on existing petrol forecourts representing an unexploited profit base (Keynote, 1993) have also been major factors contributing to this trend.

With the progression of these economic and demographic issues, the traditional retail format has experienced a rapid decline (IGD, 1994) and in order to compensate for this, many petrol retailers have had to identify ways of adding value to their operation through the development of new retailing concepts (Singleton, 1998). One of the methods of achieving this has been based on the convenience offer through the expansion of their forecourt shops (Keynote, 1993; Denning & Freathy, 1996; Singleton, 1998). This move is evident in, for example, improved and enlarged shop facilities, availability of a wider range of product lines and the implementation of strategic marketing plans aimed at generating customer loyalty and improved profitability (Convenience Store, 1996; Mintel, 1996). Such is the potential of oil companies’ roadside real estate that, in many markets, profits from fuel sales can be eclipsed by profits from the growing number of products which constitute a viable forecourt sale (Independent Retail News, 1998b).

The increased incidence of convenience stores on UK forecourts may be viewed as a reactive, offensive marketing strategy by the petrol industry majors in response to the fierce competition and predatory pricing they face from supermarket giants selling petrol as loss leaders (Denning & Freathy, 1996; Phillips, 1996) (See Table 2).

<table>
<thead>
<tr>
<th>Table 2: Growth of superstore petrol forecourts, 1985-1996</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of UK petrol forecourt sites</td>
</tr>
<tr>
<td>Share of UK market (%)</td>
</tr>
</tbody>
</table>

Source: Adapted from IGD, 1994

3 Calculated estimates on the basis of current growth trends
This, coupled with falling profits from petrol, has resulted in the rapid growth of forecourts in the UK c-store market (see Table 3). In addition, convenience retailing on the forecourt represents a segment of petrol companies' investment structure whose opportunities are not yet fully exploited (Keynote, 1993) thus providing an opportunity for differentiation and the consequent development of a new profit base for these companies.

<table>
<thead>
<tr>
<th>Table 3: Summary of growth of UK C-store market, 1990-1995</th>
</tr>
</thead>
<tbody>
<tr>
<td>Symbol groups e.g., SPAR</td>
</tr>
<tr>
<td>CTN-based</td>
</tr>
<tr>
<td>Off-licences</td>
</tr>
<tr>
<td>Forecourts</td>
</tr>
<tr>
<td>Superstore Retailers</td>
</tr>
<tr>
<td>Co-ops</td>
</tr>
</tbody>
</table>

*Source: Philips, 1996*

**Supply Chain Integration: A Forecourt Perspective**

For its successful operation, a convenience-retailing organisation needs to have many different sites (albeit each with limited floor and shelf space). It also needs to carry a wide product range in addition to being able to provide a high response rate to changes and fluctuations in consumer and market demands. Such an organisation therefore needs a highly responsive (J-I-T) and functionally dynamic supply chain.

One of the approaches being implemented by petrol companies within this market is to invest in a bid to bolster flagging profits is the 'supply chain option' (Rowlands, 1999) wherein the optimisation of supply chain processes is used as a new source of competitive strength. Within this strategy however, there are many factors limiting the development of these petrol forecourts as true convenience outlets (Independent Retail News, 1997b), one of which is the unavailability
of traditional retail skills and expertise. Other challenges include how to re-engineer and restructure the traditional function-orientated systems whilst optimising the management of relationships along the supply network in order to achieve the potential benefits of this supply chain approach (Gregson, 1976; Stevens, 1989). Other more specific barriers to supply chain integration include:

- Problems with managing change within the organisation especially with regard to strategic support issues (Bowersox & Daugherty, 1995);
- Issue linked to the nature and management of supply chain relationships (Bowersox & Daugherty, 1995; Balsmeier & Voisin, 1996);
- Mapping supply chain processes on existing organisational structures (Spekman, 1988);
- Technical issues concerning the automation of information availability and distribution equipment required for optimising the logistics process (Cooper et al, 1997; New, 1996);
- Supply chain communication and control issues (Ellram, 1996; Wilkinson, 1996);
- Less than accurate levels of operational information (Gustin et al, 1995);
- Cost/Service Trade-off issues along the supply chain (Maltz & Ellram, 1997); etc.

The focus of this section therefore is to explore these issues by identifying the nature of challenges encountered by organisations – and the supply chain implications of practices which these organisations instigate – whilst attempting to implement the SCM concept. In order to overcome most of the barriers listed above, many convenience retailers have been working towards the introduction of a total supply chain view of operating their forecourt outlets (Smith, 1998). Strategies employed include the use of direct supplier negotiation, centralised warehousing and distribution functions and the use of third parties (IGD, 1994).
In recognition of the importance of process-orientation and a process-driven approach to competitive performance (Ostroff & Smith, 1992; Christopher, 1996), these organisations have increased their focus on the management of supply chain-wide critical tasks, which generate customer value and hence competitive advantage. In particular, petrol companies within the UK have increased emphasis on Customer Management, Supplier Development and increasing the efficiency of the order fulfilment process. Of these, the paper focuses on the supplier development for the purpose of increasing order fulfilment efficiency through the strategy of logistics outsourcing.

Supplier Development Strategies
These can be defined as efforts made by organisations to increase suppliers' performance and capabilities in order to effectively meet supply needs (Krause & Ellram, 1997). It is rapidly becoming a more common phenomenon within larger petrol retailers with examples including the evolution of effective communication between buyers and suppliers (Lascelles & Dale, 1989; Galt & Dale, 1991) as well as direct investments of buying firms in supplier organisations (Monecka et al., 1993).

By nature, the supplier development process involves the adoption of a more effective strategy for managing organisations’ procurement activities. Traditionally, this has been managed with an adversarial, win-lose approach. In this traditional model, organisations will seek a reduction in procurement and related costs at the expense of suppliers through the incitement of price competition amongst a large number of its potential suppliers. On the long run however, this approach has a negative effect on the buying organisation because it resulted in weak
relationships between buying and supplying organisations thus leading to inefficient supply chain services and related processes.

Today's model for supplier development within SCM proposes that buying organisations should take a proactive approach to developing seamless supply chain operations by establishing mutually beneficial relationships with suppliers for the purpose of reducing overall supply chain costs. In this way, the inherent advantages of an effective supplier development strategy – which include higher process efficiency, continual cost reduction and value enhancement, benefits associated with holding lower inventory levels, etc. (Christopher, 1996) can be achieved. This approach creates an inherent need for close relationships between buying firms and their respective suppliers (Lascelles & Dale, 1989; Hartley & Jones, 1997) as well as the opportunities for realising mutual benefit (Christopher, 1993) encouraged by information technology.

There are a few strategies through which supplier development can be achieved; two of these - relevant to the current discussion - are the strategies of outsourcing (Spekman, 1988; Quinn, 1992) and reduction in supplier base. There are obvious relationships in these two strategies, the most important being the fact that an effective reduction in the supplier base can be achieved through the adoption of outsourcing strategies.

The strategy of logistics outsourcing by petrol companies - in addition to being a strategy for outsourcing activities for which they lack adequate competence - represents a strategy for supplier development through which the overall number of supply chain relationships which need managing is effectively reduced. This involvement of petrol retailers with third party
logistics service providers (3pls) therefore represents a form of buyer-supplier process integration. In this situation, 3pls do not particularly need to actively facilitate SCI; the nature of their relationship with the retailers - by definition - is an attempt by these retailers to integrate their supply chain by adopting a strategy through which seamless logistics processes can be achieved, i.e., logistics outsourcing.

For many of these petrol companies, the motivations for the mutual dependence involved in supply base reduction and outsourcing of logistics operation include the search for logistics competence and distribution expertise; cost control and the limitations inherent in managing numerous supply chain relationships. On the basis of these and the realisation that one of the fundamental drivers of SCI is the realisation that lean logistics is a vital pre-requisite for market responsiveness, the relationship between retailers and 3pls can be analysed with the understanding that logistics outsourcing represents a SCI strategy. On the issue of using third parties, the next section looks at outsourcing as a valid way of optimising the supply chain integration process.

**OUTSOURCING - THE USE OF THIRD-PARTY LOGISTICS PROVIDERS**

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). Outsourcing is the act of using third parties rather than in-house capability to perform non-core activities (Ellram & Cooper 1990) whilst maximising the possibilities of developing comparatively higher levels of competitiveness. It represents a viable strategic option for dealing with non-core supply chain processes (Cooke,
1998) and generally involves the transfer of responsibility and the need for assets to a third party (Ellram & Cooper 1990).

These 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. This is as a result of the increasing trend of SCM (Copacino 1998) and is indicated by the increased 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), logistics outsourcing represents a specifically-defined contractual relationship, which is dependent on third parties meeting specified performance criteria set by the buying organisations.

**The Role of Logistics in Retailing**

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, 1998), is increasingly being recognised as a vital part of organisations’ marketing strategy (Sheffi, 1990). The effective engineering and management of the logistics function in many organisations represents an opportunity to improve both profit and service levels (Sheffi, 1990). Within the retail environment, the logistics process would include all activities, procedures and related information involved in getting products from manufacturers to end consumers. The discipline of logistics therefore involves the study of
the flow of goods and services, and accompanying information, within and between organisations.

In many organisations, the logistics function is now widely used as a strategic competitive weapon. In particular, many retail organisations are initiating and implementing strategic change in such a way that logistics is being used to exploit these organisations’ unique competencies in order to achieve a sustainable competitive advantage (Gustin et al, 1995). As a result, logistics is currently undergoing significant changes; also, pressures from increased competition and high customer-service level expectations have created a need for more professional and better-equipped logistics services that are usually beyond the scope of these organisations. Confronted with such competitive pressures, these organisations are faced with decisions of the make/buy kind especially with regard to the logistics processes of purchasing and distribution.

In addition, the emergence of the need to focus on core business activities within organisations has led many to contract out the logistics function to third party providers (Lambert & Stock, 1993; Rao & Young, 1994; Sheffi, 1990). Various reasons have been suggested for the use of these third parties, some of which include the need for specialised expertise and information technology (Fernie, 1989); cost reduction (Cavinato, 1989); flexibility (LaLonde & Maltz, 1992); improved service quality and a lower risk distribution asset-use (Fernie, 1989). At the heart of these strategic logistics issues is the fact that organisations along the supply chain need to reconfigure their operation in order to accommodate whatever changes they make to their logistics practice. One of the most common ways of doing this is to adopt a process-oriented, supply chain integration approach (Stevens, 1989; Cooper, J., 1993) which places emphasis on
the implementation of business processes that cut across functional barriers, e.g., information control, order fulfilment, etc. In order to achieve this integrative approach in practice, organisations have tended to form logistics alliances with third party service providers (McGinni et al, 1995). The way in which these third parties function to achieve this level of integration is an issue that requires further exploration as far as academic research is concerned.

The Role of Third Parties in Retail Logistics
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 (McGinni et al, 1995). Generally, retailing 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 is concerned with the strategic management of the supply chain (Christopher, 1986) and the distribution channel thus becomes an arena within which the functions of marketing and logistics culminate in consumer transactions (Wilkinson, 1996).

Along this channel, power is defined as the ability of an organisation to affect the decision making and/or behaviour of others along the channel. It represents a mechanism by which the distribution channel is organised (Wilkinson, 1996). Within the supply chain therefore, a centre of power is essential for effective supply chain management. Until the mid-1960s, this channel power resided mostly with manufacturers who typically enforced their product specifications and delivery schedules over the entire supply chain (Sparks, 1994). Today, there has been a significant shift in power from manufacturers to downstream customers. This is particularly the
case in fast moving consumer markets (e.g., grocery retailing) where many of the large retailers have extended their reach back up the supply chain.

The Use of Third Party Logistics Service Providers to facilitate SCI

Third party logistics services can include any or all of transportation management (Sheffi, 1990); warehousing (LaLonde & Maltz, 1992); inventory management; customer management; customer order processing; distribution and procurement functions (Sparks, 1994); logistics integration and import/export activities (Copacino, 1997). This act of using third parties rather than in-house capability to perform non-core activities (Ellram & Cooper, 1990), is a way by which companies reduce financial risk amongst other things. It 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 value-adding services (Spekman, 1988).

The nature of market relationships, 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 logistics functions (Rao & Young, 1994). In addition, 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).

From the ongoing discussion, SCI can be viewed as a strategy which seeks to maximise the effectiveness of the supply chain by establishing ongoing relationships between trading partners along the supply chain (Bowersox & Daugherty, 1995); in this case between third party service providers and convenience retailers. In order to ensure continuous improvement in product and service quality, SCI seeks to maximise supply chain responsiveness by minimising uncertainty
and risk while yielding overall productivity and quality improvements along the supply chain. Further research is however required in order to analyse how integration can be achieved in practice especially in such a context as that presented by convenience retailing where the endless challenge organisations face is one concerned with finding the right balance of product volume and variety. Only a flexible, effectively integrated supply chain is able to cope within such environments.

CONCLUSION
In order to remain competitive, industrial organisations are continually faced with challenges to improve product quality and product development efficiency whilst reducing production costs and lead times. The traditional approach to developing competitive strategy and structuring organisations is no longer a valid means for ensuring a firm’s survival within today’s industries characterised by constant turmoil and heavy competition.

SCM - through the effective operation of the logistics process - has been promoted as a vital source of achieving enduring positions of superiority over competitors (in terms of customer preference) and the positioning of the supply chain for achieving sustainable competitive advantage represents a major strategic benefit to organisations today. In particular, the application of SCM strategies of integration through logistics outsourcing has become very popular within the UK forecourt convenience retail industry. These organisations have supplemented their lack of adequate SCM and retail experience by tapping into the expertise of
third party logistics service providers. In this way, these otherwise traditional petrol companies are able to strategically position themselves within the UK convenience retail sector. Within this sector, ongoing and sustainable competitiveness is tied to the dynamics of the supply chain in which the retail organisations participate and the objective mission (through effective supply chain management) is to ensure a smooth-running distribution channel, which provides enhanced customer value through service delivery. At the same time, costs are kept at a minimum through a reduction in inventory and improved capacity utilisation.

From this discussion, one can deduce that supply chain management represents an innovative way by which organisations can compete effectively in the marketplace by utilising their assets - in particular, inventory - more effectively. It offers a philosophy for managing the logistics process from a marketing perspective and in the case of forecourt convenience retailers, the logistics process drives the entire supply chain and can thus represent a vital source of competitive strength.
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