

Issues in Market-driven Supply Chain Management

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Issues in Market-driven Supply Chain Management

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Abstract

Focusing on fashion industry, this paper attempts to clarify the relationship between SCM (supply chain management) and marketing. Recent research streams indicate that the importance of the supply chain system no longer lies in efficient delivery of materials and products but in rapid response to market demand. Successful supply chain management therefore requires the ability to integrate external suppliers as well as a firm's internal functioning. This study focuses on the concept of market orientation and business resources, explaining the importance of managing inter-firm relationships in SCM. Literature reviews show that business resources developed through collaborations with external actors provide sustainable competitive advantages for supply chain systems. Therefore, studies should focus on comprehensive activities within a supply chain network, rather than on a dyadic relationship. This paper shows how existing forecast-driven strategies are do not address recent business circumstances, with their turbulent and volatile market demands. In contrast, supply chain systems need to respond to real market demand and penetrate information into all activities through the integration of suppliers, thus helped by a new generation of Web-based information systems. The paper points to the importance of upstream activities (coordinating inter-firm relationships in a supply chain) and advocates the presence of a facilitator who can bridge both upstream and downstream activities. This study should contribute to both SCM and marketing in academia, as well as business practices.

Keywords: market orientation, inter-firm relationships, fashion business, SCM, ICT

1. Introduction

Recent business circumstances can be characterized as 'turbulent', influenced by increasing global competition and rapid technological change (Achrol 1991). The market

has also become more turbulent and complex due to the increased uncertainty of market demand. Now, the focus of research has moved beyond individual firms to value-creating networks that deliver value to the end customer from procurement activities. Under these circumstances, SCM (Supply Chain Management) has been seen to play an important role in creating value-chains. Srivastava, Shervani and Fahey (1999) define CRM, SCM and new product development as the three core business processes which explicitly contribute to generating and sustaining customer value. In the past, marketing research streams did not acknowledge the need for closer integration of marketing and SCM (Achrol 1991, Achrol and Kotler 1999, Juttner, Christopher and Baker 2007). Now, however, SCM is a requirement when it comes to management of upstream and downstream relationships with suppliers and customers in order to create enhanced value in the final market place at less cost (Christopher 1998).

In addition, developing information technologies contributes greatly to furthering the integration trend of SCM and marketing. In the past, due to the lack of standard interfaces between systems and databases, it was extremely difficult to integrate information systems within each department or company. However, once the developing internet and web relevant technologies had become standard, interoperability between information systems became smoother. Now, a new trend in ICT (Information and Computer Technology) - cloud computing and SaaS (Software as a Service) - has emerged. This allows firms to use a common information infrastructure and applications, enabling them to share data and integrate systems easily.

The purpose of this paper is to clarify the relationship between SCM and marketing, showing theoretical backgrounds to these integration trends in supply chain management and marketing. Focusing on the concept of market orientation and operant resources, the study attempts to clarify the new roles for inter-firm relationships in developing SCM.

This study focuses primarily on the fashion industry, which has attracted academic researchers and business practitioners because of its market characteristics such as very short demand cycles and the high level of volatility and uncertainty. These unique characteristics have created new approaches for SCM.

This paper is organised as follows: first, there is a literature review relating the concept of market orientation and business resources. Next, the study describes the nature of the fashion industry, clarifying several issues that SCM has to address. The paper then goes on to discuss changes in SCM research trends, showing why inter-firm relationships are emphasised in discussions on SCM. Finally, findings, future research and conclusions are

outlined.

2. Market Orientation and Operant Resources

Conceptual and empirical research on the concept of market orientation has long suggested that inter-functional coordination is the key to achieving the main goal of marketing - the creation of superior customer value (Juttner, Christopher and Baker 2007).

In traditional marketing, customers' activities are studied, and only marketing departments carry out marketing activities. However, by combining strategic management with the marketing concept, the view is expanded to include competitors' activities and company-wide activities. Consequently, this approach focuses on understanding the express desires of customers in their served markets and developing products and services that satisfy those desires. Such an approach was called "customer orientation" (Slater and Narver 1998) and assumes that competitive advantages could be achieved by having closer relationships with customers.

However, too much emphasis on customer orientation leads to missed opportunities for adapting innovation (Christensen 1997, Day 1994). Focusing only on specified customers leads to seeing the business through customers' eyes, and the business begins to adapt to the customers' way of doing business. In addition, managers tend to avoid the risk of being unwilling to risk displeasing powerful existing customers. As a result, the customer-oriented philosophy is reactive and short term in its focus (Slater and Narver 1998), and generally causes difficulties when "product innovation" (Abernathy and Utterback 1978) occurs. The concept of market orientation emphasizes continuous interaction with markets and external environments. From the perspective of information-processing capabilities, Achrol and Stern (1988) and Achrol and Kotler (1999) point out the importance of business networks compared to vertically integrated hierarchies. They maintain that networks are better adapted to knowledge-rich environments because of their superior information-processing capabilities. Therefore, companies embedded in strategic networks have advantages and business outcomes which are increasingly decided by competition between networks of firms rather than by competition among firms (Achrol and Stern 1988 and Achrol and Kotler 1999).

In order to carry out marketing orientation, it is necessary to consider the connection between business resources and developing competitive advantages. Constantine and Lusch (1994) define two types of resources: operand resources are those on which an operation or

act is performed to produce an effect, while operand resources are employed to act on operand resources and other operand resources. While operand resources are typically physical and tangible (Madhavaram and Hunt 2008), operand resources are likely to be invisible, intangible, dynamic and infinite in nature (Vargo and Lusch 2004). "Resources" can be assumed as not only physical, monetary and human but also, and more importantly, as skills, knowledge or capabilities. Competencies and capabilities can be defined as a complex bundle of operand resources such as knowledge or skills (Penrose 1959, Day 1994) as well as tangible basic resources (Madhavaram and Hunt 2008). Consequently, developing competitive advantages becomes an issue when dealing with how operand resources are handled (Vargo and Lusch 2004).

Resources can lead to sustained competitive advantages when operand resources have characteristics that (1) provide superior value to customers and (2) are difficult to imitate (Dierickx and Cool 1989, Barney 1991). In addition, the multiple applications of these resources are significant characteristics (Penrose 1959). They can therefore be used in different ways to speed up the firm's adaptation to environmental changes (Day 1994, Prahalad and Hamel 1990).

Assuming that resources cannot be exchanged, they must be developed within a firm. Therefore, the focus turns to the activities of firms' business processes (Day 1994). The competitive advantage of firms stems from dynamic capabilities rooted in high performance routines operating within a firm, embedded in its processes, and conditioned by its history (Day 1994). These capabilities are developed by long established firm activities, and may depend on the historical use of resources in an extremely complex process. Capabilities are so deeply embedded in organizational routines (Pfeffer and Salancik 1978) and practices that they cannot be traded or imitated.

Consequently, organizational learning is emphasized to develop business resources. While learning orientation focuses on internal activities, market orientation is shown to impact significantly on the integration of internal and external activities (Braunscheidel and Suresh 2009). Market orientation is an inherently learning orientation (Slater and Narver 1995, 1998). Therefore, continuous organizational learning and interaction with external activities leads to an increase in the significance of the inter-firm relationship. Capabilities are defined as the subset of the operand resources generated by organizational learning, which allows the firm to create new products and processes, and respond to changing market circumstances (Teece and Pisano 1994).

The concept of market orientation (e.g. Narver and Slater 1990, Kohli and Jaworski

1990) is to adapt to dynamic business environments and to develop sustained competitive advantage by focusing on continuous organizational learning (Jerez-Gomez and Valle-Cabrera 2005) and on the interactions of internal and external actors. In addition, the capabilities of sharing understanding across departments and developing knowledge for future markets (Li and Calantone 1998) are emphasized to create continuously superior customer value. However, the difficulty is that the future cannot be precisely predicted under dynamic and turbulent market conditions. Therefore, a market-oriented business conducts market experiments, learns from the results of those experiments and modifies its offering based on the new knowledge and insight (Slater and Narver 1995, 1998). Thus, through these business experiences, developed capabilities and market knowledge can become competitive advantages (Day 1994). Capabilities can be defined as the firms' abilities to integrate, build and reconfigure internal and external resources to address a rapidly changeable environment (Teece and Shuen 1997).

It is becoming clear that competitive advantage derives from the combination of capabilities within the network of linked organisations. This is a fundamental shift from the traditionally held view of a business model based upon a single firm (Christopher, and Towill 2001).

3. The nature of turbulent markets and the example of the fashion industry.

Fashion markets have several unique characteristics compared with other industries (Christopher, Lowson and Peck 2004) : (1) a short life-cycle, (2) high volatility, (3) low predictability and (4) high impulse purchasing. These characteristics lead to the following issues for management.

Longer lead-time

In the fashion industry, the length of lead-time takes longer; a nine-month lead-time is not unusual (Minami 2006). It is not only the time it takes to make or ship the product, but more often the multiple steps that occur from the point at which a decision is taken to place an order that can be problematic (Christopher, Lowson and Peck 2004). One of the reasons is that the total time in manufacture is managed separately through each step, and the quantities processed at each step are determined by batch quantities. Figure 1 shows the relationship between the lead-time (the advance ordering time) and major sales forecast error ahead of a sales season. It is apparent that the longer lead-time or advance ordering

times may cause problems throughout the supply chain (Lowson 2001). Therefore, the longer lead-time increases the risk of both obsolescence and stock-outs.

Hidden demand

Organisations aim to meet any customer demand for a product on offer at the time and place the customer needs them. However, because there are many steps in the supply process, they are typically slow to recognise changes to real demand in the final market place (Christophjer, Lowson and Peck 2004, Minami 2006). Real demand is what consumers are buying or requesting hour-by-hour, day-by-day. Most supply chains are driven by batched orders, which themselves are driven by forecasts and inventory replenishment. Therefore, each step in the supply chain acts as a stock buffer, meaning that individual parties in the chain tend not to have any visibility of real demand. Figure2 shows that the existence of buffers in the supply chain hides real demand.

The fundamental problem is the existence of lead-time gap between logistics and customer-demand. In the supply chain, the time it takes to source materials, convert them into products and move them into the market place is invariably longer than the length of time the customer is prepared to wait (Christopher, Lowson and Peck 2004). This difference between what might be called the 'logistics pipeline' and the customers' order cycle time is termed the 'lead-time gap'.

Short-life-cycle

Fashion markets can be characterized by their very short life cycle. Therefore,

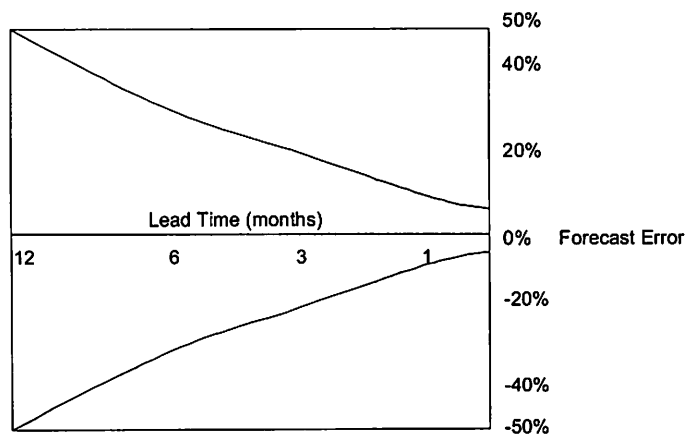


Figure 1 The relationship between lead-time and Sales Forecast Error
(from Lowson 2001 p.285)

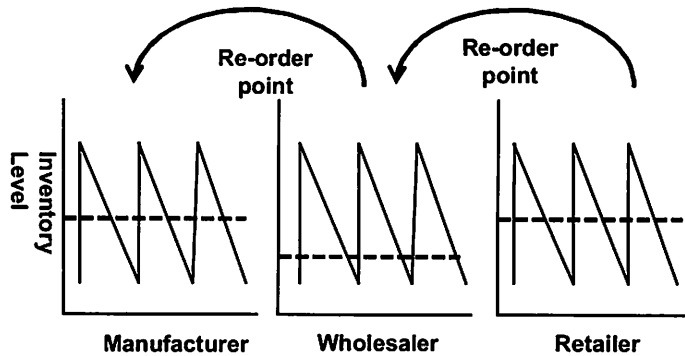


Figure 2 Inventory hides real demands of the market
(Modified Christopher et al, 2004)

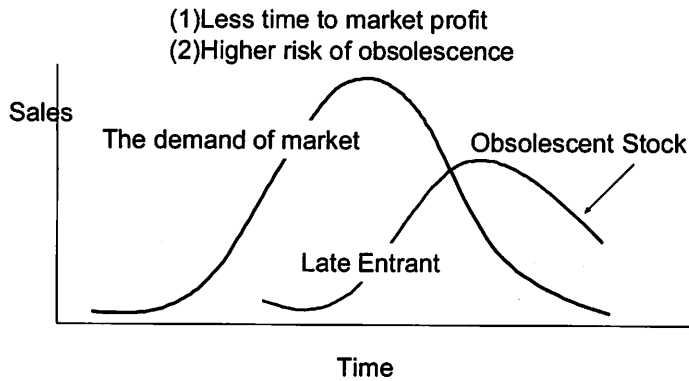


Figure 3 Shorter Life-cycles making timing crucial
(Modified Christopher et al.2004)

responding to trends, making products that customers want, and delivering and sorting them into the shop as soon as possible become the only way to achieve success in the fashion market. If a company is slow to market, it will miss significant sales opportunities that will be not repeated. Moreover, the supplier is likely to find that when the product does finally arrive in the market place, demand is starting to fall way, leading to the likelihood of markdowns.

4. Strategies of Supply Chain Management in the fashion business

4.1 Speculations and Postponement

The fashion industry carried out two managerial methods to adapt these

characteristics. The first is the strategy of speculation, which aims to reduce the costs of order processing and transportation by the placement of large orders as well as the reduction of stock-out. (Lambert, Stock and Ellarm 1998). The strategy is carried out at the earliest possible time to reduce the costs of the supply chain. Speculation makes it possible to gain economies of scale in manufacturing and logistics operations (Pagh and Cooper 1998). The strategy, offshore, is an example of this. A foreign manufacturer produces and ships 100% of goods needed for sales prior to the start of that selling season (Lowson 2001). Purchasing decisions are consequently made considerably in advance of the sale season before any demand indication is known (Lowson 2001). However, when manufacture takes place off-shore, the period in which to make these decisions is shorter / maintained. The lead-time remains long, and therefore the ability to forecast demand is crucial to the success of this strategy.

On the other hand, the converse concept of speculation is the strategy of postponement. The strategy of postponement aims to reduce risk and uncertainty, starting with the differentiation of goods that occurs during manufacturing and logistics operations. Because parts of the manufacturing and logistics operations can be postponed until final customer commitments have been obtained, the risk and uncertainty of those operations can be reduced or fully eliminated (Page and Cooper 1998). Companies can use postponement to shift the risk of owing goods from one member to another in the supply chain process. A manufacturer stops making products until orders are received, retailers and channel members postpone owing inventories by either purchasing from sellers who offer faster delivery, purchasing on consignment, or purchasing only when a sale has been made. Postponement can take three forms: time (delaying activities until orders are received), place (delaying the movement of goods or services until orders are received) and form (delaying activities that determine the final form of a good or service until demand is known) (Lowson 2001).

The concept of the decoupling point is a kind of postponement strategy (Mason-Jones, Naylor and Towill 2000, Lowson 2001). The decoupling point separates the part of the supply chain geared towards directly satisfying customer orders from the part based on planning. The decoupling point is also the point at which strategic stock is held as a buffer between fluctuating customer orders and production output (Mason-Jones, Naylor and Towill 2000). Postponement can be achieved by moving product differentiations (at the decoupling point) closer to the end user. Postponement product differentiation reduces the risk of both stock-outs and holding excess stocks (Davies 1993). When the decoupling point

is marked as the manufacturer, it can be observed that speculation strategies are applied in upstream activities from a manufacturer. On the other hand, retail or somewhere in downstream activities can be applied for postponement strategy.

Postponement or the concept of decoupling point is an operational strategy that aims at delaying activities until exact attributes of demand can be identified (Lowson 2001). The decoupling point is the point at which forecast-driven and order-driven activities meet in the goods flow: the point shows how deeply the customer order penetrates the supply chain (Lowson 2001). A major problem in supply chains is their limited visibility of real demand. Because supply chains have multiple steps from the point of procurement of materials to the final market place, real demand tends to be hidden in each step. Therefore, the management tends to be forecast-driven rather than demand-driven. The decoupling point is the point that enables real demand to penetrate into the supply chain. In other words, the flow of a product up to the decoupling point can be forecast-driven, which allows it to achieve a volume-oriented economic scale, while the flow of a product after the decoupling point can be demand-driven. By using the concept of the decoupling point, delayed configurations can significantly improve responsiveness (Christopher 2000).

Table1. Feature of speculations and Postponement strategies

	Speculations	Postponement
Production Cost	Low	Medium or high
Inventory Cost	High	Low
Distribution Cost	Low	High

4.2 The philosophy of lean and just-in-time systems

The philosophy of 'Lean' or JIT (just-in-time) system is an approach to reduce lead-time and inventory costs when it is used for supply chain. The philosophy aims at reducing waste and redundant inventory by delivering products or materials just when an organization needs them (Lambert, Stock and Ellram 1998). The origin of lean manufacturing can be traced to the Toyota Production System, with its focus on the reduction and elimination of waste. This philosophy is in direct contrast to traditional large inventories and safety stocks held just in case they are needed. In JIT philosophy, the ideal lot size is one unit, safety stocks are considered unnecessary, and any inventory should be eliminated.

JIT has numerous implications for logistics, as it integrates all SCM activities.

Therefore, achieving coordination and integration within and between companies is the key to the successful implementation of JIT. However, the problem is implementing this philosophy into situations where demand is less predictable. There are certain conditions where a lean approach makes sense, in particular, where demand is predictable, requirement for variety is low, and volume is high- the very conditions in which Toyota developed the lean philosophy.

For example, fashion businesses need to adapt to situations where the variety of products is high and, consequently, volume at the individual stock keeping unit (SKU) level is low. Christopher (2000) pointed out that many firms have been misguided in their attempts to adopt a lean model in conditions to which is not suited.

4.3 Agile Supply Chain

Recently, there has been a growing interest in agile supply chain strategies, both among academics and business practitioners. The idea of 'agile' in the context of supply chain management focuses on responsiveness. Previously-existing strategies of fashion industry were forecast-driven because of the longer lead-time. By contrast, agile supply chains are shorter and seek to be demand-driven (Christopher and Towill 2001).

An agile supply chain has a number of characteristics: (1) Market sensitive - it is closely connected to end-user trends, (2) Virtual - it relies on shared information across all supply chain partners, (3) Network-based - it gains flexibility by using the strengths of specialist players, (4) Process-aligned - it has a high degree of process interconnectivity between the network members.

However, agility should not be confused with leanness. There are a number of common elements between the lean and agile paradigms (Christopher and Towill 2001). However, an agile supply chain is market sensitive. This means that it needs to be capable of reading and responding to real demand (Christopher, Martin 2000). Consequently, the most significant characteristic of an agile supply chain is the ability to provide information of real-demand in the final market place to all activities in the supply chain. The QR philosophy is a good example of the agile concept in supply chain management. This philosophy, aimed at linking all activities when responding real demand in a market, was developed in the fashion industry for a large number of stock keeping units with short product life cycles, high seasonality and high complexity.

The agile supply chain also implies being more than just flexible. In the context of the supply chain, flexibility means a firm can adapt itself to producing a range of products. On

the other hand, agility aims at operating efficiently under a competitive environment dominated by change and uncertain conditions. Agility is conceptually distinct and different from flexibility, but flexibility is a key characteristic of agility (Christopher 2000, Braunscheidel and Suresh 2009). A system can be flexible without being agile, but an agile system is also flexible. In other words, flexibility is the ability to provide a wide variety of products from internal activities, while on the other hand, supply chain agility is an externally focused capability derived from flexibility in the supply chain processes, which is in turn viewed as an internally focused competency (Swafford, Ghosh and Murthy 2006, Braunscheidel and Suresh (2009).

5. Toward the integration of SCM and marketing

5.1 Definition of SCM

In the past, much of the works in the fashion industry was based on demand forecasting of fashion products (Christopher, Lowson and Peck 2004). As a result, these traditional methods had to cope with the risk of over-stocked or under-stocked situations, as forecasting demand for fashion products is extremely difficult. However, recent trends have tended to focus on more demand-driven strategies and the integration of all supply chain activities. As a result, the definition of SCM has changed.

The term SCM was originally introduced by consultants in the early 1980s (Lambert and Cooper 2000, Juttner, Christopher and Baker 2007). The term tends to be used as a substitute for logistics, but the definition of supply chain management is much broader than logistics (Lambert, Stock and Ellram 1998). Traditionally, SCM was viewed as logistics outside the firm to include customers and suppliers. However, "logistics can be defined as part of the supply chain process that plans, implements, and controls the efficient, effective flow and storage of goods, services, and related information from the point-of-origin to the point-of consumption in order to meet customer requirements and, being also a bigger concept that deals with the management of material and information, flows across the supply chain" (Lambert and Cooper 2000, p.67). SCM has been re-conceptualized from integrating logistics across the supply chain. Based on this emerging distinction between SCM and logistics, the definition explicitly declared that logistics management is only one aspect of SCM (Lambert and Cooper 2000).

In channel research, the focus was on manufacturer to the customer for the most part. On the other hand, SCM looks at the process from suppliers to end customers. Therefore,

the supply chain management approach attempts to manage both upstream and downstream activity within the supply chain, while marketing channels tend to focus solely on downstream activity (Ellram 1991).

SCM can be defined as the management of upstream and downstream relationships with suppliers and customers in order to create enhanced value in the final market place at less cost to the supply chain as a whole (Christopher 1998, Juttner, Christopher and Baker 2007).

5.2 Uncertainty, time, and information-based competition

Supply chain performance improvement initiatives strive to match supply to demand, thereby driving down costs and simultaneously improving customer satisfaction. However, uncertainty is impossible to remove from the supply chain due to the type of product involved (Christopher and Towill 2001). For example, if a product is highly fashionable, then by its intrinsic nature, demand will be unpredictable. Hence, specific supply chains are faced with the situation where they have to accept uncertainty but need to develop a strategy that still enables them to match supply and demand.

Even though a firm uses both strategies of speculations and postponement, uncertainty cannot be removed in their supply chains. Uncertainty is created by a lack of information. Bourgeois and Eisenhardt (1988) mentioned that in the microcomputer industry in the 1980's, the rate of change was so extreme that information was often of questionable accuracy and was quickly rendered obsolete in contrast to other industries. A lack not only of quantitative but also qualitative information provides uncertainty. Buying decisions need more alternative choices in a high-velocity environment and therefore need information that is more accurate in order to evaluate alternatives. Bourgeois and Eisenhardt also pointed out that the lifetime of information is linked with occurring uncertainty when technological change is extremely high. Information (or knowledge) gathered at a particular point in time may not remain relevant for long, so strategic decision-making is problematic in this kind of environment, not only because change is so dramatic but also because it is difficult to predict the significance of a change as it is occurring (Bourgeois and Eisenhardt 1988).

Glazer and Weiss (1993) defined this deterioration of information with the term 'time-sensitivity', where information in a given period loses its value in subsequent periods. Accordingly, they showed that when time-sensitivity of information is high, uncertainty increases because the values of received information tend to depreciate quickly.

5.3 Information system and technologies

The above discussions show that rapid delivery and sharing of information in supply chain members can reduce the risk of uncertainty. Information systems greatly support this time and information-based management. Retail and fashion industries have been leaders in the area of this type of competition, relying heavily on advanced computer systems involving bar-coding systems and information systems like CRM (Customer Relationship Management), ERP (Enterprise resource planning) and EDI interfaces to achieve quick response management.

In order to deliver and share information with players in supply chain, process alignment is critical. However, in the past, due to their central server and procedural software, systems lacked flexibility and interoperability with other systems. In the 1990' s, even though a variety of enterprise software, such as SCM, CRM, and ERP, emerged, these products could not share data or interconnect with a different system.

Local systems linked by electronic data interchange (EDI) support interoperability for networked organizations. However, EDI interfaces focus only on data exchange (Verwijmeren 2004), and therefore miss the decision rules required for supply chain management (Garcia-Dastugue and Lambert 2003). In addition, small-and medium-sized enterprises do not use the EDI technologies because it would not justify the investment to install EDI based systems (Stefansson 2002, Garcia-Dastugue and Lambert 2003).

Because of its central architecture, an ERP system assumes one central organisation. However, in dynamic networks there is no central point of authority. Moreover, the procedural ERP software cannot easily support the coupling and decoupling of organizations to the dynamic network (Verwijmeren 2004).

In 2000, intra and inter-organizational integration was increasingly being achieved through EAI, which incorporated functionality from disparate applications and led to cheaper, more functional and manageable IT infrastructures (Themistocleous, Irani and Love 2004). Application integration was based on a diversity of technologies such as message brokers, adapters and eXML to incorporate systems.

Recently, the new generation of web-based software has focused on the implementation of SCM, enabling different entities to be connected, even though their internal systems may be quite different. The system's Web-aspect provides significant advantages, as the system is distributed through interoperable, cross-platform and highly pluggable Web-service components (Subramani 2004).

A new generation of Web-based enterprise information systems is provided by a

system structure that is entirely modular, plug-gable and separable (Tarantilis, Kiranoudis and Theodorakopoulos 2008). Enterprise resource planning (ERP) software systems attempt to integrate all departments and functions across a company onto a single information system that can serve all those different departments' particular needs (Tarantilis, Kiranoudis and Theodorakopoulos 2008).

Developing ICT (Information and Computer Technology) greatly contribute to realise the integration trend of SCM, being more indispensable for future (White, Daniel and Mohdzain 2005). For example, Oracle Corporation aims to integrate software products, acquiring companies such as Siebel (famous for their CRM systems), BEA systems (offering application server software), and Peoplesoft, an ERP software company from the middle of the 2000's. The acquisition of software companies is possible because Web technologies are now the platform for all software products, allowing to cooperation with different systems.

5.4 The emphasis of collaboration with external activities

However, computer systems are not enough to create speed to market. Fundamental changes in operational relationships are required, such as information sharing among suppliers, manufacturers, and retailers about lead-time, sales forecasts, production and purchasing needs, new product shipping plans, and payment information. Vertical integration is a way to accommodate speed based management. One of the keys to achieving agile response to fast-changing markets lies upstream of the organization in the quality of supplier relationships (Christopher 2000). Responsive demand chains for delivering products under dynamic, changeable and uncertain business situations require a new concept which merges the demand and supply chain aspects (Rainbird 2004). Rainbird conceptualised demand chain management and defined it as an understanding of current and future customer expectations, market characteristics, and available response alternatives to meet these through deployment of operational processes.

As well as these downstream activities (Wise and Baumgartner 1999) of scanning market demand, the focus of recent studies has shifted to upstream activities, where service providers manage the supply side (Hobday et al.2005, Ervelles and Stevenson 2006). Firms cannot store all of their necessary technology in-house, requiring external actors in order to combine internal and external technology.

This paper assumes the existence of a 'facilitator', who is able to understand and analyse the attributes of the demand side, seeking and selecting potential technology from suppliers, and integrating it. Finally, the facilitator provides these integrated solutions to the

demand side. These activities are linked together by partnerships and alliances, often working in temporary consortiums for the duration of a project. In summary, the role of inter-firm relationships should be focused on developing capabilities that can integrate external and internal resources from the supply side to match demand.

6. Discussions and Conclusions

This paper attempts to clarify the relationship between SCM and marketing concept, showing the importance of managing inter-firm relationships in SCM through studying relevant literature.

In the past, fashion businesses focused on forecast driven management, developing insight and tools to improve demand forecasting for fashion products, and/or using speculation strategy. However, it became apparent that markets are increasingly volatile and hence less predictable. As a result, the strategy of the fashion industry now requires a rapid response to real market demand, as well as more time-sensitive strategies.

Recent supply chain systems, for example agile (e.g. Christopher 2000), or demand supply chain (e.g. Juttner, Christopher and Baker 2007), aim at improving customer services through increased responsiveness, as well as reducing inventory requirements due to shorter lead times, improved quality or product freshness through reduced handling, lower inventories, faster throughput and reduced supply chain cost.

The concept of market orientation greatly contributes to the discussion of the link between SCM and managing inter-firm relationships. This concept significantly affects both internal and external supply chain integration. In addition, by using the concept of operant resources, business resources can become competitive advantages when they develop through continuous collaboration with external actors rather than internal activities. Therefore, it is theoretically asserted that competitive advantage derives from a combination of capabilities within all activities in a supply chain network. Past research focused almost entirely on the characteristics of a single focal firm within the supply chain and was based on responses from a single key informant within the focal firm (Braunscheidel and Suresh 2009). We should look at the supply, not based on a chain of businesses with one-to-one relationships but on a network of multiple businesses and relationships (Lambert and Cooper 2000). Therefore, the role of internal, cross-functional integration, and external integration with key customers and suppliers should be examined when discussing supply chain management. (Braunscheidel, and Suresh 2009). This paper advocates the existence

of a 'facilitator', who is able to understand and analyse the attributes of the demand side, as well as integrate suppliers. The facilitator provides these integrated solutions to the demand side.

In summary, with the integration of supply chain systems, new types of supply chain systems are expected to provide (a) competitive advantage (b) reduced operational costs and (c) better collaboration among supply chain partners. This research suggests that a new research issue, the integration of SCM and marketing, is required. Rather than something forecast-driven, a "market-driven" management system would be expected to provide products and services through analysing not only quantitative data and sales volumes coming from POS systems, but also qualitative data, customer behaviour data, and forecasting market demands. This qualitative data penetrates all activities within the supply chain.

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