

Study of Supply Chain Management and Buyer Supplier Relationship

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Abstract— Supply chain performance is a rapidly developing area of research. Many companies are trying to find tools for enhancing performance measures in response to turbulent business markets and for efficiently controlling their business activities. The contemporary view of competitiveness and strategy is based on the foundation that customer value is created by firms working together for common aims and not created by firms working in isolation. Therefore there is increasing recognition that firms, who engage in co-operative long-term partnerships, improve the operation of the supply chain as a whole for the mutual benefit of all parties involved.

Key words: Supply Chain Management,

reasonable to ask if they respond to different cues within the relationship. This aspect is examined by looking at the interaction of relationship dimensions – specifically the antecedents of relationship success. Our motivation for this study was to consider a wide range of relationship dimensions drawing on both transaction cost and social exchange theory rather than presupposing certain dimensions would dominate. We examined matched-pair relationships to identify specific differences in perception between the parties within the relationship. Thus, the contribution of the paper is that there are significantly different drivers of relationship success for buyers and suppliers in the same relationship.

I. INTRODUCTION

Management of buyer-supplier relationships is central to the success of supply chain management in firms (Harland, 1996). In particular, strategic relationships with critical suppliers must be understood in order to maximize the value creation in the supply chain (Chen et al., 2004). Studies have shown that successful management of these relationships contributes to firm performance (Tan et al., 1999). Dimensions such as trust and commitment are shown to play an important role in high value strategic relationships, where specific investments are high, and contractual governance alone is not adequate (Morgan and Hunt, 1994). In such relationships, it is important that both parties perceive that they are gaining value from the relationship if it is to continue and the relationship is to be considered a success (Narayandas and Rangan, 2004). Researchers have used both transaction cost theory and social exchange theory as separate and complementary theories to explain the antecedents and dynamics of relationship success (Kwon and Suh, 2004; Kingshott, 2006; Hawkins et al., 2008; Zhao et al., 2008; Liu et al., 2009). Researchers have used both single-respondent and dyadic samples in order to understand the differences in perceptions of the relationship between buyers and suppliers. However, the antecedents and dynamics have mainly been tested on separate groups of buyers and suppliers and rarely between buyers and suppliers in the same relationship (O’Toole and Donaldson, 2002;

Terpend et al., 2008). Even when matched pairs in a relationship have been studied, the results have been aggregated to the relationship (Liu et al., 2009). We use both transaction cost theory and social exchange theory factors across a matched-pair dyad directly comparing buyer and supplier perceptions of the same relationship. There are two distinct aspects to the question of differences in perception. One aspect is whether relationship partners perceive the same levels of trust, commitment and performance in a relationship. This issue is dealt with through an examination of perception levels – the values of the constructs. A second aspect is how characteristics of a relationship are valued by each partner, specifically what characteristics lead to a successful relationship. Given that the two partners have different interests and different needs in the relationship, it is

II. CONCEPTUAL MODEL

The study of buyer-supplier relationships and purchasing process has been the central issue in relationship marketing and purchasing as well as business-to-business marketing literature. A brief review of the literature will be based on the hierarchical conceptual model (Figure 1), and details will be discussed with posited hypothesis in the next following section.

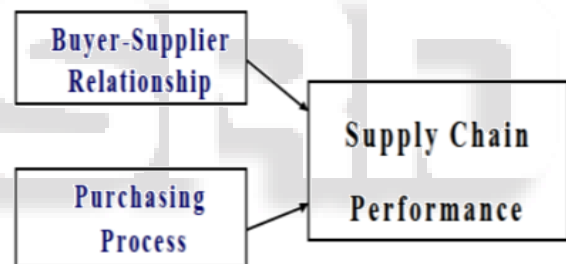


Fig. 1:

Buyer-supplier relationships in the supply chain are one of the most important elements of supply chain integration. Establishing and managing effective relationships at every link in the supply chain is becoming the prerequisite of business success. High volatility in the retail industry reflects rapid fluctuations in customer demand and unpredictable market trends. In addition, environmental diversity reveals uncertainty in the global business environment. Facing market volatility and diversity, retailers are encouraged to develop relatively flexible relationships with multiple channel partners to deal with unexpected market demands and thus reduce the dependence on the vendor (Ganesan 1994).

A. The Technology Transfer Model:

Elaborated in the early 1990s by Esposito and Raffa (1991,1994), the technology transfer model aims to analyse the wide range of customer subcontractor and subcontractor-subcontractor relationships between two firms. In this model, the channels through which two firms communicate are viewed as vehicles for transferring the various technology components (Allen, 1988). The firm’s technology is seen as sets of knowledge embodied in hardware systems, software systems, and human resources (Technology Atlas Team,

1987). This implies a systematic application of various categories: machinery, professional skills, information, and organizational rules. Amongst the above mentioned communication channels, there are seven channels that can directly linked to the information sharing process (see fig 2). One remark can be made. It is possible to represent the flow of exchange of information, material, and financial goods between two firms. Moreover, the model is able to measure the intensity of collaborative relationships between buyer and supplier. The degree of use of technology transfer channels shows that the new subcontracting relationships, unlike the traditional ones, are typified by a significant exchange of the technology categories (machinery, organizational rules, professional skills and information).

B. Internet Channel: The E-Supply Chain Portal

An often overlooked factor in website effectiveness and development is the effect of individual user differences on the acceptance of the new technology. Another key barrier to full supply chain management has been the cost of communication with, and coordination among, the many independent suppliers in each supply chain. The key to enhanced supply chain operations is not solely efficient information transfer, but timely information availability. In fact, the use of information systems to ensure visibility (transparency) of item demand, location, and status to all parts of the logistics network was identified over a decade ago as an important attribute of manufacturing (Kehoe and Boughton, 2001, 2001-2). The Internet is the first channel that makes it possible for information located at a central source to be available to anybody. Furthermore, using Internet based information transfer, supply webs will replace the traditional linear movement of information within supply chains, thereby facilitating a more interactive approach to supply chain partnering. The Internet provides the opportunity for demand data and supply capacity data to be visible to all companies within a supply chain. Therefore, before deciding to embrace e-supply chains, a firm needs to clearly understand its own automation needs and different potential options for creating supply chains including their benefits and challenges. It is only then that a firm should select the supply chain option that it can successfully manage. A portal, a solution for enabling the real time end-to-end e-supply chain, is a site that serves as a starting point for accessing the web from which the user may access many other sites. The most important function is the collecting of buyers and suppliers to make the transaction easier for the buyer and more efficient for the suppliers (Hartman and Sifonis, 2000). The presentation layer gives the user of the portal access to certain information, dependent upon the user's level of security clearance and/or need to know. Portal technology allows all the partners in a supply chain to log onto a single portal site and immediately get the relevant information they need to make certain decisions. The portal has uses for both suppliers and customers. Suppliers can be given insight into the inventory levels of other portal users and tune their products based on this information. Customers can be given diverse information and services on a unified front-end on the Internet. An additional significant advantage of portal technology for streamlining and coordinating the internal operations of the firm is that it provides the unifying structure allowing a single, shared database to coordinate all the

transactions within the firm as well as the transactions between the firm and its trading partners in real-time.

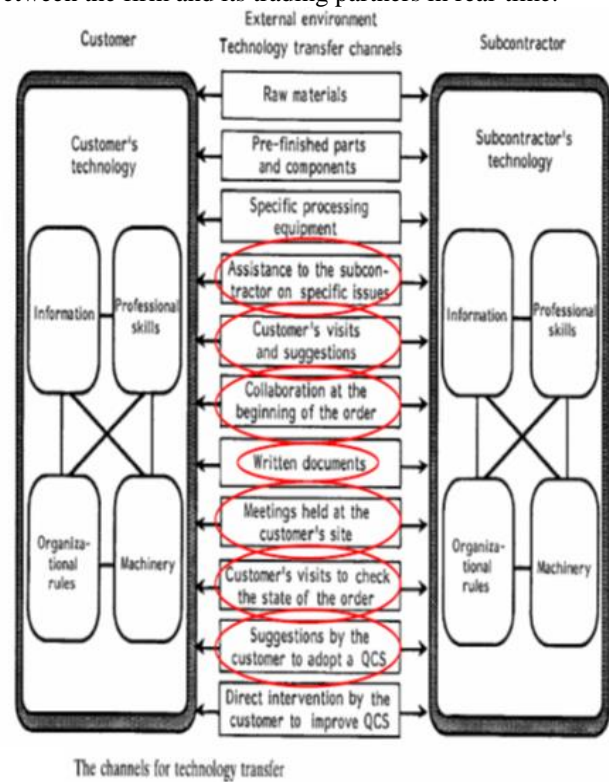


Fig. 2:

III. MEASURES OF SUPPLY CHAIN PERFORMANCE

Supply chain performance is an important and multi-faced issue in supply chain management. Performance measurement is defined as the information regarding the processes and products results, that allow the evaluation and the comparison in relation to goals, patterns, past results and with other processes and products (Petrovic-Lazarevic and Sohal 2002). It is important to identify those determinants that drive supply chain success. What should be measured and what action should be taken based upon the measure are the key issues in today's fast-paced, competitive economy. To achieve an efficient and effective supply chain, many companies have realized the importance of performance evaluation and what measures should be used. The objectives of performance measurement are to improve the efficiency and effectiveness of a supply chain (Beamon 1999; Gunasekaran et al. 2001), and also consider the overall supply chain goals and the metrics to be applied (Gunasekaran et al. 2001).

A. Measures Of Performance:

To evaluate the effectiveness and efficiency of retail supply chain performance, the performance measures for this research is based on Gunasekaran et al's (2001) classification; measures are identified as financial and non-financial. A detailed description of each measure will be discussed in the next section.

B. Financial Measures:

Sales growth rate and profitability, which are frequently used as predictors of financial performance (Bourne 1999; Gales and Blackburn 1990; Tan et al. 1999). Sales growth rate is measured as the percent change in annual sales over the last

three years (Gales and Blackburn 1990; Tan et al. 1998; Tan et al. 1999). Profitability refers to the average retail profits that the retailer can make from the sportswear. The study of Dollinger and Kolchin (1986) shows there is a strong positive correlation between purchasing activity and firm profitability.

Non-financial measures The non-financial measures characterize the essence of flexibility and customer service in the supply chains. Flexibility refers to the ability of making available the products or services to meet the particular customer demands (Gunasekaran et al. 2001). Flexibility is a key measure of supply chain performance and is often regarded as a reaction to environmental uncertainty (Beamon 1999; Suarez et al. 1991; Vickery et al. 1999).

Supply flexibility. Fashion is a precarious business, and heavy stock-keeping units associated with variety of sizes, colors and styles of sportswear are a big burden for retailers. To carry enough inventory to satisfy consumer demand with minimum inventory carrying cost, it is a trend that retailers tend to place small order quantities and receive frequent deliveries. Tsay (1999) suggests implementing quantity flexibility (QF) as a response to inefficiencies, such as over-stocking and under-stocking, occur in the supply chain.

Product exchange and return. Some retailers prefer buying some brand named sportswear on consignment as there is no inventory investment, or on memorandum buying as any unsold items can be returned for full credit or exchange (Rogers and Gamans 1983).

Delivery efficiency. Nowadays, customers are raising their service expectations with regard to ever-shorter delivery time (Fawcett and Marnan 2001). Stewart (1995) concluded that delivery performance is the first key to supply chain excellence and the driver of customer satisfaction in supply chain management. The main purpose of customer service metrics is to measure how the suppliers are serving (or not serving) the retailers (Hausman 2000). Customer service has been highly differentiated and become one of the major competitive advantages for a sports apparel retail outlet.

Product availability. Because the nature of the sportswear market involves volatility and seasonality, product availability is a critical factor to customer satisfaction and customer loyalty at the retail level (Sabath 1995). Unsatisfied demand will cause lost sales, lost customer and obsolete inventories

Product quality. The quality of the product provided by suppliers reflects the brand's image and value (Chaudhuri and Holbrook 2001). Wisner and Tan (2000) include product quality as a criteria of supplier performance, and Tan et al. (1999) show that quality has a positive impact on growth and return on assets.

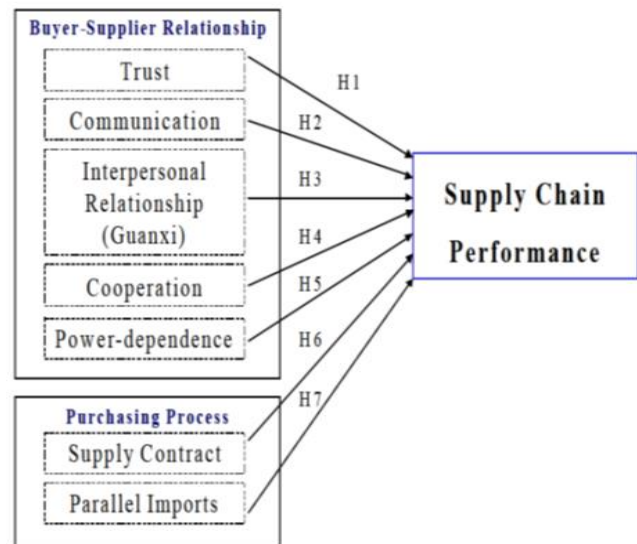


Fig. 3:

IV. CONCLUSION

The Supply Chain management is a process which includes the variety of operations to perform and that requires proper coordination of all the parameters and the factors of the SCM. Pre-established conceptual measures for the outcome of retail supply in performance consisting of financial measures and non-financial measures are used. The findings will extend our understanding of what factors have impact on retail supply chain performance.

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