
STATUS OF SUPPLY CHAIN MANAGEMENT: AN OVERVIEW

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ABSTRACT

India is moving fast towards its economic development. Crucial changes have occurred in today's economy which has in turn altered the relationship between customers, suppliers and business organizations. Supply chain management (SCM) deals with the management of supply chain activities to maximize customer value and achieve a sustainable competitive advantage. The goal of this paper is to provide an overview of supply chain management. It sheds some light on aspects such as the basic stages of a supply chain, supply chain decisions, modelling approaches to supply chain management and the common problems faced by supply chain management. However some Indian companies are moving towards making their supply chain and logistics efficient, most of them have done very little or nothing. If companies choose to compete in the global environment, they will have to look for ways to reduce expenditures of their suppliers and channel partners, logistics or distribution partners. This reduction in cost will leads the revamping of supply chains and significant investment in information technology, because information technology tools and techniques plays very important role in improving the status of the SCM.

Key words: Supply Chain Management, Logistics

INTRODUCTION

In its earliest stages supply chain was a set of linear, individualized processes that linked manufacturers, warehouses, wholesalers, retailers and consumers together in the form of a human/paper chain. This often resulted in miscommunication between different groups due to poor information and lack of coordination. Synergy of procurement, demand planning and forecasting, inventory management, transportation modes was still far from possible. However, as manufacturing and economic growth flourished during the 1950s, there developed a greater interest in the need for SCM. After 1950, supply chain management got a boost with the production and manufacturing sectors getting highest attention. The inventory became the responsibility of the marketing, accounting and production areas. Order processing was part of accounting and sales. Supply chain management became one of the most powerful engines of business transformation. It is the one area where operational efficiency can be gained. It reduces organization costs and enhances customer services. Business today is in a global environment. This environment forces companies, regardless of location or primary market base, to consider the rest of the world in their competitive strategy analysis. Firms cannot ignore external factors such as economic trends, competitive situations or technology innovations in other countries, if some of their competitors are competing or are located in those countries. Companies are going truly global with Supply Chain Management.

Nowadays, the management's challenges are increasingly formed from a complex network of suppliers that can do threaten the business and the creation of new opportunities for agency management. To understand the supply chain risks which the companies are faced to makes possibility for agencies managers to make more power to realize and challenge against unexpected happenings. In the unsecure and unstable terms of competitive environment, recognizing of above mentioned risks cause the adaptation and act as a strategic lever in the organizations competitive process. Supply chain risk appraisal process can help to make strategic decisions and operational plans to reduce the quantity of

supply chain defects (Zurich Insurance Company,2010). The process of advancement in this regard is described in the way that, at first, organizations were trying to produce the products with better quality and the least costs by standardization and improving their own internal processes in order to increase their competitive power. In the past, the dominant thinking was that the powerful engineering and designing and also harmonious and consistent production operations are the leading factor to access market demands and, as a result, to get more market share and, therefore, the organizations do their best to increase efficiency. In later years, with increasing of diversification in customer's expected patterns, the organizations were concerned with increasing elasticity in production lines and development of new products for customer's satisfaction. In later time, by improving of production processes and using further engineering models, most of the industrial managers found that to continue their presence in the market, it's not enough to have improvement in internal processes and flexibility in companies abilities. But parts and materials producers should produce the materials with the best quality and least costs and also products distributors must have a close relation with policies of market development of producers. By such a view point, the supply chain approaches and its management were born (Mentzer.etal). Most of the companies take different actions like contracting to manufacture diversified productions to have cost advantage and market share. These actions may be efficient due to the stable conditions. But these actions by itself can effect on supply chain by different kinds of risks. The risks like unsecure economic cycles, customer's uncertain demands and human and natural events. So, in regard to more increasing of these actions, the need to study of different methods and strategies for supply chain risk management in the superior companies has also been put to agenda more than before (Sharafati,2009). In this research, besides explanation of the concepts of supply chain, supply chain management, risk and non determination in supply chain, we talk about the existing risks in supply chain and finally, after inquiry of risk models in supply chain, we examine one of the them and the questionnaire which has been extracted from the best selected model, is analyzed by DEMATEL method.

ISSUES AND CHALLENGES IN SUPPLY CHAIN MANAGEMENT

(i) Supply Chain Integration

Supply chain management (SCM) executives face unique challenges, with respect to integrating supply chainspecific strategies with the overall corporate business strategy. In recent years, given changing business realities related to globalization, the supply chain has moved up on the chief executive officer (CEO) list of priorities, but it's not always for the right reasons, in many cases, CEOs only pay attention to the supply chain when they want to cut costs or when something is wrong. Since the supply chain essentially moves the lifeblood of the organization, process efficiency on a global scale is essential to optimized business operations. The importance of global integration to the Multi-National Company (MNC) lies in the differential advantage to be gained from the ability to exploit differences in capital and product markets, to transfer learning and innovation throughout the firm, and manage uncertainty in the economic or political environment in different countries or regions. However, the general understanding of the business environment in most industries is that competition has increased and the conditions under which business is made are more turbulent. Many researches have mentioned a classification of supply chain integration challenges. SC integration challenges can be classified through the challenge of system relationships; the SCM system has two kinds of relationships, which are the relation between sub-systems, and the relationship between SCM system and the business strategies, This classification emphasizes the technical challenges that came from the relation between SCM system and internal business strategy, unfortunately this classification bypass the challenges that the companies may face from external environment.

(ii) Information Sharing

Information sharing in a supply chain faces several hurdles. The first and foremost challenge is that of aligning incentives of different partners. It would be naïve of a partner to think that information sharing and cooperation will automatically increase his or her profit. In fact, each partner is wary of the possibility of other partners abusing information and reaping all the benefits from information sharing. For example, supply chain partners seldom share information that relates to sensitive cost data, e.g. production yield data or purchase price of parts. This is consistent with economists. Finding that a powerful monopolistic or monopsonistic partner can extract all economic profit from his or her partner, but one way of defending a positive profit for the weaker party is to keep the cost hidden and maintain informational superiority. The profit associated with superior information is often called the informational rent. Even when each partner is guaranteed a positive gain in return for information sharing, each partner can play a non-cooperative game and haggle over how much. This may potentially lead to a failure to share information. Thus, trust and cooperation become critical ingredients in a supply chain partnership. On the other hand, trust needs to be rationalized by a relevant economic return. Cooperative game theory offers a starting point to the resolution of the problem, but reality is much more complicated with many additional factors and special considerations. Another concern associated with information sharing is the confidentiality of information shared. Suppose, for example, that a supplier supplies a critical part to two manufacturers who compete in the final product market. Either manufacturer would not share information (like sales data) with the supplier unless it is guaranteed that the information is not leaked to the other manufacturer. But the situation becomes tricky if the supplier and one of the two manufacturers are the same company. Note also that information sharing in certain settings can be a subject of antitrust regulations. Suppose that two retailers regularly share with the supplier their demand projection for the next ten weeks. The projection by one retailer may implicitly signal the plan of a sales/promotion campaign in some future week. When this information is relayed to the other retailer through the supplier, it may be potentially used as a price fixing instrument between the two retailers. For example, the two retailers may take turns lowering the price by the use of forecast signals and avoid cut-throat price competition. This practice may be a subject of scrutiny by the antitrust authorities.

(iii) Supply Chain Network Design

Another aspect that requires more attention is the full integration of forward and reverse activities in SCM. As we can conclude from the surveyed literature, only a few papers attempt this integration and, again, significant simplifications are made. One aspect that has been scarcely considered in (integrated) supply chain planning concerns postponement decisions, which refer to the possibility of not filling customer demands on time. As a result, backorders are generated that incur penalty costs. This issue was explicitly integrated with strategic decisions (Wilhelm et al., 2005). Clearly, more research is needed on this aspect, whose relevance has been raised by SCM. In particular, it is important to consider the impact that it may have on strategic decisions. In addition to these findings, we note that the large majority of location models within SCM is mostly cost-oriented. This somewhat contradicts the fact that SCND decisions involve large monetary sums and investments are usually evaluated based on their return rate. One of the few models addressing this issue was focusing on maximizing the potential return on facility investment. Gupta, 2017 is the only example we found that considers revenue management for remanufactured products in reverse logistics. Regarding the methodology that has been developed to solve SCND problems, a rich and varied group of available solution techniques can be observed. This aspect along with the continuous development of more computing power makes it possible to handle comprehensive models. Hence, although the incorporation of the various features discussed above would naturally increase the complexity of the resulting models, the possibility of solving real-life problems seems quite promising. The main conclusion that can be drawn from this review is that we can find a

growing stream of research aiming at the integration of strategic and tactical/operational decisions in supply chain planning. Moreover, the role of facility location is decisive in supply chain network planning and this role is becoming more important with the increasing need for more comprehensive models that capture simultaneously many aspects relevant to real-life problems. Nevertheless, much research is still needed in order to include in the existing models many issues that so far have not received adequate attention in the literature. Therefore, there is still much room for the development of new models (and solution techniques) for helping the decision-making process in integrated supply chain planning.

REVIEW OF LITERATURE

The quality of the material sourced from emerging economies is at par with the world standards. But the supply chain management best practices are not followed by suppliers. The problems faced by these firms from their suppliers are common viz. product shortage, delayed delivery, supply disruptions, lack of logistics facilities, etc. (Lin and Zhou, 2011; Thakkar, Kanda, et al., 2011). Therefore there is a need to percolate the best practices to second tier or third tier suppliers. As a whole chain they need to perform better (Sutton, 2004; Soni and Kodali 2011). Indian firms and suppliers too are no different. They share the same approach of other firms in emerging economies. Indian organizations need to change the way people think. They need to change their mindset. We realized that first hand information from the people responsible for supply chain management in Indian industries should be gathered to analyse the supply risk management perspective and practices implemented by them. This information would also reveal the degree of importance given to this area by Indian firms. A limited number of risk related surveys can be found in the area of supply chain.

CONCLUSIONS

Supply chain practices in India show that visibility is still limited. The companies have a realistic view on the advantages and risks of information sharing and so information is shared only selectively. Our study reveals that most Indian firms have aligned their logistics and supply chain objectives with their business objectives. However, due to some aberrations and diseconomies of scale/ scope most of them are not able to reap full potential benefits. Action is required by the Indian government to improve the infrastructure for better functioning of various supply chains. Firms and their supply chains need to closely integrate themselves into a network, carefully manage the complexity that ensues, align their business strategy with logistics and supply chain operations, and leverage information and communication technology with process improvement and pioneer operational innovation for superior performance.

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