

POSITION OF SUPPLY CHAIN MANAGEMENT IN INDIAN INDUSTRY**Pravinder**Research Scholar
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ABSTRACT: Supply Chain Management has gained significant importance in the 21st century. It is so because small companies like Wal-Mart, Dell, and Amazon owe their entire success to their agile and adaptive supply chain. These were small companies virtually unknown not so long ago and suddenly they became the most competitive and admired companies on the stock bourse. 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 Supply Chain Management.

KEYWORDS: Supply Chain Management, investment

INTRODUCTION

Supply Chain Management and Logistics involves optimizing the delivery of goods, services and information from supplier to customer. An effective supply chain makes companies competitive and profitable. Information is essential to making optimal supply chain decisions because it provides the global scope needed to make optimal decisions. Information technology (IT) provides the tools together this information and analyses it to make the best supply chain decisions. Latest and the state of art technologies and management tools ERP, CRM, and SRM along with auto ID technique RFID have to be used for improving the performance of Supply Chain Management and Logistics in India. The Indian economy has been growing at an average rate of more than 8 per cent over the last four years putting enormous demands on its productive infrastructure. Whether it is the physical infrastructure of road, ports, water, power etc. or the digital infrastructure of broadband networks, telecommunication etc. or the service infrastructure of logistics – all are being stretched to perform beyond their capabilities. Interestingly, this is leading to an emergence of innovative practices to allow business and public service to operate at a higher growth rate in an environment where the support systems are getting augmented concurrently. 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.

PROBLEMS TO OVERCOME IN IMPROVING PERFORMANCE OF THE SUPPLY CHAIN MANAGEMENT

High cost of Supply Chain: The Indian industry spends an exceptionally high amount of 13% of its GDP on logistics and 22% of the aggregate sales are tied up in inventories.

Inadequate infrastructure scenario required for efficient Supply Chain: The fifth largest country in terms of gross national product (GNP) and purchasing power parity, consumer base of over a billion people (Centre for Monitoring Indian Economy, 2000), India is the fastest growing market in the world.

Inadequate investments in Information Technology (IT): Though India is a leading exporter of IT products, Indian companies are unfortunately least inclined to use them. Hence, the IT penetration in India is low. This is not surprising that Indian companies are 1.3% of the gross sales. For companies that use IT systems, there seem to be a clear bias towards using stand-alone IT systems. Using these systems would mean that collaboration would be low as these stand-alone systems are not friendly when it comes to implementing recent supply chain models like CPFR, VMI etc. in the present scenario the supply chain around the world is On-Demand, using technology such as internet, mobile, wireless, RFID etc, whereas Indian supply chain is still to come out of this slumber.

Lack of proper logistic infrastructure: Country wide infocomm B2B network and poor conditions of roads results in capital being tied up in huge stock piles of obsolete goods both in terms of moving inventory as well as at the factory site, and lack of professionally competent logisticians.

ISSUES AND CHALLENGES IN SUPPLY CHAIN

Supply Chain Integration: Supply chain management (SCM) executives face unique challenges, with respect to integrating supply chain specific 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.

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 monopolistic 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.

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 (Sheu, 2003) focusing on maximizing the potential return on facility investment. Moreover, substantial investments lead to a period of time without profit. Companies may wish to invest

under the constraint that a minimum return will be gradually achieved (e.g., at least a pre-defined amount should be earned within a given time limit, (Shapiro, 2004). By considering profit-oriented objective functions, it also makes sense to understand, anticipate and react to customer behaviour in order to maximize profit or revenue. This means bringing revenue management ideas into strategic supply chain planning. The contribution by Mitra, 2007 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 (Sahay and Mohan, 2003; (Thakkar, Kanda et al., 2011; Soni and Kodali, 2011). We realized that first hand information from the people responsible for supply chain management in Indian industries should be gathered to analyze 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 (Thun and Hoeing, 2011).

In current study lot of research has been done to understand what the Supply Chain Management is and how it is affecting organizations, what are different challenges and it can be proved as a tool for improving overall performance in today's global competitive environment.

LOGISTICS AND SCM PRACTICES FROM SECONDARY SOURCES

Industry and academic estimates put logistics and SCM spend in India at approximately 13% of the Gross Domestic Product (GDP). Global estimates for this vary and are around 13% of GDP in China and about 9% of GDP in the US. The transportation cost in India accounts for nearly 40% of the cost of production, with more than half the goods being moved by road. Trucking accounts for nearly 70% of transportation and accounts for 60% of all logistics cost. 67% of truck ownership is in the hands of small unorganized players. Road is followed by rail and finally coastal shipping. Rail has been steadily losing ground due to myopic government strategies and inherent inefficiencies. The freight movement of Indian

railways has risen to 411354 net tone-kilometers and the total road length is 3315231 kilometers. Though enormous maritime routes are available combination of poor government policies and lack of initiative from the private sector, water which is probably the cheapest mode of transport is barely used. Air as a mode is limited to a small percentage of courier shipments. Various SCM spend indicators such as in-bound transportation costs, inventory related costs and distribution expenses as percentage of net sales vary from industry to industry. However, as per Centre for Monitoring Indian Economy (CMIE), they are coming down over a period of years. The aggregate of the same for nine major manufacturing industries for four years are shown in Table-1. These industries spent nearly 17-19% of their net sales on various logistics activities, including distribution, warehousing, and inventory. Global averages are around 9-12%. So, there is ample scope to reduce spends on logistics. This in turn allows companies to protect operating margins during downturns and make above-normal profits during upturns.

Table-1: SCM Spend in 9 Major Indian Manufacturing Industries

SCM Spend Indicator	2010-11	2011-12	2012-13	2013-14	2014-15
In-bound Transportation Costs as % of Net Sales	1.7%	1.5%	1.4%	1.5%	1.7%
Inventory-related Costs as % of Net Sales	13.5%	13.9%	13.4%	13.4%	14.2%
Distribution Expenses as % of Net Sales	3.2%	2.9%	2.0%	2.9%	3.3%
Total SCM Spend as % of Net Sales	17.9%	18.4%	17.5%	17.5%	18.2%
Source: CMIE					

The focus on costs and ICT-enabled services is leading to electronic procurement that cuts time and costs (including transaction costs) and brings in transparency and speed. The ERP industry in India is worth US\$ 300 million and is growing at over 15% a year. 52% of the respondents in ETIG (Economic Times Intelligence Group) SCM 2014 survey have implemented ERP and three-fourths of these find ERP to be extremely effective in business. 44% of the companies surveyed had already implemented data warehousing and mining applications, and another 26% had plans to do so. Almost every firm found this practice to yield good results in revealing consumer trends, patterns and potential segments.

For supply chain tracking, the most preferred method is the truck driver reporting his location. Another method gaining popularity is the use of SMS (Short Messaging Service). Time lags here can be pre-determined. Depending on the number of times the SMS signal is polled and sent by to the base station, the location of the vehicle can be accurately determined. With Global Positioning Systems (GPS), this is no longer the issue. However, the use of GPS for supply chain management in India is relatively low.

CONCLUSIONS

Effective Supply Chain Management and Logistics contributes to competitive advantage to organizations. This paper conveys the conceptual idea of SCM and Logistics as well as importance of information technology tools and technologies for improving the performance of SCM and Logistics in India. To achieve this improved performance, organizations should focus on applying techniques which offer a strategic opportunity for companies to gain an increase in revenue. This is possible by refocusing on integrating IT with supply chain management and Logistics. The desired technology platform can capture enterprise-level data and deliver information to support the specific needs of their global manufacturing or distribution. Organizations must realize that they must harness the power of IT to collaborate with their business alliances. Business organizations must offer more value for less money by utilizing the latest innovative technologies to achieve continuous quality improvement by being highly cost effective. In their search for excellence, the leading business organizations of the world are using SCM, which employs the

latest and state-of-the-art IT technologies and tools. They also need to rigorously measure and monitor critical operational performance metrics such as customer service, responsiveness, supply chain costs, asset utilization, product quality and operational flexibility in order to achieve overall business success.

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