

Strategic Framework For Supply Chain Management

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Abstract-The relevance of Supply Chain Management (SCM) strategies is much more in this competitive world, where there is fluctuating market. The theme is given by a structured model framework. There are different types of strategies in supply chain management. Some of them are sourcing strategy, inventory strategy, warehousing strategy, transport strategy, customer satisfaction strategy etc. The Strategic decisions are very crucial for an organization. Here different types of supply chain strategies are discussed.

Keywords: Supply chain management, Strategies, Uncertainty

I. INTRODUCTION

The role of marketing cannot be ignored in successful supply chain implementation. Min and Mentzer (2000) exclusively studied the role of the marketing in effective supply chain management, marketing concept, marketing orientation, relationship marketing and its impact on supply chain implementation. They hypothesized that marketing function promote individual firms' coordinated activities inside and outside the firm to achieve customer satisfaction. Effective supply chain management requires partners to build and maintain close long-term relationship. Ellram and Cooper (1990) asserted that a successful business rely on farming strategic partnership a long lasting inter firm relationship with trading partner. Better relationship helps in inventory and cost reduction and joint planning to impart agility and success to the supply as a whole. Marketing plays an important role in implementation and success of supply chain at strategic and tactical level. It provides valuable market information and success of supply chain at strategic and tactical level. It provides valuable market information about customers, competitors, potential channel partners, and emerging business avenues and information is the key in managing supply chain agent. The management consulting industry contributes with new buzz words to stimulate and sustain interest. "Supply chain thinking" is a better characterization. It infers a gradual infusion of new mindset and methods into traditional task. Supply chain thinking brings a new perspective for managers to deal with the issues relating to products, markets, people and skills, operations and finance. Supply Chain Management (SCM) is an integrative business philosophy and implementation action to manage materials information and cash flows from raw material excavation to ultimate end use. The objective of implementing Supply chain management is to reduce

Inventory level, increase customer satisfaction and build competitive advantage to create customer value. Supply chain management presents an integrated approach to resolve issues in sourcing, customer service, demand flows and distribution.

The results derived by applying SCM are as follows:

1. Reduced operational cost.
2. Improved flow of supplies.
3. Reduction in delays in distribution and increased customer satisfaction

II. RELATIONSHIP STRATEGIES IN SUPPLY CHAIN MANAGEMENT

In the present scenario of globalization, customer service and supply chain management is becoming significant to the corporate world. Companies are dealing with consumer through suppliers, distributors, and retailers. They want to deal with their customers directly. On the other hand consumers' demands are increasing. So companies must acquire suitable strategies for immediate flow of product and information throughout their supply chain network. The main theme is to manage customer service in order to attract, enhance and retain customer. It acts as an antidote for building long term relationship with potential customer. Customer relations help to operate the front office functions of sales, marketing and customer services. Customer relations are marketing function and target the profitable customer (Sheth and Parvatiyar, 1995). Marien (2000) lays out the four key enablers like organizational infrastructure, technology, strategic alliances and human resource management which are the key aspect of supply chain management effectiveness. Customer Relationship is technology driven. The main components include ways of customer contact like telephone, mail, personal selling, after sales service etc, call centers, automatic complaint handling, electronic point of sales and integrated information system for digital world. The major thing is to gather and segment information in order to develop customer insight for effective business. The objective of supply chain management and customer relations is not different. The purpose of implementing supply chain management is to ascertain higher customer satisfaction, increasing profit, expanding revenue base, reducing inventory, lowering product cost and increasing reliability of products. This trend confirms the finding at global level by many scholars (Cooper et al. 1997, Lambert & Pagh, 1998; Bowersox & Closs, 1989).

The main objective of SCM is to fulfill the demand at a right place at the right time with right quality at the lowest possible cost. The movement of materials, intermediates and

the final product from the producer to the consumer is called logistics. Logistics is an integral part of SCM. The relationship between supplier and company on the basis of cost, quality, speed and flexibility is given in (Table-1).

III. MANAGING SUPPLY CHAIN TO CUSTOMER NEEDS

Customer oriented companies need to build leading edge supply chain management system. For this, five areas must be addressed.

(i) Understanding customer service need

- Which customer-servicing elements are important to customer?
- What performance levels are acceptable?
- What value added capability can give the company a distinctive edge?

(ii) Structure and operating policies

- How many distribution centers should a company have? Where should the location be?
- What are the costs and customer service implications of supply chain network design?
- What types of supply chain network configuration make the best strategic sense:

Hence Integrated supply chain management requires careful design of three elements. They are organization structure, customer need and culture of each company.

IV. SUPPLY CHAIN REDISGN STRATEGIES

In today's uncertain environment new products are launched and businesses are born everyday. Customers are increasingly difficult to keep and costly to replace. Companies face intense competition from traditional powerhouses and new players and must continue to find new opportunities and increase efficiencies. The effect of September 11 2001 has made the global market environment even more volatile, with added security concern for global travel and logistics. So Companies increasingly focus themselves as a part of supply chain rather than a single firm competing against other individual firms (Christopher, 1998). This holds true especially in food supply chain because of self-life constraints of food products and increased customer attention for safe and environmental friendly production methods (Boehlje et al; 1995). Recent event have increased interest in supply chain management (SCM) as a means of improving the strength of supply chain. The development of SCM appears to start along the line of physical distribution and transport (Croon et al. 2000), based on the theory of industrial Dynamics, and derived from the work of Forrester (1961). The term Supply Chain Management was originally introduced by consultants in the early 1980s and has subsequently gained tremendous attention (La Londe 1998). A typical supply chain is a network of information's, materials and services possessing link with the characteristics of supply, transformation and demand.

More over Supply Chain Management (SCM) is the integration of activities relating to supply chain and management of supply chain organization and activities through co-operative organizational relationships, effective

business processes and high levels of information sharing to create high performing value systems that provide member organizations a sustainable competitive advantage. The beginning of a supply chain can be traced back to "Mother Earth", that is the ultimate original source of all materials that flow through the chain (eg. iron ore, coal petroleum, wood etc). Supply chains are essentially a series of linked suppliers and customers; every customer is in term, a supplier to the next down stream organizations until a finished product reaches the end user.

Since 1980s, literature on SCM has emphasized the need for collaboration among successive actors from primary producers to final consumer to satisfy consumer demand at lower costs. As defined by the Global Supply Chain Forum, SCM integrates business processes from end user to original suppliers; and it provides products, services and information that add value for customers and stakeholders (Lambert et al. 1998). A driving force behind SCM is to optimize its own results rather than optimize the performance of the chain by integrating its goals and activities with other organizations. Now SCM is the planning, co-ordination, and control of all business process in an integrated way in order to deliver superior customer value at minimum cost to the end customer keeping in view of other stakeholders (Cooper et al. 1997).

The following questions among many others were identified by Lambert and Cooper as potential research opportunities:

- How should a firm decide which internal process to link with which customers and suppliers?
- How should a firm analyze the network to determine if there is a better configuration?
- What decision criteria determine whose internal business processes prevail across all or part of the supply chain?
- What are the barriers to implement and how should they be overcome?

Academics first described SCM from a theoretical stand point to clarify how it differed from more traditional approaches to manage the flow of materials and the associated flow of information (Ellram & Cooper, 1990). According to Bechtel & Jayaram (1997), the emphasis was on facilitating product movement and coordinating supply and demand between a supplier and buyer. Competitive advantage can be derived through the management of materials through inbound and outbound channels. SCM literature provides little information on how to redesign supply chains and evaluate these designs qualitatively and quantitatively (Beamon, 1998).

V. STRATEGIC ROLE AND RESPONSIBILITIES

In a stable environment, each function manages independently. In an uncertain or dynamic environment a close working relationship among functions is needed and operated in an integrated way.

Performance measure: Performance is measured according to desired result. It is determined taking into consideration several inputs and its outputs.

- *Information System:* Three aspects of this system are important.
- Timely and accurate information.
- Integrated applications software with full functionality.
- Advanced decision support system which allow a “what if “simulation of the cost and customer service.

Channel Integration: The efficiency will increase by integrating the supply chain management system with the suppliers and customers.

Creating the perfect order:

The perfect order is designed to measure the effectiveness of a defined function. It measures the percentage of orders that proceed through every step of order management process without any fault. Each step must go smoothly for the order to consider as a perfect one.

These steps are as follows:

1. Order entry
2. Credit clearance
3. Inventory availability
4. Accurate picking
5. On time deliver
6. Correct invoicing

VI. DECISION POLICY AND COMPLEXITY

Decision policies applied in a supply chain may result in bad performances. In the supply chain for fresh fruits and vegetables, the purchasing department of the exporting firm aggregated customers' orders over time to be able to buy large batches, thus reducing responsiveness. Furthermore, customers demand on different products in one delivery but each product may have a different lead-time. Hence decision complexity is a major source of supply chain uncertainty.

A. *Supply chain Information system*

Timely data and applicable data are prerequisite when exchanging information. In information is not up to date and will managed in order to provide current information on stock levels and stock availability, the total time frame of considerations i.e. Order forecast horizon becomes larger.

B. *Supply Chain organization structure*

The final sources of uncertainty were identified in the company culture and division of responsibilities and authority. Specific human behaviour in decision-making processes resulted in different outcomes because of cognitive or political influences.

VII. STRATEGIC SUPPLY CHAIN PERFORMANCE

Integrated SCM will only increase the importance of logistic activities. SCM provides supply chain members with the opportunity to optimize logistical performance at the inter-organizational level. This represents a major departure from current logistic practices that are often characterized by independent efforts with limited co-ordination with organizations. Logistic professional will continue to be challenged to manage the movement of product across the

supply chain in a timely and cost effective manner that meet customers' required service levels. In order to meet this challenge, a supply chain wide logistics strategy is required which will be the primary driver for the specific logistics strategy with in each supply chain member organizations. Distribution networks, transportation modes, carrier management, inventory management, warehouse. The scope of the logistic strategies is now the entire supply chain. It is no longer necessary for each supply chain member organizational to manage its logistic activities on an independent basis

VIII. CONCLUSION

Supply Chain Management is an integrated concept. Traditional approaches to maximize efficiency, utilization and productivity and to minimize costs and wastages are not adequate. Today's world of competitive environment requires focus on customer. It requires perfect alignment between the business strategy and the supply chain strategy. So decision-makers must realize the importance of arranging inputs to manufacturing. Vendor relations must be improved for better management. Logistics problems require multiple solutions depending on the industry. So only joint efforts can solve the supply chain related problems. Results of transformation are encouraging and the can look forward to sustain growth in future. For this the company has to develop new strategies as new challenges come up.

IX. REFERENCES

- 1) Beamon, B.M. (1998). 'Supply Chain design and analysis models and methods, International Journal of production Economics', 55, pp. 281-294.
- 2) Bowersox, D.J, and D.J. Closs (1989). 'Simulation in logistics: A review of present practice and a look into the future, Journal of Business logistics', 10, pp. 133-148.
- 3) Bechtel, C. and J. Jayram (1997). 'Supply Chain Management: A strategic perspective. International Journal of Logistic Management', 8 (1), pp. 15-33
- 4) Boehlji, M., J. Akridge and D. Downey (1995). 'Restructuring agribusiness for the 21st century. Agribusiness', 2 (6), pp. 312-325.
- 5) Christopher, M.G. (1998). 'Logistics & Supply Chain Management: Strategies for reducing cost and improving services'. Pitman Publishing, London, pp. 141-167.
- 6) Cooper, M.C., D.M. Lambert and J.D. Pagh (1997). 'Supply Chain Management: more than a new name for logistics. International journal of logistics management', 8 (1), pp. 1-13.
- 7) Croom, S.R., P. Romano and M. Giannakis (2000). 'Supply Chain Management: An analytical framework for critical literature review', European Journal of Purchasing and Supply Management, 6, pp. 67-83.
- 8) Ellram, L.M. and M.C. Cooper (1990). 'Supply Chain Management, partnership and the supplier, third party relationship'. International Journal of

- Physical Distribution & Logistics Management, 21 (1), pp. 13-22.
- 9) Forrester, J. (1961). 'Industrial Dynamics', New York, Wiley.
 - 10) Handfield, R.B and E. L. Nichols (1999). 'Introduction to Supply Chain Management', Prentice Hall, Englewood Cliffs, NJ.
 - 11) Lambert, D.M., M. C. Cooper and J. D Pagh (1998). 'Supply Chain Management: Implication, Issues and Research Opportunities', International journal of logistics management, 9 (2), pp. 1-19.
 - 12) La Londe, B. J. (1998). 'Supply Chain evolution by the numbers', Supply Chain Management Review, 2, pp. 7-8.
 - 13) Min, S. and Mintzer, J.T. (2000), "The role of marketing in Supply Chain Management", International Journal of physical distribution & logistic management, 30 (9), pp. 765-787.
 - 14) Seth, Jagdish, N., and A. Parvatiyar (1995), 'The Evolution of relationship Marketing', International Business review, 4 (4), pp. 397-418.