

Implication of Supply Chain Management: A Study for Indian Automobile Industry

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Abstract—In Indian context the low cost model will work due to stepping up in competition among the manufacturer of automotive components. In Indian market suppliers there are plenty of suppliers and manufactures of spare parts and accessories across the country. In order to compete globally it is necessary to accept changes in the market and to adopt modern methods of cost reduction and lead time reduction to achieve economic advantage. In order to meet global supply and demand, customer satisfaction, management of inventory healthier relationship and coordination amongst the players of Supply Chain (Supplier, Manufacturer and Customer) is necessary for Indian Automakers. In current era it is necessary to reconstruct supply chain strategies and processes in context to auto industry in order to meet global challenges. In last few decades large multinational players entered into Indian market despite of high raw material cost, poor economic policies and produce vehicles possesses verity of features with lowest possible minimum cost only because of managing well-organized supply chain. This paper focused on adoption of smart and modern supply chain practices in Indian Automobile industry.

Keywords: Supply Chain, Supply Chain Strategy

1. INTRODUCTION

Global supply chain in context to local automotive market creates an environment and necessity to change traditional supply practices. The automotive industry offers rapid increases in the number of models and model variants that are available on the global market to customers [1]. Recent emphasis on global climate change is increasing pressure on automotive executives to make the right decisions in many areas, including R&D and manufacturing [2]. Due to uncertainty in demand and supply it is very difficult for manufacturers of auto segments to manage supply chain. In Indian context their supply chain turns in to more and more difficult and requires lots of homework before introducing new practice. Globalization increase anxiety on producer and suppliers of vehicles to perform with efficiency.

In a highly challenging and competitive environment such as today, where supply chain is a popular tool for improving the

organizational competitiveness, an efficient and effective supply chain strategy is a must for automotive manufacturers and their component manufacturers so as to meet changing consumer demands [3]. Increasing globalization has led to an alarming concern regarding the improvement of the quality of the goods & services, customized services, inventory reduction, in-formation timing and the most important element i.e. the satisfaction of the ultimate customer [4].

The objective of SCM is to maximize synergies among all parts of the chain in order to supply the final consumer more effectively, not only by reducing cost but also by adding value to the product. The cost reduction may be obtained through fewer transactions, reduced variability of demand and less transport and inventory [5]. Logistics and SCM practices may be defined as a set of activities undertaken to promote effective and efficient management of supply chains. These include supplier partnership, physical movement of goods, meeting customer demands and information sharing throughout the supply chain [9].

Nowadays, a considerable number of companies like MarutiUdyog Ltd., Mahindra and Mahindra, Dell and HP etc. are implementing supply chain management practices. Many of them are striving hard for spearheading competitiveness in their respective sphere through cross-functional collaboration, both within the enterprise and supply chain partners [8].

Increasing competition and low profitability has forced manufacturers to go beyond their

own factory gates and search for improvements in the interaction with their suppliers and customers along their supply chains. This new logic in competition, based on supply chains, has inspired the appearance of Supply Chain Management (SCM) [6].

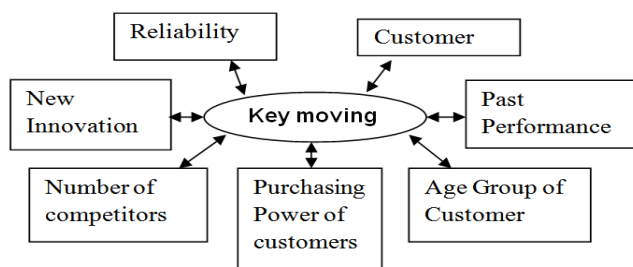
2. LATEST TRENDS IN INDIAN AUTOMOBILE INDUSTRY

Due to huge population Indian Automobile market there is plenty of scope for Auto companies as for as future as concerned. With the increasing growth in demand on back of rising income, expanding middle class and young population base, in addition to a large pool of skilled manpower and growing technology, will propel India to be among the world's top five auto-producers by 2015 [7]. Indian Automobile Industry shares 22 % of Indian GDP. India will likely to become world's largest market player in automotive segment by 2025. New Government in India has vision to promote foreign investment in automotive sector.

Due to its deep forward and backward linkages with several key segments of the economy, automotive industry has a strong multiplier effect and is capable of being the driver of economic growth. A sound transportation system plays an essential role in the country's speedy economic and industrial development [8].

3. KEY MOVING FACTORS FOR AUTOMOTIVE INDUSTRY

Decision making depends upon many key factors which controls the sales and production of automotive component. Some major factors are reliability, customer satisfaction, new innovation, past performance, number of competitors, age group of customer, purchasing power of customers. Therefore R & D department plays key role for the performance for an automotive company. It is very difficult to predict customer preference for an automotive company in present scenario. By managing proper Supply Chain network some of these key factors can be easily controlled.



Due to faster economic growth customer segment and their demand will change drastically therefore regular focus on supply chain practices is necessary in coming decades.

4. SUPPLY CHAIN IN INDIA FOR AUTO SECTOR

Supply Chain is the integration of material flow, product flow, process flow and information flow. Automobile companies across the globe changing their concentration on understanding and execution of Supply Chain practices in the integration of material flow, product flow, process flow and

information flow. As for as Indian Automobile as concern Supply Chain Management (SCM) Practice depends on certain parameters (reliability, customer satisfaction, new innovation, past performance, number of competitors, age group of customer, purchasing power of customers) and categories (Sedan Car, Hatchback Car, SUV, LMV, HMV, Two wheelers etc.).

Automobile companies are required to set some strategy, marketing policies, production processes, sales strategy and new forecasting techniques for both inbound and outbound Supply Chain.

5. EFFECT OF SUPPLY CHAIN MANAGEMENT TO OVERCOME UNCERTAINTIES

One of the major and difficult factors in achieving better performance in Supply Chain in Automobile Industry is proper control of Inventory. To reduce the impact of these inventory uncertainties, supply chain managers must first understand their sources, the targeted market size, researched feasibility outcomes and the magnitude of their impact [8]. By Proper planning of inventory effect of uncertainties can be reduced up to a great extent. Proper Management of Warehouses use of Information Technology, use of quantitative techniques, proper scheduling of production run and logistics tools in automobile sector effect of uncertainties can be reduced.

6. CONCLUSION

In automotive industry supply chain becomes more and more challenging. There is requirement of innovate and cost affective supply chain in Indian automotive industry to face global competition. It is necessary to pay attention for the requirement and demand of the customer to enhance performance. Supply Chain of automotive industry is more complex and cumbersome, so it is necessary to maintain relationship coordination across the network of Supply Chain. Future is more competitive due to research and innovation across the globe. Flexibility is also necessary in automotive supply chain industry for sustainable development.

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