

Critical analysis of auto industry supply chain issue in developing countries and future trend

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Abstract: Supply chain is complex and critical process to any industry as it directly lead to customer satisfaction, makes directly effect on bottom line profit and on future business prospectus as well. The purpose of this paper is to address supply chain issue prevailing and future trend in developing countries so that future research can be framed to find out solutions.

Key words: Supply chain Issue , Supply chain future trend.

Introduction: The Indian automotive industry goes through an change by implementation of SCM in the industry. Due to globalization the relation between supplier and assembler increases. And there is increase in competition in manufacturer which help in increase quality, cost reduction, overall margin, extends market, optimize inventory, estimate the demand. SCM increase the standard of enterprise by introducing IT strategy as help in the fast transfer of information. SCM also help in planning the schedule of order and execution of program in efficient way. SCM help to reduce error in execution of planning and control.

Lewis and Talalayevsky (2004) said that there are different techniques which Indian automotive industry uses in implicating the supply chain like quick response, continuous replenishment programs and efficient consumer response.

This paper concludes interviews of 48 professional working in department of supply chain in automotive industry in various parts of India.

Supply chain issues in developing countries...

Study reveals that developing countries including India facing issue to attain global standard of supply chain.

- (1) Automotive industries have outdated technology of supply chain in the domestic market. Therefore loosing operational efficiencies and not achieving desired inventory turnover & deliveries to customers.
- (2) Supply chain partners do not have trust on each other's. Therefore buyer and seller roles do not share information frankly which led to distortion in planning.
- (3) Supply chain related documentation and procedures are not updated. It does not keep properly and takes too much time to trace the documents.
- (4) Companies facing problem of integrated computerized system, hence not able to establish link to suppliers.

- (5) Original suppliers of some components do not exist locally, parts / raw material to be procured globally. It makes supply chain more complex and need sophisticated planning to order the components globally.
- (6) Machines and equipment which are imported from technological leader exists worldwide. Their spare part need to procure from origin country. It need communication tools and network for such procurement process.
- (7) Developing countries also facing problem of cash reserve of foreign currency and value of their currency gets fluctuate in international market on daily basis. Quotation receiving, finalization of buying decision and placing order need to be complete with -in same day. It again requires faster communication tools and management of organization also should be equipped with technology.
- (8) Every country has its own culture related to working hours, negotiation stages, and commitment. These factors make effect on working of supply chain.
- (9) Specification requirement also vary country to country as some country avoid using of lead in plating process. Standards related to allowable limit of hazardous material in components manufacturing differ internationally. Therefore, supply chain must provision of latest update on concerns.
- (10) Developing countries are poor in some areas of structured approach and therefore not able to access their supplier perfectly.
- (11) Some procurement function performed without following procurement procedures, this will led to distortion in systematic approach and concerns caught , raised by auditors later .
- (12) Suppliers are using international commercial terms which are not acceptable, it makes delay in procurement and increase lead time of delivery without any purpose.

To achieve those goals which cannot be achieved by the individual includes the systematic arrangement between material and information by suitable operation and strategies called supply chain management.

SCM enables players to increase confidence between partners and cooperation hence increases inventory visibility and speed of inventory flow. As there is increasing competition in market the firm, company, industry, organization needed to check out their strategies of business, rethinking on their planning and control, to steady movement and growth in the market.

Indian industry is growing, but there is emerging of new technology, increasing competition in the market, the lifecycle of product is short, they are facing many challenges. Is Indian supply chain is not able to fulfill the demand of customer. Today Indian industry capable of producing two wheeler, cars and heavy vehicle, the production cost of these products can be reduced using supply chain management.

As India is developing country the supply chain management is used by the various industry, mostly on those industry having high inventory cost. The optimization of SCM helps to fulfill the required goals. Many of the Indian industries trying to reduce their logistic cost by implementing supply chain management, and developing old supply chain. Auto producer of India has great chance to develop their supply chain by using supply chain solution. The turnover Indian industry estimated 34 billion in 2006 and expected that it will be 122 billion in 2016. It is observe that Indian economy has a key factor in the form of auto manufacturer. Honda has 3.9 million motorcycles annually. India is in 2nd position in manufacturing tractor and 5th in commercial vehicle producer.

As Indian transport system is increasing, within this automotive industry is also increasing. With the unexpected and extension of market it creates difficulties to managers and engineer to control the inventories.

To improve the profit and efficiency of the industry, there is need to implementation of supply chain management to reduce operational cost. Mahindra & Mahindra using an efficient supply chain management.

Future trending practices in supply chain---

Many OEM'S and tier1 outsourced their activity includes daily collection and dispatch of material to store and inventory place. The storage of inventory started by the key player closed to OEM'S plant which helps to develop JIT. The services like assembling material, packaging, incoming inspection, cleaning are provided by an third party called 3PLs. From the observation there is increase in outsourcing of auto supply chain packaging 15%, outbound logistic54%, warehousing 69%, inbound logistic77%.

As OEMs and suppliers unique, there outsourcing will grow in future. Role of logistic service provider will be complex includes module assembly, inventory management and parts, it also include part's sourcing at India and global level. This role of logistic service provider will create the ability to handle the material of SC and its planning.

All this creates vast opportunities for these players, there is requirement of some strength and ability to enter in these area like international presence, transporter's relation, deep information & skills regarding planning and project management, it ability, ability to integration of supplier. Due to the capability of logistic player growth of outsourcing in future may be limited.

The challenges and facts comes out from the discussion are comes from the continuous change in domestic market, a huge conclusion is that India is growing fast in international market. The international OEMs finding component & parts from Indian market and India wants to utilize this opportunities to stands in international market.

As many Indian players have some footprints in global market, they are looking for more growth in the market. Export became major key factor in formulated global strategy. So there is challenge for Indian automotive to improvement supply chain at international level.

Exports consider as key part for most of the professional and managers, and it is estimated that it will be double in next five years. An observation indicate that new player improving their exports about 10 to 20 percent in next five years, and there is strong assumption that it will cross to 40 percent . Indian player observed that Europe and North America are efficient market for exports and continuously efficient in next five years.

Indian supplier and OEMs are not only exports, they also setting their manufacturing in other countries and having different type of models to invest in other countries as owner, acquisition as well as partnership. The research study show that putting own manufacturing plant compared to acquisition and partnership is most efficient. The model put up on the basis of opportunity and desire of taking risk. The acquisition of business in other country will help in creating customer as they are new in market. Hence it is possible that different supply chain models arise to address market globally.

As global supply chain is vast and expended to many countries, there are many challenges arises like complexity increases due to increased lead time, more no. Of stages, stakeholders are multiple, customers expectation of quality of product. The study identified many key factors which effectively managing the supply chain. Logistic service provider with global reach: as they have global reach, relation with market and experience in different type of market, these help in reducing the time to enter in new market. the local presence in market help in taking decision and manage the local skills. Factors good logistic service provider contributes with global reach contributes 41%, local presence 33%, dedicated internal organization 17% and it capability 8% to global SCM efficiency.

Due factors in global market are different that of domestic market so need of dedicated internal organization.

As Indian industry are fast growing in international market there comes challenges and opportunities for the control of SCM, and to overcome these challenges there is development in planning of investments by Indian auto player.

For the future investment in supply chain global supply chain 38%, vendor management 31%, dealer management & distributor 23% & improved planning and process improvement 8% contributed.

Vendor management includes management of supplier of parts, service provider, so their management is necessary for global SCMs.

Dealer management, dealer has direct relation with the customer and it directly affects the market management, by the observation of dealer the market strategies can be developed.

There is an interesting evolution in automotive industry of India. If we consider long term growth the fact is strong but in case of short term there is uncertainty. According to global OEMs Indian market looks strong and planned which boost the competition.

Professional executives think that their supply chain can meet to competition exceeding the optimal cost which connects supply to demand. With the help of any dynamic industry Indian industry can be grow to international level.

By the discussion of A.T.Kearney's with c-suit executive, seven trends concluded which affects the automotive industry growth,

It is expected that India will become the third largest auto producer till 2020, but still there is short term volatility responsible for the uncertainty. So there is needed to make long term growth but keep in mind the short term uncertainty.

It is observed that the cost of Indian auto product is 30 percent more than that of China or other markets; it is due to inefficient production and fluctuation in cost of fuel and wages. So cost control is necessary
Increasing product proliferation: there is need for the increase in number of product to run with market.

There is need of growth in exports from India.

India faces lack in capabilities of executives in supply chain functional strategy.

Due to double digit growth in market creates opportunities for OEMs & large supplier which require take action by industry's stakeholder.

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