

# A Study of Determining Potential Factors Contributing In Supplier Selection by Original Equipment Manufacturers (OEM) In India

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**Abstract**— Automobile industry is very dynamic all across the world and going through a tremendous transformation especially in developing economies. The role and participation of developing countries in global automobile production and supplies is considerably being increased. Keeping this in mind the current study focuses on determining important parameters of tier 1 supplier selection by OEMs in India to be competitive in their business. For this, extensive literature is done and telephonic conversations were made with managers working in OEMs in India. The study found 6 important parameters like- 'cost, quality, service, finance, ICT and capacity' which OEMs do consider for tier 1 supplier selection.

**Keywords:** OEM, Automobile Industry, Supplier Selection

## I. INTRODUCTION

In current business scenario the fast moving world's economy, the manufacturing organizations are provoking the market constituents of always requesting clients, suppliers and other business associated to focus on contracting lifecycles of a product and down value disintegration. Thus, in present situation would drive to reduce expenses, center around capabilities, improve the store network execution and utilizing the efficient supply base from efficient suppliers (Suhagini & Koneru, 2018). This circumstance has turned out to be more basic than any other time in recent memory and it brings about conglomerating the factor of upper hand in the core of a maker. The suppliers' selection is always very crucial and strategic to improve organization's operations and efficient control over production. Indian automobile industry is flooded with auto parts suppliers with varied range of product and pricing. The main focus of the OEMs are on to establish trusted supply chain to avoid uncertainty and unwanted cost usually incurs during the emergency time (Narahari & Koneru, 2018).

### A. Drivers of Supplier Management in Automobile Industry

S. No.	Key Drivers of Supplier Management in @Automobile Industry
1.	Increasing operational scale that @results in increasing need for local as well as @global suppliers
2.	The increasing complexity of supply chains which also @result in a rising depth of the organization's supplier base
3.	Growing risks in a supply @chain which can make the organizations more vulnerable to performance

	failure if their involved suppliers are @not managed and evaluated effectively
4.	Managing supplier data that allows organizations to streamline crucial supplier data to provide meaningful insights for improving supplier management
5.	Establishing long-term supplier relationships that @will enable suppliers and organizations to meaningfully collaborate and @create synergies for maximized performance for the long-run.
6.	Leveraging supplier relationships @in times of organizations or external distress to ensure business performance doesn't fluctuate.
7.	An increasing competition which implies organizations have to identify and improve aspects of their business @processes that can provide them a competitive @advantage
8.	Matching industrial standards of @supplier performance so that organizations can achieve @best-in-class performance.

### B. OEMs and Their Purchasing Function

Indian automobile market has many players in the ground and making the industry peculiar in many senses. OEM represents the group of 'original equipment manufacturer' who manufacture and assemble vehicles. The organizations face tough competition from both internal and external players and wants to be proactive to handle uncertain market situation. Biggest OEMs in India use strategic planning for effectively managing their suppliers and supplies. The procurement of raw material and other vehicle accessories are the challenging tasks which needs to be handle carefully in order to be reasonable in their offerings (Gaikwad & Sunnapwar, 2019). -There has been an -evolution in the role and -structure of the purchasing function that gained great importance -in the supply chain management due to the globalization and accelerated technological -amend. It involves buying the raw materials and components for the organization to meet current need. The actions connected -with it include selecting and -qualifying suppliers, rating supplier performance, negotiating contracts, -comparing price, quality and service, sourcing -goods and service, timing purchases, selling terms of sale, evaluating the -value received, predicting price, service, etc. (Mathiyazhagan, Sudhakar & Bhalotia, 2017). The most prominent sourcing/purchasing system is defined as:

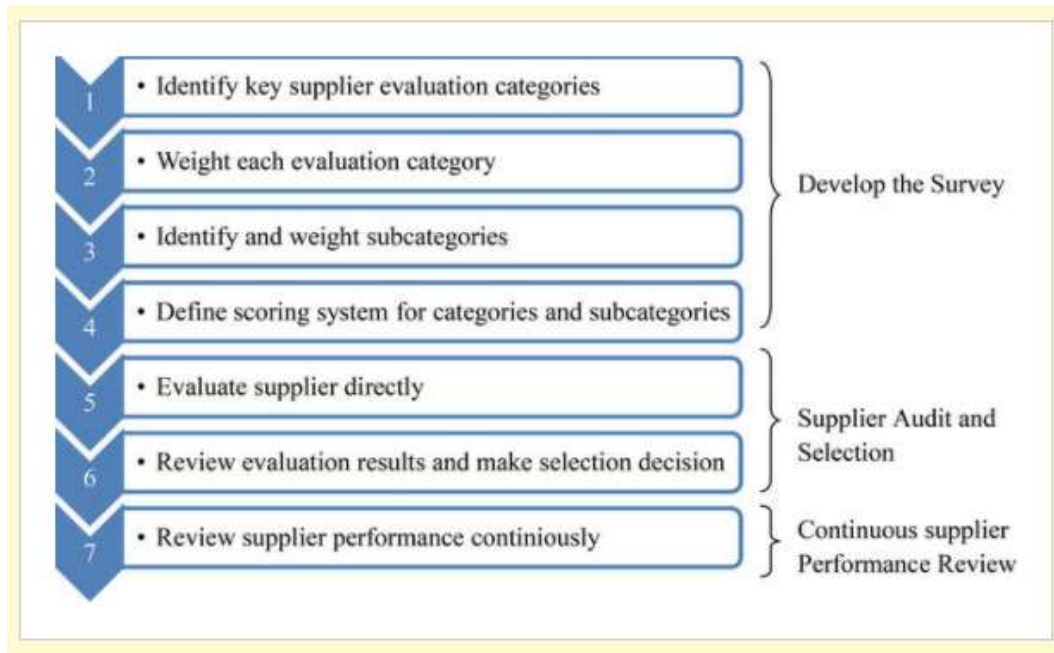


Fig. 1: Supplier Selection and Purchasing System

Source: DOI: 10.5772/intechopen.84383

The major players in OEM categories in India are Maruti-Suzuki, Bajaj Auto, Ashok Leyland, Tata Motors, Ford India, Honda, Renault, Nissam, Hyundai, Toyota, Force Motors, Eicher Motors, Volvo, Marcopolo, Piaggio, Mitsubishi, Man and so on. These are the strength of the country and play crucial role for the economy. The OEMs supplier selection and retain criteria is important to learn as it directly put impact on various macroeconomic factors.

The global auto component suppliers look at it with lots of hopes and future potential. Indian auto industry has been evolved as one of the best business hubs in the world due to several reasons. According to the IBEF report, Indian auto component industry are some very prominent advantage which make it profitable for both suppliers as well as investors. Some of the crucial advantages to the country are shows in below fig. 2-

C. India Advantage for Auto Component Industry

India has many strategic advantages for auto component industry which make it more attractive and peculiar across the



Fig. 2: Advantage to Indian Auto Component Industry

Source: www.ibef.org

## II. REVIEW OF LITERATURE

Akman (2015) gone through the study of supplier evaluation and found that, the role of suppliers in making operations easy and cost effective is crucial. The supply chain management gives inner strength to the firm and facilitate effective operations. The global automotive industry is transforming through technological innovation and shifting to zero inventory mechanism. Due to the keen competition among the suppliers and shrinking margins led firms to search for bets cost control alternatives. The study also observed that, cost advantage is directly associated with suppliers' efficiency as it help to minimize many operational expenses.

Awasthi & Kannan (2016) opined that, the industry is shifting to green channel development in which suppliers' modest operating is crucial. The study focused upon green supplier development which is being now important to meet regulatory measures. It is now one of the prominent factors of supplier selection. It gives additional advantages to the firm and make it competitive in the market. Even in global automobile market, green channel is much needed and in demand.

Bhattacharya, Chanda & Lohokare (2018) found e-platform for managing transactions with component suppliers. Techno savvy suppliers have more chances to get select and MNCs prefer them. E-communication leads to quick information sharing and make business faster. OEMs are strict to adhere the current market demand and prefer to work with technically sound players. The global auto component firms are now technically sound and be scientific in their working.

Govindan & Kannan (2010) observed the significant change in the industrial growth and development during the recent years. The industry become sizable for all stakeholders and offer tremendous possibilities for future expansion. The commercial development across the world take automobile industry ahead of all industries. The significance of auto component makers and suppliers has increased and started paying crucial role in industry success. The suppliers started paying strategic role in offering competitiveness. The supplier selection thus become crucial and strategic relation. Today, the OEMs consider competitive pressure, quality certifications, internal system and suppliers' past performance for supplier selection (Suraraksa & Shin, 2019).

## III. RESEARCH METHOD

The study describes the supplier selection criteria of OEMs in India through descriptive research technique. Extensive review of related literatures have been done and identified the most prominent criteria for auto component suppliers in India. Only Indian OEMs and multination companies operating in Indian automobile market have been considered in the study. Out of the study of literatures most relevant factors have been identified for supplier selection in India. The analysis is presented with the help of diagram and graphs.

## IV. ANALYSIS

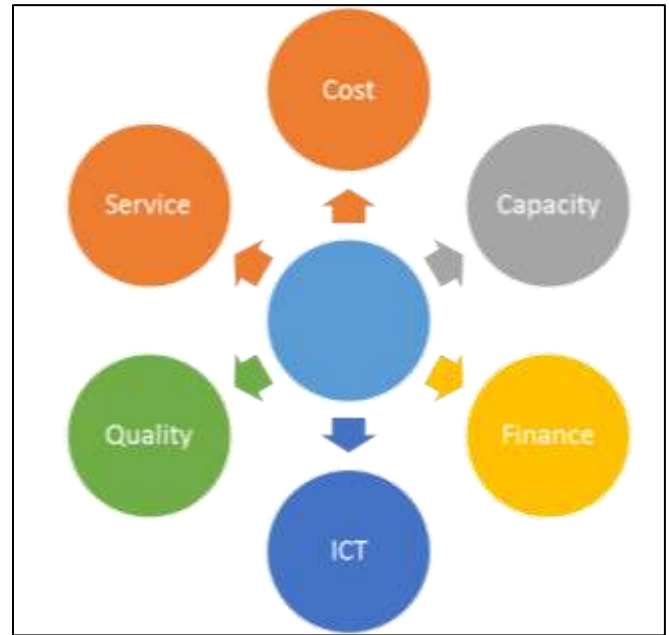
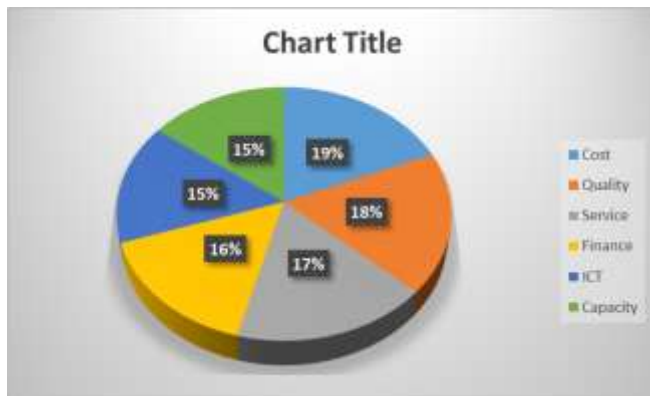


Fig. 3: Automobile Supplier Selection Parameters in India

- 1) Cost (4.862): This parameter includes- product cost, logistics cost, ordering cost, minimum order quantity. This is the highest preferred factor in India. In supplier selection 'cost' plays prominent role.
- 2) Quality (4.718): This is the second highest factor after 'cost' which play crucial role in automobile supplier selection. It includes- product quality, machinery quality, concern for quality control and improvement, quality certifications, ISO implementation etc.
- 3) Service (4.537): This is the third highest factor which play significant role in supplier selection. It includes- delivery assurance, reliability on services, information sharing, after sales services, guarantee/warranty, and timeliness of communication.
- 4) Finance (4.104): 'Finance' ranks at fourth position which includes- credit rating, net worth, past financial performance, financial stability & capacity, fixed asset and comparative balance sheet. OEMs always put more emphasis on financial background of the supplier for ensuring hustle free supplies.
- 5) ICT (4.016): It is very prominent factor being considered now a days by OEMs in India. It includes PO and payment system, production scheduling, use of barcode/Rfid system, ERP etc.
- 6) Capacity (3.850): This is sixth crucial parameter for automobile supplier selection in India which includes- installed capacity, delivery capacity, inventory turnover, flexibility in production, technological capability.

S.No.	Factor	Factor Load	Rank
1.	Cost	4.862	1 <sup>st</sup>
2.	Quality	4.718	2 <sup>nd</sup>
3.	Service	4.537	3 <sup>rd</sup>
4.	Finance	4.104	4 <sup>th</sup>
5.	ICT	4.016	5 <sup>th</sup>
6.	Capacity	3.850	6 <sup>th</sup>

Table 4: Descriptive Statistics



Graph 5: Rank of Key Criteria of Automobile Supplier Selection

The result shows that, all six factors have close weights in both 'factor load and percentage'. These factors have significant impact on OEMs choice for supplier selection in India. Each factor has significant role and importance to the industry. Every supplier has to focus on these parameters for getting selected and become competitive in OEMs' eyes. The identified factors have great relevance in today's business world especially in automobile industry.

#### V. CONCLUSION

Supplier selection in India is influenced by multiple factors depending upon the size and capacity of OEMs. The study considered big OEMs both in terms of 'size and capacity' of order and identified six important parameters which OEMs do consider while selecting auto component suppliers like- 'cost, quality, service, finance, ICT and capacity'. These are the six prominent factors very popular in India among OEMs for supplier selection. These parameters are required for being eligible and are important determinant of supplier's capabilities. OEMs believes that, suppliers who carry these attributes have capacity to handle OEMs' demand and working conditions. It also reflect that, Indian automobile industry is not in compromising condition as it committed for world class quality of products. Keeping such factors in mind OEMs actually need to ensure the service quality and the whole product quality during the supply tenure. Focusing on these parameters suppliers can win the heart of the OEMs and shows their capabilities.

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