

An Investigative Effect Analysis on Components of Supply Chain for the Performance of the Automotive Supply Chain Management and Implementing Tools & Techniques for Improvement Their Of Performance

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Abstract: India is becoming a global manufacturing hub. Increasing demand in domestic and international markets is opening a new world of opportunities for the Indian Industry. Increasing competition, due to globalization is making inevitable for the Indian industries to provide cost effective quality output with stringent delivery schedules. Issues in supply of inferior quality, delayed supply, unwarranted cost escalation, etc. would adversely impact the credibility and business potential of the Indian industry. Amongst many difficulties faced by Indian manufacturers, supply chain disruption management is a major issue, which can result in large tangible and non-tangible losses

Keywords: Quality Output, On Time Delivery, Globalization, Supply Chain Management

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I. Introduction

1. Introduction to Component of Automotive Supply chain Management:-

Supply chain management is made up of a few components that are very important as well as critical to the system.

1.1 Planning

This is one of the most important stages. Before the beginning of the entire supply chain, it is essential to finalize the strategies and put them into place. Checking the demand for the product or service, checking the viability, costing, profit, and manpower etc., are vital. Without a proper plan or strategy in place, it will be well-nigh impossible for the business to achieve effective and long term benefits. Therefore, enough time has to be devoted to this phase. Only after the finalization of the plans and consideration of all pros and cons, can one proceed further. Every business needs a plan or blueprint or a roadmap based on which the strategies are made. Planning helps to identify the demand and supply trends in the market and this, in turn, helps to create a successful supply chain management system.

1.2 Supplier

Suppliers play a very crucial role in supply chain management systems. Products and services sold to the end user are created with the help of different sets of raw materials. It is therefore necessary that suitable quality raw materials are procured at cost effective rates. If a supplier is unable to supply on time, and within the stipulated budget, the business is bound to suffer losses and gain a negative reputation. It is crucial that a company procures good quality resources so it can create good quality products and maintain its reputation in the market. This necessitates a strong role for suppliers in the supply chain management system.

1.3 Inventory

For a highly effective supply chain management system it is essential that an inventory is kept and thoroughly maintained. An inventory means the ready list of items, raw materials and other essentials required for the product or service. This list has to be regularly updated to demarcate available stock and required stock. Inventory management is critical to the function of supply chain management, because without proper inventory management the production, as well as sale of the product, is not possible. Businesses have now started to pay more attention to this component simply because of its impact on the supply chain.

1.4 Production

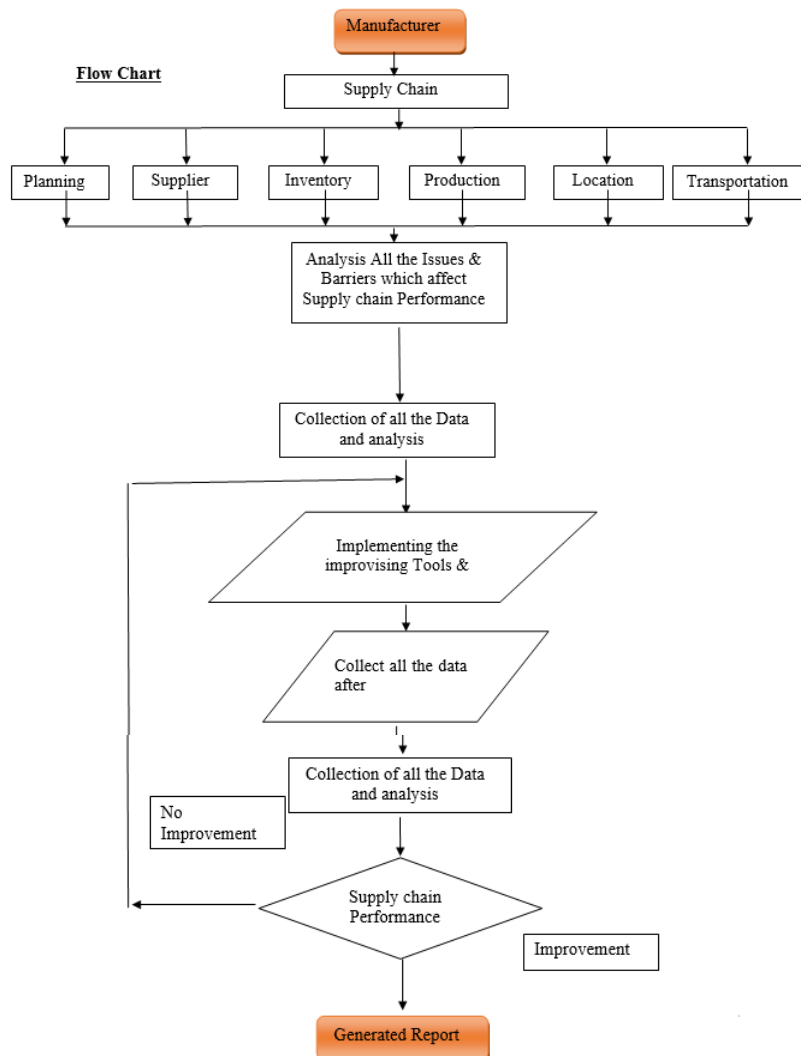
Production is one among the most important aspects of this system. It is only possible when all the other components of the supply chain are in tandem with each other. For the process of production to start it is essential that proper planning and supply of goods, as well as the inventory, is well maintained. The production of goods is followed by testing, packaging and the final preparation for delivery of the finished product.

1.5 Location

Any business, that wants to survive as well as flourish, needs a location which is profitable for the business. Take for example; a carbonated drink factory is set up in an area where water supply is scarce. Water is a basic necessity of such business. The lack of water could hamper the production as well as affect the goodwill of the company. A business cannot survive if it has to share an already scarce raw material with the community. Hence, a suitable location, which is well connected, and very close to the source of essential resources for production is vital to a business' prosperity. The requirement and availability of manpower must also be considered while setting up a business unit.

1.6 Transportation

Transportation is vital in terms of carrying raw materials to the manufacturing unit and delivering the final product to the market. At each stage, timely transportation of goods is mandatory to sustain a smooth business process. Any business which pays attention to this component, and takes good care of it, will benefit from the production and transportation of its goods on time. It is essential that a company works towards a safe and secure transportation process. Be it in-house or a third-party vendor, the transportation management system must ensure zero damage and minimal loss in transit. Well-managed logistics systems along with flawless invoicing are the two pillars of secure transportation.



II. Conclusion:-

After analyzing and implementing Tools and techniques in the components of Supply chain the OEM Companies will operate smoothly and can have better reputation in the market. The OEM Companies will get benefits including improved Distribution channel, Regulated inventory, Reduction in operating cost, and better coordination.

References:

- [1]. Manisha Ketkara and O. S. Vaidya, Study of emerging issues in supply risk management in India, Social and Behavioral Sciences 37 (2012) 57 – 66
- [2]. M Deepak, A Noorul Haq, K. Mathiyazhagan, identification of pressures, barriers and drivers for the implementation of green supply chain management, AIMTDR 2014) December 12th–14th, 2014, IIT Guwahati,
- [3]. Souresh Bhattacharya, Dr. D.Mukhopadhyay and Dr. Sunil Giri, SUPPLY CHAIN management in Indian automotive industry: complexities, challenges and way ahead, (IJMVSC) Vol.5, No. 2, June 2014.
- [4]. Javier Gonzaléz-Benito, Barrie Dale, Supplier quality and reliability assurance practices in the Spanish auto components industry: a study of implementation issues, European Journal of Purchasing & Supply Management 7 (2001) 187}196
- [5]. Francisco J., Ferriols. Josefa Mula., Manuel Díaz-Madroñero, Supply Chain Management as the Company Engine in Automotive Manufacturing, International Federation of Automatic Control June 19-21, 2013.
- [6]. S. N. Teli, Dr. V. S. Majali, Dr. U. M. Bhushi, Dr. A. S. Deshapande, Lynn A. Fish, Supply Chain Quality Management.
- [7]. Knowledge based Supplier Quality Management System for Automobile Industry, Volume 1, Issue 4, ISSN : 2277 – 5668.