

Analytical Study and Implementation of Supply Chain Management

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Abstract - India is amongst the leading countries in terms of Purchasing Power Parity (PPP) and constitutes to one of the rapidly developing markets in the world. Experiments and Research has found out various opportunities and research agendas to integrate sustainability problems with supply chain and operations management. SME's are unorganized due to lack of technical support. Supply Chain Management, as the application of SCM in many industries, which unlocks other applications of SCM in various areas. However, we find that SCM is not a mainstream practice to systematically take a sustainability approach in overcoming supply chain and operations management problems. This paper presents an overview of practices carried out in India regarding SCM. Our exploratory study is based on both field visits and secondary data. The data related to facts, figures as well as qualitative responses about the logistics infrastructure and supply chain practices is captured. The main focus of this work is on supply chain collaboration and partnerships, supply chain structure, facilities network design, transportation and logistics and the role of Information and Communications Technologies (ICT).

Keywords — Sustainability, Supply Chain Management, Logistics, SME, Transportation, ICT

I. INTRODUCTION

Logistics and SCM practices carried out may be defined as a set of activities undertaken to increase effectiveness and efficiency of management for various supply chains. Some of the main logistics and SCM practices that improve performance are related to estimation of customer requirement, efficient, effective and optimised delivery network, integration and collaboration throughout the supply chain, sharing of information and vision using ICT as well as informal methods [1]. The new technologies are creating strategic opportunities for the organizations to gain competitive advantages in various areas of management including logistics and supply chain management [2].

For providing customer value incorporation of SCM activities within the organization are to be provided and it becomes the main objective of SCM. It will help in creating efficient and feasible relationships in any industry.

SCM is needed for various reasons: optimising operations, effective outsourcing, increasing income and profit value, enhancement in customer satisfaction, creating quality products, getting competitive advantage, increasing use of E-commerce, and increasing complexity of supply chains. For manufacturing industries, implementation of supply chains are relatively easy because products in manufacturing cycle are to be produced from suppliers input and it is to be dispatched to different customers [6]. A concept of green supply chain is becoming a recent trend as

far as concerned recent literatures. Although this environmental problem has been very important for business, it's been integrated with supply chain management in recently time. The literature about environmentally conscious supply chain is very limited. Authors reviewed optimisation techniques and models for quantifying environmental parameters such as carbon emission. The project main aim is to identify, analyse and describe the scientific and cooperative research in the field of supply chain management in India.

In this paper our work in the food and packaging industry is shown and how we optimise their supply chain management. We have approached many SME's in the end we decided to work with Abhiraj Wafers and Namkeen. Initially we are going to study SCM in general and then study their current SCM and try to optimise it by using various tools like JIT, etc.

II. LITERATURE REVIEW

SCM was earlier related to inventory control within a supply chain. This concept was later changed to include the management of all units within a supply chain. According to Samir K. Srivastava, (2006) [1] - India is amongst the leading countries in terms of Purchasing Power Parity (PPP) and constitutes to one of the rapidly developing markets in the world. The problems faced are related to choosing and working with the right partners, gaining trust between them and designing the right system of measuring performance.

Paper represents a picture of practices regarding logistics and Supply Chain Management (SCM) in India. SCM includes challenges such as gaining trust and integration among supply chain partners, recognizing the best practices that can facilitate supply chain process alignment and integration, and successfully incorporating the latest collaborative information systems and Internet technologies that increases efficiencies. Thallera, N. Moraitakisb, H. Rogersc, U. Clausena, (2012) [4]

Major issues regarding logistics sector in India are highlighted like Last mile delivery, Value added delivery, reverse logistics, Outsourcing to a lot of small players in the sector. Study provides a comprehensive overview of the current state of the art in the logistics research sector and helps identify opportunities for academic and industrial research cooperation. A common platform for exchange of experience can thus facilitate an effective mutual transfer of knowledge between partners in India and Germany. Current trends in Indian logistics research

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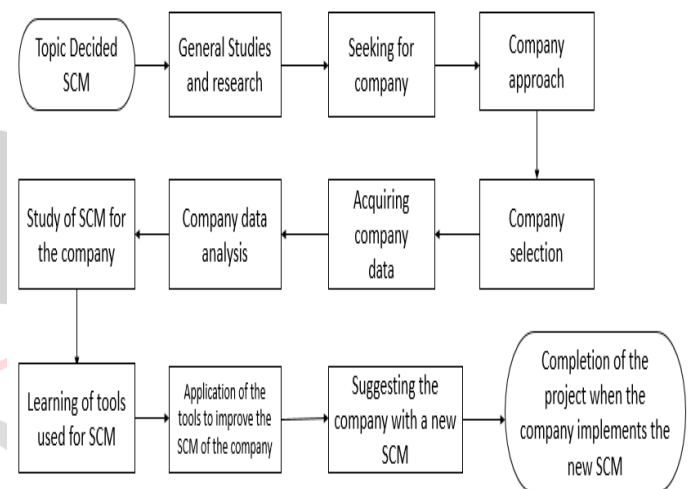
III. PROPOSED WORK

The objective of this project is to study and try to improve the SCM of a company. Which will be beneficial to them as it will generate more profits or reduce production cost without losing the product quality? We also aim make the production process more smooth and time efficient with the new SCM

[We decided SCM as our BE project topic. General study and research had to be done as we didn't have much idea regarding the topic. Our team was divided in 2parts and the work was distributed, one team had to find or seek a company and the other had to learn basics of all the

required tools. Once the company was finalised we were given the current company data which we needed, all of us had to analyse the acquired data and study according in detail. With our guides help we selected appropriate tools to improve the company's SCM and our guide also thought us how to use them. We used the tools and all the data that we gathered to design a new and improve SCM to the company so as to help them grow quickly. The company was suggested to apply the new SCM as it may be helpful to them in the future, and project completion once the company approves that our suggested SCM is of their use or not.

Flow Chart



[FIG. 1] FLOW CHART

IV. CONCLUSION

This study will assess the current level of logistics and supply chain practices as suggested by Abhiraj Wafers and Namkeen. Our findings will indicate that contextual factors such as the type of industry, its role in the supply chain, supply chain length and how the supply chain influence logistics and SCM practice. This study will identify the logistics and SCM practices of this company and discern various emerging trends as well as areas of concern.

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