CHAPTER 1

INTRODUCTION

This chapter presents the background of the study, the problem, justification and research objectives.

1.1 BACKGROUND

Shortened product life cycles, increased competition and high expectations of customers have forced many leading-edge companies to move from physical logistics management towards more advanced supply chain management. Additionally in recent years it has become clear that many companies have reduced their manufacturing loss as much as it is practically possible. Therefore in many cases the only possible way to further reduce loss and lead times is with effective supply chain management (SCM).

In addition to cost reduction, the supply chain management also facilitates customer service management, inventories, transportation systems and whole distribution net works so that organizations are able to meet or even exceed their customers expectations.

Nowadays, the SCM is core business concept that is deeply embedded within the functional backbone of an organization starting from purchasing, then to manufacturing, distribution to customer service and ending with sales. It forms a key factor in gaining customer loyalty and reducing costs. However, the reliability of the supply chain management depends on complex and dynamic network of facilities and organizations with different conflicting objectives.
The supply chain management is the integration of key business process from goods end user through original suppliers, which provides products, services and information that add value for customers and other stakeholder. The supply chain management not surprisingly, emerges as the core constituent that needs to be understood and handled deftly, if the object of a supplier is to fulfill the customers’ needs. In an article in the Hindu Business News (March, 2002), that according to the President of the Spencer & company “SCM is critical to retail business” not just for continuity in supply, but to bring to customers fashionable, latest, best and better value products, thus making the SCM is critical. Experts feel that in manufacturing and fast moving consumer goods (FMCG), outsourcing of SCM makes sense. In life style products, however outsourcing of SCM can get little unpredictable in view of fast changing fashion.

In an article in The Economic Times 500 (September, 2002), mentioned that The value of the organized market in India is estimated at $ 9 billion as against Brazil’s FMCG market in 2000-01 being $ 12 billion in FMCG. The FMCG sector is expected to clock over 40% growth in the next 5 years. This indicates the opportunity available for phenomenal growth of FMCG segment. Similarly in the manufacturing segment 20% to 30% of the value of all goods and services produced will enhance the economy of the country. A country’s level of manufacturing activity is directly related to its economic health. Manufacturing factory of the world continues to register the highest growth rate globally year after year. But manufacturing is currently undergoing a transition (Nasibitt, 1984) which though evolutionary from a technology view point is revolutionary on its impact on the economy and employment. Thus manufacturing is considered as an economic process.

Indian companies are to leverage the supply chain for competitive advantage and as such, there are only few initiatives to measure the performance of their existing supply chain systems. The supply chain management initiatives could be considered as a competitive tool and a cost reduction approach (Ramakrishnan, 2006).
1.2 THE PROBLEM

Increasing uncertainly of supply networks, globalization of business proliferation of product variety and shortening of product life cycles have forced Indian organization to look beyond their 4 walls for collaboration with supply chain partners. With a gross domestic product (GDP) of over $47.43 billion, the industry spends 14% percent of its GDP on logistics. (Raghuram & Rangraj, 2000). Another article in the Wall Street Journal (March, 2006), mentioned that annual global logistics expenditures exceeded $3.5 trillion, nearly 20% of the world’s GDP, making logistics perhaps the last frontier for major corporations to significantly increase shareholder and customer value.

In an article in the Economic Times 500 (September, 2002), mentioned that India’s 10% GDP growth is based on two areas i.e., industry and services. At a macro level the projected 7.9 % GDP growth for the current fiscal 2006-07 is indeed a mark able achievement for the Indian economy by past standards. In this direction, SCM has to play an important role in the economic process of the country.

On the evolution of the component industry in India, the quality cost and delivery has improved a lot as Mashiro Takedagawa, president and CEO of Honda Siel car company tells. Nevertheless, he says that logistic cost can not be wished away as “Local procurement is necessary to improve cost” he adds.

In an another article in the Hindu Business News (April, 2002), mentioned that the government aims at increasing the share of manufacturing in the country’s gross domestic product (GDP) from 17 to 33 percent emphasizing the importance of manufacturing in India’s growth, the sector contributed to about 53 percent of exports and received more than two – thirds of total foreign investments. It accounted for 11 percent of the workforce of about 45 million. In particular, the importance of Small and medium enterprises (SME) should be focused. Strengthening the SME sector is one of the principles which the Govt of India is
following ultimately. The SMEs in the manufacturing segment will be the backbone of a strong Indian economy.

Considering this scenario it is necessary to study the supply chain practices, its performance being followed by Indian industries and to suggest areas for improving the same. Some of the questions asked are “What are the metrics used for measuring supply chain performance in manufacturing and FMCG industries? What are the best practices that followed across various industries in India and globally with a view to benchmarking them with best practices? This research attempts to answer questions through a survey of a sample of selected industries in manufacturing and FMCG segments. This research includes the various performance metrics of supply chain, commonality among the best performing supply chains. Measuring the performance against industry standard is called as benchmarking.

Monitoring supply chain performance is an intriguing new field according to Lee and Whang (2001). Supply chain monitoring must start with tight tracking of the many different processes involved in a solutions are appearing to provide updated information on how products and information flow through the different parts of the supply chain. Supply chain performance measures can be classified broadly into two categories. (i) Qualitative measures (such as customer satisfaction and Product quality and (ii) Quantitative measures (such as order to delivery lead time, supply chain response time, flexibility resource utilization, delivery performance etc). (www.supply-chain.com) Improving supply chain performance requires a multi dimensional strategy that addresses as to how the organization serves diverse customers’ needs. While the performance measurements may be similar, the specific performance goals of each segment may be quite different.

Supply chain performance measurements can cover many areas, including procurement, production, distribution, warehousing, inventory, transportation and customer service. However, a good performance is shall cover the entire spectrum of the supply chain. Any supply chain is only as strong as its weakest link. The solution is to measure all key areas of the supply chain. Since “What gets measured, gets managed” it is inevitable that once such measures are put in place, management attention will be directed to these key issues. (Lapide1998). Measurement is
important, as it affects behavior that impacts supply chain performance. As such, measurement provides means by which a company can assess whether its supply chain has improved or degraded.

1.3 JUSTIFICATION FOR THE STUDY

It is effective supply chain management that ensures goods delivery in time from one place to another. Essentially a management strategy, Supply chain management (SCM) is a relatively new concept in India. In today’s world, Supply chain management (SCM) tracks movement of men, material, money, machinery and information from one point to another (Kapoor & Kansal, 2003). The classic objectives of logistics and supply chain management are to be able to have the right products in the right quantities (at the right place) at the right moment of minimal cost (Nevem work group, 1989). Supply chain management (SCM) is commonly described as a systematic method where the right material is delivered to the right customer, in right quality and quantity and at the right place at the right price (www.supply-chain.com).

In today’s competitive business environment, companies world over are shifting their attention towards understanding and implementing extended supply chain management that integrates product, process and information flows within and across organizational boundaries. Rapidly changing user demand and developments in information technology (IT) are forcing companies to look for and implement continuous improvements in their supply chains. This in turn requires performance metrics which assess the entire supply chain performance rather than narrow company – specific or process-specific performance, which restrain improvements across the chain.

The fundamental objective of a high performing supply chain is to produce products to match customer’s demand cycle, while producing the greatest value possible to the customers. The increasing competitive and reliable supply chain.
Supply chain management is no longer a matter of operational and functional areas of the firm. Today, it is a strategic issue demanding top level management attention. The supply chain can have huge leverage on the creation of customer value. Supply chains will fight the new battle for market dominance, as such measurements around the Supply chain are critical. If we look at competition today, it is “Supply chain versus supply chain” (Ramakrishnan, 2006). This brings out a situation that competitors might focus on developing superior supply chain performance.

Globally, a variety of ‘measurement-approaches’ such as the supply chain council’s SCOR model, the logistics score card and balanced score card etc. are widely used to track metrics and ensure continues improvement (Lapide, 2000). The role of these measures and metrics in the success of an organization cannot be overstated because they affect strategic tactical and operational planning and control. Performance measurement and metrics have an important role to play in setting objectives, evaluating performance and determining future courses of actions. Performance measurement and metrics pertaining to supply chain have not received adequate attention from researchers and/or industries.

This study is focused on metrics which are followed generally by a cross section of industries. The metrics such as cycle time, cost, quality and assets are selected for performance measurements in this study. These operational metrics could be easily linked with financial measures. For example, Inventory turns with working capital, cycle time with return on investments, quality with customer satisfaction level etc, these metrics are already tested by some of the researchers in the past. This study is focused on evaluating existing supply chain metrics that are followed across various industries in manufacturing and Fast Moving Consumer Goods (FMCG) in India and also benchmark globally with best practices.
1.4 RESEARCH OBJECTIVES

The overall purpose of this research was to measure the supply chain performance in selected segments in manufacturing which included auto & auto components, electronics, white goods, engineering and also FMCG sector. The objectives were:

1. To determine and measure performance metrics in the supply chain of FMCG and manufacturing segments.
2. To study the significance of cycle time metrics in fast moving consumer goods (FMCG) and manufacturing industries.
3. To study the significance of cost metrics, in fast moving consumer goods (FMCG) and manufacturing industries.
4. To study the significance of quality metrics, in fast moving consumer goods (FMCG) and manufacturing industries.
5. To study the significance of assets metrics in fast moving consumer goods (FMCG) and manufacturing industries.
6. To study the significance of logistics cost metrics in fast moving consumer goods (FMCG) and manufacturing industries.
7. To study the significance of cycle time metrics, within manufacturing industries.
8. To study the significance of cost metrics within manufacturing industries.
9. To study the significance of quality metrics within manufacturing industries.
10. To study the significance of assets metrics within manufacturing industries.
11. To study the significance of logistics cost metrics within manufacturing industries.
12. To study the relation ship among the SCM performance metrics.
13. To assess the current supply chain metrics followed across various industries in India and compare the same with best practices in the respective industries.
14. To compare the Indian practices with that followed globally, wherever possible.
15. To provide inputs on improvements possible in supply chain metrics across various industry verticals.