A STUDY ON SUPPLY CHAIN MANAGEMENT IN TVS LOGISTICS PVT LTD, CHENNAI

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ABSTRACT

For any business to compete successfully in the modern, globalised business environment, it needs to mobilize its suppliers and customers to co-operate in order to reduce unnecessary costs and inefficiencies between them and to ensure the best value for the final customer. The focus is on management of the supply chain as a whole (or a system) and maximum value for the final customer of the supply chain, instead of on management for the maximum benefit of one of the parties in the supply chain. If the supply chain is seen as a system of organizations with one aim (value for the final customer), it is logical that a problem in one part of the supply chain must affect the workings and efficiency of the system or supply chain as a whole. This article reports on an exploratory empirical study to illustrate the effect of problems at one party in the supply chain on the whole supply chain. The study was done at automotive component manufacturers. To determine how problems at one place permeate through the whole supply chain, correlation testing was done between supplyside, internal operations, and distribution or customer-side problems. The study found that problems experienced at one place in the supply chain had a negative impact throughout the supply chain. Automotive supply chains should therefore be managed more as a system, taking into consideration the effect of decision making and actions at one part of the supply chain on other parts of the supply chain. There should be a supply chain wide co-operative effort to find solutions to inefficiencies at all places in the supply chain.

1. INTRODUCTION

Supply Chain Management (SCM) is the active management of supply chain activities to maximize customer value and achieve a sustainable competitive advantage. It represents a conscious effort by the supply chain firms to develop and run supply chains in the most effective & efficient ways possible. Supply chain activities cover everything from product development, sourcing, production, and logistics, as well as the information systems needed to coordinate these activities.

The concept of Supply Chain Management (SCM) is based on two core ideas:

1. The first is that practically every product that reaches an end user represents the cumulative effort of multiple organizations. These organizations are referred to collectively as the supply chain.
2. The second idea is that while supply chains have existed for a long time, most organizations have only paid attention to what was happening within their “four walls.” Few businesses understood, much less managed, the entire chain of activities that ultimately delivered products to the final customer. The result was disjointed and often ineffective supply chains.

The organizations that make up the supply chain are “linked” together through physical flows and information flows.

1.1. PERFORMANCE MEASUREMENT

Experts found a strong relationship from the largest arcs of supplier and customer integration to market share and profitability. Taking advantage of supplier capabilities and emphasizing a long-term supply chain perspective in customer relationships can both be correlated with a firm's performance. As logistics

competency becomes a critical factor in creating and maintaining competitive advantage, measuring logistics performance becomes increasingly important, because the difference between profitable and unprofitable operations becomes narrower. A.T. Kearney Consultants (1985) noted that firms engaging in comprehensive performance measurement realized improvements in overall productivity. According to experts[*according to whom?*], internal measures are generally collected and analyzed by the firm, including cost, customer service, productivity, asset measurement, and quality. External performance is measured through customer perception measures and "best practice" benchmarking.

WAREHOUSING MANAGEMENT

To reduce a company's cost and expenses, warehousing management is concerned with storage, reducing manpower cost, dispatching authority with on time delivery, loading & unloading facilities with proper area, inventory management system etc.

WORKFLOW MANAGEMENT

Integrating suppliers and customers tightly into a workflow (or business process) and there by achieving an efficient and effective supply chain is a key goal of workflow management.

2. REVIEW OF LITERATURE

Supply chain management is the systematic, strategic coordination of the traditional business functions and the tactics across these business functions within a particular company and across businesses within the supply chain, for the purposes of improving the long-term performance of the individual companies and the supply chain as a whole (Mentzeret al., 2001).

A customer focused definition is given by Hines (2004) "Supply chain strategies require a total systems view of the linkages in the chain that work together efficiently to create customer satisfaction at the end point of delivery to the consumer. As a consequence costs must be lowered throughout the chain by driving out unnecessary costs and focusing attention on adding value. Throughout efficiency must be increased, bottlenecks removed and performance measurement must focus on total systems efficiency and equitable reward distribution to those in the supply chain adding value.

The supply chain system must be responsive to customer requirements." Global supply chain forum - supply chain management is the integration of key business processes across the supply chain for the purpose of creating value for customers and stakeholders (Lambert, 2008).

A supply chain, as opposed to supply chain management, is a set of organizations directly linked by one or more of the upstream and downstream flows of products, services, finances, and information from a source to a customer. Managing a supply chain is 'supply chain management' (Mentzeret al., 2001).

In the 21st century, changes in the business environment have contributed to the development of supply chain networks. First, as an outcome of globalization and the proliferation of multinational companies, joint ventures, strategic alliances and business partnerships, significant success factors were identified, complementing the earlier "Just-In-Time", "Lean Manufacturing" and "Agile Manufacturing" practices. Second, technological changes, particularly the dramatic fall in information communication costs, which are a significant component of transaction costs, have led to changes in coordination among the members of the supply chain network (Coase, 1998)

Many researchers have recognized these kinds of supply network structures as a new organization form, using terms such as "Keiretsu", "Extended Enterprise", "Virtual Corporation", "Global Production Network", and "Next Generation Manufacturing System". In general, such a structure can be defined as "a group of semi-independent organizations, each with their capabilities, which collaborate in ever-changing constellations to serve one or more markets in order to achieve some business goal specific to that collaboration" (Ackerman's, 2001)

Three major movements can be observed in the evolution of supply chain management studies: Creation, Integration, and Globalization (Movahedi et al., 2009)

Arntzen, Brown, Harrison, and Trafton (1995) provide the most comprehensive deterministic model for supply chain management. The objective function minimizes a combination of cost and time elements. Examples of cost elements include purchasing, manufacturing, pipeline inventory,

transportation costs between various sites, duties, and taxes. Time elements include manufacturing lead times and transit times. Unique to this model was the explicit consideration of duty and their recovery as the product flowed through different countries.

3. RESEARCH DESIGN

3.1 RESEARCH METHODOLOGY

Research methodology is the systematic, theoretical analysis of the procedures applied to a field of study (**Kothari**, 2004). **Methodology** involves procedures of describing, explaining and predicting phenomena so as to solve a problem; it is the 'how'; the process, or techniques of conducting **research**.

3.2 RESEARCH DESIGN

Research design adopted for this research is "**Descriptive Research** ". It includes surveys and fact-finding enquiries of different kinds. The major purpose of descriptive research is description of the state of affairs as it exists at presen

3.3 OBJECTIVES

- To study the supply chain management process in TVS logistics pvt ltd
- To study the distribution network of TVS logistics Pvt ltd
- To analysis the transport management system of TVS logistics Pvt ltd
- To study the warehouse and operational problems faced by TVS logistics pvt ltd

3.4 STATEMENT OF PROBLEM

Safety and Quality Products

More than ever it is important to have a quality product. As quality standards rise, it is crucial to produce safe and high-quality products. Companies are working harder than ever to avoid damaging recalls that can hurt the bottom line.

Global Manufacturing

When faced with the challenge and opportunity that is manufacturing on a global scale, it is critical to have a procurement network that can support those global supply chain management needs.

Shorter Product Life Cycles and Changing Market Demands

In line with changing market demands and shorter product life cycles, industries must work to find a lean concept and an adjacent workable lean solution.

New Technology

Having access to the latest technology has proven to be a challenge. Those who are able to effectively utilize the latest technology to their advantage have been able to see the direct results to support new product development.

Consolidation of Supplier Base

Consolidating supplier base can offer many perks. From cutting overhead costs to lowering the margin of error, the challenge lies in finding a supplier that meets each companies needs in regards to experience

SCM's can't do it all

Unfortunately supply chain management systems cannot do all that companies may hope for. Be realistic about what can be achieved and research into how an SCM could help your business.

Demands

Customers want their products immediately and at a good price, yet this is not always possible and puts companies under a great deal of pressure to provide customers with what they want. It is not always possible for companies to create both quick and remunerative methods due to the demands of the chain.

Globalization

Due to these demands, companies are often forced to collaborate with countries in which products can be produced at a lower cost. Despite this, delivery times take even longer, therefore may not be beneficial at all.

Market growth

Increasing the customer base can be a hard challenge to tackle in order to expand distribution both at home and abroad. There are a number of factors to take into consideration when doing so, including trading policies, fees, and government policies, therefore is not always easy to get to grips with.

Inventory

Most of the time, companies are unsure about what stock they own and confusion can arise surrounding whether products have been lost due to their SCM system being not as reliable as expected. Money can be lost easily though these false expectations as there is often too much stock to keep track of which as a result is not being sold.

3.5 SAMPLING FRAMEWORK

The population is finite and **"Simple random sampling method**" will be adopted for selecting samples from the finite one.

3.6 PROFILE OF RESPONDENTS

The survey was conducted among employees in **TVS LOGISTICS PVT LTD CHENNAI.** The total population is **1476** employee the sample population of my study is **100** employees. Based on the population I took 7% of the total population as sample size.

4. DESCRIPTIVE STATISTICS

Descriptive statistics is the term given to the analysis of data that helps describe, show or summarize data in a meaningful way such that, for example, patterns might emerge from the data. Descriptive statistics are simply a way to describe our data. "Descriptive analysis is largely the study of distribution of one variable. This study provides us with profiles of companies, work groups, persons and other subjects on any of a multiple characteristics such as size, compositions, efficiency, preferences etc."

Descriptive analysis is more specific in that they direct attention to particular aspects or dimensions of research target. Such studies reveal potential relationship between variables, thus setting the stage for more elaborate investigation later. It is a search for broader meaning and research findings. It is the device through which the factors that seem to explain what has been observed by researcher in the course can be better understood and provides theoretical conception which serve as a guide for further researches. It is essential because it will lead towards findings of the study and proper effective conclusions of the study.

Descriptive approach is one of the most popular approaches in these days. In this approach, a problem is described by the researcher using questionnaire or schedule. This approach enables a researcher to expose new ideas or areas of investigation. Direct contact between respondents and researcher is brought through this descriptive approach.

DESCRIPTIVE ANALYSIS OF PRIMARY DATA

This part of study is mainly focused on verifying main objectives of study. Researcher used **Chi square**, **simple percentage** and **graphs** as statistical tool for analysis of data

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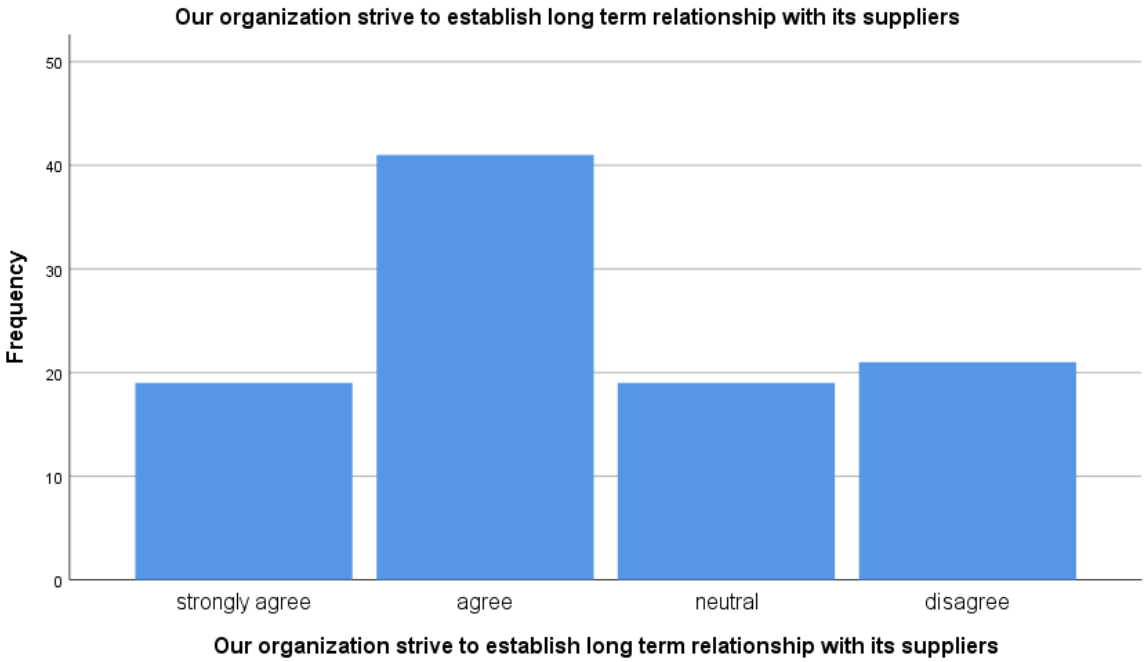
Our organization strive to establish long term relationship with its suppliers

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	19	19.0	19.0	19.0
	agree	41	41.0	41.0	60.0
	neutral	19	19.0	19.0	79.0
	disagree	21	21.0	21.0	100.0
	Total	100	100.0	100.0	

INTERPRETATION

In the above specified table, 19% of the respondents specified strongly agree, 41% of the respondents specified agree, 19% of the respondents specified neutral, 21% respondents specified disagree. According to this analysis most of the employees specified agree



Our supply chain members share risks and rewards

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	41	41.0	41.0	41.0
	agree	38	38.0	38.0	79.0
	neutral	21	21.0	21.0	100.0
	Total	100	100.0	100.0	

INTERPRETATION

In the above specified table, 41% of the respondents specified strongly agree, 38% of the respondents specified agree, 21% of the respondents specified neutral. According to this analysis most of the employees specified strongly agree

5. CONCLUSION

Efficient material & supply chain management is crucial for the success of any small scale manufacturing & fabrication project and can be the deciding factor between a successful project and a project full of delays and claims. Better material management methods and decision models are needed to improve the electrical industry current practices, thus increasing efficiency and minimizing costs. An effective supply management system is essential for managing efficient material management to avoid material shortages, misplacements, loss, and theft which might result in increases in crew idle times, loss of productivity and delay of activities. Organization should implement an efficient material management system due to the fact that in most of the cases they are asked to squeeze their bids in order to keep the costs of project under budget. In such a case, failures to effectively manage materials could result in decreases in profit or even a loss. The primary goal is to have the material needed, in the amounts needed, with the quality required, and the time that they are needed. Most electrical companies have a material management system that serves their 205 needs, although it could be improved. Standardization of the material management system could be a step forward in improving the system and eliminating some of the bottlenecks. The research presented in this document aimed at designing an integrated system of decision- support tools for material procurement for the small scale industry particularly an electrical industry. An integrated approach for material procurement provides better decisions on what to order, how much to order and where to deliver. Future research will be needed to develop a more complete framework integrating other decisions needed in areas such as supplier selection and preliminary material scheduling during the prefabrication phase. A fully integrated approach will better improve communication and minimize gaps in information flow among all the parties and departments involved.

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