

SYNOPSIS OF THE THESIS ON
A COMPREHENSIVE FRAMEWORK ON STUDY OF
LOGISTICS MANAGEMENT IN AUTOMOBILE
TRANSPORTATION SYSTEM IN SOUTH INDIA

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Introduction

Logistics has been performed since the beginning of civilization. Logistics involves the integration of various processes like transportation, inventory, warehousing, material handling, information and packaging. Implementing best practice of logistics has become one of the most exciting and challenging operational areas of business and public sector management. One of the several competencies required to create customer value is efficient logistics. The auto industry is one of the key sectors of the Indian economy. Cost reduction in transportation plays a major role in the current competitive market. An appropriate logistics system has to be evolved for cost reduction in automobile transportation.

Ashok Leyland being a leading commercial vehicle manufacturer in South India, a study on the vehicle movement of the same has been initiated to understand the logistics aspects in transporting their vehicles from the production centers to various locations. The important aspect of the study is to identify the areas of cost reduction in transportation, inventory and warehouse during the course of the movement of automobile vehicles from the production centers to the end users location.

Significance of the study

Logistics is becoming an important factor of gaining and sustaining competitive advantages. Automobile Industry is playing a major role in the growth of the country. Unlike the old approaches to logistics which was restricted to the army, today, it has gained recognition in business organizations as one of the important business functions and a tool for developing competitiveness. The public distribution system in the country needs logistical support for delivering goods at the right place on time and at the lowest cost. This in turn benefits on saving the transportation cost and time, cost of inventory and warehousing. As far as the society is concerned, this will also lead to optimum utilization of scarce resources of fuel and reduced cost of transportation expenses.

Statement of the problem

Logistics involve the integration of transportation, inventory, warehousing, information, material handling and packaging of an organization. The operating responsibility of logistics is the geographical positioning of raw materials, work-in-process, and finished inventories where required at the lowest cost possible. The study is concentrated with Logistics activities of automobile transportation system in south India. Ashok Leyland has been a major player in India's commercial vehicle industry; the study is aimed at assessing and analyzing the cost in Transportation, Warehousing and Inventory of automobile chasses. The study also intends to explore the various alternate modes of transportation.

Objectives of the study

- ❖ to learn about the Logistics practices in automobiles industry in India
- ❖ to assess the issues in Logistics Management
- ❖ to analyze the Logistics strategies and practices followed by major automobile manufacturing companies in South India
- ❖ to study the issues faced by the intermediaries in getting the vehicle from the Warehouses/Depots
- ❖ to study the issue being faced by the transporters during transportation of Chasses
- ❖ to study the various issues in receipts and delivery of vehicles at Depots/Warehouses
- ❖ to suggest an optimal automobile transportation policy
- ❖ to develop a model for warehousing policy in logistics management of automobile transportation
- ❖ to develop a demand forecasting model for inventory planning.
- ❖ to make a comparative study of the various modes of automobile transportation

Research Design

The study has been carried out in two phases. In the first phase, a survey on the automobile Transport contractors, Warehouse Managers and Managers of Dealers of Ashok Leyland were conducted. This was to study the issues faced by them during transportation of the vehicles, the quality and conditions of vehicles received by them. Descriptive Research Design has been used for this study. Census data was collected by way of administering questionnaires and has been analyzed and presented using various statistical tools.

In the second phase, the researcher collected data associated with the Inventory Management Department and Logistics & Warehouse Management Departments. A comprehensive study has been done and the researcher developed Models for Transportation, Demand Forecasting, and Warehouse Shifting. An Alternate mode of Transportation has also been suggested for the movement of vehicles with optimum cost policy.

Chapter Scheme

This study is presented in seven chapters. The first chapter introduces the Research subject. It consists of objectives of the study, scope, significance and methodology of the study. It also discusses the areas of Logistics Management, Warehouse, Transportation, Inventory, the automobile Industry and its major players. The second chapter deals with the theoretical frame work of the study in the core areas of Logistics Management giving in depth details of Warehouse, Transportation and Inventory. The Review of Literature is presented in detail in third Chapter, and the research methodology has been discussed in fourth Chapter. The fifth Chapter elaborates the perspectives of intermediaries in Logistics activities and the sixth chapter gives a comprehensive study of Ashok Leland. The final chapter summarizes the summary, findings and recommendations.

Major findings of the study

It is found that suitable application of Management Science tools can help to reduce huge cost of Transportation, Warehousing, and Inventory of vehicles such as:

- i) Implementation of Optimum Transportation Policy.
- ii) Shifting the Warehouse at strategic locations.
- iii) An appropriate Demand forecasting model.
- iv) Alternate mode of transportation.

Recommendations:

Following are the major recommendations:

- i) Implementation of Optimum Transportation Policy for shipment of vehicles from various factories to different destinations will reduce the cost of transportation to a great extent.
- ii) Warehouse shifting to strategic locations by applying Operation Research Techniques will yield cost savings.
- iii) Use proper demand forecasting tools to avoid unnecessary wastages.
- iii) Railway mode for transportation is the most appropriate alternate mode for long and larger quantity of vehicles transportation.

Conclusion

The auto industry is one of the key sectors of the Indian economy. The industry has been growing since the opening up of the sector to Foreign Direct Investment (FDI) in 1993. It has deep forward and backward linkages with the rest of the economy and has a strong multiplier effect resulting the auto industry becoming the driver of the economic growth of India. In today's world cost management and cost reduction has become a priority for most businesses. Most companies are compelled to explore and exploit all possible cost reduction and productivity enhancement techniques. Knowing where and how to save money is what we are all about! In the present study, it has been established that if the automobile companies implement scientific tools for their logistic Management, the end users will be highly benefited with lower price of the vehicles leading to better growth of the industry which ultimately boosts the economy!