

A Study On Supply Chain Management In Auto Ancillary Units In The Salem District Of Tamilnadu

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DOI: 10.47750/pnr.2022.13.509.128

Abstract

SCM refers to the network of interrelated transactions between clients and suppliers at every stage of the production process. These transactions begin with the purchase of raw materials at the point of origin and continue through the purchase of finished goods and work-in-progress at the point of consumption. Within this study, an effort has been made to identify the elements that have a role in determining the adequate supply chain management level in the sample units located within the Salem District. A representative sample of one hundred people who responded was taken from the Salem District. The study's evaluation utilized a straightforward percentage analysis, the chi-square test, and the Henry Garret Ranking Method. The findings indicate that efficient and environmentally friendly delivery chain procedures, on their own, will aid businesses in gaining a competitive advantage and might ensure sustained growth over the long-term.

Keywords: Supply chain, management, transactions, consumption, benefit, etc.,

INTRODUCTION

An appropriate administration and control of goods, money and information flow between the supplier and the client are known as supply chain management (SCM) (SCM). SCM is the network and coordination of interrelated business transactions between clients and suppliers at all stages, from raw materials at the point of origin to work-in-progress, finished items, and the point of consumption. Due to globalization and liberalization, every industry is increasing its regional sourcing and marketing reach to remain competitive. Successful SCM extends beyond the supplier and the customer to encompass the supplier's suppliers and the customer's customers as well.

The interaction and updating of information between suppliers and consumers are becoming more crucial in the effective operation of the companies, regardless of the size of the industry—small, medium, or big. SCM practices are consequently becoming a competitive advantage for all firms. It is far more vital and pertinent for the survival and growth of the incredibly competitive automotive component producers and related industries. The automotive sector's success, which is backed by the presence of multiple Indian firms and worldwide automotive leaders, is one of the causes fueling the rapid expansion of the Indian auto component/auto accessories sector.

NEED FOR THE STUDY

From a limited selection of autos to a vast choice of vehicles from worldwide automotive giants, the Indian automotive sector has developed and gone a long way. In addition, for economical and quality reasons, some multinational automakers are striving to obtain components and assemblies from Indian vendors. This confronts the Indian car ancillary sector with excellent prospects and challenging difficulties. Supply chain management is increasingly becoming one of the most efficient instruments for company improvement, supporting industries in

effectively addressing these challenges. The competition from more aggressive providers will drive suppliers, manufacturers, distributors, dealers, retailers, and service organizations to update their supply chain processes and techniques. The researcher has performed the present study primarily to understand the growing trends of SCM in the current scenario, complexity and issues encountered because of supply chain management in the sample auto auxiliary units.

OBJECTIVES

The following is a list of the goals that the study aims to accomplish.

1. To investigate the logistics of the supply chain in micro, small, and medium-sized automotive auxiliary units in the Salem District.
2. To identify the elements that impact the supply chain management that is effective in the sample units.

REVIEW OF LITERATURE

Cuthbertson and Piotrowicz (2008) analyzed and classified the supply chain measures of several companies. These supply chain measures are accessible in the form of case studies and are considered to be examples of best practices. "Supply Chain Best Practices: Identification and Categorization of Measures and Benefits" was the study title. According to the study, operational-level activities and supply chain measurements connected to inter-organizational levels were not considered. The measures analyzed in the chosen organisations were mainly related to economic issues.

Koskinen (2009) used a constructive research methodology to analyze the relationship between corporate and supply chain strategy in her "Supply Chain Strategy in a Global Paper Manufacturing Company: A Case Study." This study was published under "Supply Chain Strategy in a Global Paper Manufacturing Company: A Case Study." The study findings indicate that each firm has its supply-chain plans and strategies, which, when combined, make up the corporate supply-chain strategy. However, this organization does not have a corporate supply chain plan in place at present. According to the study's findings, a new supply chain management model should be implemented for the company's overall supply chain strategy. This model emphasizes collaboration between the company's multiple business divisions and logistics departments.

In his article titled "Teleological processes in supply chain management: Illustrations," published in 2010, Stevenson offers insights and discusses teleological processes in Supply Chain Management. To enhance and broaden the knowledge and investigation of SCM, a conceptual framework derived from complexity sciences has been published. They found that the teleological processes of SCM provide highly crucial insights and offer new and challenging options for further studies within SCM. Their research was published in the journal *Systems and Computers in Medicine*. The research also demonstrates that using teleological processes in SCM may also sell and result in managerial ideas and insights to think and keep away from poor or wrong grounds within the planning, implementation, and evaluation of SCM. This was shown by the fact that the research was conducted.

RESEARCH METHODOLOGY

Area of the study: The Salem District was the location of the research investigation.

Sample Size and Method

The technique of sampling was stratified, and then it was used to draw the sample. In the context of the present research, "small and medium industries" refers to enterprises that are either sole proprietorships, partnerships, private limited companies, or limited corporations whose primary activity is the production of automobile components inside the Salem District. Both the respondents' selection and the sample size have been limited to one hundred. The research design for this study was a descriptive cross-section.

Nature and source of data: The research was conducted using the questionnaire method; primary data were collected from coconut product marketers in Salem; secondary data were collected from relevant journals, magazines, and textbooks; and no data were collected from any other sources.

Statistical tools used for the study:

- Simple percentage analysis
- Chi-Square
- Henry Garret Ranking Method

LIMITATIONS OF THE STUDY

- ❖ Because the research was only conducted on a small portion of the Salem District population, its findings cannot be extrapolated to the whole district.
- ❖ The statistical approaches utilized to analyze each have their own set of limitations.
- ❖ This study is subject to all the constraints associated with collecting primary data.

ANALYSIS AND INTERPRETATION

- Simple percentage analysis

Table no.1Detail of Auto Ancillary Units

Implementation of quality systems	No. of respondents	Percentage
Quality Systems implemented	49	49
Quality Systems not implemented	51	51
Type of systems implemented		
ISO9000	88	88
TS16949	7	7
ISO14000	3	3
Others	2	2
Average delivery performance		
Below 80%	11	11
80% -90%	51	51
Above90%	38	38
Total	100	100

Source: Primary data

As per the data shown in table no. 1, out of 100 respondents, 51% have not established quality systems in their car auxiliary units, whereas 49% have done so in their units.

According to the table, 88% of the respondents have incorporated ISO 9000 in their respective industries; 7% of the respondents have implemented TS 16949; 3% of the respondents have implemented ISO 14000 in their units; and 2% of the respondents have implemented other standards such as VDA 6.3, OHSAS 18001, QS9000, and so on in their respective units.

The data presented in the table above demonstrates that the delivery performance of 51% of the respondents falls between 80% and 90%, that 38% of the respondents have performed above 90% on average in their delivery to their customers, and that 11% of the respondents have performed below 80% on average in their delivery performance.

Chi-square

Table No.2 Relationship between the Organisation type and level of knowledge of SCM

S.No	Organization Type	Level of Knowledge on SCM			Total
		High	Medium	Low	
1	Proprietorship	15 (24.1%)	9 (12.8%)	7 (18.4%)	31
2	Partnership	11 (28.3%)	19 (48.6%)	15 (42.1%)	45
3	Pvt.Ltd./Ltd.	9 (47.6%)	7 (38.5%)	8 (39.5%)	24
	Total	35	35	30	100

Source: Primary data

Table no. 2 reveals that the proportion of Pvt. Ltd./Ltd. firms with a high level of knowledge of SCM is the greatest, with 47.6%, while the percentage of proprietorship enterprises with a high level of knowledge of SCM is the lowest, with 24.1%.

The percentage of employees with a medium level of expertise in SCM is highest in partnership types of businesses at 48.6%, while it is lowest in proprietorship types of businesses at 12.8%.

The percentage of employees with a low degree of expertise on SCM is highest among partnership employees at 42.1 percent, while it is lowest among proprietorship employees at 18.4 percent.

As a result, most of the units in the sample of small and medium auto ancillary units in the Salem area have a medium degree of understanding of SCM as it relates to supply chain management. This constitutes 48.6 percent of the total number of partnerships.

Table no. 3 Parameters for successful competitive advantages-Garrett scores and rank

S.No	Reasons	Average	Rank
1	You offer a competitive price than your competitors	73.19	II
2	You are flexible in meeting the customer demand	48.98	V
3	Your reaction and response time is faster than the competitor	43.88	VII
4	You deliver customer orders on time	61.16	III
5	You provide dependable delivery to your customers	58.36	IV
6	You can deliver goods at the customer's expected frequency (Like Just in Time, Kanban,etc.)	44.63	VI

7	You offer better quality products to customers than the competitors	76.39	I
8	You offer products at small lots	33.48	VIII
9	You are first in the market in introducing new products	25.69	X
10	You have your time-to-market lower than the industry average	29.15	IX

As per Table, "Offer superior quality items to clients" was ranked as the first criterion with a score of 76.39 Garrett points. This is understandable, given the information provided in the table. With a total of 73.19 Garrett points, the phrase "Offer competitive price" was placed as the second most important criterion. With a total score of 61.16, Garrett points "On-time delivery of client orders" was placed as the third most crucial criterion. With a total score of 58.36 Garrett points, the characteristic "Provide dependable delivery to your consumers" was regarded as the fourth most important. With a total of 48.98 Garrett points, "Flexible in answering the client need" was placed as the fifth most crucial criterion to consider. With a total of 44.63 Garrett points, the characteristic "Capable of delivering items at customer desired frequency (Like Just in Time, Kanban, etc.)" was placed as the sixth most important one. Seventh on the list of parameters was "Reaction and response time is faster than the rival," which received a score of 43.88 out of 100 possible Garrett points. The eighth and final criterion, "Offer items in small amounts," received Garrett's score of 33.48 out of 100 points. Garrett points out a score of 29.15 that "time-to-market shorter than the industry norm" was regarded as the ninth most crucial characteristic. With a score of 25.69, Garrett points "Introducing new items" was placed as the eighth factor for the company's success. According to the results of the sample units, which had an average of 76.39 Garrett points, it is possible to conclude that providing consumers with items of higher quality is the most critical factor in achieving a successful competitive advantage.

CONCLUSION

SCM is a complicated procedure in an average production organization, which includes a variety of methods and transactions related to associated business companions and stakeholders, ranging from the dealer's dealer to the customer's customers. SCM is a procedure that is used to manage supply chain management. The level of difficulty and the process is going to be different for each agency. According to the study's findings, the effectiveness of an organization's supply chain improves in tandem with the level of sophistication of its SCM processes. These well-known indicate that businesses with developing SCM procedures may have the ability to have flexible production capabilities and the capacity to respond immediately to changes in market conditions. The organizations must implement provide chain control methods to continue existing and succeed. In today's world, providing a product of high quality is the most successful means of entering any business. The company must immediately begin enforcing delivery chain management measures if it is to continue existing and expanding. Implementing efficient and environmentally friendly methods in the supply chain will help businesses achieve a competitive advantage and may help ensure sustained growth. At the same time, the firm will be in a better position to achieve its goals in the future's highly competitive business climate if the suggestions above are implemented in an environmentally responsible manner.

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