A Study on The Role of Logistics Operations in VRL Logistics

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ABSTRACT

This research examines the vital importance of logistics operations in improving the efficiency and effectiveness of supply chain management, specifically focusing on VRL Logistics Service in Coimbatore. The swift expansion of logistics outsourcing has intensified competition and resulted in the rise of numerous service providers. The study assesses the logistics services offered, levels of customer satisfaction, and the primary challenges encountered in logistics operations. It also highlights the factors that influence the success or failure of logistics outsourcing and underscores the need for strategic collaboration between logistics and both international and national stakeholders. Utilizing primary data gathered through a structured questionnaire with a sample of 76 respondents, the study evaluates the satisfaction levels regarding the services provided by VRL Logistics and offers suggestions for operational enhancements. The results enhance the understanding of how logistics operations affect customer service, cost efficiency, and overall business growth.

KEYWORDS

Logistics Operations, Supply Chain Management, Outsourcing, Customer Satisfaction, VRL Logistics, Transportation, Warehousing, Inventory Management, Automation, Digital Tools, Strategic Integration, Service Quality, Logistics Efficiency.

INTRODUCTION

Logistics outsourcing is one of the fastest-growing areas. The number of outsourcing companies and logistics service providers has increased dramatically and competition has intensified. Both outsourcing companies and service providers, face great challenges in their outsourcing venture. A better understanding of success and failure factors and the concerns involved is needed so that outsourcing companies can take better advantage of the outsourcing opportunity. The negotiation, planning and implementation of supporting logistic

arrangements between nations, their forces and agencies. It includes furnishing Logistics support (major end items, materials, and / or services) to, or receiving Logistics support from one or more friendly foreign governments, international organization or military force. It also includes planning and action related to the intermeshing of a significant element, activity, or component of the military Logistics system or procedures of the United States with those of one or more foreign governments, international organization or military force on a temporary or permanent basis.

OBJECTIVES OF THE STUDY

- To examine the demographic profile of the respondents in VRL Logistics Service, Coimbatore.
- To study about the overall services provided.
- To analyze the satisfaction level on the services rendered.

- To offer suggestion and recommendations for better logistical approach of VRL Logistics service, Coimbatore.

REVIEW OF LITERATURE

Steven R. Clinton, Roger J. Calantone (1987), "Impact of Transport facility to Provide logistics Industry". This Study emerged as a subject of considerable interest – particularly in terms of strategic advantage and that, as a result, logistics strategy has received increased emphasis. One popular conceptualization of logistics strategy is the werox at al. (1987) typology (process/market/channel), and that empirical evidence supports this typology in North America states that as firms increase their international operations and involvement, logistics strategy becomes even more important. Reports results indicating that conceptual equivalence is difficult to maintain across these different cultures and that use of the typology may not be appropriate outside the North American sector.

J. Samuel Paulson (1987), "A Study on Freight forward mechanism in Logistics industry". The importance of logistics in agriculture and service industries in India manufacturing accounts for 25% of GDP, about USD 125 billion and provides employment for 16% of the population. 200 samples has been used for the survey and data analysis. In other developing economies it is generally 40% of GDP. Recently there is a debate, following the success of IT companies in the global markets, whether India should jettison manufacturing and concentrate on IT and other service sectors.

Lambert and Stock (1993), "Effects on Transport of Trends in Logistics and Supply Chains Management". In this study he Added that freight forwarders offer shippers lower rates than the shippers could obtain directly from the carrier, because small shipments generally cost more to transport than large shipments. Deste and Meyrick (1992) argued that forwarders attached a much greater importance to the cargo handling technology and to the availability of flexible contracts. Studies of the buying decision-making of organisations such as air freight forwarders are comparatively rare, despite the importance such intermediaries have in the marketplace.

James Jixian Wangm Department of Geography and Geology (1998), "The development of the Hong Kong container port in a regional context is examined in the light of Hayuth's five- stage load-center model". In this study reveals that the port-hinterland relationship between Hong Kong and China is unique as the hub and its hinterland belonged to two economies at different development levels and of different institutional settings. The development gap in containerization resulted in the inter-port competition stage being missed when Hong Kong became a load cent.

C.Kaleappan (2001),"A Study of Logistic Service Quality in a Container Terminal Operations". The study is focused on the satisfaction level of the container terminal main users. The main users of the container terminal are the shipping agent, forwarding agent and others. The unit of analysis was individual operations staffs from the main users of the container terminal. The dependent variable was satisfaction and the independent variable was personal contact quality order release quality, information quality, ordering procedures, order accuracy, order condition, order quality, order discrepancy handling and timeliness. The model used in this study was It was also found that for the independent variable timeliness, information quality, order condition and order accuracy are the main concerns of the users. As for the overall satisfaction level, the main concern of the users is the personnel contact. Whereby, how the personnel's try to resolve problems encountered by the users. Also, the knowledge and experience of the personnel's are the factors which influence the satisfaction level of the users.

NEED FOR THE STUDY

- To comprehend the significance of logistics in effectively managing the supply chain
- To solve issues with delivery, warehousing, and transportation systems
- To increase customer happiness, time management, and cost effectiveness
- To examine how logistics promotes operational excellence and business expansion

- To investigate how automation and digital tools affect logistics operations
- To determine any inadequacies or holes in the present logistics procedures
- To improve logistics strategy and planning decision-making

SCOPE OF THE STUDY

- Covers the fundamental logistics tasks of inventory management, warehousing, and transportation.
- Focuses on logistics tasks that are both incoming and outbound.
- Examines the function of logistics in various business sizes and industries. includes research on new technologies such as artificial intelligence (AI), GPS tracking, and logistics automation.
- Assesses the ways in which supply chain coordination is enhanced by logistics integration.
- Relevant to manufacturing facilities, retailers, and logistics service providers offers suggestions for enhancing service delivery and logistics performance.

RESEARCH METHODOLOGY

This methodology explains about the overall objective of research design, data collection method, sampling procedure, construction of questionnaire, tools of analysis.

Sample Design

This study is done through a Convenient Sampling Method. The study depends on primary data. A pilot study is conducted to validate the questionnaire and to confirm the feasibility of the study. Based on the pilot study, the questionnaire is modified suitably to elicit response from the sample group.

Sampling Size

Sample of 76 people were taken into study, and their data were collected.

METHOD OF DATA COLLECTION

The data for this study are of two types: -

- Primary data
- Secondary data

Primary Data

The Primary data is collected through questionnaires administered to a sample of 76 employees in VRL Logistics, Coimbatore District.

Secondary Data

Secondary data was collected through various publications of newspapers, annual reports, magazines, VRL Websites related with logistics, transportation and journals of supply chain.

DATA ANALYSIS AND INTERPRETATION

CHI SQUARE TEST

The main intention of the study is to find out the workers satisfaction to increase the way of training. The primary data collected have been analyzed by preparing tables and simple percentage method has been used to interpret the data. Chi-square test is applied to test whether there is any significant relationship between various factors level of satisfaction Index.

Gender and Level of Satisfaction

H0 = There exist no significant association between gender of the respondents and level of satisfaction.

Gender	**Level of Satisfaction**			**Total**
	High	**Moderate**	**Low**	
Male	22	28	9	59
Female	10	5	2	17
Total	**32**	**33**	**11**	**76**

Calculated $\chi 2$ Value: 2.554 Degree of freedom: 2 Table Value: Five per cent level: 5.991

Since the calculated $\chi 2$ value (2.554) is less than the table value (5.991) at five percent level of significance. *H0* is accepted. Hence it is concluded that there is no significant association between gender of the respondents and their level of satisfaction.

Age and Level of Satisfaction

H0 = There exist no significant association between age of the respondents and level of satisfaction.

Age	**Level of Satisfaction**			**Total**
	High	**Moderate**	**Low**	
Below 25 years	18	13	9	40
26-35 years	8	12	2	22
36-45 years	3	8	0	11
Above 45 years	3	0	0	3
Total	**32**	**33**	**11**	**76**

Calculated $\chi 2$ Value: 12.666 Degree of freedom: 6 Table Value: Five per cent level: 12.592

Since the calculated $\chi 2$ value (12.666) is greater than the table value (12.592) at five percent level of significance. *H0* is rejected. Hence it is concluded that there is a significant association between age of the respondents and their level of satisfaction.

Area of Residence and Level of Satisfaction

H0 = There exist no significant association between area of residence of the respondents and level of satisfaction.

Area of Residence	**Level of Satisfaction**			**Total**
	High	**Moderate**	**Low**	
Rural	9	11	5	25
Urban	14	13	5	32
Semi-urban	9	9	1	19
Total	**32**	**33**	**11**	**76**

Calculated $\chi 2$ Value: 2.165 Degree of freedom: 4 Table Value: Five per cent level: 9.488

Since the calculated $\chi 2$ value (2.165) is less than the table value (9.488) at five percent level of significance. *H0* is accepted. Hence it is concluded that there is no significant association between area of residence of the respondents and their level of satisfaction.

Educational Qualification and Level of Satisfaction

H0 = There exist no significant association between educational qualification of the respondents and level of satisfaction.

Educational Qualification	**Level of Satisfaction**			**Total**
	High	**Moderate**	**Low**	
No formal education	1	3	1	5
Up to HSC	7	5	1	13
Under graduate	17	18	7	42
Post graduate	7	7	2	16
Total	**32**	**33**	**11**	**76**

Calculated $\chi 2$ Value: 2.137 Degree of freedom: 6 Table Value: Five per cent level: 12.592

Since the calculated $\chi 2$ value (2.137) is less than the table value (12.592) at five percent level of significance. *H0* is accepted. Hence it is concluded that there is no significant association between educational qualification of the respondents and their level of satisfaction.

Occupation and Level of Satisfaction

H0 = There exist no significant association between occupation of the respondents and level of satisfaction.

Occupation	**Level of Satisfaction**			**Total**
	High	**Moderate**	**Low**	
Employer	1	3	1	5
Employee	14	12	5	31
Self Employed	-11	15	5	31
Others	6	3	0	9
Total	**32**	**33**	**11**	**76**

Calculated $\chi 2$ Value: 4.649 Degree of freedom: 6 Table Value: Five per cent level: 12.592

Since the calculated $\chi 2$ value (4.649) is less than the table value (12.592) at five percent level of significance. *H0* is accepted. Hence it is concluded that there is no significant association between occupation of the respondents and their level of satisfaction.

Size of the Family and Level of Satisfaction

H0 = There exist no significant association between size of the family of the respondents and level of satisfaction.

Size of the Family	**Level of Satisfaction**			**Total**
	High	**Moderate**	**Low**	
Less than 4 members	21	13	2	36
Between 4 and 7 members	10	19	7	36
Above 7 members	1	1	2	4
Total	**32**	**33**	**11**	**76**

Calculated $\chi 2$ Value: 11.847 Degree of freedom: 4 Table Value: Five per cent level: 9.488

Since the calculated $\chi 2$ value (11.847) is greater than the table value (9.488) at five percent level of significance. *H0* is rejected. Hence it is concluded that there is a significant association between size of the family of the respondents and their level of satisfaction.

Earning members in the Family and Level of Satisfaction

H0 = There exist no significant association between earning members in the family of the respondents and level of satisfaction.

Earning members in the Family	**Level of Satisfaction**			**Total**
	High	**Moderate**	**Low**	
One member	14	7	2	23
Two - Five members	13	22	8	43
Above five members	5	4	1	10
Total	**32**	**33**	**11**	**76**

Calculated $\chi 2$ Value: 6.201 Degree of freedom: 4 Table Value: Five per cent level: 9.488

Since the calculated $\chi 2$ value (6.201) is less than the table value (9.488) at five percent level of significance. *H0* is accepted. Hence it is concluded that there is no significant association between earning members in the family of the respondents and their level of satisfaction.

Monthly income and Level of Satisfaction

H0 = There exist no significant association between monthly income of the respondents and level of satisfaction.

Monthly income	**Level of Satisfaction**			**Total**
	High	**Moderate**	**Low**	
Upto Rs.5000	1	2	0	3
Rs.5,001 - Rs.15,000	10	7	4	21
Rs.15,000 - Rs.30,000	12	13	2	27
Above Rs.30,000	9	11	5	25
Total	**32**	**33**	**11**	**76**

Calculated $\chi 2$ Value: 3.666 Degree of freedom: 6 Table Value: Five per cent level: 12.592

Since the calculated $\chi 2$ value (3.666) is less than the table value (12.592) at five percent level of significance. *H0* is

accepted. Hence it is concluded that there is no significant association between monthly income of the respondents and their level of satisfaction.

CONCLUSION

Logistics sector Reforms have changed the face of Indian logistics industry. The reforms have led to the increase in resource productivity, increasing level of deposits, credits and profitability. However, the profitability, which is an important criteria to measure the performance of banks in addition to productivity, financial and operational efficiency has come under pressure because of changing environment of the company. An efficient management of banking operations aimed at ensuring growth in profits and efficiency requires up-to-date knowledge of all those factors on the company profit. In recent year, there have been considerable pressures on the profitability of the company. A lower profitability may rise due to lack of control over the expenses. Company is urged to generate sufficient revenue to meet the rising cost of fund. Profitability is a key result area where performance and results directly and virtually affect the survival. Therefore, every company should aim at increasing their

performance for earning profits by rendering best and quality products and services to the customers and for their survival as well.

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