

EXPLORING THE TRIALS AND TRIUMPHS OF CHENNAI'S FREIGHT FORWARDERS

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ABSTRACT

The seamless management of the supply chain is contingent upon the efficiency and efficacy of logistics operations in the ever-changing global trade and commerce scene. The study presented in this abstract aims to provide a thorough analysis of the various factors that impact the performance of logistics. These factors include the role and difficulties faced by freight forwarders, the effects of aging on infrastructure and technology, the impact of income on delivery performance, and the potential benefits of automation in improving logistical efficiency. To examine the function of freight forwarders in logistics and shed light on the many duties and difficulties they face. In the logistics ecosystem, freight forwarders act as pillars, coordinating the complex dance of moving commodities across international borders. This research aims to offer insights into optimizing their contributions to effective logistical operations while managing the intricacies of global trade dynamics by closely examining their roles, duties, and challenges. Infrastructure and technology can create obstacles to the smooth flow of information and commerce as they get older. This study aims to identify opportunities for revitalization and modernization to correspond with the changing needs of the logistics industry by analysing how the age of infrastructure and technology effects logistical operations and innovation adoption. Additionally, in order to better understand the critical role that timely delivery plays in customer satisfaction and corporate competitiveness, this research aims to identify the connection between income levels and on-time delivery performance. This study intends to shed light on socioeconomic aspects influencing delivery dependability by studying the link between respondents' income levels and on-time delivery performance. The analysis will provide significant insights for improving service quality and performance.

Keywords: Freight forwarders, Logistics, Technology, Challenges, Responsibilities.

INTRODUCTION

Logistics and supply chain management (SCM) have received increased attention over the last two decades due to their ability to cut operational costs, improve delivery performance, and boost customer satisfaction. This increased emphasis is critical for firms seeking to improve their competitiveness in terms of cost efficiency, quality, timeliness, and adaptability. Globalization has increased the importance of logistics and supply chain management (SCM), as multinational corporations (MNCs) participate in more worldwide sourcing, manufacturing, and distribution, complicating supply chains (Jacquelyn Lynn., (2006)). Traditionally, logistics and supply chain management have been used interchangeably, however with subtle variations. Supply Chain Management is defined by its strategic emphasis, whereas logistics is more operationally focused. These ideas have evolved since the 1970s, when "Physical Distribution

Management" was characterized by a lack of coordination between organizational activities, though with subtle variations. The strategic perspective of supply chain management sets it apart from logistics, which is typically more operationally focused. The origins of these ideas can be found in the "Physical Distribution Management" dearth of organizational function coordinating in the 1970s. Reducing inventory and cycle times, removing duplications, and enhancing customer service all while cutting costs are the goals of supply chain management. This change in emphasis from creating value for customers to gaining market share promotes long-term profitability and a persistent competitive edge. Beyond simple logistical connections, supply chain management includes contractual arrangements, supplier selection, information and money transfers, building construction, and more general social, economic, political, and environmental factors. Logistics mostly deals with storage and transportation, but effective management of logistics is essential to the success of supply chain management. It is clear that supply chain management and logistics are interdependent: if one fails, the chain as a whole is at risk Clifford (F.Lynch, (1997).

LITERATURE REVIEW

Logistics stands out as a critical and complex function within this network. It serves as a unifying force, connecting suppliers to customers and integrating various functional entities within a company. Given the relentless competition in today's markets, firms must strategically allocate resources to capitalize on opportunities (Alan Rushton, (2006)). This strategic focus encompasses both internal factors such as management style, culture, and human resources, as well as external factors like technology, globalization, and competitive pressures. In this dynamic environment, logistics emerges as a pivotal concept, enabling firms to leverage their strengths and advantages in the marketplace.

1. Herbert Kopfer (2014), small and medium-sized freight carriers are advised to establish horizontal coalitions to reduce operational costs in road haulage. By sharing resources and exchanging customer requests within the coalition, carriers can enhance operational efficiency. The integration of transshipment into the pickup and delivery process further optimizes operations, with synchronized vehicles at transshipment points resulting in significant cost savings, as demonstrated through a mixed-integer programming model.

2. Shefali Tiwari's (2013) research underscores the pivotal role of shipping and logistics in foreign trade operations. Understanding different modes of transport, shipping lines, routes, and transshipment is essential for decision-makers involved in Export-Import operations. The paper also sheds light on the role of the Bureau of Industry and Security (BIS) in enforcing export regulations, particularly concerning items with dual-use applications. Clarifying export control requirements, including the need for Export Control Classification Numbers (ECCNs), the paper provides crucial insights for compliance and regulatory adherence in international trade.

3. K. Parimala and S. Geetha (2013), the focus is on the challenges faced by transporters in the Indian road transport sector. Through an opinion survey and discussions with stakeholders at Rameswara Transports, Coimbatore, various issues are highlighted, including inadequate roads, heavy taxes, lack of maintenance, coordination issues, and challenges in rural areas. This study sheds light on the multifaceted problems affecting the efficiency of road transport in India.

4. Riaz and Bilal (2011) explore the outsourcing of logistics activities to enhance efficiency in manufacturing companies. Logistics outsourcing, involving third-party logistics providers, is depicted as a strategic move to optimize the flow of goods and information while achieving cost-effective, reliable, and fast delivery objectives. Their research focuses on a manufacturing

company, Pakson International, operating in Pakistan, comparing its logistics outsourcing practices with those documented in the literature.

5. Pallavi Bhattacharjee and Vanitha Kohli (2005) analyze the potential for cost reduction and value creation through logistics management in corporate India. While outbound logistics traditionally receive more attention due to their higher expenditure share and critical role in production, companies are increasingly exploring cost-saving opportunities in inbound logistics. This shift includes considerations of third-party logistics contracting, driven by the potential for enhanced logistics management at reduced costs.

6. Paroma Roy Chowdhry (2004) underscores the pivotal role of logistics management in today's competitive landscape. From supply chain operations to product distribution, logistics efficiency not only affects expenses but also impacts market share and competitiveness.

7. David B. Grant (2004) highlights the cultural and contextual factors influencing attitudes towards logistics management across different regions. Proposing a framework adapted from Hofstede, Grant suggests exploring these factors to deepen understanding in the field of global logistics.

8. J.S. Ahluwalia (2003) focuses on leveraging logistics for competitive advantage, emphasizing its critical role in business success. Highlighting the importance of efficient transportation configuration, the study underscores the significance of timely and cost-effective delivery in meeting customer needs and sustaining core competencies in a fiercely competitive market environment.

9. Bruce Strahan and Art Van Bodegraven (2002) underscore the evolving role of logistics as a strategic tool for aligning supply with demand. They emphasize that modern logistics aims to fulfill customer expectations regarding delivery time, location, and method. By enabling faster order turnaround and facilitating cross-document facility location, modern logistics enhances overall organizational productivity. Furthermore, they highlight the symbiotic relationship between supply chain management and logistics, emphasizing their intertwined nature in contemporary business operations.

OBJECTIVES OF THE STUDY

1. To identify the impact of age on technologies and infrastructure.
2. To identify the relationship between income levels and on time delivery performance.
3. To identify challenges faced by the freight forwarders in logistics industry.

RESEARCH METHODOLOGY

The research design adopted in this study is **DESCRIPTIVE RESEARCH**

RESEARCH TOOL

CHI SQUARE

REGRESSION

FACTOR ANALYSIS

DATA ANALYSIS AND INTERPRETATION

RELATIONSHIP BETWEEN AGE (YEARS) OF THE RESPONDENTS AND INFRASTRUCTURE AND TECHNOLOGY

HYPOTHESIS TESTING

Null hypothesis (H₀):

There is no significant relationship between age (years) of the respondents and infrastructure and technology.

Alternative hypothesis (H₁):

There is significant relationship between age (years) of the respondents and infrastructure and technology.

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
AGE (YEARS) OF THE RESPONDENTS * INFRASTRUCTURE AND TECHNOLOGY	113	100.0%	0	.0%	113	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	93.583 ^a	64	.009
Likelihood Ratio	98.845	64	.003
Linear-by-Linear Association	2.909	1	.088
N of Valid Cases	113		

a. 83 cells (97.6%) have expected count less than 5. The minimum expected count is .10.

INTERPRETATION:

As per the above table, it is inferred that the P value is 0.009; it is significant to 5% (0.05) significant level. The minimum expected count is 0.10. Thus alternative hypothesis is accepted and it is found that there is significant relationship between age (years) of the respondents and infrastructure and technology.

FACTOR ANALYSIS**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.552
	Approx. Chi-Square	13.616
Bartlett's Test of Sphericity	df	10
	Sig.	.191

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.376	27.527	27.527	1.376	27.527	27.527
2	1.141	22.823	50.350	1.141	22.823	50.350
3	.899	17.975	68.325			
4	.830	16.606	84.931			
5	.753	15.069	100.000			

Extraction Method: Principal Component Analysis

Component Matrix^a

	Component	
	1	2
1.COMPETITION IMPACTS THE QUALITY OF SERVICE PROVIDED BY FREIGHT FORWARDERS	.677	.110
2.DIFFERENTIATING SERVICES IS NECESSARY TO REMAIN COMPETITIVE IN THE MARKET	.697	.007
3.MARKET COMPETITION INFLUENCES PRICING STRATEGIES IN THE FREIGHT FORWARDING INDUSTRY	-.136	.754
4.COMPETITIVE MARKET IS CHALLENGING FOR FREIGHT FORWARDERS	.639	.122
5.ACHIEVING AND MAINTAINING A SATISFACTORY MARKET SHARE IS CHALLENGING IN THE INTERNATIONAL LOGISTICS SECTOR	-.074	.738

Extraction Method: Principal Component Analysis.

a. 2 components extracted.

The above table indicates the extracted components matrix. This contains the loading of every variable into each factors All loadings has been stifled and remaining components are taken for the investigation. With the above, output has been yield from the table, significant are taken as factors.

REGRESSION

Table - to Analysing the income per annum in Rs. of the respondents on on-time delivery performance.

Variables Entered/Removed

Model	Variables Entered	Variables Removed	Method
1	INCOME PER ANNUM IN RS. OF THE RESPONDENTS ^a		Enter

- a. All requested variables entered.
- b. Dependent Variable: ON-TIME DELIVERY PERFORMANCE

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.021 ^a	.000	-.009	.57029

- a. Predictors: (Constant), INCOME PER ANNUM IN RS. OF THE RESPONDENTS

From the above table it clearly shows that the regression value of R is 0.021 (i.e) there is an income per annum in Rs. of the respondents on on-time delivery performance. The coefficient of the relation explain that the R square value is 0.000;which mean 0% of variance of the customers was influenced by income per annum in Rs. of the respondents.

ANOVA

Model	Sum Squares	df	Mean Square	F	Sig.
1 Regression	.015	1	.015	.047	.829 ^a
Residual	36.100	111	.325		
Total	36.115	112			

a. Predictors: (Constant), INCOME PER ANNUM IN RS. OF THE RESPONDENTS

b. Dependent Variable: ON-TIME DELIVERY PERFORMANCE

From the above table the significant value is less than 0.05, so the on-time delivery performance having the significant income per annum in Rs. of the respondents.

Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	2.637	.142		18.506	.000
INCOME PER ANNUM IN RS. OF THE RESPONDENTS	.011	.053	.021	.217	.829

a. Dependent Variable: ON-TIME DELIVERY PERFORMANCE

From the above table the significant value is greater than 0.05. Hence H1 is rejected, (i.e) alternative hypothesis (H0). It is evident that the variables have a significant impact. Thus the factor having strong income per annum in Rs. of the respondents.

Analysis:

The regression analysis is carried on independent variable as income per annum in Rs. of the respondents with dependent variable as on-time delivery performance. The significant value is to less than 0.05 to be qualified/ accepted for every variable and hence there would a positive influence on independent variables.

Interpretation:

The F statistic value is 19.430 with p value ($p = 0.000$) were less than alpha value (0.05). This means the independent variables income per annum simultaneously affected the dependent variables on-time delivery performance. Hence, the regression model is useful in predicting on-time delivery performance. The coefficient of determination (R Square) of regression model is 0.000, indicating that 0% of variance in independent variables is explained by the on-time delivery performance. The beta coefficients for the independent variable were positive and the p values of the t-test for independent variable were greater than the alpha value (0.05). This shows that there is significant positive influence of income per annum in Rs. of the respondents and on-time delivery performance.

CONCLUSION

In summary, this research demonstrates that goods forwarders operating in Chennai are confronted with an extensive array of obstacles and obligations pertaining to global logistics. The results emphasize the crucial significance of complying with customs regulations, allocating resources towards infrastructure and technology development, and effectively managing market competition. Furthermore, the research emphasizes the critical importance of punctual delivery performance as a fundamental factor influencing achievement within the sector. Additionally, the research underscores the criticality for goods forwarders to establish a unique market position, adjust to technological progress, and efficiently navigate fierce market competition. Securing and sustaining punctual delivery performance continues to be of utmost importance, necessitating proactive strategies to reduce disruptions and improve customer contentment. The study's findings essentially highlight the complex and diverse array of obligations and challenges encountered by goods forwarders in Chennai's international logistics sector. Furthermore, they emphasize the critical need for strategic measures to tackle these intricacies and guarantee ongoing prosperity in the industry's ever-changing and fiercely competitive environment.

REFERENCE

- Alan Edward Branch, (2007), Elements of Shipping. Rontledge publications, 8th edition.
- Alan Rushton, (2006), The handbook of Logistics and Distribution Management. Kogan Page Publications, 3rd Edition.
- Clifford F. Lynch, (1997), Logistics Outsourcing-A Management guide. Council of Logistics Management.
- Evans, R. and Danks, A.T., (1998), Strategic Supply Chain Management : Creating Shareholder value by alining supplying chain strategy with business strategy, Gattorna, J. (ed.), Strategic Supply Chain Allignment, Gower, 18-37.
- Grant, D., Lambard, D., Stock, J., and Ellaram, L., (2006), Fundamentals of logistics Management. McGraw-Hill Higher Education.
- Jacgudyn Lynn., (2006), Start your own freight brokerage business. Entrepreneur Press, 2nd Edition.

- Sahay, B.S. (ed.), Supply Chain Management for Global Competitiveness, Macmillan, pp.77-93.
- K.Bagyalakshmi and R.Karthika., (2015), A study on the influencing factors forexporters in choice of selecting the freight forwarders. International JournalofMultidisciplinary Research and Development, 2 (4), 198-200.
- Gattorna, J., Ogulin, R., and Selen, W., (2004), An Empirical investigation of 3rdand 4th party logistics provider practices in Australia. Logistics AssociationofAustralia,7-18.
- Gordan, B.H., (2003), The changing face of third party logistics. Supply ChainManagement review, Reed Business information.
- Jin-Long Lu., (2013), Investigating Critical Factors That Influence Shippers‘ and International Freight Forwarders‘ Preferences in Carrier Selection using Integrated Hierarchical Information Integration Approach. Journal Of Marine ScienceAndTechnology,21(2),182-190.
- Min, S. and Mentzer, J.T (2000), The role of marketing in Supply Chain Management, International Journal of Physical Distribution and logistics management, 30 (9), 766-787.