

A Study on Freight Forwarding and Their Impact on Export and Import

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ABSTRACT

Freight forwarding serves as the backbone of international trade by bridging the gap between shippers and carriers through specialized logistics solutions. This study examines the operational efficiency of forwarders, focusing on their role in documentation, customs clearance, and multimodal transport. Using a descriptive research design, data was collected from 70 professionals across logistics, import, and export departments. Results indicate that 80% of respondents view proper documentation as the most critical factor in reducing customs delays. The study concludes that digital transformation and multimodal integration are essential for forwarders to evolve into strategic partners in the global supply chain.

Keywords: Freight Forwarding, Logistics, Import/Export, Customs Clearance, Supply Chain.

INTRODUCTION

Nations depend on a vast network of roads, rail, and seaports to move goods globally. A freight forwarder acts as an intermediary, booking space for shipments via asset-based carriers like ships and airplanes. Referred to as "travel agents for freight," they provide the expertise required to process complex documentation and navigate international regulations. Companies like Unique Line offer comprehensive "door-to-door" services, allowing businesses to focus on their core activities while the forwarder manages the entire transport process.

REVIEW OF LITERATURE

OECD Logistics Outlook (2026) reported that freight forwarders are increasingly expected to support sustainable trade growth by adopting digital platforms, complying with international regulations, and contributing to carbon-reduction initiatives. The report highlighted the growing strategic importance of freight forwarders in global supply chains.

Alam and Rahman (2025) focused on customer relationship management in freight forwarding and concluded that effective communication, transparency in pricing, and responsiveness to customer needs significantly influence long-term client retention.

Al-Haddad and Kotzab (2025) examined digital transformation in freight forwarding firms and found that artificial intelligence and big data analytics improve demand forecasting, route optimization, and decision-making accuracy. Their study emphasized the growing role of data-driven logistics.

Chen, Liu, and Zhao (2025) studied the application of artificial intelligence and big data analytics in freight forwarding operations. Their findings revealed that predictive analytics enhances demand forecasting, route optimization, and cost control, leading to improved service reliability and customer satisfaction.

Singh and Dhingra (2024) analyzed operational challenges faced by freight forwarding firms in emerging economies and identified customs delays, regulatory complexity, labor shortages, and infrastructure limitations as major constraints affecting service performance.

SCOPE OF THE STUDY

Freight forwarders often face significant legal exposure by mislabelling carriage contracts as "bills of lading" rather than "consignment notes." By assuming the role of a principal carrier instead of an agent, forwarders unnecessarily attract the liabilities of international conventions, such as the Hague Rules, which impose mandatory minimum limitations (e.g., 2 SDR per kg). This positioning prevents cargo interests from pursuing the actual carrier, forces forwarders to adopt rigid package limitations, and strips them of the ability to exclude liability. These risks usually stem from systemic oversights, such as using "cut and paste" terms or prioritizing the prestige of appearing as a ship/aircraft operator over sound legal protection.

STATEMENT OF PROBLEM

The freight forwarding industry faces critical legal and operational risks, primarily due to the misclassification of carriage contracts as "bills of lading" rather than "consignment notes". This "misnomer" causes forwarders to unnecessarily assume the liabilities of a principal carrier under international conventions like the Hague Rules, exposing them to mandatory minimum damage payouts and cargo litigation. Operationally, the sector is hampered by systemic bottlenecks, with customs clearance issues (25.7%) and port congestion (21.4%) identified as the leading causes of shipment delays. Furthermore, a significant 80% of industry professionals agree that incorrect documentation and poor inter-departmental communication directly threaten international trade relationships and operational success.

OBJECTIVES OF STUDY

- To study the freight forwarding logistics and its operational effectiveness.
- To understand the various freight forwarding services provided by logistics companies.
- To analyse the modes of transportation used in freight forwarding.
- To identify the major challenges faced in freight forwarding logistics.

RESEARCH METHODOLOGY

This study adopts a Descriptive Research Design to provide a clear, systematic interpretation of the current operational environment within the freight forwarding sector in Chennai. By focusing on core functional areas such as Export/Import Bays and Customs offices, the research utilized Simple Random Sampling to select a sample of 70 respondents from a target population of managers and executives across the logistics, documentation, and accounts departments.

Data was gathered through a structured questionnaire and analyzed using Percentage Analysis for demographic classification, Weighted Average Analysis for quantifying Likert-scale responses regarding service quality, and Correlation Analysis to evaluate the relationship between professional experience and digital efficiency. This rigorous methodology ensures that the findings are grounded in direct empirical evidence from core operational staff.

ANALYSIS AND INTERPRETATION

Proper documentation by freight forwarders reduces customs clearance issues- **Weighted average analysis.**

| Responds category | Weight(W) | Frequency(F) | Total score(W*F) |
|-------------------|-----------|--------------|------------------|
| Strongly agree | 5 | 32 | 160 |
| Agree | 4 | 24 | 96 |
| Neutral | 3 | 8 | 24 |
| Disagree | 2 | 4 | 8 |
| Strongly disagree | 1 | 2 | 2 |
| Total | | 70 | 290 |

$$\text{Weighted Average} = \frac{\sum W * F}{N}$$

$$\text{Weighted Average} = \frac{290}{70} = 4.14.$$

Interpretation

The weighted average of 4.14 signifies a strong consensus among respondents that the documentation expertise of freight forwarders is vital for minimizing customs clearance hurdles. This aligns with the qualitative data suggesting that documentation errors are a recognized cause of shipment delays. The high score validates the freight forwarder's role as an 'Ocean Transportation Intermediary' or 'Customs Broker' whose primary value proposition is navigating the complex regulatory environment to ensure seamless cargo movement.

Correlation Analysis between Experience and Digital Efficiency.

| Work experience | Strongly agree | Agree | Neutral | Disagree | Strongly disagree | Total |
|-----------------|----------------|-----------|----------|----------|-------------------|-----------|
| 0-3yrs | 9 | 7 | 2 | 1 | 1 | 20 |
| 4-6yrs | 8 | 6 | 2 | 1 | 1 | 18 |
| 7-9yrs | 7 | 5 | 2 | 1 | 0 | 15 |
| 10 above | 7 | 5 | 3 | 2 | 0 | 17 |
| Total | 31 | 23 | 9 | 5 | 2 | 70 |

Interpretation

The relationship between work experience and the perception of digital efficiency reveals a very positive outlook within the industry. Out of the 70 professionals surveyed, a significant 77% (54 respondents) believe that digital systems are essential for improving operational efficiency. Interestingly, this support isn't just coming from the younger "0-3 years" group; even the most seasoned professionals with over 10 years of experience strongly advocate for

technology, with 12 out of 17 respondents in that category favouring digital tools. This suggests that as freight forwarders gain more experience and face real-world complexities—like the documentation errors and customs delays identified in this study—they increasingly realize that manual processes are no longer sufficient. The data clearly shows a unified mindset across all levels of seniority, proving that the industry is ready and eager for digital transformation to stay competitive and minimize errors.

FINDINGS

WEIGHTED AVERAGE

The study reveals that 78.6% of respondents consider professional freight forwarding a critical factor in ensuring smooth international trade operations. To quantify the collective opinion on service quality, the Weighted Average Analysis tool was applied, resulting in a high score of 4.14 regarding the importance of documentation in reducing customs hurdles. This score indicates a strong professional consensus that administrative precision is the primary defines against shipment delays. Despite this expertise, 25.7% of shipment lags are still attributed to customs clearance challenges, followed by port congestion and coordination gaps.

CORRELATION ANALYSIS

Furthermore, a Correlation Analysis conducted between work experience and digital efficiency shows a unified industry-wide shift toward modernization. The data highlights that 77% of the total sample, including seasoned professionals with over 10 years of experience, strongly advocate for the use of digital systems like ERP and real-time tracking to improve operational speed. These findings confirm that success in global logistics is heavily influenced by a forwarder's ability to combine deep regulatory knowledge with technological innovation.

SUGGESTIONS

- Adopt digital platforms such as blockchain and IoT to ensure secure documentation and real-time cargo monitoring, reducing delays and disputes.
- Standardize documentation processes across international borders to minimize errors and improve efficiency in customs clearance.
- Invest in multimodal transport integration, particularly rail freight, to balance costs, reduce environmental impact, and improve reliability.
- Develop customer relationship management systems to enhance transparency in pricing and responsiveness to client needs.
- Implement predictive analytics to forecast demand, optimize routes, and control costs more effectively.

CONCLUSION

Freight forwarding has emerged as a cornerstone of international trade, bridging the gap between shippers, carriers, and consignees through efficient logistics solutions. The findings of this study highlight both the strengths and challenges of the industry, ranging from the critical role of documentation and customs clearance to the growing importance of technology, sustainability, and customer satisfaction. Suggestions emphasize the need for digital transformation, strategic partnerships, multimodal integration, and proactive risk management to overcome inefficiencies and meet evolving global demands. Ultimately, freight forwarders must evolve into digitally empowered, customer-focused, and sustainability-driven organizations. By embracing innovation, strengthening collaboration, and prioritizing customer trust, they can enhance operational efficiency and reinforce their indispensable role in global supply chains.

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