



A STUDY ON CUSTOMS CLEARANCE AS A VALUE-ADDED SERVICE IN FREIGHT FORWARDING: INSIGHTS FROM FREEDOM SHIPPING AGENCY

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Abstract: *Customs clearance plays a vital role in ensuring seamless international trade, and when integrated as a value-added service in freight forwarding, it significantly enhances efficiency and reliability. This study explores how freight forwarders leverage customs brokerage to enhance cargo movement, reduce delays, and optimize supply chain operations. Using industry insights and survey-based analysis, the research evaluates the impact of customs expertise, regulatory compliance, and digital clearance solutions on freight efficiency. Findings indicate that businesses increasingly prefer end-to-end logistics solutions that encompass customs handling to mitigate risks and reduce operational complexities. Additionally, advancements in electronic documentation, AI-driven compliance checks, and automated duty calculations are reshaping customs services within the freight sector. The study highlights the growing demand for integrated logistics solutions, urging freight forwarders to enhance their customs capabilities to drive competitiveness and improve global trade facilitation.*

Keywords: *Customs Clearance, Freight forwarding, Supply chain optimization, Global Trade Efficiency.*

Introduction

This report examines customs clearance as a value-added service in freight forwarding, with a specific focus on Freedom Shipping, a logistics provider based in Tuticorin, Tamil Nadu. The study explores the role of customs clearance in enhancing service quality, improving operational efficiency, and increasing customer satisfaction in the freight forwarding industry. Through an analysis of Freedom Shipping's operations, industry trends, and customer requirements, the report identifies key strategies for leveraging customs clearance to create competitive advantages. Customs clearance, a key component, ensures adherence to trade regulations while facilitating smooth cargo transit. As a value-added service, it allows freight forwarders to meet client demands for speed, compliance, and cost efficiency. This report examines customs clearance within the operations of Freedom Shipping, a Tuticorin based logistics provider. The study aims to assess the impact of customs clearance on service quality, evaluate Freedom Shipping's practices, and propose strategies to enhance its value proposition. Findings indicate that efficient customs clearance reduces delays, minimizes costs, and strengthens client relationships. Recommendations include investing in technology, enhancing staff expertise, and fostering partnerships with customs authorities to optimize service delivery. The advancement of global trade has transformed the world into a tightly interconnected marketplace, enabling the exchange of goods, services, and resources on an unprecedented scale. Central to this seamless international trade system is the logistics industry, where freight forwarding plays a pivotal role. Freight forwarders serve as the orchestrators of cross-border shipments, taking charge of critical processes such as transportation, warehousing, documentation, and supply chain management.



Statement of the Problem

This study seeks to address the question: How can freight forwarders integrate customs clearance as a value-added service to overcome these challenges, enhance service quality, and achieve a competitive advantage in the global logistics market? The problem is compounded by varying customs regulations across countries, frequent policy changes, and the growing demand for faster, more cost-effective services. Customs clearance remains a significant bottleneck in international freight forwarding, often leading to delays, increased costs, and customer dissatisfaction. Many freight forwarders rely on third-party customs brokers, resulting in fragmented service delivery, lack of transparency, and limited control over the clearance process. This disconnection hinders the ability to provide seamless end-to-end logistics solutions.

Need and Objective

Assess the potential of customs clearance services to streamline freight forwarding operations and enhance customer satisfaction. Identify best practices and technological solutions that enable freight forwarders to manage customs processes efficiently in-house or through strategic partnerships. Provide evidence-based insights to guide freight forwarding companies in differentiating their services in a highly competitive market. Address the knowledge gap regarding the operational and financial impacts of integrating customs clearance, offering a roadmap for industry players to adapt to evolving trade regulations and customer expectations.

Objective

- To evaluate industry perspectives on the necessity of outsourced customs clearance services.
- To assess the cost implications of integrating customs clearance as part of logistics operations.
- To identify pain points in traditional customs clearance processes, such as documentation errors and delays.
- To evaluate how pricing transparency in customs service's influences freight forwarding client decisions.
- To investigate the role of AI & automation in streamlining customs clearance procedures.
- To compare the satisfaction levels between businesses using outsourced vs. in-house customs clearance services.

Review of Literature

1. Alam, O. M. T. et.al.(2025) Freight forwarding is a such important part in the global trade industry as a whole because they ensure that goods get moving from one border to another efficiently. Such trade comes easier and cheaper for logistics, customs clearance and transportation.

2. Stolarski, P., Lewańska, E., & Abramowicz, W. et.al. (2025) The paper presents business models (BMs) for blockchain-based businesses. The paper is a study of IT-aligned BMs categorized by the concepts and possibilities of blockchain business applications. The research aimed to recognize and analyze the extent and directions in which blockchain architectures influence the means of conducting businesses.

3. González-Mendes, S., & Costa, C. J. et.al. (2024) Nowadays, Blockchain is generating the interest of diverse companies in implementing it. This technology could generate various advantages by applying cryptocurrencies, smart contracts, decentralized applications (Dapps), or Non-Fungible Tokens (NFTs) to firms.



4. Chao, Y., & Goll, A. et al. (2024) This research paper investigates the role of blockchain technology in sustainable business model innovation by proposing a comprehensive framework. The study addresses the following research questions: How can blockchain technology enhance business model components? What are the specific innovations enabled by blockchain technology? To answer these questions, a hybrid approach was employed.
5. Rogova, E., & Avdiaj, S. et al. (2024) This study investigates the environmental impact of cryptocurrency blockchain technology, specifically focusing on the adoption of Bitcoin and Ethereum. Utilizing instrumental regression analysis, it examines the consensus mechanisms Proof of Work (PoW) and Proof of Stake (PoS) and their association with carbon footprint.
6. Ullah, I., & All, Z. et al. (2024) Smart cities stand as pivotal components in the ongoing pursuit of elevating urban living standards, facilitating the rapid expansion of urban areas while efficiently managing resources through sustainable and scalable innovations.
7. Sembiring, L., & Efendy, R. et al. (2023) Existing business models are changed and disrupted by blockchain technology, which warrants more research. This study tries to describe the phenomena of blockchain technology in relation to business model innovation in the enterprise ecosystem on the basis of that.
8. Gatenheim, J., & Lindfors, A. et al. (2023) The following report addresses value-added services in international freight forwarding. The study was conducted at JAS Worldwide, one of the actors in this industry with a regional headquarter in Gothenburg. The company aims to investigate the customers' demands in the automotive industry, how well they can satisfy those demands with their services, and their understanding of what the customers perceive as value, as they intend to expand within this segment.
9. Garg, A. et al. (2023) Purpose-This paper analyse the predictors of performance of freight forwarding companies by examining the relationships among service quality, on-time delivery, flexibility in operation, cost of services, customer service, value added services and performance of freight forwarding companies.
10. Gupta, S. K., Ilinich, S., & Noah, V. et al. (2023) Customs clearance is a necessary procedure before goods can be imported or exported internationally. If a shipment is cleared, then the shipper will provide documentation confirming customs duties that are paid and the shipment can be processed.
11. Popa, C., & Goia, I. et al. (2022) This paperwork is aiming to describe the business model for freight forwarding services as part of the logistics network, in reference to the freight shipments for individuals or corporations toward the market demand, as final customer, or to final points of goods distribution.
12. Purwoko, H., Thamrin, H. M., Yuliyanto, A., & Sembiring, H. A. et al. (2022) Logistics is as service industry that relies heavily on people to execute operations in order to provide a better perception to customers through customer service. In stiff competition, customer service will make a big difference between competitors.
13. Oni, B. G., & Ojekunle, A. J. et al. (2022) The performance of the Nigerian manufacturing sector has been unsatisfactory low. This study therefore investigates the impact of Customs clearance process



in Lagos Seaports on the performance of the three dominant sectors namely consumers’ goods, industrial goods and Healthcare manufacturers.

14. Nguyen, T. et.al. (2021) The theoretical framework describes logistic structure of organization in Vietnam, and explain how business competence of a service company is evaluated in the context of this thesis. The research method used in this thesis was literature review. The literature was conducted by using reliable databases and academic sources.

15. Bassa, L., Owusu Kwateng, K., & Kamewor, F. T. et. al. (2021) Seaports play an immeasurable role in the advancement of international trade. They have been the common avenue for the transportation of goods and services from one continent to another, and it has also been the linking transport of one mode of transport to another.

Research Objectives

The research employed a mixed-methods approach, combining qualitative interviews with 20 stakeholders at Freedom Shipping Agency and a structured questionnaire distributed to 200 logistics professionals, including freight forwarders, customs brokers, and import/export business owners. Data was analyzed using percentage analysis, ANOVA, and Chi-Square tests to assess relationships between variables such as respondent roles and perceptions of customs clearance efficiency. The survey revealed a balanced gender distribution (50% male, 50% female) and a youthful demographic, with 74.5% of respondents aged 18-25 and 59% having less than one year of industry experience.

Respondents

The respondent pool comprised 50% male and 50% female participants, with 74.5% aged 18-25 and 59% having less than one year of experience. Freight forwarders and business owners were the primary respondents, reflecting their prominence in logistics operations. Table 1 shows the distribution by role.

Table 1. Percentage Distribution of Respondents by Role

Role	No.	%
Freight Forwarder	85	42.5
Customs Broker	47	23.5
Import/Export Business	68	34
Total	200	100

Statistical Analysis

Data was analysed using percentage analysis for descriptive insights, ANOVA to compare efficiency ratings across roles, and Chi-Square tests to assess relationships between variables (e.g., delays and communication frequency). The rotated component matrix identified key factors influencing perceptions of customs clearance.



Results and Discussion

The study reveals strong awareness of customs clearance as a value-added service, with 90% of respondents acknowledging its role. Additionally, 81% rated it as very or extremely important, emphasizing its strategic significance.

Usage and Efficiency: 76% of respondents utilized customs clearance services, primarily timesaving (42%) and cost efficiency (35.5%). However, 42.5% rated efficiency as poor, and 45% as average. ANOVA results ($p=0.263$) indicate no significant difference in efficiency perceptions across roles, suggesting widespread dissatisfaction.

Variable	Component 1	Component 2	Component 3
Service Efficiency	0.821	0.051	-0.102
Delays Frequency	0.815	-0.163	0.037
Communication Updates	0.847	-0.036	0.006
Digitalization Support	0.153	0.354	0.109

Challenges: Delays were frequent (57.5% often or always), followed by unexpected charges (47.5%) and documentation errors (28%). Only 50.5% received regular updates, highlighting communication gaps.

Cost and Satisfaction: 77.5% noted increased costs due to customs clearance, though 15.5% reported savings from efficiency gains

Technology Adoption: 45.5% supported digitalization, and 73% favored AI integration. However, 50% were hesitant to invest, citing costs and implementation challenges.

Table 2. Rotated Component Matrix for Key Variables

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

The findings align with Gupta et al. (2023), who noted inefficiencies in Indian customs processes. The high incidence of delays and charges underscores the need for technological intervention, as supported by Stolarski et al. (2025).

Recommendation

To strengthen customs clearance as a value-added service, freight forwarders like Freedom Shipping Agency should:

Enhance Transparency: Provide itemized cost estimates to eliminate unexpected charges.

Adopt Technology: Implement AI-driven documentation and real-time tracking systems to reduce errors and delays.

Improve Communication: Use digital tools like email alerts and online portals for consistent updates.

Invest in Training: Equip staff with expertise in customs regulations and digital tools.

Promote Digitalization: Conduct awareness campaigns to encourage technology adoption among stakeholders.



Conclusion

The study was carried out to evaluate the impact of customs clearance as a value-added service in freight forwarding at Freedom Shipping Agency, Tuticorin. Effective customs clearance is essential for seamless international trade. The agency must adopt strategic measures to enhance its customs clearance processes. Freedom Shipping Agency should implement proactive planning to streamline customs operations. This requires a dedicated team focused on ensuring compliance, leveraging technology, and maintaining strong coordination with regulatory authorities. The agency experiences challenge due to regulatory complexities, which impact operational timelines and client satisfaction. Adopting advanced technologies, such as automated documentation and real-time tracking, can mitigate these issues and improve service reliability. While the company already employs some technological solutions, additional tools and training for staff would further enhance customs clearance efficiency and client trust. Addressing these areas diligently can help achieve operational excellence. Efficient customs clearance also benefits the agency from multiple perspectives, so sustained efforts are needed to maintain and improve this critical service. The management must prioritize investment in technology and expertise to sustain the competitive advantage gained through effective customs clearance, as this will significantly contribute to the agency's success in the global logistics market.

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