

CUSTOMS CLEARANCE EFFICIENCY IN FREIGHT FORWARDING PROCESS

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ABSTRACT

Customs clearance of cargo plays a pivotal role in facilitating international trade by ensuring compliance with regulations and facilitating the movement of goods across borders. The researcher started the study with the following research question. 1. How can be efficiency be achieved in customs clearance process?. 2. Why is it essential to be efficient in freight forwarding process? 3. What are the ways and means of achieving efficiency in customs clearance freight forwarding process? Descriptive research design is adopted in this study with a sample size of 143. The study provides information on customs clearance efficiency in freight forwarding process. The study focuses on efficient clearance procedures such as overcoming delays, minimizing costs and enhancing supply chain efficiency. It highlights the importance of efficient customs clearance procedures in reducing delays, minimizing costs, and enhancing supply chain efficiency. The study also emphasizes the impact of digitalization and technological advancements in customs clearance, emphasizing the adoption of electronic systems and risk-based approaches to streamline processes and enhance trade facilitation. Furthermore, it underscores the need for collaboration between stakeholders, including customs authorities, importers, exporters, and logistics service providers, to address challenges and ways to improve the overall effectiveness of customs clearance operations. The study throws light on the scope for further research in this domain. Overall, this study shed light on the critical role of customs clearance in facilitating global trade and underscores the importance of continuous improvement and innovation in this domain.

Keywords: *Customs, clearance, process, freight forwarding, operations, efficiency etc.*

1. Introduction

The crucial step in freight forwarding is customs clearance, ensuring the lawful entry of goods into a country while adhering to customs regulations. It primarily involves the submission and verification of essential documentation such as commercial invoices, packing lists, bills of lading, certificates of origin, and necessary permits or licenses.

Accuracy and completeness of these documents are imperative to avoid delays, fines, or potential seizure of the goods.

Freight forwarders serve as intermediaries between importers/exporters and customs authorities, leveraging their expertise in international trade regulations to expedite the clearance process. To guarantee the prompt submission and processing of necessary



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documentation, they collaborate with shipping companies, airlines, customs officers, and other relevant parties. Additionally, freight forwarders assist clients in determining and paying duties, taxes, and other fees imposed by customs to avoid delays or penalties.

Furthermore, physical inspections of the products by customs authorities to confirm their value, contents, and conformity with import laws may be necessary as part of the customs clearance process. In order to make sure that the products are available for inspection and to facilitate any necessary communication between customs authorities and their clients, freight forwarders manage these inspections. Essentially, customs clearance in freight forwarding ensures that goods can enter a country lawfully and in compliance with regulations, which is why it is crucial for facilitating international trade. In order to ensure that their clients' goods are moved across borders without incident, freight forwarders are essential in navigating the

complexity of the customs clearance process.

Problem Statement

Significant difficulties are presented by the inefficiencies in the freight forwarding process's customs clearance, which include delays, higher expenses, and compliance problems. This study aims to thoroughly examine these barriers and propose solutions to streamline the customs clearance process, ultimately enhancing efficiency and facilitating smoother international trade operations by streamlining the customs clearance procedure.

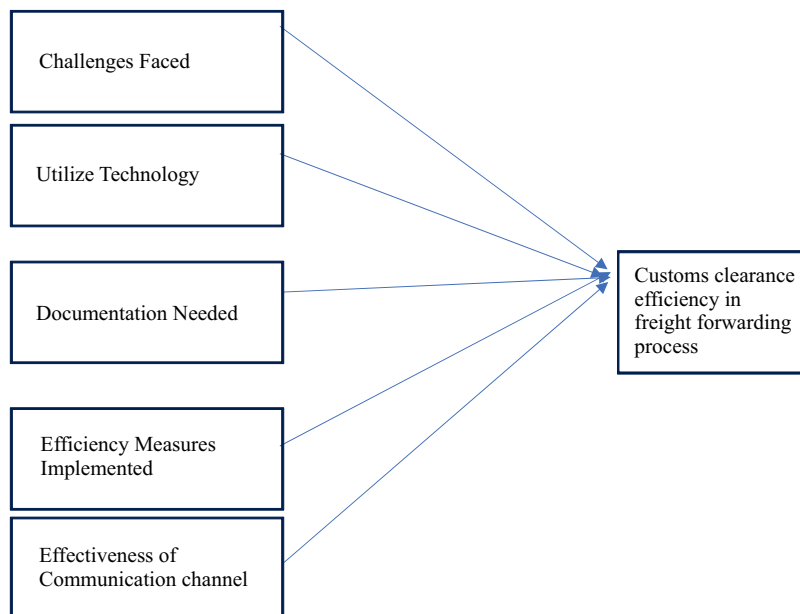
Objectives of the Study

1. To study the challenges faced by freight forwarders in customs clearance processes, such as delays, documentation issues, communication barriers, and regulatory compliance.
2. To study the level of customs clearance efficiency in freight forward processing.
3. To find relationship between independent and dependent factors.

FRAMEWORK

INDEPENDENT FACTORS

DEPENDENT FACTOR



2. Review of Literature

BJ Kipkoech (2020) found the declaration process significantly improves the efficiency of clearing and forwarding agents. Customs verification and release significantly enhanced performance. The study revealed a strong connection between customs verification and release and job performance. The customs declaration had minimal impact on performance. The study advises implementing pre-lodgment of documents to expedite border clearance processes. Sandeep Kumar Gupta et al (2023) identified the major customs-related problems as unexpectedly high duties, clearance denial, health/sanitary/safety concerns, labeling discrepancies, insufficient documentation, and import/packing regulation issues. PEZA VASP encountered challenges in the importation, lodging, processing of surety bonds, and releasing or clearing of goods as revealed by Eloisa D. Macalino et. al, (2022) study. Based on the analysis, no significant difference was found in the challenges faced by the respondents based on their profile characteristics. To improve customs clearance, the Bureau of Customs should evaluate the current process, devise strategies, and provide regular training for all involved parties.

Cargo Clearance Agents (CCAs) at the Dar es Salaam Port have been evaluated for technical effectiveness by AR Mwaisaka (2021), with particular attention paid to office space, staff qualifications, and ICT equipment. The majority of CCAs were inefficient; factors influencing this included ICT equipment, staff credentials, and office space. Expanded research, trend analysis, allocative efficiency evaluation, and determining the best resources to provide services are among the recommendations. According to Bushra Al-Haddad et al. (2021), customs clearance procedures constitute the foundation of global trade and supply chains, but if they are not properly handled, they can also act as a

bottleneck for import and export companies. This procedure may vary over time in response to shifts in the global economy. Increased lead times, a drop in product availability, and a lower standard of customer service were all consequences of the business's inability to clear cargoes by a specific deadline. Both retailers and government representatives in charge of customs clearance contribute to longer clearance periods. The impact of bureaucratic simplification on customs clearance procedures has been studied by JAC Ayarza (2022), the study evaluates the relevance of Brazil's policy changes in practice using qualitative and descriptive research methods. The results show improved operational efficiency, decreased time and expense burdens, and simplified procedures for international trade. According to Qi Gao et al. (2023), robotic process automation (RPA) is the term for business process software technology used to automate well-defined, repetitive operations in a variety of industries, including accounting and auditing. However, because this subject is unique, its application in customs management has lagged. This study builds a framework model, describes the RPA technology's research and development (R&D) process, and describes how it was introduced into post-clearance audits. It also covers the concept, functions, foundations, and application values of RPA technology. Unit consumption data analysis is used to expound on the application and deployment of RPA.

4. Limitations of the study

1. Information Access and Quality: Obtaining exact and current information on customs freedom can be troublesome due to varying revealing principles across districts and locales.
2. Customs Guidelines Inconstancy: Customs rules vary incredibly across nations and districts, making it trying to sum up discoveries across all areas.

3. Information Assortment Subjectivity: View of effectiveness and fulfillment can be emotional, especially when obtained from overviews or meetings, which might bring inclination into the review.
4. Outer Impacts: Factors like international occasions, monetary slumps, or catastrophic events can influence customs leeway productivity, however may not be represented in the review. Innovation Variations: Organizations fluctuate in their degrees of innovation combination in processes, affecting information similarity across associations.
5. Functional Contrasts: Varieties in organization sizes, designs, and asset accessibility might prompt various traditions leeway efficiencies that the review could not completely catch.

5. Inferential statistics

CHI SQUARE:

HYPOTHESIS:

Null Hypothesis (H0): There is no significant association between the variables timely responses and customs authorities, as tested in the chi-square tests.

Alternative Hypothesis (H1): There is a significant association between the variable's timely responses and customs authorities, as tested in the chi-square tests.

TIMELY RESPONSES:

	Value	df	Asymp.Sig
Pearson Chi-Square	21.407a	8	.006
Likelihood Ratio	26.670	8	.001
Linear-by-Linear Association	5.041	1	.025
N of Valid Cases	143		

a. 11 cells (73.3%) have expected count less than 5. The minimum expected count is .28.

CUSTOMS AUTHORITIES

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	22.518a	8	.004
Likelihood Ratio	26.255	8	.001
Linear-by-Linear Association	5.009	1	.025
N of Valid Cases	143		

a. 11 cells (73.3%) have expected count less than 5. The minimum expected count is .28.

1.01.

INFERENCE:

Chi-Square tests on the information uncover varying measurable importance. Both Pearson Chi-Square and Probability Proportion tests show p-esteem ($p < 0.001$). Less experience prompts conflict. Additionally, bunch view of customs specialist's contrasts ($p < 0.004$). In any case, restricted information (anticipated counts < 5) requires a bigger example size for more grounded ends on customs specialists.

II. ONE-WAY ANOVA:

HYPOTHESIS:

Null Hypothesis (H0): There is no significant difference in the means of the groups tested in the ANOVA tests for (customs regulations, documentation errors, required paperwork, requirements for documentation)

Alternative Hypothesis (H1): There is a significant difference in the means of the groups tested in the ANOVA tests for (customs regulations, documentation errors, required paperwork, requirements for documentation).

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
customs regulations	Between Groups	2.954	2	1.477	.853	.428
	Within Groups	242.347	140	1.731		
	Total	245.301	142			
documentation errors	Between Groups	11.022	2	5.511	4.662	.011
	Within Groups	165.495	140	1.182		
	Total	176.517	142			
required paperwork	Between Groups	3.857	2	1.929	1.652	.195
	Within Groups	163.443	140	1.167		
	Total	167.301	142			
requirements for documentation	Between Groups	8.348	2	4.174	3.452	.034
	Within Groups	169.260	140	1.209		
	Total	177.608	142			

INFERENCE

ANOVA results uncover huge contrasts between bunches for documentation blunders (p- esteem = 0.011) and necessities for documentation (p-esteem = 0.034). This recommends a few gatherings battle more with these perspectives contrasted with others. No huge contrasts were found for customs guidelines (p-esteem = 0.428) or required desk work (p-esteem = 0.195)

CORRELATION:

HYPOTHESIS:

Null Hypothesis (H0): There is no significant correlation between any pair of variables tested in the correlation analysis.

Alternative Hypothesis (H1): There is a significant correlation between at least one pair of variables tested in the correlation analysis

Correlation is significant at the 0.01 level (2-tailed).					
		Adequate support	Responsive workforce	Provide clear instructions	Minimizing delays
Adequate support	Pearson Correlation	1	.547**	.399**	.247**
	Sig. (2-tailed)		.000	.000	.003
	N	143	143	143	143
Responsive workforce	Pearson Correlation	.547**	1	.324**	.467**
	Sig. (2-tailed)	.000		.000	.000
	N	143	143	143	143
Provide clear instructions	Pearson Correlation	.399**	.324**	1	.369**
	Sig. (2-tailed)	.000		.000	.000
	N	143	143	143	143
Minimizing delays	Pearson Correlation	.247**	.467**	.369**	1
	Sig. (2-tailed)	.003	.000	.000	
	N	143	143	143	143

INFERENCE

The relationship examination shows solid positive connections between elements influencing customs clearance efficiency.. Sufficient staff support, a responsive labor force, clear guidelines, and limiting deferrals are essentially interrelated (p -value < 0.01). This recommends that zeroing in on one perspective can definitely affect the others. For instance, giving clear guidelines (relationship = 0.369) could prompt fewer deferrals (connection = 0.247), and a responsive labor force (relationship = 0.547) may be better prepared to deal with circumstances where satisfactory help is significant.

5. Findings

- The group comprises a nearly even distribution of males (53.8%) and females (46.2%), highlighting a balanced representation of genders within the workforce.
- The group is primarily composed of logistics-focused roles, with Logistics Coordinators (39.2%) and Customs Brokers (30.8%) being the most common positions.
- Other roles such as Operations Managers (21.7%) and Customer Service Representatives (8.4%) are present in smaller proportions.
- The workforce consists mostly of individuals with moderate experience levels, with 40.6% having 6-10 years and 39.2% having 0-5 years of experience.
- Only 20.3% of the group have over 10 years of experience, indicating a relatively young work force in terms of industry experience.
- The dominant mode of transportation utilized by the group is sea freight (86.7%), reflecting its critical role in international trade and customs processes.
- Air (7.7%) and road (5.6%) transportation are far less common in comparison, suggesting limited reliance on these modes for freight forwarding.
- The majority of individuals work in medium-sized companies with 51-100 employees (51.0%), indicating a preference for these companies in terms of employment.
- Smaller companies (11.2%) and larger companies (8.4%) are less represented in the group.
- The group primarily focuses on Food and Agricultural Products (38.5%), suggesting a significant reliance on customs clearance efficiency in these sectors.
- Other key industry sectors include Industrial Goods (32.9%), Consumer Goods (18.2%), and Granite Products (10.5%).
- Significant correlations exist, as demonstrated by Pearson Chi-Square and Likelihood Ratio tests (p -values < 0.05).
- A linear relationship is indicated by the Linear-by-Linear Association tests (p -value = 0.025).
- ANOVA Tests for Customs Regulations and Delays shows that
- There is no significant differences were found in means across groups for customs regulations (0.218) and delays in customs clearance processes (0.477).

- There is a significant association ($p < 0.05$) and a potential linear relationship between experience and technology systems used.
- No significant association was found ($p > 0.05$), implying experience level does not significantly impact agreement with these tools.
- Significant differences in means were found for documentation errors and requirements for documentation ($p < 0.05$).
- Post-hoc testing is recommended for these variables to identify specific groups with differing means.
- Significant correlations were found among adequate support, staff training programs, clear instructions, and minimizing delays.
- No significant differences found in customs authorities or delays ($p\text{-value} > 0.05$).

6. Contribution to the society

- The study identified a critical area for improvement – communication within a specific group ($p\text{-value} = 0.008$). To bridge this gap, consider targeted communication strategies. This could involve fostering collaboration between departments, establishing clear communication channels (e.g., designated communication platforms), and conducting regular training sessions on procedures and regulations.
- While experience didn't directly impact agreement on technology usefulness ($p > 0.05$), a potential linear relationship suggests a benefit from increased exposure for all ($p\text{-value} = 0.025$).

Develop user-friendly training modules or workshops to bridge the gap between experience levels and technology adoption. This will ensure everyone feels comfortable and confident utilizing these systems to their full potential.

- Significant differences were found in documentation errors and requirements ($p < 0.05$). Conduct post-hoc testing to pinpoint specific groups struggling with these aspects. This will allow for tailored training programs and targeted support to address these challenges.
- While the workforce is primarily moderate experience (0-10 years), leverage existing expertise. Partner experienced staff (20.3% with over 10 years) with newer employees to create a knowledge-sharing environment and ensure smooth documentation processes.
- The group primarily handles Food and Agricultural Products (38.5%). While optimizing processes for this sector is crucial, ensure effectiveness across all industries (Industrial Goods, Consumer Goods, and Granite Products). Stay informed about trends and updates in relevant customs regulations and requirements for a well-rounded approach.

7. Conclusion

The study identified key areas for improving customs clearance efficiency in the freight forwarding process. These include the need for targeted training due to a younger workforce, prioritizing efficient sea freight clearance, and optimizing processes for specific industries. A freight forwarding company can enhance customs clearance processes, leading to quicker deliveries, lower costs, and higher customer

satisfaction by focusing on training, communication, process optimization, documentation accuracy, and technology integration will enable the company to navigate challenges, harness technology, and achieve efficient international trade. Future studies can be conducted with respect to other areas of freight forwarding efficiency. Likewise, efficiency of other means of transportation can be studied in future.

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