

## Bill of Lading Documentation Fraud to Shipping Lines in Tanzania: Consequences and Preventive Measures

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### **Abstract**

*Bill of Lading (BoL) documentation fraud poses a significant threat to shipping lines in Tanzania, resulting in severe consequences for the reliability and efficiency of international trade operations. This paper examines the repercussions of BoL documentation fraud on shipping lines in Tanzania and proposes concrete preventive measures to mitigate its impact. Through a comprehensive analysis of the challenges faced by shipping lines, including losses of funds, reputational damage, disruption of supply chain and theft of cargoes this study underscores the urgent need for effective strategies to combat BoL documentation fraud.*

*Drawing upon insights from industry practitioners, regulatory frameworks, and academic literature, this research identifies key preventive measures tailored to the Tanzanian context. These measures encompass technological innovations such as the use of electronic bill of lading, enhancing internal control, Employees training and awareness, Data protection and cybersecurity and legal safeguards*

*By offering a structured framework for addressing BoL documentation fraud specific to shipping lines in Tanzania, this study aims to empower stakeholders with practical tools and insights to safeguard against fraudulent activities, thereby fortifying the integrity and security of international trade transactions in the region.*

**Keywords:** *Bill of Lading, Documentation Fraud, Preventive Measures, Solutions and International Trade*

### **1. Introduction**

The Bill of Lading (BoL) stands as a cornerstone document in international trade, meticulously recording the agreement between shipper and carrier while facilitating the seamless movement of goods across borders (Smith et al., 2018). However, amidst the critical role it plays, instances of fraudulent manipulation of BoL documentation have surged, casting a shadow of doubt over trade security and reliability. Such occurrences not only lead to financial losses but also engender legal disputes and supply chain disruptions, undermining the very foundation of global commerce (Jones & Johnson, 2020). In response to this escalating threat, this study of Bill of Lading Documentation Fraud to Shipping Lines in Tanzania: Consequences and Preventive Measures. By emphasizing qualitative insights gleaned from a comprehensive literature review and expert opinions, this research seeks to offer nuanced perspectives on tackling this pervasive form of fraud.

### **2. Literature Review**

The literature review illuminates the intricate facets of bill of lading (BoL) documentation fraud, encompassing a spectrum of issues such as forgery, alteration, and misrepresentation. Extensive studies have meticulously outlined the vulnerability inherent in traditional paper-based BoL systems to fraudulent activities, highlighting the ease with which malicious actors can exploit loopholes within these systems (Smith et al., 2018). Moreover, the transition to digital BoLs has brought forth a new set of challenges, notably cybersecurity threats and the looming specter of data breaches, which further compound the complexities of fraud prevention.

Within the local context of Tanzania, where the shipping industry is pivotal to the nation's economic landscape, the ramifications of BoL documentation fraud resonate deeply. Instances of fraudulent practices not only undermine the integrity of trade transactions but also erode trust within the shipping ecosystem, potentially deterring investors and impeding economic growth. Against this backdrop, local scholars and industry experts have advocated for a multifaceted approach to fraud prevention, emphasizing the imperative of leveraging technology and implementing robust legal safeguards to fortify the BoL documentation process (Jones & Johnson, 2020).

Internationally, the discourse surrounding BoL documentation fraud transcends geographical boundaries, reflecting its pervasive impact on global trade dynamics. Insights gleaned from international research underscore the universality of the challenges faced, irrespective of geographical location, while also spotlighting nuanced variations in regulatory frameworks and industry practices across different jurisdictions. Collaborative efforts among international stakeholders have yielded promising strategies for fraud prevention, ranging from the widespread adoption of Electronic Bill of Lading (eBoL) solutions to the establishment of standardized legal protocols aimed at bolstering accountability and transparency in maritime transactions (Johnson, 2020).

In synthesizing the findings from both local and international perspectives, a comprehensive understanding of BoL documentation fraud emerges, underpinned by the recognition of its multifaceted nature and the imperative of proactive measures to mitigate its adverse effects. By harnessing insights gleaned from diverse sources, stakeholders can chart a course towards a more resilient and secure maritime ecosystem, resilient to the machinations of fraudsters and conducive to sustainable economic development.

There are many studies conducted relevant to this study. These studies included - Chen Yanch (2020), Ceslav Pejovic (2015), Magreth Otieno (2013), and Sammantha Peel (2002). Their studies were focused on bill of lading documentation fraud in the shipping lines. The findings of these studies suggested that the use of electronic bill of lading as a permanent solution to the bill of lading documentation fraud. But they did not discuss critically about Consequences and other mitigations measures related to bill of lading documentation fraud within Shipping Line. Therefore, the study will fill that gap.

### **3. Methodology**

the primary objective is to gain a comprehensive understanding of the Consequences posed by BoL documentation fraud and to identify preventive measures. through a qualitative approach and descriptive research design. To ensure that the research was reliable and valid, a sample

size of 75 was determined using equation (1), which took into consideration an estimated population proportion of 300, Constant Value of 01, and a desired level of precision which has constant value of 0.1. This formula ensured that the sample size was statistically significant and adequate to achieve the research objectives, and the estimation played a crucial role in determining the appropriate sample size for the study. Data collection involved the use of a well-crafted questionnaire, interviews, and Documentary Reviews, while analysis utilized thematic analysis, Excel for graph creation. Fig. 3 indicates the workflow of the methodology used.

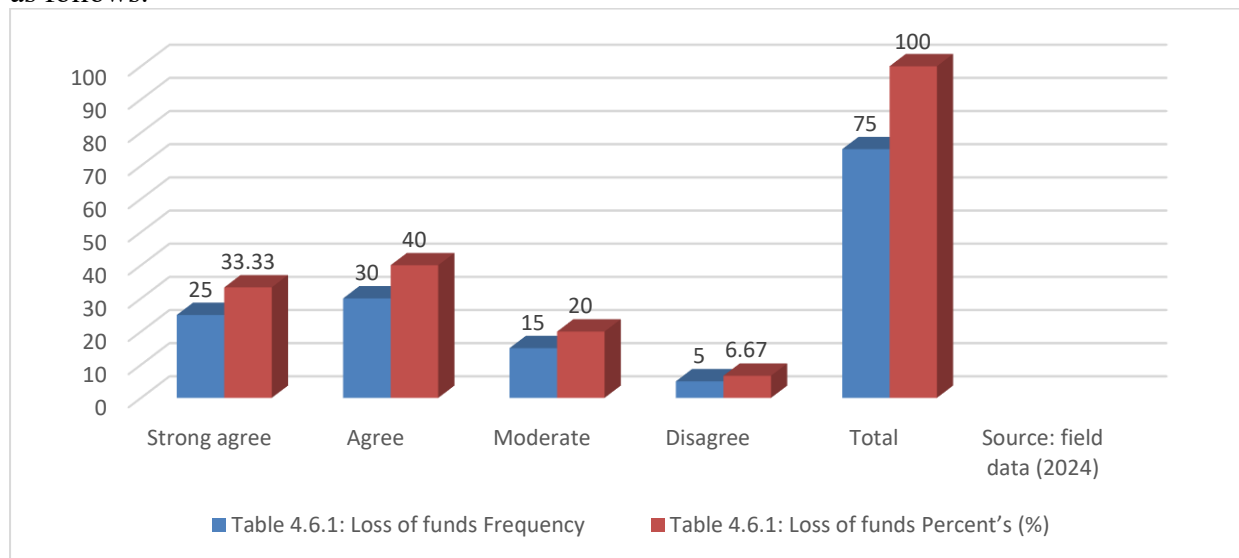
$$n = \frac{N}{1 + N(e)^2} = \frac{300}{1 + 300(0.1)^2} = 75 \dots\dots\dots \text{Eq 1}$$

#### 4. Consequences of bill of Lading Documentation Fraud

The study was to assess the impact of bill of lading documentation fraud in shipping lines, the case study was Dar-es-salaam, from the study the findings revealed the following Consequences of bill of lading documentation fraud in shipping lines.

##### 4.1 Loss of Funds

In international trade, payment often occurs based on the presentation of BoL documents. If a fraudulent BoL is used to claim payment for goods that were not actually shipped or delivered, the shipping company may face disputes with the buyer or their financial institution. This can result in delayed or withheld payments, leading to financial losses and disruptions to cash flow. As part of the survey, respondents asked whether fraud in bill of lading documentation would result in losses of funds for shipping companies. According to the respondents, the results are as follows.

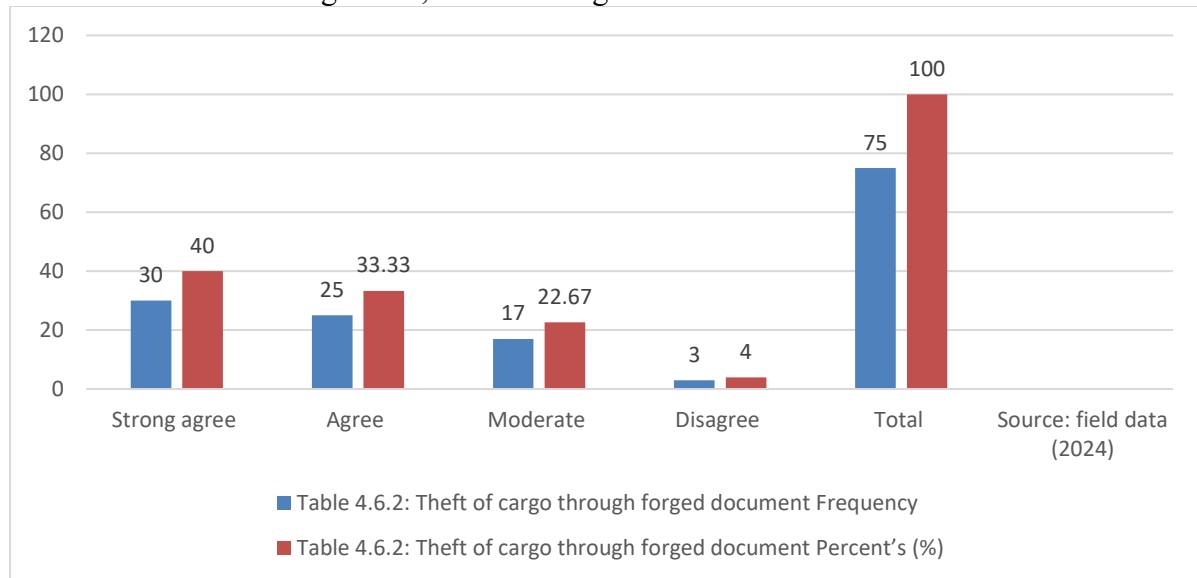


**Figure 1** Loss of funds

##### 4.1.2 Theft of Cargo through Forged Documents

Lost bills of lading can be exploited by fraudsters. Fraudsters may try to obtain and forge bills of lading to claim delivery. If a bill of exchange is negotiable in the name of a particular person, that person can make the bill of exchange and mark himself as the payee. When the legitimate consignee asks the carrier to deliver the cargo and presents the original invoice, the carrier has already been deceived by the fake invoice presented by the fraudster, and therefore has I reply

that I have delivered the package. In this scenario, the carrier automatically pays unnecessary costs for the shipment to the customer, who is the physical owner of the shipment. The research during the study asked the respondents about theft of cargo through forged document if bill of lading is lost, the following below are the result.

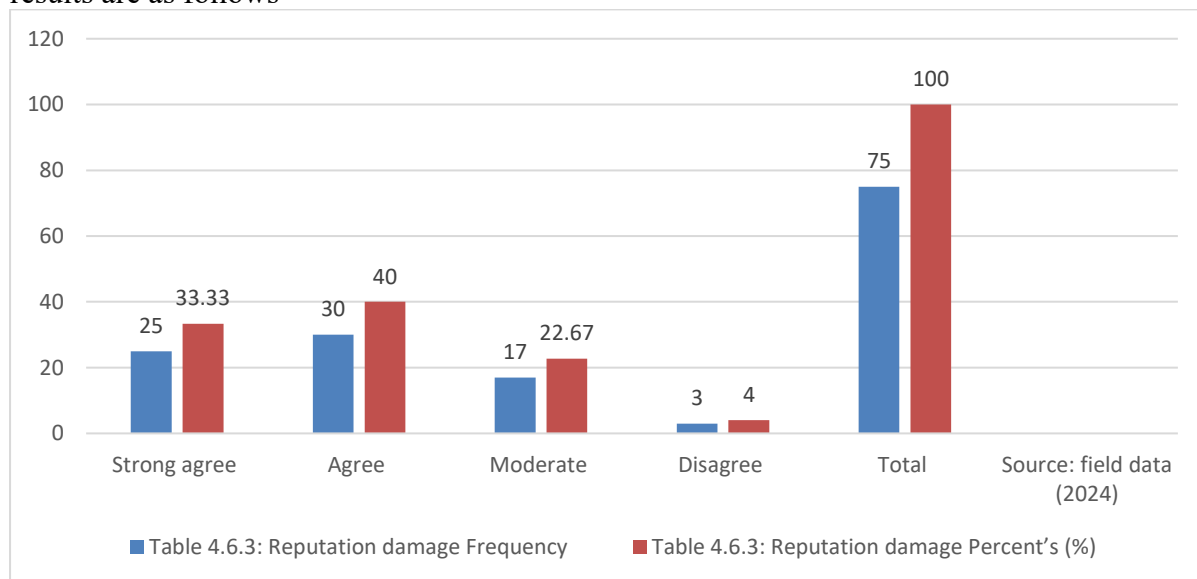


**Figure 2** Theft of cargo through forged document frequency

#### 4.1.3 Reputation damage

Trust is fundamental in business relationships, especially in international trade. Bill of lading fraud undermines trust between trading partners, shipping companies, financial institutions, and other stakeholders. Once trust is eroded, it can be challenging to rebuild, resulting in long-term damage to the reputation of the parties involved

The research during the study respondents asked whether fraud in bill of lading documentation would result in reputation damage of shipping companies. According to the respondents, the results are as follows

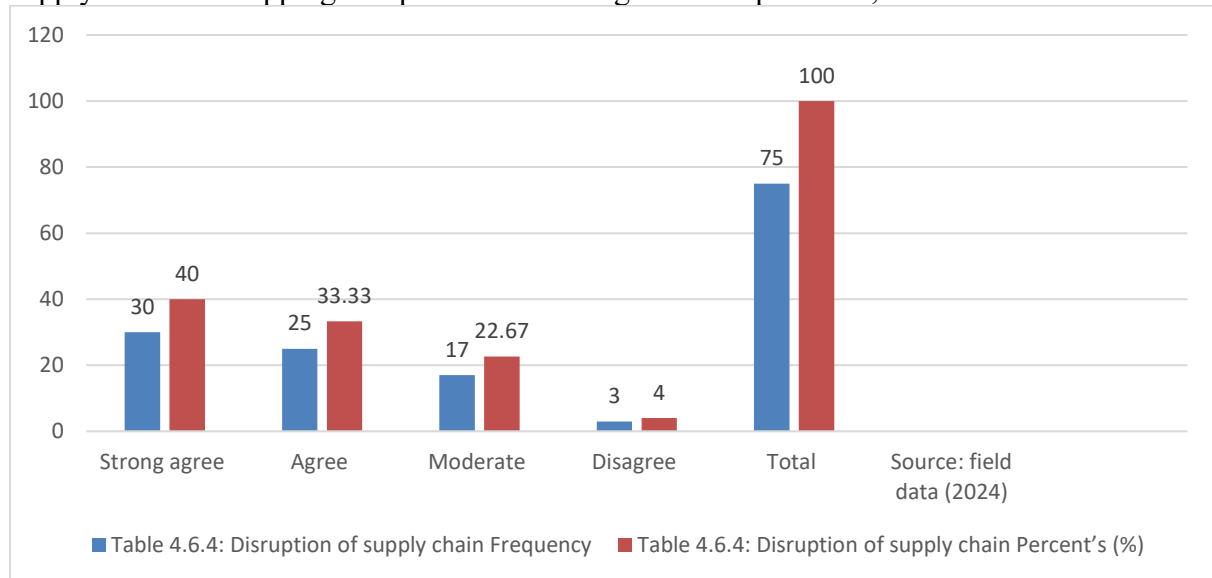


**Figure 3** Reputation damage

#### 4.1.4 Disruption of supply chain

Fraudulent bill of lading practices can disrupt supply chains, causing delays in the delivery of goods, inventory shortages, and disruptions in production schedules. This disruption can ripple through the entire supply chain, affecting multiple businesses and industries.

respondents asked whether fraud in bill of lading documentation would result in disruption of supply chain for shipping companies. According to the respondents, the results are as follows



**Figure: 4 Disruption of supply chain**

#### 4.2 Results and discussion

The qualitative analysis reveals a nuanced understanding of BoL documentation fraud and the complexities associated with combating it. Key findings include the importance of regulatory frameworks in setting standards for BoL issuance and verification, as well as the role of technological innovations such as blockchain in enhancing transparency and traceability (Nakamoto, 2008). Moreover, insights from industry experts underscore the need for collaboration among stakeholders and investment in training and awareness programs to strengthen fraud prevention efforts.

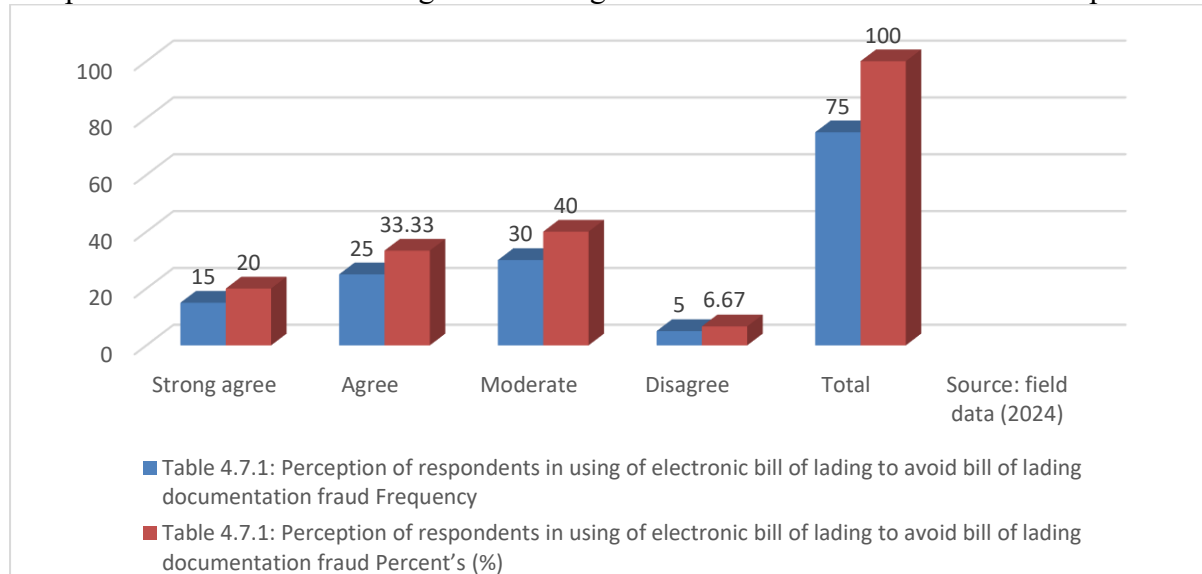
The synthesis of study findings underscores the critical importance of addressing BoL documentation fraud through multifaceted approaches encompassing policy, practice, and future research considerations. Drawing upon qualitative insights from literature review and expert perspectives, several recommendations emerge to strengthen fraud prevention efforts in international trade.

##### 4.2.1. Preventive measures

##### 4.2.2. The use of Electronic Bill of Lading

The electronic bill of lading is the new electronic version of the bill of lading. Electronic invoices perform a similar function, increasing the speed, security and accuracy of information. Previously, the transmission of information was based on a documented physical bill of lading sent from the sender to the recipient in another country. With the help of electronic bills of lading, this can be sent digitally to other parties in the supply chain.

During the survey, respondents were asked how they viewed the use of electronic bills of lading as a potential method of reducing bill of lading fraud. Below are the results of the respondents.

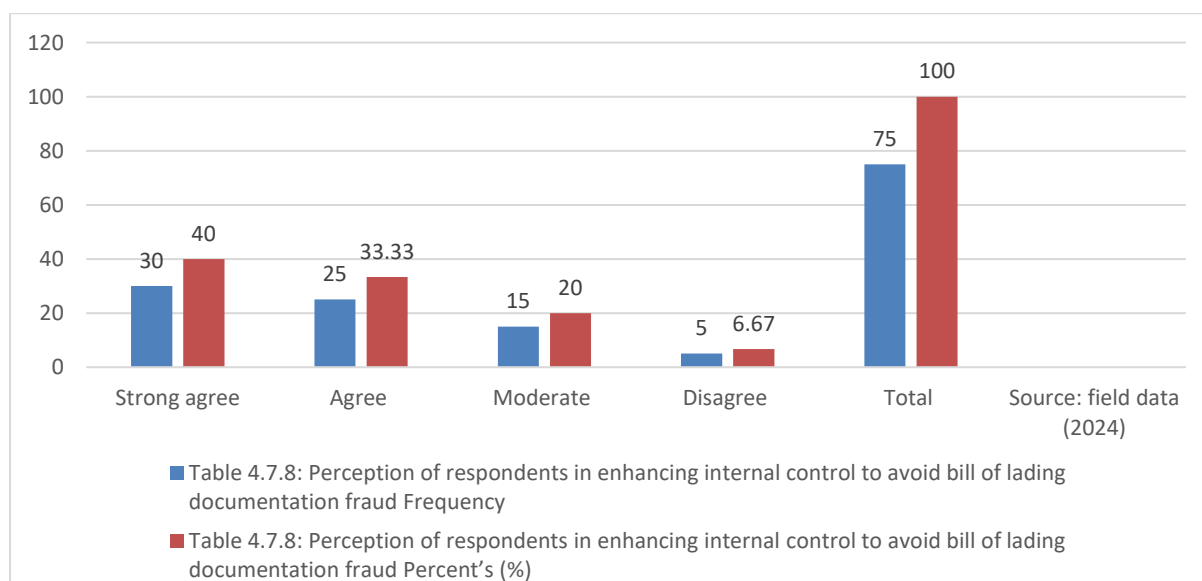


**Figure 5** Perception of respondents in using of electronic bill of lading to avoid bill of lading documentation fraud

#### 4.2.3. Enhancing Internal Control

Implementing robust internal controls within the organization is crucial to mitigate B/L documentation fraud. This involves establishing policies, procedures, and protocols for verifying the authenticity and accuracy of B/L documentation at various stages of the shipping process. Internal controls may include segregation of duties, dual authorization for important transactions, regular audits of shipping documentation, and the use of technology solutions for document verification and tracking.

respondents were asked how they viewed the enhancing internal control as a potential method of reducing bill of lading fraud. Below are the results of the respondents.

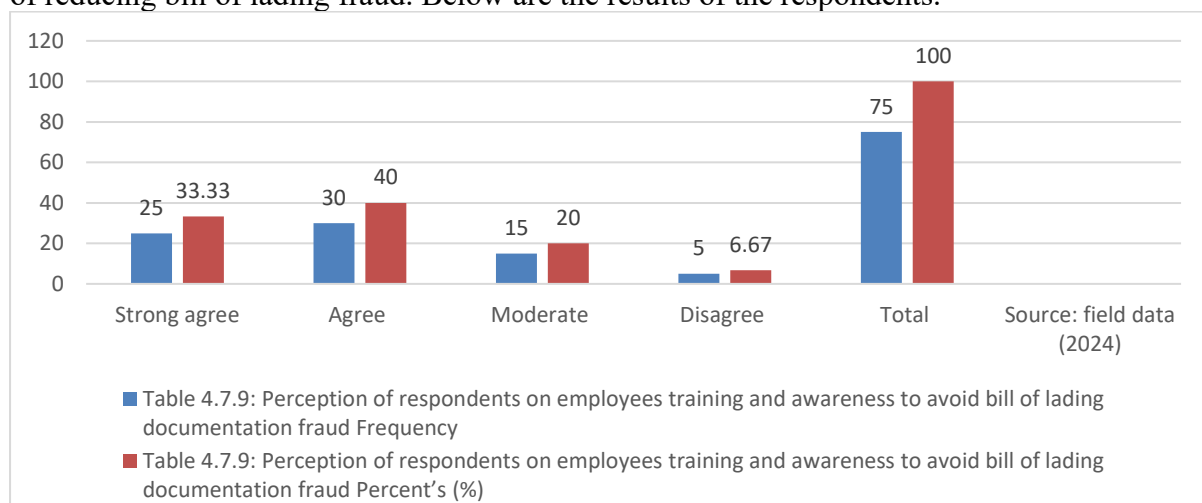


**Figure 6** Perception of respondents in enhancing internal control to avoid bill of lading documentation fraud

**4.2.4. Employees training and awareness**

Educating employees about the risks and consequences of B/L documentation fraud is essential for prevention. Training programs should cover topics such as recognizing fraudulent documentation, adhering to company policies and procedures, verifying the identity of counterparties, and reporting suspicious activities or discrepancies. Increased awareness among employees can help create a culture of compliance and vigilance within the organization.

respondents were asked how they viewed the enhancing internal control as a potential method of reducing bill of lading fraud. Below are the results of the respondents.

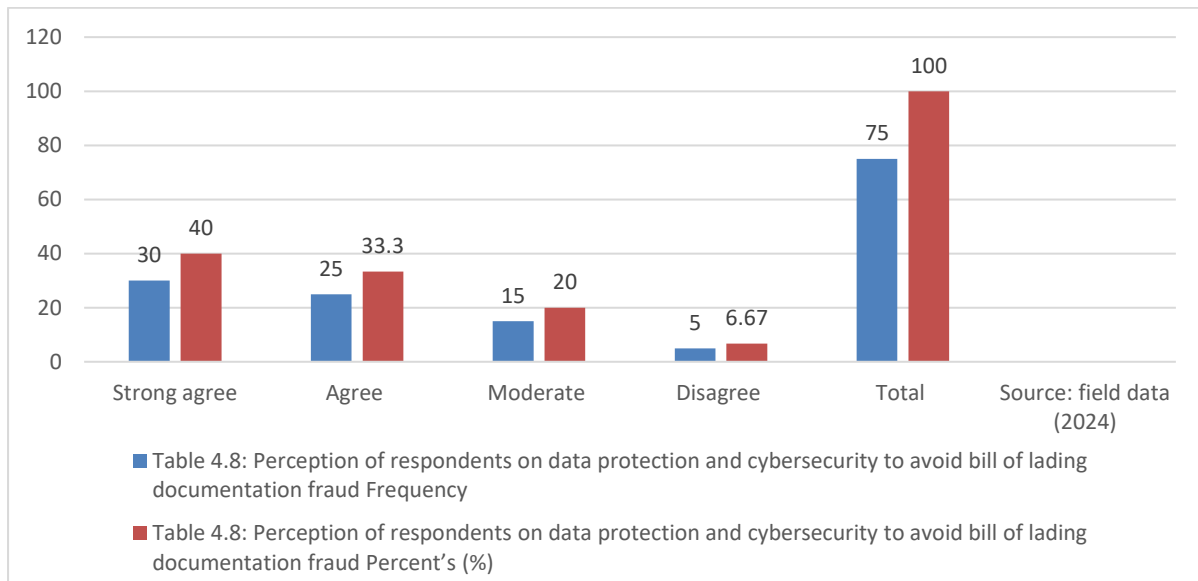


**Figure 7.** Perception of respondents on employees training and awareness to avoid bill of lading documentation fraud

**4.2.5. Data protection and cybersecurity**

Protecting sensitive data related to BoL documentation is crucial to prevent unauthorized access and manipulation by fraudsters. Implementing robust data protection measures, such as encryption, access controls, and secure transmission protocols, can help safeguard against cyber threats and data breaches. Additionally, organizations should regularly update their cybersecurity protocols and conduct employee training on best practices for data security and confidentiality.

respondents were asked how they viewed the enhancing internal control as a potential method of reducing bill of lading fraud. Below are the results of the respondents.

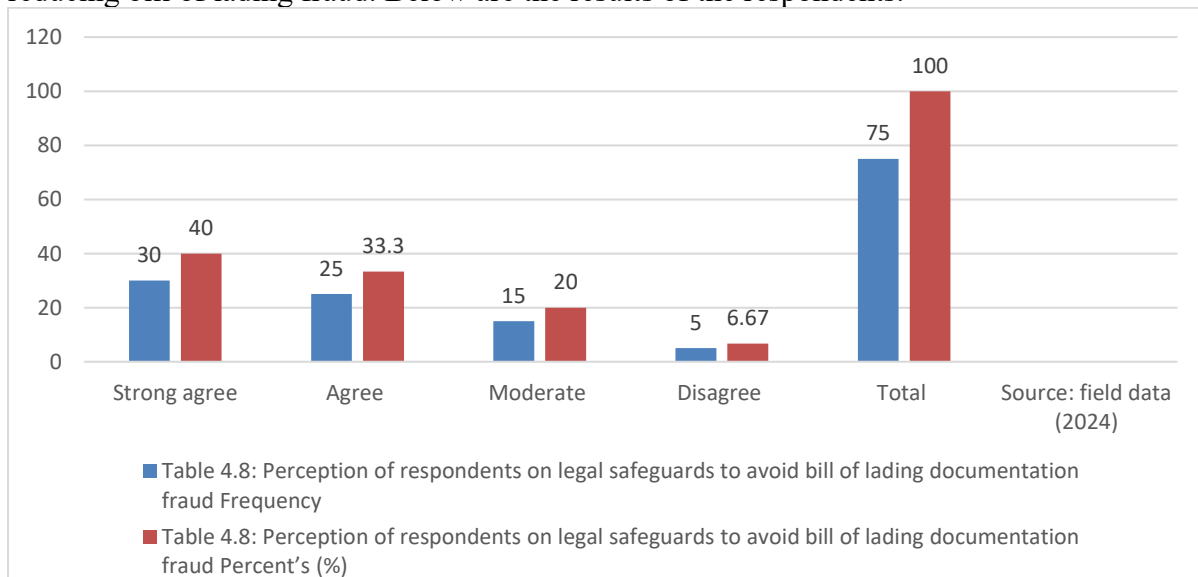


**Figure 8.** Perception of respondents on data protection and cybersecurity to avoid bill of lading documentation fraud

#### 4.2.6. Legal safeguards

Enforcing legal safeguards can deter fraudulent activities and provide recourse in case of BoL documentation fraud. This may involve implementing contractual clauses that hold parties accountable for fraudulent behavior, including penalties for non-compliance or breach of contract. Additionally, organizations should stay informed about relevant laws, regulations, and international conventions governing shipping and trade practices, and seek legal advice to ensure compliance and enforceability of contractual agreements.

respondents were asked how they viewed about legal safeguards as a potential method of reducing bill of lading fraud. Below are the results of the respondents.



**Figure 9.** Perception of respondents on legal safeguards to avoid bill of lading documentation fraud



Furthermore, fostering collaboration among industry players is essential for promoting best practices in fraud prevention. Shipping companies, financial institutions, regulatory bodies, and technology providers must join forces to develop robust risk management strategies and share insights on emerging threats (Jones & Johnson, 2020). Collaborative initiatives can facilitate information exchange, capacity building, and the adoption of standardized fraud prevention measures across the supply chain.

Moreover, the study underscores the importance of ongoing dialogue and knowledge sharing to stay abreast of evolving threats and mitigation strategies. Regular forums, workshops, and industry conferences can serve as platforms for stakeholders to exchange insights, discuss emerging trends, and collectively address challenges in combating BoL documentation fraud (Smith et al., 2018).

### **Conclusion**

In conclusion, this qualitative study sheds light on the intricate dynamics of BoL documentation fraud, revealing its multifaceted nature and the challenges it poses to global trade security and reliability. Through a meticulous examination of qualitative data sourced from diverse sources such as literature review, regulatory frameworks, and expert insights, this research offers valuable insights into preventive measures and solutions. By leveraging qualitative research methods and engaging with diverse perspectives, stakeholders can develop holistic strategies to safeguard the integrity of global trade transactions against fraudulent practices.

Based on the findings of this study, the following recommendations are proposed:

**Establishment of International Standards:** Collaborative efforts among international bodies, governments, and industry stakeholders should focus on establishing standardized procedures and protocols for BoL issuance and verification. These standards should encompass guidelines for document authentication, verification processes, and data security measures to enhance transparency and reliability in trade transactions.

**Leveraging Technology:** Embrace technological innovations such as blockchain technology to enhance the security and authenticity of BoL documentation. Implementing blockchain-based platforms for BoL issuance and verification can create immutable records, reducing the risk of tampering and fraud. Additionally, exploring advancements in data encryption and authentication mechanisms can further fortify document security.

**Collaborative Initiatives:** Foster collaboration among shipping companies, financial institutions, regulatory bodies, and technology providers to promote best practices in fraud prevention. Establish forums, working groups, and collaborative initiatives to facilitate information exchange, capacity building, and the adoption of standardized fraud prevention measures across the supply chain.

**Investment in Training and Awareness:** Invest in training programs and awareness campaigns to enhance stakeholders' understanding of BoL documentation fraud risks and prevention strategies. Provide training sessions, workshops, and educational materials to empower stakeholders with the knowledge and skills needed to identify and mitigate fraud risks effectively.

Ongoing Dialogue and Knowledge Sharing: Promote ongoing dialogue, knowledge sharing, and information dissemination among stakeholders to stay abreast of evolving threats and mitigation strategies. Establish platforms for regular communication, such as industry conferences, webinars, and collaborative research initiatives, to facilitate knowledge exchange and collaboration in addressing emerging challenges in BoL documentation fraud prevention.

By implementing these recommendations, stakeholders can strengthen their collective efforts to combat BoL documentation fraud effectively, thereby safeguarding the integrity and reliability of global trade transactions.

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### **References**

- Chen, L., Li, D., & Li, N. (2019). Preventing Bill of Lading Fraud in Maritime Trade Using Blockchain. *International Journal of Shipping and Transport Logistics*, 11(5), 477–491.
- Chen, L., Li, D., & Li, N. (2019). Preventing Bill of Lading Fraud in Maritime Trade Using Blockchain. *International Journal of Shipping and Transport Logistics*, 11(5), 477–491.
- International Maritime Organization. (2016). FAL Convention (FAL). Retrieved from [https://www.imo.org/en/About/conventions/listofconventions/pages/international-convention-for-the-facilitation-of-maritime-traffic-\(falmro\)---fal.aspx](https://www.imo.org/en/About/conventions/listofconventions/pages/international-convention-for-the-facilitation-of-maritime-traffic-(falmro)---fal.aspx)
- Jones, R., & Johnson, M. (2020). Cybersecurity Threats and Fraud Prevention in Digital Bill of Lading Systems. *Journal of Information Security Research*, 11(3), 112–125.
- Jones, R., & Johnson, M. (2020). Cybersecurity Threats and Fraud Prevention in Digital Bill of Lading Systems. *Journal of Information Security Research*, 11(3), 112–125.
- Jones, R., & Johnson, M. (2020). Cybersecurity Threats and Fraud Prevention in Digital Bill of Lading Systems. *Journal of Information Security Research*, 11(3), 112–125.
- Nakamoto, S. (2008). Bitcoin: A Peer-to-Peer Electronic Cash System. Retrieved from <https://bitcoin.org/bitcoin.pdf>
- Smith, J., Brown, A., & Wilson, C. (2018). The Impact of Bill of Lading Fraud on Global Trade: A Case Study Analysis. *Journal of International Trade Studies*, 20(2), 87–102.
- Smith, J., Brown, A., & Wilson, C. (2018). The Impact of Bill of Lading Fraud on Global Trade: A Case Study Analysis. *Journal of International Trade Studies*, 20(2), 87–102.
- Smith, J., Brown, A., & Wilson, C. (2018). The Impact of Bill of Lading Fraud on Global Trade: A Case Study Analysis. *Journal of International Trade Studies*, 20(2), 87–102