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LOGISTICS RISK MANAGEMENT AND DELIVERY PERFORMANCE OF INTERNATIONAL SHIPPING COMPANIES IN SOUTH-WEST NIGERIA

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ABSTRACT: *This study examined logistics risk management and delivery performance of international shipping companies in South-West Nigeria. The correlational research design and the positivist research philosophy were applied in this study. The population of this study consisted of 12 international shipping companies in South-West Nigeria. The census sampling technique was adopted where all the members of the population were studied. The sampling units consisted of managers of international shipping companies in South-West Nigeria. The instrument for data collection was the questionnaire which was structured on a point rating scale. The data collected via the questionnaire were analyzed statistically while the hypotheses were tested using Spearman Rank Order Correlation Coefficient (rho). The SPSS version 24 was used to correlate the data collected on the study variables. The findings revealed that transportation risk management has a significant relationship with accurate delivery of international shipping companies. This study also reported a significant relationship between transportation risk management and on-time delivery of international shipping companies. The study equally revealed that warehousing risk management has a significant relationship with accurate delivery of international shipping companies. The study also found a significant relationship between warehousing risk management and on-time delivery of international shipping companies. Therefore, it was concluded that logistics risk management, such as transportation and warehousing risk management, significantly improve delivery performance of international shipping companies in South-West Nigeria. Hence, it was recommended that international shipping companies in Nigeria should manage their logistics risks effectively as it would enhance their delivery performance.*

KEYWORDS: Logistics risk management, transportation risk management, warehousing risk management, delivery performance, accurate delivery and on-time delivery.

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INTRODUCTION

It is often said that production is not complete until the goods produced get to the final consumers. This statement emphasizes the importance of delivery in the supply chain of a company. Delivery constitutes the last stage in a typical supply chain and this function is performed by logistics companies. According to Barbengi and Kibet (2018), delivery is a crucial stage in the supply chain because it is at this stage that the production effort is completed. Shipping companies complete the production process of a company by delivering goods to the final consumers. These companies move cargos across national boundaries and ensure that consignments are delivered to their destinations in a safe and good condition. This logistics function performed by shipping companies comes with huge risks and if these risks are not spotted on time and mitigated, they will cause serious disruptions and delays in the delivery of products (Ifekanandu, 2024). Therefore, in order to improve their delivery performance, international shipping companies need to manage their logistics risk effectively.

Logistics risk management is the process of identifying, assessing and mitigating the possible obstacles that could hinder the smooth flow of goods along the supply chain of a company (Vilko & Hallikas, 2012). Managing logistics risk is an important activity because it enables companies to spot potential obstacles before they manifest into big problems. Once companies have spotted the possible obstacles that could hinder the smooth flow of goods, they can then develop plan to address them whenever they occur and prevent expensive disruptions that could arise from these potential obstacles. Unexpected circumstances or hazards during logistics operations can send a severe shock to a company and disrupt the company's operations, leading to financial loss (Ifekanandu, 2024). Kwak (2014) noted that disruptions in logistics operations can slow down the entire delivery process and lead to poor delivery performance. By identifying the possible risks, companies can develop plans to handle them whenever they arise and make their logistics operations more efficient and reliable.

Logistics risk management is considered as a strategic tool for business survival. According to Civelek (2023), risk management in logistics operations can help companies to track and handle possible logjams before they turn into roadblocks that can hinder business continuity. Managing risks associated with transportation, warehousing, inventory, order fulfillment and reverse logistics can help shipping companies to prevent unnecessary disruptions, save costs and ensure on-time delivery of goods to their destinations (Mutimbia, 2018). Customers value accurate and timely deliveries; hence, shipping companies need to identify and mitigate logistics risks that can cause serious disruptions and delays in the delivery of consignments to customers. Thus, effective logistics risks management minimizes business disruptions, lowers costs, and improves operational efficiency and delivery performance. It is against this backdrop that this study examines the relationship between logistics risk management and delivery performance of international shipping companies in South-West Nigeria.

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Statement of the Problem

Improving delivery performance has been a challenging task for many shipping companies in Nigeria. Many shipping companies in Nigeria are finding it difficult to deliver consignments to their destination in a timely and accurate manner. These companies encounter a lot of disruptions in the process of delivering consignments to their destinations. The disruptions encountered by shipping companies have caused unnecessary costs and delays in the delivery of goods to customers. A good number of shipping companies have lost a significant number of their customers due to poor delivery performance. As an effort to improve their delivery performance, some shipping companies have begun to take risk management more seriously than ever before. These companies have attached much importance to transportation and warehousing risks management with the aim of improving their delivery performance. Since these companies embraced logistics risk management, it is not yet certain whether it has improved their delivery performance as there is the absence of empirical literature that shows the relationship between logistics risk management and the delivery performance of shipping companies in Nigeria. This gap in empirical literature needs to be filled and this is the motivation behind this study.

CONCEPTUAL FRAMEWORK

The conceptual framework of logistics risk management and delivery performance of international shipping companies is shown in Figure 1 below:

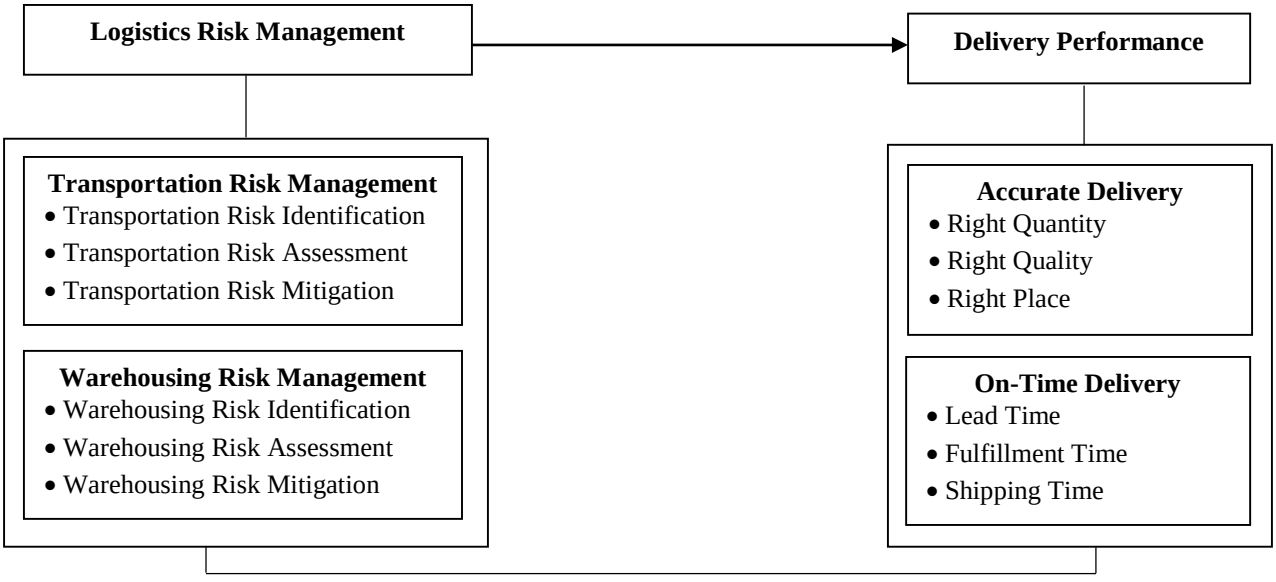

Fig. 1: Conceptual framework of logistics risk management and delivery performance of international shipping companies

Source: *Author's Conceptualization*

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Aim and Objectives of the Study

The aim of this study is to explore the relationship between logistics risk management and delivery performance of international shipping companies in South-West Nigeria. The specific objectives of the study are to:

1. determine the relationship between transportation risk management and accurate delivery of international shipping companies in South-West Nigeria;
2. ascertain the relationship between transportation risk management and on-time delivery of international shipping companies in South-West Nigeria;
3. examine the relationship between warehousing risk management and accurate delivery of international shipping companies in South-West Nigeria;
4. determine the relationship between warehousing risk management and on-time delivery of international shipping companies in South-West Nigeria.

Research Questions

The following research questions were raised in this study:

1. What is the relationship between transportation risk management and accurate delivery of international shipping companies in South-West Nigeria?
2. To what extent does transportation risk management enhance on-time delivery of international shipping companies in South-West Nigeria?
3. What is the relationship between warehousing risk management and accurate delivery of international shipping companies in South-West Nigeria?
4. To what extent does warehousing risk management enhance on-time delivery of international shipping companies in South-West Nigeria?

Research Hypotheses

The following hypotheses were postulated in this study:

Ho_1: There is no significant relationship between transportation risk management and accurate delivery of international shipping companies in South-West Nigeria.

Ho_2: There is no significant relationship between transportation risk management and on-time delivery of international shipping companies in South-West Nigeria.

Ho_3: There is no significant relationship between warehousing risk management and accurate delivery of international shipping companies in South-West Nigeria.

Ho_4: There is no significant relationship between warehousing risk management and on-time delivery of international shipping companies in South-West Nigeria.

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Review of Related Literature

Concept of Logistics Risk Management

Logistics risk management is the process of identifying and handling the potential and unforeseen circumstances that could hinder the smooth flow of goods along the supply chain (Singhal et al., 2011). Managing logistics risk is important because various factors or unforeseen circumstances, such as natural disasters, man-made errors and geopolitical challenges, can cause serious disruptions to the logistics processes (Colicchia & Strozzi, 2012). However, it should be noted that managing logistics risks effectively does not mean eliminating the entire risks associated with transportation, warehousing, storage (inventory), order fulfillment and reverse logistics; rather, it involves the implementation of strategies to identify, analyze and mitigate the possible challenges that could hinder the smooth operations (Olson & Wu, 2011). The goal of managing logistics risks is to reduce disruptions and ensure the stability and reliability of the supply chain operations of a company (Vilko & Hallikas, 2012). Santhosh (2021) noted that companies can incur higher operational costs, loss of a significant number of their customers and experience reputational damage due to severe disruptions in their logistics operations. This is why logistics risk management is important because it increases customer retention rate and protects the financial health and reputation of companies. With appropriate strategies, companies can be able to deal with unforeseen circumstances that could hinder their smooth flow of goods before they turn into big problems (Belantova & Taraba, 2019).

Dimensions of Logistics Risk Management

There are several dimensions of logistics risk management in academic literature. However, the dimensions of logistics risk management considered in this study are transportation risk management and warehousing risk management.

Transportation Risk Management

Transportation risk management is the process of identifying, assessing and mitigating the risks associated with transportation activities of a company (Krishna & Naikan, 2019). Transportation is the physical movement of people and goods from one place to another (Nina, 2021). This movement of people and goods can be done by road, sea, air, rail or pipeline depending on the nature of the products. However, transportation operations face risks that emerge from natural disasters, poor weather conditions, accidents, damage of goods during transit, loss of cargoes during transit, vehicles or ship breakdown, theft and security breaches (Arivumalar & Mohan, 2023). Transportation risks have the potential of disrupting smooth transportation operations, increasing costs and causing unnecessary delays in the delivery of goods to customers (Song & Zhang, 2023). To minimize the negative impact of these unexpected events, companies need to manage their transportation risks effectively by identifying the possible event that could occur during transit, and develop plans to handle the situation when they eventually occur (Kwak, 2014).

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Warehousing Risk Management

Warehousing risk management is a set of activities that include the identification, assessment and mitigation of risks related to the storage of goods (Colicchia & Strozzi, 2012). Warehousing is the process of storing or keeping materials and goods safe until when they are needed (Singhal et al., 2011). Warehousing operation faces a number of risks which include potential damage of goods stored in the warehouse, accidents, fire outbreak, possible conflagrations, theft and security breaches, human errors as well as natural disasters such as earthquake and flood (Yan et al., 2022). Olson and Wu (2011) stated that warehousing risks have the potentials of disrupting smooth warehouse operations, increasing costs and jeopardizing business continuity. Therefore, to minimize the negative impact of these unexpected events, companies need to effectively manage their warehousing risk. Belantova and Taraba (2019) stated that the effective management of warehousing risks involves identifying the possible events that could occur, analyzing these risks effectively, developing plans to control and mitigate these risks, and continuously reviewing and improving the risk management process.

Concept of Delivery Performance

Delivery performance refers to how well a company is able to fulfill customer demand at the wish date (Mulder, 2021). However, Barbengi and Kibet (2018) argued that delivery performance is not only concerned with meeting deadlines but also ensuring accurate deliveries where the right quantity and quality of products are delivered in the line with customer order. Elbert et al. (2016) opined that delivery performance is the end result obtained from the delivery activity of a company and it is more concerned with lead time, order fulfillment rate and stock-outs. Thus, delivery performance can be good or bad depending on how a company evaluates its delivery performance. Generally, a company can be said to have a good delivery performance if it delivers the right quantity and quality of products ordered by customers and meet customers' deadlines (Ifekanandu et al., 2024). On the other hand, a bad or poor delivery performance occurs when the company fails to deliver the right quantity and quality of products ordered by customers and meets customers' deadlines (Ifekanandu et al., 2024). Therefore, it is important for companies to measure their delivery performance in order to know what they are doing well and what they are doing poorly.

Measures of Delivery Performance

Delivery performance can be measured using various indices. However, in this study, delivery performance is measured using accurate delivery and on-time delivery.

Accurate Delivery

Accurate delivery is the delivering of customer order at the right quantity, right quality, right place and at the right time (Rao et al., 2011). It indicates the degree of consistency between a customer's order and what is delivered by a company. Customers expect companies to deliver their orders accurately without any form of complaint or disappointment. Accurate deliveries help companies to build their reputation and increase customer trust (Peng et al., 2017). Customers patronize companies that have built their reputation based on accurate deliveries. When companies deliver

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customer orders accurately, customers will be satisfied with their services and re-patronize them in the future. Ademe and Adewuyi (2021) posited that companies need to provide accurate delivery in order to be more reliable. According to Ifekanandu et al. (2024), a company that delivers customer orders accurately will stand out among the crowd, increase customer loyalty and sustain its competitive advantage.

On-Time Delivery

On-time delivery is the ability of a company to deliver customer order at the stipulated or agreed date. It measures how well a company meets the promised delivery date despite all odds (Elbert et al., 2016). Garg et al. (2014) opined that on-time delivery measures how many customers' orders are delivered on-time. It indicates the degree of efficiency of the delivery team of a company in meeting a delivery date. Barbengi and Kibet (2018) opined that on-time delivery helps to build long-term relationships with customers, increases customer loyalty and reduces customer defection rate. Companies need to deliver customer orders at the promised date in order to build customer trust and increase loyalty. By delivering customer orders on time, companies send a strong message to their customers that they can be trusted to deliver their promises in the future (Rao et al., 2011).

Theoretical Review

This study applied the modern portfolio theory to explain logistics risk management in shipping companies. Modern portfolio theory explains how investors assemble a portfolio of assets that can maximize expected return for a given level of risk (Corporate Finance Institute, 2023). The theory argues that investors are typically risk-averse as they always prefer a lesser risk portfolio when it comes to maximizing expected return. According to the theory, investors want a higher expected return as compensation for taking a higher level of risk. The theory demonstrates how investors select investments that maximize their expected returns with a minimal and acceptable level of risk. Modern portfolio theory is very relevant in explaining how shipping companies manage their logistics risks by assembling an asset portfolio that maximizes expected return for a given level of logistics risk. The theory argues that shipping companies always prefer a less risky portfolio while trying to maximize their expected return. These companies demand a higher return for taking a higher level of logistics risk.

Empirical Review

Some related empirical studies have been conducted on logistics risk management practices of firms in different countries. For instance, Belantova and Taraba (2019) empirically examined risk management in the logistics projects of companies in Czech Republic. The researchers adopted the survey research design and used questionnaires to collect data from logistics managers in selected companies in Czech Republic. After analyzing the data collected using percentage and frequency analysis, bar chart and pie chart, the researchers found out that most of the companies in Czech Republic manage their logistics risks by themselves without using external logistics risk management experts.

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Kwak (2014) explored risk management in international container logistics operations with a particular focus on risk analysis and mitigating strategies. The study adopted the quantitative and qualitative research approaches where questionnaire, focus group discussion and interview were used to collect data from logistics practitioners. The model was tested using the partial least squares and structural equation modeling (PLS-SEM) while the data collected were analyzed using descriptive statistics, ANOVA and regression analysis. The findings revealed that building a stable logistics network, leveraging logistics information, leveraging outsourcing contracts and developing logistics collaboration are the mitigation strategies adopted by international container logistics firms.

Civelek (2023) carried out a study to determine the effect of supply chain risk management on logistics performance and innovation performance. Their study adopted the survey research design where data were collected from 30 medium-sized firms in the technology industry in Turkey. After analyzing the data collected using structural equation modeling (SEM), the researcher found out that both risk control and risk mitigation have positive effects on innovation performance. The study also revealed that risk control is more effective than risk identification, risk assessment and risk mitigation in improving logistics performance.

Arivumalar and Mohan (2023) examined risk management in global shipping transportation service. Their study employed the case study and qualitative research approach where an interview was used to collect data from operations and logistics managers in Right Logistics International Pvt Ltd. The data collected were analyzed using qualitative content analysis. The findings revealed that the risk management strategies adopted by Right Logistics International includes supplier vetting and risk assessment as well as contingency planning.

Yan et al. (2022) carried out a study to determine logistics risk measurement in international trade. Their data were collected from Regional Comprehensive Economic Partnership (RCEP) countries while the Fuzzy Comprehensive Evaluation (FCE) and Analytic Hierarchy Process (AHP) methods were used to evaluate the logistics risks in international trade. The Confirmatory Factor Analysis (CFA) and Structural Equation Modeling (SEM) were used to analyze the data collected from the respondents. The findings revealed that logistics loss risk, logistics timeliness risk and logistics cost risk, environmental risk and logistics information risk are the major logistics risks in international trade with RCEP countries. The study also revealed that accidents, bankruptcy or ultra vires of logistics companies, cargo characteristics and customs clearance problems are the major causes of logistics risk in international trade.

Mutimbia (2018) explored the effect of supply chain risk management on operational performance of oil marketing companies in Kenya. The researcher adopted the correlational survey research design and used a structured questionnaire to obtain data from heads of departments and supervisors of 54 oil marketing companies in Kenya. The data collected were analyzed using descriptive statistics such as percentage and frequency analysis while the confirmatory factor analysis and structural equation modeling (Amos) were used to test the hypotheses and the model. The results revealed that supply risk management, demand risk management and political risk management have a linear and positive relationship with operational performance, while a negative

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relationship was reported between operational risk management and operational performance of oil marketing companies in Kenya.

Gap in Literature

From the studies reviewed, it was observed that logistics risk management has been researched extensively by logistics scholars and researchers. However, none of these studies relate logistics risk management to delivery performance of international shipping companies in Nigeria. Even transportation risk management and warehousing risk management are yet to be related to accurate delivery and on-time delivery. This has created a gap in literature which this study attempts to fill from the Nigerian perspective.

METHODOLOGY

The correlational research design and the positivist research philosophy were applied in this study. The population of this study consisted of 12 international shipping companies in South-South Nigeria (Nigerian Shipping Council, South-West Zone, 2025). The census sampling technique was utilized in this study where all members of the population were studied. The sampling units were made up of managers of the international shipping companies in South-West Nigeria. The managers include general managers, logistics managers, operational managers, transportation managers, warehouse managers, delivery managers and safety managers of the companies. A sample of 84 managers was drawn from the 12 international shipping companies on the ratio of 7 managers per company. Questionnaire was used as the main instrument for data collection. The questionnaire was structured on a 4-point rating scale such as Strongly Agree, Agree, Disagree and Strongly Disagree. After a validity and reliability test, 84 copies of the questionnaire were administered to the respondents (managers) and 75 copies were collected. The data collected were statistically analyzed while the hypotheses were tested using Spearman Rank Order Correlation Coefficient (rho). The SPSS 24.0 version was used to correlate the data collected on the study variables.

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RESULTS AND DISCUSSION

The results of the SPSS correlation analysis carried out on the study variables are presented in the tables below:

Table 1: Result of correlation analysis between transportation risk management and accurate delivery of international shipping companies

			Transportation Risk Management	Accurate Delivery
Spearman Rank (rho)	Transportation Risk Management	Correlation Coefficient	1.000	.649**
		Sig. (2 tailed)	.	.001
		N	75	75
	Accurate Delivery	Correlation Coefficient	.649**	1.000
		Sig. (2 tailed)	.001	.
		N	75	75

**Correlation is significant at 0.01 levels (2 tailed)
*Correlation is significant at 0.05 levels (2 tailed)

Source: *SPSS-Generated Output*

Table 1 indicates that transportation risk management has a strong and positive correlation with accurate delivery of international shipping companies and this correlation is significant statistically at 0.01 level (rho = .649**). As a result of this, we then reject the null hypothesis (Ho_1) and accept the alternate hypothesis which states that there is a significant relationship between transportation risk management and accurate delivery of international shipping companies in South-West Nigeria.

Table 2: Result of correlation analysis between transportation risk management and on-time delivery of international shipping companies

			Transportation Risk Management	On-Time Delivery
Spearman Rank (rho)	Transportation Risk Management	Correlation Coefficient	1.000	.781**
		Sig. (2 tailed)	.	.001
		N	75	75
	On-Time Delivery	Correlation Coefficient	.781**	1.000
		Sig. (2 tailed)	.001	.
		N	75	75

**Correlation is significant at 0.01 levels (2 tailed)
*Correlation is significant at 0.05 levels (2 tailed)

Source: *SPSS-Generated Output*

Table 2 shows a strong and positive correlation between transportation risk management and on-time delivery of international shipping companies and this correlation is significant statistically at 0.01 level (rho = .781**). Based on this result, we reject the null hypothesis (Ho_2) and accept the alternate hypothesis. This means that we then accept that there is a significant relationship between

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transportation risk management and on-time delivery of international shipping companies in South-West Nigeria.

Table 3: Result of correlation analysis between warehousing risk management and accurate delivery of international shipping companies

			Warehousing Risk Management	Accurate Delivery
Spearman Rank (rho)	Warehousing Risk Management	Correlation Coefficient	1.000	.610**
		Sig. (2 tailed)	.	.001
		N	75	75
	Accurate Delivery	Correlation Coefficient	.610**	1.000
		Sig. (2 tailed)	.001	.
		N	75	75

**Correlation is significant at 0.01 levels (2 tailed)
*Correlation is significant at 0.05 levels (2 tailed)

Source: *SPSS-Generated Output*

Table 3 shows that warehousing risk management is strongly and positively correlated to accurate delivery of international shipping companies and this correlation is significant statistically at 0.01 level (rho = .610**). Based on this result, the null hypothesis (Ho_3) is rejected and the alternate hypothesis is accepted. This means that we then accept that there is a significant relationship between warehousing risk management and accurate delivery of international shipping companies in South-West Nigeria.

Table 4: Result of correlation analysis between warehousing risk management and on-time delivery of international shipping companies

			Warehousing Risk Management	On-Time Delivery
Spearman Rank (rho)	Warehousing Risk Management	Correlation Coefficient	1.000	.732**
		Sig. (2 tailed)	.	.001
		N	75	75
	On-Time Delivery	Correlation Coefficient	.732**	1.000
		Sig. (2 tailed)	.001	.
		N	75	75

**Correlation is significant at 0.01 levels (2 tailed)
*Correlation is significant at 0.05 levels (2 tailed)

Source: SPSS-Generated Output

Table 4 indicates that warehousing risk management has a strong and positive correlation with on-time delivery of international shipping companies and this correlation is significant at 0.01 level (rho = .732**). Consequently, the null hypothesis (Ho_4) is rejected and the alternate hypothesis is accepted. This implies that there is a significant relationship between warehousing risk management and on-time delivery of international shipping companies in South-West Nigeria.

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DISCUSSION OF FINDINGS

It was reported in this study that a significant relationship exists between transportation risk management and accurate delivery of international shipping companies in South-West Nigeria. This finding was deduced from the result of the correlation analysis carried out on transportation risk management and accurate delivery. The result revealed that transportation risk management has a strong and positive correlation with accurate delivery of international shipping companies and this correlation is significant at 0.01 level (see Table 1). As a result of this, we then rejected the null hypothesis (Ho_1) and accepted the alternate hypothesis which states that there is a significant relationship between transportation risk management and accurate delivery of international shipping companies in South-West Nigeria. This finding is in line with the research conducted by Mutimbia (2018) and Song and Zhang (2023) as both studies revealed that risk management in transportation operation has a significant impact on the delivery performance of firms.

This study also reported a significant relationship between transportation risk management and on-time delivery of international shipping companies in South-West Nigeria. This finding was obtained from the result of the correlation analysis carried out on transportation risk management and on-time delivery. The result showed a strong and positive correlation between transportation risk management and on-time delivery of international shipping companies and this correlation is statistically significant at 0.01 level (see Table 2). Based on this result, we rejected the null hypothesis (Ho_2) and accepted the alternate hypothesis. This means that there is a significant relationship between transportation risk management and on-time delivery of international shipping companies in South-West Nigeria. This finding is consistent with the findings of Krishna and Naikan (2019) and Nina (2021) which revealed that transportation risk management enables companies to reduce unnecessary disruptions in their transportation process and deliver products in a timely manner.

A significant relationship was reported between warehousing risk management and accurate delivery of international shipping companies in South-West Nigeria. This finding emerged from the result of the correlation analysis carried out on warehousing risk management and accurate delivery. The result revealed that warehousing risk management is strongly and positively correlated to accurate delivery of international shipping companies and this correlation is statistically significant at 0.01 level (see Table 3). Consequently, we then rejected the null hypothesis (Ho_3) and accepted the alternative hypothesis which states that there is a significant relationship between warehousing risk management and accurate delivery of international shipping companies in South-West Nigeria. This finding is supported by Vilko and Hallikas (2012) and Mutimbia (2018) as both studies revealed that identifying, assessing and mitigating warehousing risk helps companies to minimize disruptions in their warehousing operations and make accurate deliveries.

Finally, it was revealed that warehousing risk management significantly relates to on-time delivery of international shipping companies in South-West Nigeria. This finding was derived from the result of the SPSS correlation analysis carried out on warehousing risk management and on-time delivery. The result revealed that warehousing risk management has a strong and positive

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correlation with on-time delivery of international shipping companies and this correlation is significant at 0.01 level (see Table 4). Consequently, the null hypothesis (Ho_4) was rejected and the alternate hypothesis was accepted. This implies that there is a significant relationship between warehousing risk management and on-time delivery of international shipping companies in South-West Nigeria. This finding is in line with the position of Singhal et al. (2011) and Colicchia and Strozzi (2012) as they argued that managing warehousing risk effectively helps companies to meet deadlines and avoid unnecessary delay in the delivery of products to customers.

CONCLUSION

This study explored logistics risk management and delivery performance of international shipping companies in South-West Nigeria. It critically analyzed transportation and warehousing risk management and related them to delivery performance such as accurate delivery and on-time delivery of companies. The empirical results revealed that transportation risk management has a significant relationship with accurate delivery and on-time delivery of international shipping companies. The study also revealed that warehousing risk management is significantly related to accurate delivery and on-time delivery of international shipping companies. Therefore, it was concluded that logistics risk management, such as transportation risk management and warehousing risk management, significantly enhances the delivery performance of international shipping companies in South-West Nigeria.

RECOMMENDATIONS

The study provides the following recommendations:

1. International shipping companies in Nigeria, particularly those that are experiencing poor delivery performance, should manage their logistics effectively as it would improve their delivery performance.

2. International shipping companies in Nigeria should identify, analyze and mitigate risks associated with their transportation activities as it would enable them to minimize unnecessary disruptions in their transportation processes and ensure accurate and timely delivery of products to customers.

3. International shipping companies in Nigeria should manage their warehousing risk effectively by identifying the possible events that could disrupt their warehousing operations and develop plans to handle them whenever they occur, as this would enhance smooth warehousing operations and improve their delivery performance.

4. International shipping companies in Nigeria should be more proactive in their approach to managing logistics risk as this would prevent unnecessary costs and disruptions in their logistics operations and improve their delivery performance.

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5. Finally, it is recommended that international shipping companies in Nigeria should periodically review the logistics risk management policies and strategies to identify those areas that create room for loopholes and adjust them accordingly to improve their delivery performance.

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