

Effect of Supplier Rating on Supply Chain Performance: A Case Study of Star-Rated Hotels in the Coast Region, Kenya

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Abstract

The hospitality industry, particularly star-rated hotels, heavily relies on efficient and reliable supply chains to maintain high service standards and customer satisfaction. By specifically investigating the impact of supplier financial stability, reliability, flexibility, and ethics on supply chain performance, this research seeks to provide valuable insights that can guide hotel management in optimizing their procurement strategies. Understanding how these individual factors contribute to the overall supply chain dynamics will not only enhance the operational efficiency of star-rated hotels but also contribute to the broader knowledge base in supply chain management within the hospitality sector. Therefore, the main goal of the study was to analyze the effects of supplier rating on supply chain performance among star-rated hotels in the coast region. The following specific objectives were used to provide guidance; to determine the influence of supplier financial stability on supply chain performance, effect of supplier reliability on supply chain performance, to determine the influence of supplier flexibility on supply chain performance and to determine the effect of supplier ethics on supply chain performance. This research adopted the transaction cost economics theory, agency theory and the resource based view theory. A descriptive research design was used in this research. The population of the study were the 343 senior level managers among the 49 star-rated hotels in the coast region. Stratified random sampling technique was used to arrive at the sample size. The sample size was 105 respondents. Primary data collected using structured questionnaires was used in this study. The administration of the questionnaires was through Google forms. The collected data was converted into quantitative format to make analysis using SPSS. The statistics generated were descriptive statistics which included frequencies and percentages and inferential statistics which included a multiple linear regression. The relationship between the response and predictor variables was shown using multiple linear regression. The study found out that supplier-related factors including financial stability, reliability, flexibility, and ethics have significant positive correlations with supply chain performance. Specifically, organizations that prioritize financially stable suppliers experienced improved supply chain efficiency, reduced disruptions, and enhanced operational effectiveness. Moreover, collaboration with reliable and flexible suppliers led to better adherence to delivery schedules, minimized disruptions, and maintained consistent performance standards. Ethical sourcing practices were also found to positively influence supply chain integrity, reputation, and long-term sustainability. The study concludes that integrating supplier-related considerations into procurement strategies and practices is crucial for optimizing supply chain resilience and effectiveness. Organizations should prioritize supplier financial stability, reliability, flexibility, and ethics in supplier selection processes to mitigate risks, improve operational efficiency, and achieve sustainable performance outcomes. The study recommends that organizations conduct thorough supplier assessments to evaluate financial stability, reliability, flexibility, and ethical practices. Clear criteria and benchmarks should be established for supplier

evaluation and selection processes, with an emphasis on diversifying the supplier base to mitigate risks associated with overreliance on a single supplier.

Key words: Supplier Ethics, Supplier Financial Stability, Supplier Flexibility, Supplier Rating, Supplier Reliability

Introduction

Supply chain performance is of paramount importance across industries, and its significance is particularly pronounced in the hospitality industry. A well-functioning supply chain is crucial for ensuring the seamless flow of goods and services, from sourcing raw materials to delivering final products or services to customers. In the hospitality sector, which encompasses hotels, restaurants, and other service-oriented establishments, supply chain performance directly impacts operational efficiency, customer satisfaction, and overall business success (Jawabreh et al., 2023). Timely and reliable procurement of high-quality goods and services is essential for maintaining the standard of service expected by customers. Effective supply chain management in the hospitality industry not only optimizes costs and enhances competitiveness but also contributes to the creation of memorable guest experiences (Alreahi et al., 2023). As per Migdadi (2023) from the sourcing of fresh ingredients in restaurants to the procurement of linens and amenities in hotels, a well-managed supply chain is fundamental to meeting customer expectations, ensuring sustainability, and fostering long-term relationships with suppliers—all of which are vital for the success and reputation of hospitality businesses.

The relationship between supplier rating and supply chain performance is characterized by the profound impact that the quality and attributes of suppliers have on the overall efficiency, reliability, and effectiveness of the supply chain (Shaw et al., 2021). A favorable supplier rating, reflective of factors such as financial stability, reliability, flexibility, and ethical practices, is expected to correlate positively with improved supply chain performance. Suppliers with strong financial stability contribute to a resilient supply chain by ensuring a consistent and reliable flow of goods and services (Santos et al., 2019). Reliability in supplier performance minimizes disruptions and uncertainties, fostering a smoother operational workflow. Flexibility in supplier operations allows the supply chain to adapt to changing circumstances and market dynamics, promoting agility. Ethical supplier practices not only align with corporate values but also reduce the risk of legal and ethical complications, contributing to the overall sustainability and reputation of the supply chain (Koberg & Longoni, 2019). Supplier financial stability plays a pivotal role in shaping the overall performance of the supply chain. A supplier's financial stability directly impacts its capacity to invest in quality resources, meet production demands, and maintain consistent operations (Tseng et al., 2023). Financially viable suppliers are better positioned to weather economic uncertainties, ensuring a stable and uninterrupted supply of goods or services. Their ability to manage cash flow and invest in technology and innovation enhances the efficiency of the supply chain, reducing the likelihood of disruptions (Sarkis, 2020). Moreover, Park and Li (2020) noted financially stable suppliers are more likely to uphold contractual agreements and meet delivery deadlines, contributing to the reliability and predictability of the supply chain.

Supplier reliability is a linchpin in determining the overall efficacy of supply chain performance. A reliable supplier, one that consistently delivers products or services on time and adheres to agreed-upon quality standards, significantly contributes to the smooth and uninterrupted flow of operations within the supply chain (O'Connor et al., 2020). The dependability of suppliers ensures that downstream processes can function without disruptions, reducing the risk of stock outs or delays in production. This, in turn, enhances the overall efficiency of the supply chain, allowing businesses to meet customer demands and maintain optimal inventory levels (Munir et al., 2020). Additionally, as per Ortiz-Barrios et al. (2020) reliable suppliers foster trust and long-term relationships, mitigating uncertainties associated with variability in supply.

Supplier flexibility is a crucial determinant of supply chain performance, exerting a profound influence on adaptability and responsiveness. A supplier's ability to adjust production schedules, accommodate changes in order quantities, or swiftly respond to shifts in market demands enhances the overall agility of the supply chain (Maulina & Natakusumah, 2020). Flexible suppliers enable businesses to navigate dynamic and unpredictable conditions, such as changes in consumer preferences or unexpected disruptions, by efficiently adapting to evolving circumstances. This adaptability reduces lead times, minimizes excess inventory, and optimizes resource utilization, contributing to improved supply chain efficiency (Yuyangyuen & Aunyawong, 2023). Moreover, Nguyen and Nguyen (2023) argue supplier

flexibility facilitates collaborative problem-solving and innovation, fostering a more resilient and competitive supply chain.

Supplier ethics wield a substantial impact on the overall performance of the supply chain, extending beyond mere compliance to ethical standards and regulations. Ethical suppliers contribute to the establishment of a positive reputation for the entire supply chain, safeguarding against reputational risks that could arise from non-compliance or unethical practices (Nigro et al., 2021). Ethical behavior in sourcing, production, and distribution processes aligns with corporate social responsibility, meeting the growing expectations of socially conscious consumers (Billah et al., 2023). Furthermore, ethical suppliers are likely to engage in transparent and open communication, reducing the likelihood of conflicts and enhancing collaboration within the supply chain network. By promoting fair labor practices, environmental sustainability, and ethical sourcing, suppliers foster a sense of shared values that can lead to long-term partnerships (Hou et al., 2022).

In a global context, supplier rating assumes heightened significance as organizations increasingly operate within complex and interconnected supply chains that span across borders. The globalization of markets has led to a diversification of suppliers, with businesses often relying on a network of international partners to source goods and services (Helmold et al., 2023). According to Polyviou et al. (2023) supplier rating on a global scale involves evaluating suppliers not only for their financial stability, reliability, flexibility, and ethics but also considering their ability to navigate diverse regulatory environments, cultural nuances, and geopolitical risks. The performance of suppliers in one region can have cascading effects on the entire supply chain, impacting operations on a global scale (Roman-White et al., 2021).

Global supplier rating systems are instrumental in mitigating risks associated with supply chain disruptions, such as natural disasters, geopolitical tensions, or economic downturns in specific regions (Chandra & Kumar, 2021). Assessing the financial stability of international suppliers becomes crucial in understanding their resilience to economic fluctuations, while reliability gains significance in ensuring the timely flow of goods across borders (Nigro et al., 2021). Ortiz-Barrios et al. (2020) argue flexibility becomes essential in addressing the intricacies of cross-border logistics and adapting to changes in trade policies or market conditions. Additionally, ethical considerations on a global scale involve assessing suppliers' adherence to international labour standards, environmental regulations, and ethical sourcing practices, reflecting a commitment to sustainability and responsible business conduct.

Strategically managing supplier ratings within a global framework enables organizations to optimize their supply chain performance by fostering collaboration, minimizing risks, and promoting sustainable practices (Munir et al., 2020). This requires a nuanced understanding of the global business landscape, cultural differences, and compliance with international standards. Establishing robust supplier rating mechanisms becomes a cornerstone in achieving supply chain resilience, fostering international partnerships, and ensuring a competitive edge in the global marketplace (O'Connor et al., 2020).

In the context of Africa, the regional perspective of supplier rating reflects the diverse and dynamic nature of the continent's economies, cultures, and supply chain landscapes. Supplier rating at the regional level in Africa involves considering factors such as the economic conditions, regulatory environments, and cultural diversity that vary significantly across countries and regions. Suppliers are evaluated based on their ability to navigate the specific challenges and opportunities presented by the African business landscape, including infrastructure disparities, regulatory complexities, and geopolitical considerations (Sangle & Shitole, 2019).

Regional supplier rating in Africa also incorporates a focus on ethical business practices that align with the diverse cultural and social norms prevalent across the continent. This might involve assessing suppliers for their commitment to fair labour practices, community engagement, and environmentally sustainable operations, taking into account the unique cultural and environmental contexts of different regions within Africa. Additionally, the rating process may consider suppliers' adaptability to local market conditions, responsiveness to cultural preferences, and their role in promoting economic development within the specific African regions where they operate (Jawabreh et al., 2023).

At a local level, supplier rating assumes a critical role in shaping the dynamics of supply chain performance within a specific region or community. Localized supplier rating systems cater to the unique characteristics, challenges, and opportunities of the immediate business environment (Wachiuri, 2019). Factors such as proximity, transportation infrastructure, and regional regulations become crucial considerations in evaluating the suitability of suppliers (Wandera et al., 2022). As per Wangithi and Ndolo (2022), assessing the financial stability of local suppliers is vital for understanding their ability to navigate regional economic conditions and contribute to the overall stability of the supply chain.

Reliability of local suppliers is often tied to the efficiency of regional logistics, transportation networks, and local production capabilities. Timely deliveries and consistent product quality are imperative for sustaining smooth operations, particularly in industries where just-in-time inventory management is crucial (Mwangi & Ragui, 2021). The flexibility of local suppliers becomes significant in adapting to the specific demands of the local market, responding to changes in consumer preferences, and efficiently managing inventory levels to meet fluctuating demand within the region (Maina & Nyangau, 2023).

Ethical considerations in supplier rating at a local level extend beyond compliance with national regulations to encompass community impact, labour practices, and social responsibility (Wanjohi, 2023). Supporting local businesses that adhere to ethical standards can enhance a company's reputation within the community, fostering positive relationships and contributing to sustainable development (Ngari & Namusonge, 2023). Local supplier rating systems play a pivotal role in aligning supply chain practices with regional values, promoting economic growth, and strengthening the resilience of businesses within the local context.

The Coast region of Kenya stands as a beacon in the country's tourism landscape, boasting pristine beaches, cultural richness, and historical significance. Star-rated hotels in this coastal haven serve as the cornerstone of the region's hospitality sector, providing luxurious accommodations for a diverse array of tourists (Bukirwa & Kising'u, 2021). The allure of the Coast's natural beauty and cultural attractions draws visitors from around the globe, making these hotels integral to the local economy. As pillars of the tourism industry, these establishments face the dual challenge of maintaining high-quality services while navigating the complexities of the ever-evolving market (Sangle & Shitole, 2019).

In this context, supplier rating and supply chain performance are critical determinants of operational excellence and guest satisfaction. The evaluation of suppliers, considering factors such as financial stability, reliability, flexibility, and ethics, is paramount for ensuring a seamless flow of goods and services in the hospitality supply chain. The financial stability of local and international suppliers influences the availability of high-quality products and services, essential for maintaining the standards expected by discerning guests. Reliability in the timely delivery of fresh produce, linens, and other amenities is crucial for sustaining daily operations in these hotels.

Supplier flexibility is essential for adapting to the unique demands of the coastal market and the seasonal nature of tourism, optimizing inventory management and enhancing responsiveness to changing guest preferences. Ethical supplier practices, including sustainable sourcing and adherence to local labor regulations, not only align with the cultural and environmental values of the region but also contribute to the positive reputation of star-rated hotels. In this local context, supplier rating becomes integral to the overall supply chain performance, ensuring that these hotels provide exceptional services while fostering sustainable and ethical business practices in alignment with the coastal region's unique characteristics (Sangle & Shitole, 2019).

Specific objective of the study

- i. To evaluate the effect of supplier financial stability on supply chain performance among star-rated hotels in the coast region
- ii. To establish the effect of supplier reliability on supply chain performance among star-rated hotels in the coast region
- iii. To establish the effect of supplier flexibility on supply chain performance among star-rated hotels in the coast region

- iv. To assess the effect of supplier ethics on supply chain performance among star-rated hotels in the coast region

2.0 Literature review

The study was guided by the following theories: the transaction cost economics theory, agency theory and the resource based view theory.

3.0 Conceptual framework

The diagrammatic representation below demonstrates the hypothesized association amongst the response and the predictor variables. The independent variable for this study was supplier rating with three measures namely supplier financial stability, supplier reliability, supplier flexibility and supplier ethics. Supply chain performance was the response variable which was the focus of the study and was given by quality goods and services, cost reduction, organization productivity and customer satisfaction.

Independent variables

Dependent variable

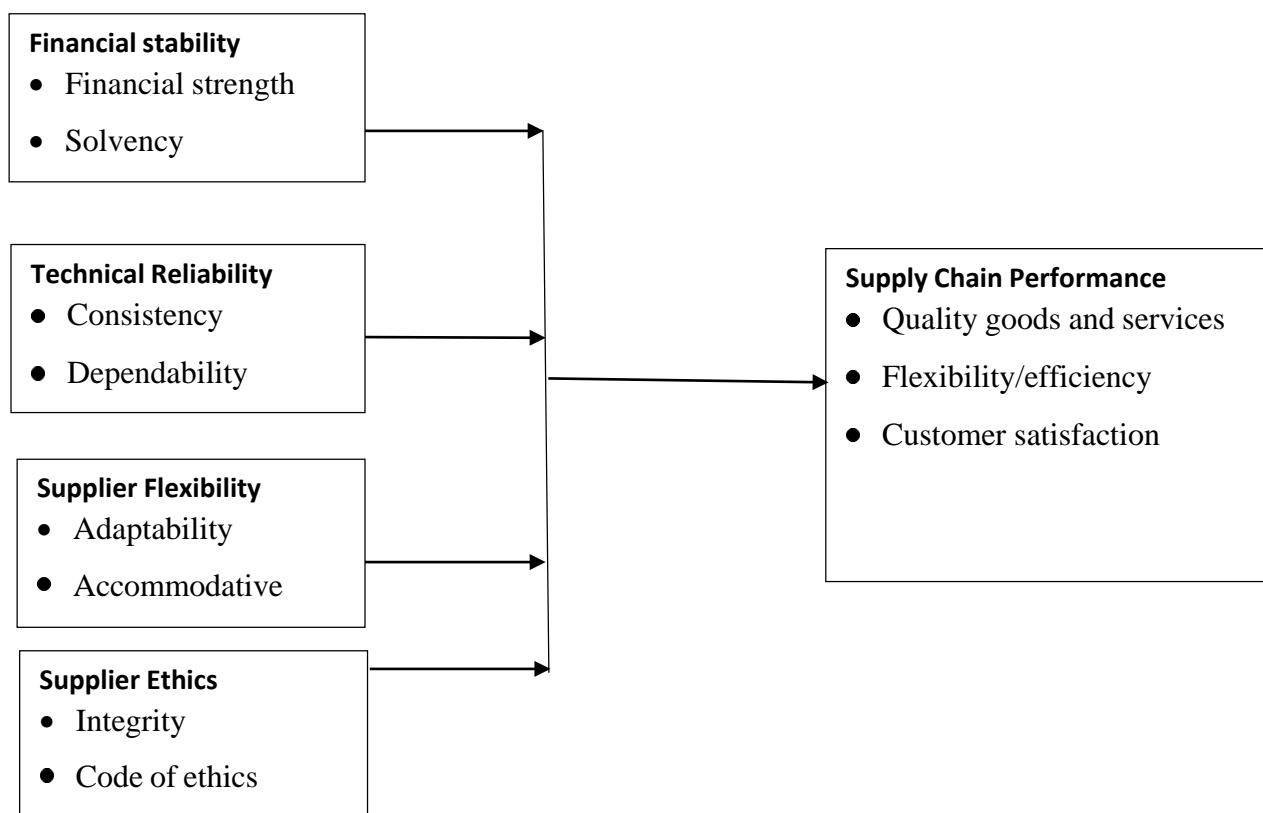


Figure 1: The Conceptual Model

Source: Researcher (2023)

Supplier Financial Stability and Supply Chain Performance

Ojijo (2023) studied how procurement performance amongst /public university is affected by financial stability. The survey included employees in procurement departments in chartered public universities. The design adopted was a cross-sectional survey whereby data was obtained from the institutions in the area at a single point in time. The population consisted of the employees from these public universities and a sample obtained of employees within the procurement departments. The use of structured questionnaires in data collection was adopted in which the drop and pick technique was used. From the findings, it was shown that the financial capacity of suppliers was a substantial factor in the performance of the procurement function of the public universities in the country.

In a study on the evaluation of effect of supplier financial stability on public procurement performance. a case study of Kephis, Kenya, Wangithi and Ndolo (2022), made the conclusion that the firm evaluate their suppliers using an established criterion: Supplier's financial stability, qualitative issues, pricing, if supplier is environmentally conscious, supplier's production capacity, employee capacity of the supplier, preference and supplier reservation. Environmental concern, employee capacity and pricing of supplier were the most crucial criteria used which meant that firms are conscious about keeping production at a minimum cost, producing the right volumes and employing the right expertise that will meet market demands while being conscious to environmental matters. Supplier evaluation as a practice enables firms to reap the benefits of the process.

In a report by the Majewski et al. (2020) after a survey of supplier evaluation in selected EU countries, a competitive process of sourcing suppliers needs to be conducted in an open and objective manner that will generate the best value for money in procurement. Some of the standard principles to be met in the procurement process include an assessment of the supplier financial standing, capability and willingness to embrace current technology among others. Supplier financial stability positively influences supply chain performance.

Muhammad et al. (2020) studied the supplier selection determinants in the Pakistani Telecom industry. An explanatory non-experimental design was adopted to meet the study objectives. A panel data model (fixed effects) was used on the basis of Hausman specification tests and analyzed using SPSS. From results, financial ability was the most crucial factors determining supplier and performance of the procurement process. It was also found that the financial capacity of suppliers determines their ability to deliver which improves performance of the procurement process. Supplier financial capacity has been found to enhance performance of the procurement process.

Mulongo et al. (2021) conducted a study determining the key supplier-related factors that influence the procurement performance in the service industry. The study intended to determine how financial stability, prior performance and supplier reliability influenced the performance of this function. A case study design was chosen. Collection of data was done using questionnaires containing both open and closed ended questions. SPSS was utilized in the analysis of the collected data. Findings from the study showed that supplier financial capacity, prior performance and supplier reliability have a substantial impact on procurement performance. Evaluation of suppliers to determine financial capacity and past performance should be considered together with their reliability before being awarded contracts for the supply of goods or services.

Supplier Reliability and Supply Chain Performance

Awuah et al. (2022) studied the effect of procurement process on procurement performance of public tertiary institutions in Ghana. A descriptive design was considered suitable for this study. Population targeted in the study included a total of 650 employees from public tertiary institutions in Ghana. A Stratified random sampling was useful in choosing a sample for the study. Primary and secondary data was also collected from questionnaires, interview and annual reports from the public tertiary institutions in Ghana. Regression and correlation analysis was performed on the data collected. Findings showed that the competence of suppliers was substantial in procurement performance in public tertiary institutions in Ghana.

Oenga (2022) did a study on effectiveness of procurement process among public universities: the influence of procurement plan Kenya. A cross-sectional study design was used in the research with data being obtained through structured questionnaires administered using the drop and pick technique. SPSS version 21 aided in the analysis of the data collected. Findings showed that commitment to quality and competence by suppliers has a substantial impact on the performance of the procurement function among public universities. Experts with knowledge and experience should be considered in the process of selecting suppliers.

Purwanto and Juliana (2022) studied the technical capacity, quality, level of service and risks encountered in the process of evaluating suppliers. The study adopted a cross sectional survey design. Primary data was obtained using interview schedules together with secondary data obtained from records, books, journals, published and unpublished works. Data analysis was made using SPSS. Results from the study showed that the process of selecting suppliers should be left to experts with knowledge and expertise to professionally conduct supplier selection is greatly affected by personal and political interference more so in the sector. The process of selecting suppliers should take into account their reliability as this will influence supply chain performance.

Nyaberi (2020) studied the connection between Supplier development management practices and organizational performance of manufacturing firms in Kenya. The study was on the technical capacity of suppliers. This study used a descriptive research design. The population selected was the manufacturing firms under Kenya Association of Manufacturers as at June 2017. The Yamane formula was utilized in determining a sample of 87 with consideration being placed on key procurement heads from every firm in the study. Primary data was collected from the firms and used in the analysis. From the findings, it was revealed that supplier evaluation criteria positively and substantially impacted the performance of the firms in Kenya. Technical capacity also showed a positive substantial impact on performance. Among manufacturing firms in Kenya, technical capacity of the supplier has been found to influence performance.

Wachiuri (2019) sought to investigate the influence of supplier evaluation criteria on the performance Kenya's state corporations. A cross-sectional survey design was adopted using both quantitative and qualitative approaches. The study targeted all the 187 state corporations in Kenya. The study employed a census approach. Primary data was collected using questionnaires. In establishing the relationship of the variables correlation and linear regression analysis were done. The study findings indicated that supplier competence have a positive and significant association with performance of state corporations. Supplier competence not only affects the supply chain performance of an organization but also the performance of the organization as a whole.

Supplier Flexibility and Supply Chain Performance

Njuguna and Osoro (2023) studied the connection between the selection criteria for suppliers and the performance of petroleum companies in Nairobi city county, Kenya. The study was on the technical capacity of suppliers. This study used a descriptive research design. The population selected was the manufacturing firms under Kenya Association of Manufacturers as at June 2017. The Yamane formula was utilized in determining a sample of 87 with consideration being placed on key procurement heads from every firm in the study. Primary data was collected from the firms and used in the analysis. From the findings, it was revealed that supplier evaluation criteria positively and substantially impacted the performance of the firms in Kenya. Technical capacity also showed a positive substantial impact on performance. Among oil marketing firms in Kenya, flexibility of the supplier has been found to influence performance.

Göncü and Çetin (2022) studied the technical capacity, quality, level of service and risks encountered in the process of evaluating suppliers. The study adopted a cross sectional survey design. Primary data was obtained using interview schedules together with secondary data obtained from records, books, journals, published and unpublished works. Data analysis was made using SPSS. Results from the study showed that the process of selecting suppliers should be left to experts with knowledge and expertise to professionally conduct supplier selection is greatly affected by personal and political interference more so in the sector. The process of selecting suppliers should take into account their flexibility as this will influence supply chain performance.

Karttunen et al. (2022) did a study on how the evaluation suppliers impacts performance of procurement among Public Universities. A cross-sectional study design was used in the

research with data being obtained through structured questionnaires administered using the drop and pick technique. SPSS version 21 aided in the analysis of the data collected. Findings showed that commitment to quality and competence by suppliers has a substantial impact on the performance of the procurement function of public university campuses. Flexibility should be considered in the process of selecting suppliers.

Adam et al. (2021) studied Green supply chain management and performance of listed oil and gas firms in Nigeria. A descriptive design was considered suitable for this study. Population targeted in the study included a total of 650 employees from listed oil and gas firms in Nigeria. A Stratified random sampling was useful in choosing a sample for the study. Primary and secondary data was also collected from questionnaires, interview and annual reports from the listed oil and gas firms in Nigeria. Regression and correlation analysis was performed on the data collected. Findings showed that the competence of suppliers was substantial in procurement performance in listed oil and gas firms in Nigeria. The technical competence of supplier has also been found to have a positive effect on procurement performance of government ministries.

Mutiso and Ochiri (2019) sought to investigate the influence of supplier evaluation criteria on procurement performance of non-governmental organizations in Kenya. A cross-sectional survey design was adopted using both quantitative and qualitative approaches. The study targeted all the 87 non-governmental organizations in Kenya. The study employed a census approach. Primary data was collected using questionnaires. In establishing the relationship of the variables correlation and linear regression analysis were done. The study findings indicated that supplier competence have a positive and significant association with performance of non-governmental organizations in Kenya. Supplier flexibility not only affects the supply chain performance of an organization but also the performance of the organization as a whole.

Supplier Ethics and Supply Chain Performance

Matunga (2023) studied procurement practices and level of implementation of public procurement regulations in the devolved systems of government in Kenya. A descriptive design was appropriate for the study which analyzed the purchasing procedure used in the Health-Care industry. Results from the study showed that poor communication and supplier selection had an effect on the procurement of health care supplies. The recommendation was that adequate controls should be placed to reduce corruption. Before selecting a supplier, ethics should be considered as it has a significant influence on supply chain performance.

Adiele and Agburum (2022) sought to establish how supplier evaluation attributes relates to supply chain performance of shipping firms in Rivers State, Nigeria. A qualitative and quantitative research designs were utilized in the study. A selection of two employees based on equal proportions from a total of 20 shipping firms in Rivers State, Nigeria was selected, which gave a total of forty respondents. Primary data for the study was obtained through the use of questionnaires. Stepwise regression analysis was found to be useful for modeling the relation between supplier evaluations attributes and performance of the supply chain. On supplier evaluation attributes, these corporations consider financial health, ethics, turnover and level of profitability when evaluating suppliers. From the study it was found that supplier evaluation attributes had a positive but supplier ethics had an insignificant impact on supply chain performance.

Musyoka (2022) studied the impact of Public procurement practices and service delivery among development projects implemented by county government of Machakos, Kenya. The target population was procurement officer in charge of development projects implemented by county government of Machakos, Kenya. A census technique was adopted and incorporated all the targeted respondents, with a sample of 5 procurement officers, 63 head of departments from user departments and 12 officers who headed the various development projects. In collecting the required primary data, a structured questionnaire was utilized. An analysis of quantitative

data was made by use of inferential and descriptive statistics. The findings showed that supplier ethics was positively correlated with service delivery.

Otieno et al. (2022) evaluated effect of supplier information sharing practice on supply chain performance of Kenyan selected county governments of Nyanza Region. The study adopted a descriptive design in which a population of eleven departments was selected. Quantitative data was obtained and analyzed using descriptive statistics and inferential statistics to generate a prediction of population from observations and an analysis of the sample. From the study, it was ascertained that poor communication between procurement personnel on supplier selection had a negative impact on efficiency in the procurement department and communication was found to be essential in selecting the right suppliers who are able to meet emerging and planned requirements.

Oliech and Mwangangi (2019) examine effect of strategic procurement management on performance of level five hospitals in Kenya. In addressing the research hypotheses, a quantitative correlation design applied. A Stratified random sampling method sampled 70 respondents from 85 respondents spread out in five departments within the hospitals. The study relied on primary data that was obtained using self-administered structured questionnaires administered through drop and pick method. Analysis of data was made using inferential and descriptive statistics. Findings showed that supplier ethics was substantial to procurement contract performance in the level five hospitals in Kenya.

3.0 Research Methodology

3.1 Research Design

In this research, a descriptive research design was utilized. The use of quantitative research design permitted the scholar to analyse numerical data and test hypotheses statistically. This provided more accurate and objective results that can be replicated and generalized to a larger population. Additionally, quantitative research allowed for a larger sample size, which increased the representativeness of the findings. The data collected was analysed using statistical software, which helped to eliminate errors and biases that may arise in manual analysis (Cooper & Schindler, 2020). The descriptive study design also helped to describe respondents' views, attitudes and behaviour. In this way, the importance of the findings was measured for the general population and the shifting opinions, perceptions and behaviour of respondents over time.

3.2 Target Population

Population refers to an aggregate of subjects sharing common or similar characteristics (Cooper & Schindler, 2020). In respect of this study, the 49 star-rated hotels listed under the Kenya Hotelkeepers and Caterers Association and operating within the Coast region as at 31st December 2023 formed the study population. The unit of analysis was the CEOs and other senior managers namely finance manager, HR manager, operations manager, ICT manager, procurement manager and marketing manager. The choice of respondents was informed by the fact that they are expected to have a better understanding on their firm's supplier rating and supply chain performance, and they gave varied opinions.

The population is as shown in **Table 1**

Table 1: Population Distribution

Category	No. of Employees
CEO	49
Finance manager	49
Human resource manager	49
Operations manager	49
ICT manager	49
Procurement manager	49
Marketing manager	49
TOTAL	343

Kenya Hotelkeepers and Caterers Association (2023)

3.3 Sample and sampling procedure

This research used stratified random sampling because this method enables a researcher to subdivide the sample into suitable strata which are mutually exclusive. The employees were categorized as per their function. Cooper and Schindler (2020) stated that this sampling procedure produces a statistical efficiency increase on the sample, offers sufficient data that analyzes the respective sub-population and allows different study methods to be utilized in different strata. According to Burns and Burns (2018), the methodology calls for segmenting the research population into separate sub groups and acquiring a simple random sample for each sub group. They further stated that the selection of the sample is made in such a way that a number of sub groups within the population are included in the sub group in proportion to their number within the population.

A sample is a research target population subset from which data is gathered for generalization to the entire population, while sampling is the method of selecting individuals from a sample to ensure that the sample is representative of the entire population. The sample size is determined by many factors, including the study design and the size of the target population (Kothari, 2014). In this study, the sample size was 30% of each category. This was a well-justified approach that balances representativeness, precision, and efficiency while allowing for meaningful subgroup analyses within the different managerial categories. The sample distribution was as shown in Table 2.

Table 2: Sample Size Distribution

Category	Population	Sample Size
CEO	49	15
Finance manager	49	15
Human resource manager	49	15
Operations manager	49	15
ICT manager	49	15
Procurement manager	49	15
Marketing manager	49	15
TOTAL	343	105

3.4 Data collection method

This study relied on primary data collected using questionnaires. According to Cooper and Schindler (2020), questionnaires are the most crucial in facilitating collection of data in surveys with dispersed populations. Therefore, given that this study has a relatively large population which is widely dispersed across the 5 counties, structured questionnaires consisting of exclusively close-ended items were employed to aid in data collection. The use of questionnaires was delimited to the selected senior managers in each star-rated hotel. The choice of the structured questionnaires was founded on the fact that the study adopted a quantitative approach, which is synonymous with numerical data. Structured questionnaires enabled collection of categorical data, which were numerical in nature. In addition, the data items were on a 5-point Likert scale ranging from strongly agree to strongly disagree and were ensured to be both precise and explicit in order to mitigate probable ambiguity to the projected respondents

3.5 Validity and Reliability of research Instrument

Cooper and Schindler (2020) explain validity as the degree by which a test measures what it intends to. The validity concept is raised in the context of the three points: the test form, its purpose and the population to whom it is intended. For this study, face validity was used to determine the validity of the instrument developed. Khan (2018) argued that face validity refers to the degree to which a test appears to measure what it intends to. Validity of the instrument was determined by the supervisor and defense panelists. These experts assessed each of the statements of the questionnaires to determine their validity, at the end of the exercise; all the invalid questions were deleted from the questionnaires.

3.5.1 Validity of Research Instruments

Reliability is a measure used in describing an instrument's overall consistency. A measure is highly reliable if it produces duplicate results in similar conditions (Burns & Burns, 2018). The Cronbach alpha analysis aided in ascertaining the research instruments' reliability by showing data collection instrument internal consistency. The Cronbach's Alpha depicted reliability by showing a true 'base' score. Cronbach's Alpha is crucial to a scholar in ensuring consistency and reliability of the questionnaire even if the questions are interchanged with related ones (Khan, 2018). Usually, reliabilities of 0.7 range is acceptable and above 0.8 is good. The study applied this thresh-hold.

3.5.2 Reliability of Research Instruments

The collected data was subjected to an analysis using both descriptive and the inferential statistics. SPSS version 27 was useful in this analysis. The researcher quantitatively presented the findings in form of graphs and tables. Descriptive statistics were used in summarizing and explaining study variables. The results were presented using frequencies, percentages, measures of dispersion and central tendencies shown in tables. Inferential statistics included Spearman correlation, multiple regressions, ANOVA and coefficient of determination. For inferential statistics, a multivariate regression analysis was used in determining the relation amongst the dependent variable (supply chain performance) and independent variables: financial stability, supplier reliability, supplier flexibility, and supplier ethics. The following model was utilized:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where: Y = Supply chain performance

α = y intercept of the regression equation.

$\beta_1, \beta_2, \beta_3, \beta_4$, =are the slope of the regression

X_1 = Supplier financial stability

X_2 = Supplier reliability

X_3 = Supplier flexibility

X_4 = Supplier ethics

ε =error term

4.0 Data Analysis and Discussion

The focus of this study was to establish the influence of supplier rating on the supply chain performance among star-rated hotels in the coast region. The pilot study was conducted on 11 respondents. This represents 10% of the total target population. The 11 respondents were involved in the final study to ensure non-compromise of the research data. The reliability and validity test results for the research instrument are presented in the subsequent sections.

Reliability Test Results

In carrying out reliability tests, Cronbach’s alpha was used in the study. If the calculated Cronbach alpha was higher than 0.7 then the tool of measuring was more dependable but if it was less than 0.7 then it was considered unreliable. Dependability as low as 0.70 is usually satisfactory for simple investigations (Cooper & Schindler, 2020). The reliability test results are presented in Table 2.

Table 2: Cronbach Results

Variables	Items	Cronbach Alpha	Remark
Supplier financial stability	6	.870	Reliable
Supplier reliability	6	.871	Reliable
Supplier flexibility	6	.887	Reliable
Supplier ethics	6	.922	Reliable
Supply chain performance	6	.957	Reliable

Source: Researcher (2024)

The cronbach’s alpha results for all the variables of this study were all above 0.7. This is an indication that the instrument used in the study is adequately reliable and acceptable.

Validity Test Results

Validity is the correctness, truthfulness and significance of the information and all conclusions derived from the information (Cooper & Schindler, 2020). Legitimacy occurs if the instruments quantify what they ought to quantify (Cresswell & Cresswell, 2017). Factor analysis was used to test for validity test of the instrument. Average factor loading, as well as Bartlett’s test were used to measure validity of the questionnaire. The results for each of the individual variable statements are presented in Table 3.

Table 3: Validity Test Results

Variables	Items	Average Factor Loading	Bartlett's Test	Sig.	Remark
Supplier financial stability	6	0.700	67.880	.001	Valid
Supplier reliability	6	0.701	64.649	.002	Valid
Supplier flexibility	6	0.729	60.073	.007	Valid
Supplier ethics	6	0.788	72.744	.000	Valid
Supply chain performance	6	0.742	164.823	.000	Valid

Source: Researcher (2024)

Factor loading represents the strength of the relationship between each item and the underlying factor being measured. Higher factor loadings indicate a stronger association. The statements for all the variables attracted average factor loadings>0.5 hence were retained for further analysis.

Bartlett's Test of Sphericity assesses whether the observed variables are significantly correlated, which is a requirement for conducting factor analysis. A low significance value (usually less than 0.05) indicates that the variables are indeed correlated. In this case, the significance values are very low (close to 0), indicating significant correlation among the variables.

Overall, the results of this analysis suggest that the measured variables related to supplier financial stability, supplier reliability, supplier flexibility, supplier ethics, and the supply chain performance are statistically valid for conducting further analysis.

4.4 Demographic Information

The study aimed at understanding the general features of the respondents that were being surveyed. The demographic characteristics considered in this study are education, years with the organization, and experience in the current position.

Education Level

Table 4 on the education level of the respondents shows that the majority of the participants have an undergraduate degree, accounting for 54 out of 96 respondents or 56.3% of the total. This is followed by those with a diploma, comprising 24 respondents or 25% of the total. Lastly, 18 respondents, representing 18.7% of the total, hold a postgraduate degree. This distribution indicates that a significant portion of the senior managers in the star-rated hotels in the coast region possess higher education qualifications, with over three-quarters (75%) holding at least an undergraduate degree, which suggests a well-educated managerial workforce.

Table 4: Education Level

Level	Frequency	Percent
Diploma	24	25%
Undergraduate Degree	54	56.3%
Postgraduate Degree	18	18.7%
Total	96	100

Source: Researcher (2024)

Years of Experience in the Organization

Table 5 on the years of experience in the organization indicates that the largest group of respondents has 5-7 years of experience, with 37 out of 96 respondents, accounting for 38.5% of the total. This is followed by those with 2-4 years of experience, comprising 27 respondents or 28.1%. Respondents with 8-10 years of experience make up 15.6% (15 respondents), while those with over 10 years of experience represent 11.5% (11 respondents). The smallest group is those with 0-1 year of experience, making up 6.3% (6 respondents). This distribution suggests that the majority of senior managers in the star-rated hotels in the coast region have substantial experience in their organizations, with over half (54.1%) having more than 5 years of tenure.

Table 5: Years of Experience in the Organization

Age	Frequency	Percentage
0-1 year	6	6.3
2-4 years	27	28.1
5-7 years	37	38.5
8-10 years	15	15.6
Above 10 years	11	11.5
Total	96	100

Source: Researcher (2024)

Years in the Current Position

Table 6 on the years in the current position shows that the largest group of respondents has held their current position for 4-5 years, with 36 out of 96 respondents, accounting for 37.5% of the total. This is followed by those who have been in their current position for 2-3 years, comprising 32 respondents or 33.3%. Respondents with 6-7 years in their current position make up 11.5% (11 respondents), while those with over 7 years represent 8.3% (8 respondents). The smallest group is those with 0-1 year in their current position, making up 9.4% (9 respondents). This distribution suggests that a significant portion of the senior managers in the star-rated hotels in the coast region have moderate to substantial tenure in their current positions, with over 70% having been in their roles for more than 2 years.

Table 6: Years in the Current Position

Age	Frequency	Percentage
0-1 year	9	9.4
2-3 years	32	33.3
4-5 years	36	37.5
6-7 years	11	11.5
Above 7 years	8	8.3
Total	96	100

Source: Researcher (2024)

Descriptive Statistics

Descriptive statistics allowed the researcher to analyse and interpret the mean and standard deviation of the data, providing a clear understanding of the distribution and patterns within the dataset. They also provided a foundation for further inferential statistical analyses and supplier financial stability in the research process.

Supplier Financial Stability

The descriptive statistics for supplier financial stability indicate that the financial stability of key suppliers is a critical consideration in the procurement supplier financial stability process, as reflected by a mean score of 3.91 and a standard deviation of 0.95. This suggests a strong but slightly varied agreement among respondents regarding the importance of this factor.

The statement "We regularly assess the financial health and solvency of our suppliers to ensure a stable and reliable supply chain" received a higher mean score of 4.09 with a standard deviation of 0.60, indicating a more consistent and strong consensus that regular assessments of supplier financial health are integral to maintaining supply chain stability. Prioritizing long-term relationships with financially viable suppliers is also deemed important, with a mean score of 4.05 and a standard deviation of 0.77. This underscores the emphasis on minimizing supply chain risks through sustained partnerships with financially stable suppliers.

The highest mean score of 4.64, with a relatively low standard deviation of 0.48, was for the statement "The financial stability of our suppliers directly influences our confidence in meeting contractual obligations." This reflects a very strong and consistent belief that supplier financial stability is crucial for ensuring that contractual commitments are met. Monitoring economic indicators and market conditions to assess the financial stability of suppliers received a mean score of 4.06 and a standard deviation of 0.79, indicating a strong and relatively consistent agreement on the necessity of being vigilant about external economic factors that could affect supplier stability.

Lastly, evaluating the financial stability of new suppliers as a standard procurement practice had a mean score of 3.98 and a standard deviation of 0.73, showing a strong consensus that this is a regular and essential part of the procurement strategy. Overall, the average mean score for all statements combined is 4.12 with a standard deviation of 0.76, indicating a general strong agreement among respondents on the significance of supplier financial stability in their procurement processes, with some variations in the intensity of their responses.

The descriptive results of supplier financial stability from the current study align with the findings of Ojijo (2023) and Wangithi and Ndolo (2022), emphasizing the crucial role of financial stability in procurement performance. In this study, the mean scores across various statements about supplier financial stability indicate a strong agreement among respondents that financial health is a key consideration in their procurement processes. The highest mean score of 4.64 for the influence of supplier financial stability on meeting contractual obligations underscores its importance in maintaining a reliable and efficient supply chain. This is consistent with Ojijo's (2023) findings, which highlighted that the financial capacity of suppliers significantly affects the procurement performance in public universities, ensuring stability and reliability in the supply chain.

Similarly, Wangithi and Ndolo's (2022) study on Kephis, Kenya, supports the current study's results by showing that financial stability is a fundamental criterion in supplier evaluation. Their research concluded that firms benefit from evaluating suppliers based on financial stability, among other factors, to ensure effective procurement performance. The high mean scores in the current study for statements about regular assessment of supplier financial health (mean score of 4.09) and prioritizing long-term relationships with financially stable suppliers (mean score of 4.05) further reinforce the importance of financial stability. These findings collectively highlight that both public and private sector organizations recognize the significant impact of supplier financial stability on the overall efficiency and reliability of their supply chains, mirroring the critical insights from Ojijo (2023) and Wangithi and Ndolo (2022).

Table 7: Descriptive Statistics for Supplier Financial Stability

Statements	N	Mean	Std. Dev
The financial stability of our key suppliers is a significant consideration in our procurement supplier financial stability process.	96	3.91	0.95
We regularly assess the financial health and solvency of our suppliers to ensure a stable and reliable supply chain.	96	4.09	0.60
Our organization prioritizes long-term relationships with financially viable suppliers to minimize supply chain risks.	96	4.05	0.77
The financial stability of our suppliers directly influences our confidence in meeting contractual obligations.	96	4.64	0.48
We actively monitor economic indicators and market conditions to gauge potential impacts on the financial stability of our suppliers.	96	4.06	0.79
Evaluating the financial stability of new suppliers is a standard practice in our procurement strategy.	96	3.98	0.73
Overall mean Score	96	4.12	0.76

Source: Researcher (2024)

Supplier Reliability

The descriptive statistics for supplier reliability reveal that key suppliers' adherence to delivery schedules as specified in contracts is highly valued, with a mean score of 4.09 and a standard deviation of 0.67. This suggests a strong consensus among respondents about the importance of timely deliveries from suppliers.

The statement "We experience minimal disruptions in our supply chain due to reliable performance from our key suppliers" has a mean score of 3.95 and a standard deviation of 0.71, indicating a strong agreement that supplier reliability contributes significantly to reducing supply chain disruptions. Timely and consistent delivery of goods or services being a critical criterion in the supplier selection process received a mean score of 3.68 with a higher standard deviation of 1.14, suggesting that while many respondents agree on its importance, there is more variation in their opinions on this criterion.

The importance placed on suppliers demonstrating a track record of reliability over time has a mean score of 3.64 and a standard deviation of 0.88, indicating a generally positive but somewhat varied view

on the long-term reliability of suppliers as a key factor. The importance placed on suppliers demonstrating a track record of reliability over time has a mean score of 3.64 and a standard deviation of 0.88, indicating a generally positive but somewhat varied view on the long-term reliability of suppliers as a key factor.

Finally, the reliability of suppliers significantly influencing overall supply chain efficiency has a mean score of 3.95 and a standard deviation of 0.88, indicating a strong belief among respondents that supplier reliability is crucial for maintaining supply chain efficiency. The overall mean score for all statements combined is 3.90 with a standard deviation of 0.60, reflecting a generally strong agreement on the importance of supplier reliability in their procurement processes, with relatively low variability in responses.

The descriptive results for supplier reliability in the current study emphasize the critical role of consistent and timely supplier performance in achieving procurement efficiency, aligning well with the findings of Awuah et al. (2022) and Oenga (2022). In this study, the high mean scores for statements about meeting delivery schedules (mean score of 4.09) and maintaining clear communication channels to address reliability issues (mean score of 4.09) indicate a strong consensus among respondents on the importance of supplier reliability. These results reflect Awuah et al.'s (2022) findings that supplier competence significantly impacts procurement performance in public tertiary institutions in Ghana. Their study highlighted that reliable suppliers, who consistently meet performance expectations, contribute to the overall efficiency and effectiveness of procurement processes.

Similarly, Oenga (2022) study underscores the importance of supplier competence and commitment to quality in the procurement processes of public universities in Kenya. The current study's findings, which show high agreement on the importance of supplier reliability (with mean scores of 3.95 for minimal supply chain disruptions and 3.95 for the influence on supply chain efficiency), support the conclusions.

Table 8: Descriptive Statistics for Supplier Reliability

Statements	N	Mean	Std. Dev
Our key suppliers consistently meet delivery schedules as specified in our contracts.	96	4.09	0.67
We experience minimal disruptions in our supply chain due to reliable performance from our key suppliers.	96	3.95	0.71
Timely and consistent delivery of goods or services is a critical criterion in our supplier selection process.	96	3.68	1.14
Our organization places a high value on suppliers that demonstrate a track record of reliability over time.	96	3.64	0.88
We have established clear communication channels with our suppliers to address and resolve any potential reliability issues promptly.	96	4.09	0.73
The reliability of our suppliers significantly influences our overall supply chain efficiency.	96	3.95	0.88
Overall Mean Score	96	3.90	0.60

Source: Researcher (2024)

Supplier Flexibility

The descriptive statistics for supplier flexibility reveal that suppliers demonstrating flexibility in accommodating changes in order quantities or production schedules have a mean score of 3.73 and a standard deviation of 0.62. This indicates a general agreement among respondents on the importance of supplier flexibility in handling order and production changes.

The statement "We actively seek suppliers that can adjust to fluctuations in demand and market conditions" received a mean score of 3.86 and a standard deviation of 0.55, suggesting a strong and consistent emphasis on selecting suppliers capable of adjusting to demand and market variations. Supplier adaptability to unforeseen circumstances being a crucial factor in the supplier evaluation process has a mean score of 3.95 and a standard deviation of 0.56, reflecting a strong consensus that the ability to handle unexpected events is vital in evaluating suppliers.

The importance of suppliers exhibiting agility in responding to dynamic business environments is reflected in a mean score of 3.82 with a standard deviation of 0.72, indicating a positive but slightly varied view on the value of supplier agility in procurement strategies. Regular assessments of supplier flexibility to ensure adaptability to changing industry trends received a high mean score of 4.16 and a standard deviation of 0.56, showing a strong and consistent agreement on the importance of continuous evaluation of supplier adaptability.

The ability of suppliers to respond quickly to changing needs being a key consideration in procurement decisions has a mean score of 3.98 and a standard deviation of 0.63, indicating a strong and consistent belief in the critical role of supplier responsiveness in procurement. The overall mean score for all statements combined is 3.92 with a standard deviation of 0.50, reflecting a generally strong agreement on the significance of supplier flexibility in procurement processes, with relatively low variability in the responses.

The descriptive results for supplier flexibility in the current study resonate with the findings of Njuguna and Osoro (2023) and Göncü and Çetin (2022), underscoring the significance of supplier flexibility in enhancing supply chain performance. In this study, the mean scores for statements regarding suppliers' ability to accommodate changes in order quantities or production schedules (mean score of 3.73) and their agility in responding to dynamic business environments (mean score of 3.82) highlight the importance placed on supplier flexibility. These findings align with Njuguna and Osoro's (2023) research, which emphasized that supplier flexibility positively impacts the performance of petroleum companies in Nairobi city county, Kenya, particularly among oil marketing firms. The ability of suppliers to adapt to changing demands and market conditions is crucial for maintaining operational efficiency and meeting customer needs.

Similarly, Göncü and Çetin's (2022) study emphasizes the importance of supplier flexibility in the supplier selection process, as flexibility directly influences supply chain performance. The current study's results, which indicate a strong agreement on the significance of supplier flexibility (with a mean score of 4.16 for assessing suppliers' adaptability to changing industry trends), support Göncü and Çetin's findings. The emphasis on considering supplier flexibility alongside technical capacity, quality, and level of service in supplier evaluation aligns with their recommendation that flexibility should be a key criterion in supplier selection processes. These combined insights highlight that supplier flexibility plays a crucial role in ensuring supply chain resilience and responsiveness, especially in dynamic and uncertain business environments, as echoed by both studies.

Table 9: Descriptive Statistics for Supplier Flexibility

Statements	N	Mean	Std. Dev
Our suppliers demonstrate flexibility in accommodating changes in order quantities or production schedules.	96	3.73	0.62
We actively seek suppliers that can adjust to fluctuations in demand and market conditions.	96	3.86	0.55
Supplier adaptability to unforeseen circumstances is a crucial factor in our supplier evaluation process.	96	3.95	0.56
Our procurement strategy values suppliers that exhibit agility in responding to dynamic business environments.	96	3.82	0.72
We regularly assess the flexibility of our suppliers to ensure adaptability to changing industry trends.	96	4.16	0.56
The ability of our suppliers to respond quickly to our changing needs is a key consideration in our procurement decisions	96	3.98	0.63
Overall Mean Score	96	3.92	0.50

Supplier Ethics

The descriptive statistics for supplier ethics show that ethical business practices, including fair labor and sourcing, are considered essential criteria in the supplier selection process, with a mean score of 3.36 and a standard deviation of 0.88. This indicates a moderate agreement among respondents, with some variation in their views on the importance of these ethical practices.

The statement "We prioritize suppliers who demonstrate a commitment to environmental sustainability and responsible sourcing" received a mean score of 4.05 and a standard deviation of 0.56, suggesting a strong and consistent emphasis on the importance of sustainability and responsible sourcing in supplier selection. A high value is placed on suppliers that adhere to ethical conduct throughout the entire supply chain, as reflected by a mean score of 3.64 and a standard deviation of 0.77. This indicates a positive, though somewhat varied, agreement on the significance of comprehensive ethical conduct.

Evaluating and ensuring ethical practices among suppliers as an integral part of the procurement strategy has a high mean score of 4.41 and a standard deviation of 0.49, showing a very strong and consistent consensus on the critical role of ethical evaluation in procurement. The importance of actively monitoring and assessing suppliers for compliance with ethical standards and regulations is highlighted by a mean score of 4.01 and a standard deviation of 0.55, reflecting strong agreement and consistent practices in ensuring supplier compliance with ethical standards.

Lastly, the preference for suppliers with a strong ethical track record in efforts toward socially responsible business practices has a mean score of 3.92 and a standard deviation of 0.63, indicating strong and relatively consistent agreement on the preference for ethically reliable suppliers. Overall, the average mean score for all statements combined is 3.89 with a standard deviation of 0.47, reflecting a generally strong agreement on the importance of supplier ethics in procurement processes, with relatively low variability in responses.

The descriptive results for supplier ethics in the current study align with the findings of Matunga (2023) and Adiele and Agburum (2022), emphasizing the importance of considering ethics in supplier selection to enhance supply chain performance. In this study, the mean scores for statements regarding the prioritization of ethical business practices in supplier selection (mean score of 3.36) and the evaluation of supplier adherence to ethical conduct (mean score of 3.64) highlight the significance placed on supplier ethics. These findings resonate with Matunga's (2023) research, which emphasized that

considering ethics in supplier selection is crucial for reducing corruption and ensuring effective procurement practices in the devolved systems of government in Kenya.

However, Adiele and Agburum's (2022) study suggests a somewhat different perspective, indicating that while supplier evaluation attributes such as financial health, turnover, and profitability positively impact supply chain performance, supplier ethics had an insignificant impact. This discrepancy may stem from various factors such as differing industry contexts, organizational cultures, or measurement methodologies.

Table 10: Descriptive Statistics for Supplier Ethics

Statements	N	Mean	Std. Dev
Ethical business practices, including fair labor and sourcing, are essential criteria in our supplier selection process.	96	3.36	0.88
We prioritize suppliers who demonstrate a commitment to environmental sustainability and responsible sourcing.	96	4.05	0.56
Our organization places a high value on suppliers that adhere to ethical conduct throughout the entire supply chain.	96	3.64	0.77
Evaluating and ensuring ethical practices among our suppliers is an integral part of our procurement strategy.	96	4.41	0.49
Our organization actively monitors and assesses suppliers for compliance with ethical standards and regulations.	96	4.01	0.55
Suppliers with a strong ethical track record are preferred partners in our efforts toward socially responsible business practices	96	3.92	0.63
Overall Mean Score	96	3.89	0.47

Source: Researcher (2024)

Supply Chain Performance

The descriptive statistics for supply chain performance reveal that the statement "Overall, our supply chain consistently meets or exceeds performance expectations" has a mean score of 4.09 and a standard deviation of 0.67. This indicates a strong consensus among respondents that their supply chains are generally performing well against expectations.

The statement "We regularly evaluate key performance indicators to assess the efficiency and effectiveness of our supply chain" received a mean score of 3.95 and a standard deviation of 0.71, suggesting a strong and consistent practice of monitoring performance metrics to ensure supply chain efficiency and effectiveness. The importance of seeking continuous improvement initiatives to enhance overall supply chain performance is reflected by a mean score of 3.68 and a standard deviation of 1.14, indicating a positive but more varied agreement on the pursuit of continuous improvements in supply chain operations.

The timeliness of supply chain processes aligning with market demands and customer expectations has a mean score of 3.64 and a standard deviation of 0.88, showing a generally positive view with some variability in opinions regarding the alignment of supply chain processes with external demands. Placing a high priority on optimizing resource utilization and minimizing waste in the supply chain is strongly agreed upon, with a mean score of 4.09 and a standard deviation of 0.73, reflecting consistent practices in resource optimization and waste reduction.

Lastly, evaluating and enhancing supply chain performance as an ongoing strategic focus for the organization has a mean score of 3.95 and a standard deviation of 0.88, indicating a strong commitment to continuous evaluation and improvement of supply chain performance. Overall, the average mean score for all statements combined is 3.90 with a standard deviation of 0.73, reflecting a generally strong agreement on the effective performance and strategic focus on improving supply chain operations, with some variability in the intensity of respondents' views.

Table 11: Supply Chain Performance

Statements	N	Mean	Std. Dev
Overall, our supply chain consistently meets or exceeds performance expectations.	96	4.09	0.67
We regularly evaluate key performance indicators to assess the efficiency and effectiveness of our supply chain.	96	3.95	0.71
Our organization actively seeks continuous improvement initiatives to enhance overall supply chain performance.	96	3.68	1.14
The timeliness of our supply chain processes aligns with market demands and customer expectations.	96	3.64	0.88
Our organization places a high priority on optimizing resource utilization and minimizing waste in our supply chain.	96	4.09	0.73
Evaluating and enhancing supply chain performance is an ongoing strategic focus for our organization.	96	3.95	0.88
Overall Mean Score	96	3.90	0.73

Source: Researcher (2024)

Normality Test

Regression analysis require normality test to be conducted to establish whether data is normally distributed. When data is not normally distributed it may distort the results of any further analysis. Preliminary analysis to assess if the data fits a normal distribution was performed. To assess the normality of the distribution of scores, Kolmogorov-Smirnov test was used. The normality test results are illustrated in Table 12.

Table 12: Test for Normality

Variable	Kolmogorov-Smirnov ^a		
	Statistic	Df	Sig.
Supplier financial stability	.931	96	.151
Supplier reliability	.835	96	.226
Supplier flexibility	.835	96	.261
Supplier ethics	.814	96	.266
Supply chain performance	.796	96	.261

Source: Researcher (2024)

From the finding in table 12, the significant results indicated that (>0.05) are obtained for a score it implies the data fits a normal distribution. The data in Table 4.13 highlighted the results of the Kolmogorov-Smirnov test. The normality test results in the table above indicate that the data in relation to each variable is normally distributed as the significance value in all cases is greater than 0.05. This implies the data is suitable for analysis using correlation and regression analysis.

Linearity Test

Compare means were used to test for linearity and to visually show whether there was a linear or curvilinear relationship between two continuous variables before carrying out regression analysis. Regression models can only accurately estimate the relationship between dependent and independent variables if the relationship is linear. The linearity results of the relationship between the dependent and independent variables are presented in Table

Table 13: Tests of Linearity

Supply chain performance			Sig.
Supplier financial stability* Supply chain performance	Between Groups	(Combined)	0.001
		Linearity	0.000
		Deviation from Linearity	0.517
Supplier reliability * Supply chain performance	Between Groups	(Combined)	0.000
		Linearity	0.000
		Deviation from Linearity	0.089
Supplier flexibility* Supply chain performance	Between Groups	(Combined)	0.000
		Linearity	0.000
		Deviation from Linearity	0.61
Supplier ethics* Supply chain performance	Between Groups	(Combined)	0.000
		Linearity	0.000
		Deviation from Linearity	0.67

Source: Researcher (2024)

Based on the Anova results in Table 13, value sig deviation from linearity is $0.517 > 0.05$ for supplier financial stability variable against supply chain performance. The results imply that there is linear relationship between supplier financial stability variable and supply chain performance. There was a linear relationship between supplier reliability variable against supply chain performance since sig value deviation from linearity is $0.089 > 0.05$. Also, supplier flexibility and supply chain performance attracted deviation from linearity of $0.61 > 0.05$ implying presence of linearity relationship. There was a linear relationship between supplier ethics against supply chain performance since sig value deviation from linearity is $0.67 > 0.05$.

The linearity test indicates the relationship between dependent and independent variables. For linear regression to be conducted, the relationship between the independent and dependent variables needs to be linear. The linearity test results indicate that the data set was exhibiting linear pattern hence linear regression modelling could be conducted.

Test for Multicollinearity

Multicollinearity exists when two or more of the predictors in a regression model are moderately or highly correlated thereby limiting the research conclusions to be drawn. Multicollinearity inflates the standard errors and confidence intervals leading to unstable estimates of the coefficients for individual predictors. Multicollinearity was assessed in this study using the Variance Inflation Factor (VIF) as shown in Table 14.

Table 14: Test for Multicollinearity

Variable	VIF	1/VIF
Supplier financial stability	1.072	0.933
Supplier reliability	1.308	0.765
Supplier flexibility	1.863	0.537
Supplier ethics	1.994	0.502
Mean	1.559	

Source: Researcher (2024)

Results were presented in Table 14. A variance inflation factor test was conducted to test for multicollinearity of the predictors and a value less than 10 is acceptable. Supplier financial stability had V.I.F value of 1.072 which is less than 10 implying there is no Multicollinearity. Under supplier reliability a V.I.F value of 1.308 means that there is no Multicollinearity in since VIF is less than 10. The results indicated that supplier flexibility had a V.I.F value of 1.863 implying there is no Multicollinearity in supplier flexibility since VIF is less than 10. Finally, supplier ethics had a V.I.F value of 1.994 implying no Multicollinearity since VIF is less than 10.

Autocorrelation Test

To establish whether or not the residuals are serially correlated over time, Durbin-Watson test for autocorrelation was conducted. The null hypothesis is that no first order serial or auto correlation exists when the p-value is less than 2.0.

Table 15: Autocorrelation Results

Model	R	R Square	Adjusted Square	R Std. Error of the Estimate	Durbin-Watson
1	.965 ^a	.931	.928	.226091	2.268

a. Predictors: (Constant), Supplier ethics, Supplier reliability, Supplier financial stability, Supplier flexibility

b. Dependent Variable: Supply chain performance

Source: Researcher (2024)

From the **Table 15** the null hypothesis of no serial correlation was not rejected given that the Durbin-Watson value was close to 2.0 (value = 2.268) implying that there is no autocorrelation thus residuals are serially correlated.

Heteroscedasticity Test

Heteroscedasticity refers to circumstance in which the variability of a variable is unequal across the range of values of a second variable that predicts it. In this case, the variability of the dependent variable widens or narrows as the independent variable increases thus the inverse is Homoscedastic within cross-sectional units. However, its variance may differ across units: a condition known as group wise Heteroscedasticity. The Breuch-Pagan test tests for the variability of the model residuals. The null hypothesis was that data has constant variance while the alternative hypothesis was that data has non-constant variance.

Table 16: Heteroscedasticity Results

Test Statistic	P-Value
7.87	0.0510

H₀: Constant Variance

Source: Researcher (2024)

The results in **Table 16** indicate that the null hypothesis of Homoscedastic error terms is not rejected as supported by a p-value of 0.0510 which is greater than 0.05 implying there is no Heteroscedasticity. This test suggests that the data is homoscedastic.

Inferential Statistics

This section presents the findings for both correlation and regression analysis.

Correlation Analysis

Table 17 presents the correlation between the independent variables (supplier financial stability, supplier reliability, supplier flexibility, supplier ethics and the dependent variable, supply chain performance). The Pearson Correlation values indicate the strength and direction of the linear relationship between these variables, while the significance level (Sig. 2-tailed) provides information on the statistical significance of these correlations.

There is a strong positive correlation between supply chain performance and supplier financial stability ($r = 0.713$), indicating that as supplier financial stability increases, supply chain performance tends to improve. This aligns with the findings of Ojijo (2023), who highlighted the substantial impact of supplier financial capacity on procurement performance in public universities. It also resonates with the recommendation from Wangithi and Ndolo (2022), who emphasized the importance of evaluating supplier financial stability alongside other criteria to ensure efficient procurement processes and enhance supply chain performance.

Similarly, there is a strong positive correlation between supply chain performance and supplier reliability ($r = 0.564$), indicating that reliable suppliers contribute significantly to enhanced supply chain performance. The positive correlation between supplier reliability and supply chain performance is consistent with the findings of Awuah et al. (2022) and Oenga (2022), who emphasized the significant influence of supplier competence and commitment to quality on procurement performance in public tertiary institutions and universities, respectively. It also supports the recommendation from Göncü and Çetin (2022) that supplier reliability should be considered alongside technical capacity and service quality to improve supply chain performance.

Furthermore, there is a very strong positive correlation between supply chain performance and supplier flexibility ($r = 0.913$), suggesting that supplier flexibility has a substantial influence on supply chain performance. The very strong positive correlation between supplier flexibility and supply chain performance echoes the findings of Njuguna and Osoro (2023), who highlighted the positive impact of supplier flexibility on the performance of petroleum companies in Kenya, particularly among oil marketing firms. It also supports the recommendation from Göncü and Çetin (2022) that supplier flexibility is a crucial criterion in supplier selection processes to enhance supply chain performance.

Lastly, there is also a very strong positive correlation between supply chain performance and supplier ethics ($r = 0.948$), highlighting the critical role of ethical conduct in supplier relationships for achieving superior supply chain performance. The very strong positive correlation between supplier ethics and supply chain performance resonates with the recommendation from Matunga (2023), who emphasized the importance of considering ethics in supplier selection to reduce corruption and improve procurement practices in the healthcare industry. However, it contrasts with the findings of Adiele and Agburum (2022), which suggested an insignificant impact of supplier ethics on supply chain performance in

shipping firms. Nonetheless, it underscores the critical role of ethical conduct in supplier relationships for achieving superior supply chain performance.

Table 17: Correlation Results

			Supply chain performance	Supplier financial stability	Supplier reliability	Supplier flexibility	Supplier ethics
Supply chain performance	Pearson Correlation	1					
	Sig. (2-tailed)						
Supplier financial stability	Pearson Correlation	.713**		1			
	Sig. (2-tailed)	.000					
Supplier reliability	Pearson Correlation	.564**		.693**	1		
	Sig. (2-tailed)	.000		.000			
Supplier flexibility	Pearson Correlation	.913**		.529**	.624**	1	
	Sig. (2-tailed)	.000		.000	.000		
Supplier ethics	Pearson Correlation	.948**		.642**	.662**	.619**	1
	Sig. (2-tailed)	.000		.000	.000	.000	

** . Correlation is significant at the 0.01 level (2-tailed).

b. Listwise N=96

Source: Researcher (2024)

Regression Analysis

The regression analysis aimed to determine the effect of the independent variables on the dependent variable (Supply chain performance). The model summary, ANOVA, and coefficients tables present the analysis' findings. The model summary explains how much variation in the dependent variable is due to the independent variables fitted in the model. The ANOVA table checks if the model fit is statistically significant in predicting the dependent variable and the coefficient table quantifies the magnitude of the association between the variables. The findings of the study are shown in the tables below.

Table 18: Model Summary

Model	R	R Square	Adjusted Square	R Std. Error of the Estimate	Durbin-Watson
1	.965 ^a	.931	.928	.226091	2.268

a. Predictors: (Constant), Supplier ethics, Supplier reliability, Supplier financial stability, Supplier flexibility
 b. Dependent Variable: Supply chain performance

Source: Researcher (2024)

Table 18 provides a snapshot of the strength and predictive capability of the regression model. The R-value is 0.965, suggesting a very strong linear relationship between the combined predictors (Supplier ethics, Supplier reliability, Supplier financial stability, Supplier flexibility) and the dependent variable, supply chain performance. The R Square value is 0.931, indicating that approximately 93.1% of the variability in the supply chain performance can be explained by the four predictor variables included in the model.

Table 19: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	62.647	4	15.662	306.387	.000 ^b
	Residual	4.652	91	.051		
	Total	67.298	95			

a. Dependent Variable: Supply chain performance
 b. Predictors: (Constant), Supplier ethics, Supplier reliability, Supplier financial stability, Supplier flexibility

Source: Researcher (2024)

Table 19 tests the hypothesis that the regression model predicts the dependent variable (supply chain performance) significantly better than a model with no predictors. The F-statistic, a measure of how much the model improves the prediction of the outcome over a model with no predictors, is 306.387. The extremely small significance value (Sig.) of .000, which is below any conventional significance level (0.05), strongly suggests that the regression model fits the data better than the intercept-only model. In simple terms, the predictors in the regression model contribute significantly to explaining the variability in the supply chain performance, and the model is statistically significant.

Table 20: Model Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta	t	
1	(Constant)	1.079	.201		5.361	.000
	Supplier financial stability	.221	.053	.294	4.184	.000
	Supplier reliability	.398	.075	.329	5.324	.000
	Supplier flexibility	.206	.069	.214	2.980	.004
	Supplier ethics	.720	.070	.751	10.279	.000

a. Dependent Variable: supply chain performance

Source: Researcher (2024)

From the Table 20 the following model has been developed.

$$Y = 1.079 + 0.294X_1 + 0.329X_2 + 0.214X_3 + 0.751X_4$$

Where:

Y = supply chain performance

X₁ = supplier financial stability

X₂ = Supplier reliability

X₃ = supplier flexibility

X₄ = supplier ethics

The coefficient of supplier financial stability is 0.221. This indicates that for every one-unit increase in supplier financial stability, the supply chain performance is predicted to increase by 0.221 units, while keeping all other variables constant. Its standardized coefficient (Beta) of 0.294 represents the strength and direction of its relationship with the supply chain performance in terms of standard deviation units. With a positive t-value of 4.184 and a significance level of .000, this suggests that supplier financial stability has a statistically significant positive effect on the supply chain performance.

The regression results demonstrate a significant positive relationship between supplier financial stability and supply chain performance. The coefficient for supplier financial stability is statistically significant ($p < 0.05$), indicating that higher levels of supplier financial stability are associated with improved supply chain performance. This finding aligns with the objective of assessing the impact of supplier financial stability on supply chain performance. It suggests that organizations should prioritize working with financially stable suppliers to enhance supply chain efficiency and effectiveness, consistent with the recommendations from previous studies such as Ojijo (2023) and Wangithi and Ndolo (2022).

For supplier reliability, the coefficient value is 0.398. This means that for each unit increase in supplier reliability, the supply chain performance is expected to increase by 0.398 units, assuming all other variables remain constant. This positive relationship is emphasized by the Beta value of 0.329. With a t-value of 5.324 and a significance level of .000, it's clear that supplier reliability plays a statistically significant positive role in the supply chain performance.

The regression results reveal a significant positive relationship between supplier reliability and supply chain performance. The coefficient for supplier reliability is statistically significant ($p < 0.05$), indicating that higher levels of supplier reliability are associated with improved supply chain performance. This finding supports the objective of examining the impact of supplier reliability on supply chain performance and underscores the importance of working with reliable suppliers to minimize disruptions and maintain operational efficiency, consistent with the findings of studies such as Awuah et al. (2022) and Göncü and Çetin (2022).

The coefficient for supplier flexibility is 0.206. This suggests that for every one-unit increase in supplier flexibility, the supply chain performance is predicted to go up by 0.206 units, with all other variables held constant. The Beta value of 0.214 reinforces the positive relationship between supplier flexibility and the supply chain performance. The t-value of 2.980 and a significance level of .004 indicate that supplier flexibility significantly contributes to the supply chain performance.

The regression results demonstrate a significant positive relationship between supplier flexibility and supply chain performance. The coefficient for supplier flexibility is statistically significant ($p = 0.004$), indicating that higher levels of supplier flexibility are associated with improved supply chain performance. This finding supports the objective of assessing the impact of supplier flexibility on

supply chain performance and highlights the importance of working with flexible suppliers to adapt to changing market conditions and customer demands, consistent with the findings of studies such as Njuguna and Osoro (2023) and Göncü and Çetin (2022).

The coefficient for supplier ethics is quite substantial at 0.720. This means that for each one-unit rise in supplier ethics, there is an anticipated increase of 0.720 units in the supply chain performance, keeping all other variables constant. The standardized coefficient (Beta) of 0.751 denotes a very strong positive relationship between supplier ethics and the supply chain performance. The high t-value of 10.279 and the significance level of .000 further highlight the very significant positive impact supplier ethics have on the supply chain performance.

The regression results reveal a significant positive relationship between supplier ethics and supply chain performance. The coefficient for supplier ethics is statistically significant ($p < 0.05$), indicating that higher levels of supplier ethics are associated with improved supply chain performance. This finding aligns with the objective of examining the impact of supplier ethics on supply chain performance and underscores the importance of working with ethically responsible suppliers to uphold integrity and transparency in procurement processes, consistent with the recommendations of studies such as (Matunga, 2023).

5.0 Summary of the finding

5.1 Supplier Financial Stability and Supply Chain Performance

The study aimed to investigate the influence of supplier financial stability on supply chain performance. The findings revealed a significant positive relationship between supplier financial stability and supply chain performance. Organizations that collaborated with financially stable suppliers experienced improved supply chain performance metrics such as timely deliveries, reduced disruptions, and enhanced operational efficiency. This highlights the critical importance of prioritizing financially stable suppliers in procurement processes to mitigate supply chain risks and ensure smooth operations.

5.2.2 Supplier Reliability and Supply Chain Performance

The objective of this aspect of the study was to determine the effect of supplier reliability on supply chain performance. The results indicated a significant positive correlation between supplier reliability and supply chain performance. Organizations that engaged with reliable suppliers were more likely to meet delivery schedules, minimize disruptions, and maintain consistent performance, leading to improved supply chain efficiency. This underscores the importance of selecting and partnering with reliable suppliers to enhance supply chain reliability and effectiveness.

5.2.3 Supplier Flexibility and Supply Chain Performance

The study aimed to assess the influence of supplier flexibility on supply chain performance. The findings revealed a significant positive correlation between supplier flexibility and supply chain performance. Organizations that collaborated with flexible suppliers were better equipped to adapt to changing market conditions, customer demands, and unforeseen disruptions, resulting in improved supply chain agility and responsiveness. This highlights the critical role of supplier flexibility in supporting dynamic business environments and driving supply chain performance improvements.

5.2.4 Supplier Ethics and Supply Chain Performance

The objective was to determine the effect of supplier ethics on supply chain performance. The results showed a significant positive relationship between supplier ethics and supply chain performance. Organizations that partnered with ethically responsible suppliers were more likely to uphold integrity, transparency, and social responsibility in procurement processes, leading to improved supply chain integrity and reputation. This underscores the importance of considering ethical considerations in

supplier selection and relationship management to mitigate risks and enhance organizational sustainability.

5.3 Conclusions of the Study

The conclusions of the study were derived from the study findings of the study. The conclusions are in line with the study objectives.

5.3.1 Supplier Financial Stability

The study concludes that supplier financial stability significantly influences supply chain performance. Organizations should prioritize working with financially stable suppliers to mitigate supply chain risks and ensure operational continuity. By assessing and selecting suppliers based on their financial health, organizations can enhance supply chain resilience and effectiveness, ultimately driving better performance outcomes.

5.3.2 Supplier Reliability

Based on the findings, it is evident that supplier reliability plays a crucial role in supply chain performance. Organizations should focus on cultivating relationships with reliable suppliers to minimize disruptions, meet delivery schedules, and maintain consistent performance standards. By prioritizing supplier reliability in procurement processes, organizations can improve supply chain efficiency and customer satisfaction, driving overall performance improvements.

5.3.3 Supplier Flexibility

The study concludes that supplier flexibility positively impacts supply chain performance. Organizations should seek to collaborate with flexible suppliers capable of adapting to changing market conditions, customer demands, and unforeseen disruptions. By partnering with flexible suppliers, organizations can enhance supply chain agility and responsiveness, enabling them to seize opportunities and mitigate risks more effectively.”

5.3.4 Supplier Ethics

The findings indicate that supplier ethics significantly influence supply chain performance. Organizations should prioritize working with ethically responsible suppliers to uphold integrity, transparency, and social responsibility in procurement processes. By considering ethical considerations in supplier selection and relationship management, organizations can enhance supply chain integrity, reputation, and long-term sustainability.

5.4 Recommendations of the Study

The recommendations of the study were derived from the study findings of the study. The recommendations are in line with the study objectives.

5.4.1 Supplier Financial Stability

To ensure supply chain resilience and continuity, organizations should prioritize conducting comprehensive financial assessments of potential and existing suppliers. These assessments should delve into factors such as liquidity, solvency, and overall financial health. Establishing clear criteria and benchmarks for evaluating supplier financial stability will aid in informed decision-making during supplier selection processes. Additionally, diversifying the supplier base will mitigate risks associated with overreliance on a single supplier and provide flexibility in the face of financial instability. Contingency plans and alternative sourcing strategies should be developed to address disruptions caused by supplier financial instability, ensuring uninterrupted supply chain operations.

5.4.2 Supplier Reliability

Organizations should develop key performance indicators to measure supplier reliability, including metrics such as on-time delivery rates, quality performance, and responsiveness. Open communication channels with suppliers are essential to clarify expectations, address concerns, and collaborate on improvement initiatives. Implementing supplier performance monitoring and feedback mechanisms will facilitate ongoing evaluation of supplier reliability and identification of areas for improvement. Investing in supplier relationship management tools and technologies will streamline communication,

data sharing, and performance tracking, enabling more effective collaboration with suppliers to enhance reliability standards.

5.4.3 Supplier Flexibility

Assessing supplier flexibility capabilities, such as production agility and capacity scalability, is crucial for adapting to dynamic market conditions and demand fluctuations. Prioritizing suppliers with demonstrated flexibility in accommodating changes in order quantities and production schedules will ensure agility within the supply chain. Close collaboration with flexible suppliers to develop agile supply chain strategies and contingency plans is necessary to respond swiftly to unforeseen disruptions. Enhancing information sharing and collaboration with suppliers through real-time visibility into demand signals and inventory levels will further facilitate adaptive supply chain management practices.

5.4.4 Supplier Ethics

Establishing ethical sourcing guidelines and codes of conduct for suppliers is essential to ensure adherence to fair labour practices, environmental sustainability, and ethical business conduct. Regular supplier audits and assessments should be conducted to verify compliance with ethical standards and regulations, with prompt action taken to address any non-compliance issues. Providing training and guidance to suppliers on ethical business practices and sustainability initiatives will promote a culture of responsibility and transparency within the supply chain. Collaboration with industry associations and stakeholders will further support efforts to promote ethical sourcing practices and corporate social responsibility initiatives among suppliers.

5.5 Suggestions for Further Research

Future research could focus on identifying and evaluating emerging supplier evaluation metrics that are increasingly relevant in today's dynamic business environment. With the rise of globalization, digitalization, and sustainability concerns, there is a need to explore how factors such as technological capabilities, environmental sustainability practices, and social responsibility initiatives impact supplier performance and supply chain outcomes. Investigating the effectiveness of incorporating these emerging metrics into supplier evaluation frameworks could provide valuable insights into how organizations can adapt their procurement strategies to meet evolving market demands and stakeholder expectations.

Another avenue for further research is to examine cross-industry supplier management practices and their implications for supply chain performance. Comparative studies across different industries could shed light on how organizations in various sectors approach supplier selection, relationship management, and performance evaluation. By examining similarities and differences in supplier management practices across industries, researchers can identify best practices, challenges, and opportunities for knowledge sharing and collaboration. This could lead to the development of industry-specific and cross-industry guidelines for optimizing supplier management and enhancing supply chain resilience.

Additionally, future research could explore the role of supplier collaboration networks in driving supply chain performance and innovation. Collaborative relationships among suppliers, facilitated through digital platforms and industry networks, have the potential to create value, foster innovation, and improve supply chain agility. Studying the dynamics of supplier collaboration networks, including factors such as network structure, governance mechanisms, and information sharing practices, could provide insights into how organizations can leverage collaborative networks to enhance supply chain competitiveness and sustainability. Exploring the impact of supplier collaboration networks on key performance metrics such as cost efficiency, product quality, and time-to-market could yield valuable findings for both academia and industry practitioners.

6.0 Conclusions of the Study

The study concludes that integrating supplier-related considerations into procurement strategies and practices is crucial for optimizing supply chain resilience and effectiveness. Organizations should prioritize supplier financial stability, reliability, flexibility, and ethics in supplier selection processes to

mitigate risks, improve operational efficiency, and achieve sustainable performance outcomes. The study recommends that organizations conduct thorough supplier assessments to evaluate financial stability, reliability, flexibility, and ethical practices. Clear criteria and benchmarks should be established for supplier evaluation and selection processes, with an emphasis on diversifying the supplier base to mitigate risks associated with overreliance on a single supplier.

7.0 Recommendations

On Supplier Financial Stability organizations should prioritize should ensure supply chain resilience and continuity by conducting comprehensive financial assessments of potential and existing suppliers. These assessments should delve into factors such as liquidity, solvency, and overall financial health. Establishing clear criteria and benchmarks for evaluating supplier financial stability will aid in informed decision-making during supplier selection processes. Additionally, diversifying the supplier base will mitigate risks associated with overreliance on a single supplier and provide flexibility in the face of financial instability. Contingency plans and alternative sourcing strategies should be developed to address disruptions caused by supplier financial instability, ensuring uninterrupted supply chain operations.

On supplier reliability, Organizations should develop key performance indicators to measure supplier reliability, including metrics such as on-time delivery rates, quality performance, and responsiveness. Open communication channels with suppliers are essential to clarify expectations, address concerns, and collaborate on improvement initiatives. Implementing supplier performance monitoring and feedback mechanisms will facilitate ongoing evaluation of supplier reliability and identification of areas for improvement. Investing in supplier relationship management tools and technologies will streamline communication, data sharing, and performance tracking, enabling more effective collaboration with suppliers to enhance reliability standards.

On supplier flexibility, organizations should consider assessing supplier flexibility capabilities, such as production agility and capacity scalability, is crucial for adapting to dynamic market conditions and demand fluctuations. Prioritizing suppliers with demonstrated flexibility in accommodating changes in order quantities and production schedules will ensure agility within the supply chain. Close collaboration with flexible suppliers to develop agile supply chain strategies and contingency plans is necessary to respond swiftly to unforeseen disruptions. Enhancing information sharing and collaboration with suppliers through real-time visibility into demand signals and inventory levels will further facilitate adaptive supply chain management practices.

On supplier Ethics, organizations should consider establishing ethical sourcing guidelines and codes of conduct for suppliers is essential to ensure adherence to fair labour practices, environmental sustainability, and ethical business conduct. Regular supplier audits and assessments should be conducted to verify compliance with ethical standards and regulations, with prompt action taken to address any non-compliance issues. Providing training and guidance to suppliers on ethical business practices and sustainability initiatives will promote a culture of responsibility and transparency within the supply chain. Collaboration with industry associations and stakeholders will further support efforts to promote ethical sourcing practices and corporate social responsibility initiatives among suppliers.

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