



ROLE OF SUPPLIER RELATIONS MANAGEMENT ON THE PERFORMANCE OF HOSPITALS IN KIAMBU COUNTY, KENYA

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ABSTRACT

Despite the extensive law provisions that guide the procedures of procurement among hospitals in Kenya, there have been numerous issues arising that affect supplier relations management. Poor supplier relations have significant financial implications as well. Thus, this study sought to investigate the role of supplier relations management on the performance of hospitals in Kiambu County, Kenya. The study was guided by the following specific objectives; to establish the role of supplier selection on the performance of hospitals in Kiambu County and to determine the role of supplier payment on the performance of hospitals in Kiambu County. This study employed a descriptive research design. The study targeted all 115 registered hospitals in Kiambu County. Due to the small size of the population, the study adopted census sampling design. Therefore, the sample size of the study was 115 top level officials from procurement departments. This research used a questionnaire to collect primary data. The study carried out pilot study to pretest and validated the questionnaire and the interview guide. Questionnaires were distributed to 15 of the total 115 registered hospitals in Kiambu County. The selected sample was excluded from the final study. Quantitative data collected using questionnaires was analyzed by the use of descriptive statistics using Statistical Package for Social Sciences. To test the relationship between the study variables, inferential statistics was computed using correlation and regression analysis. The results were presented in form of tables and figures. The study concludes that supplier selection has a positive and significant effect on performance of hospitals in Kiambu County. The study also concludes that that supplier payment has a positive and significant effect on performance of hospitals in Kiambu County. From the findings, the study recommends that Hospitals in Kiambu County should consider a broader range of criteria when selecting suppliers. In addition to financial stability and experience, they should also evaluate factors such as ethical practices, compliance with regulatory standards, and the ability to adapt to changing healthcare needs.

Key Words: Supplier Relations Management, supplier selection, supplier payment and Performance of Hospitals

Background of the Study

In today's highly competitive healthcare landscape, hospitals face numerous challenges in delivering high-quality patient care while simultaneously managing costs (Sahin, Süer, & Çalıyurt, 2020). Effective management of supplier relationships plays a critical role in supporting hospital performance and achieving organizational goals. Supplier relations management (SRM) encompasses the strategic and operational activities involved in identifying, selecting, and managing suppliers to ensure the timely delivery of essential goods and services at optimal costs, while maintaining a high standard of quality and patient safety (Shin, Collier & Wilson, 2019). Supplier Relationship Management (SRM) permits the growth and preservation of strategic relationships with important suppliers and empowers organizations to assume a fresh way of thought about the supply chain and its transparency (Shin, Collier & Wilson, 2019).

The healthcare sector heavily relies on suppliers for a wide range of goods and services, including medical equipment, pharmaceuticals, consumables, IT solutions, and maintenance services (Yap, Marimuthu, & Jaafar, 2020). Hospitals need to establish and maintain strong partnerships with suppliers to ensure a steady supply of essential resources, foster innovation, and streamline operations. Effective SRM practices enable hospitals to build collaborative relationships with suppliers, align their objectives, and achieve mutual benefits, ultimately contributing to improved hospital performance (Barney, Choe, & Kwon, 2019).

The performance of hospitals is a multifaceted concept that encompasses several dimensions, including clinical outcomes, patient satisfaction, financial viability, operational efficiency, and overall organizational effectiveness (Gupta, Verma, & Singh, 2021). Optimal supplier management has the potential to positively impact each of these dimensions. For instance, hospitals that effectively manage their supplier relationships can enhance patient safety by ensuring the availability of high-quality medical equipment and pharmaceuticals (Li, Ji, & Raja, 2020). Additionally, efficient SRM practices can lead to cost savings through improved negotiation strategies, streamlined procurement processes, and reduced inventory holding costs (Wu, Yan, & Chen, 2020). By collaborating closely with suppliers, hospitals can also benefit from shared knowledge and expertise, leading to process improvements and operational efficiencies (Chang, Chang, & Yeh, 2020).

Despite the critical role of SRM in hospital performance, there is a paucity of comprehensive research exploring the specific mechanisms and outcomes associated with effective supplier relationship management. Therefore, this study aims to address this gap by investigating the impact of SRM on various performance indicators within hospitals. By examining the relationship between SRM practices and hospital performance, this research will provide valuable insights for healthcare managers, policymakers, and stakeholders, enabling them to make informed decisions and implement strategies that optimize supplier relationships.

In Kenya, there is also a growing recognition of the importance of technology in supporting effective SRM practices. Many firms are investing in digital tools such as supplier portals, e-sourcing, and e-auctions to improve transparency and collaboration with suppliers (Wambua et al., 2019). These tools also enable real-time tracking of supplier performance and facilitate communication between buyers and suppliers.

However, there are still some challenges facing the implementation of effective SRM practices in Kenya. These include a lack of skilled personnel with the necessary SRM knowledge and expertise, limited resources for implementing and maintaining SRM processes, and a lack of trust between buyers and suppliers (Ngigi, 2017). Addressing these challenges will require a concerted

effort from both buyers and suppliers to build mutual trust, develop shared goals, and establish effective communication channels.

Statement of the Problem

Despite the extensive law provisions that guide the procedures of procurement among hospitals in Kenya, there have been numerous issues arising that affect supplier relations management. Delayed payments, illegal outsourcing, and unethical procurement practices have had implications on the selection of appropriate supplier relations (Owalla, 2012). In the public hospitals sector, more than 50% of corruption cases alleged are related to supplier relations adopted (Owalla, 2012). These challenges raise questions about the methods adopted by the public health sector in their procurement processes and their impact on supplier relations. Poor supplier relations have significant financial implications as well. The Kenyan government loses close to Ksh. 71 billion, approximately 17 percent of the national budget, annually due to inflated procurement quotations resulting from poor supplier relations (KISM, 2018). Proper supplier relations management has been recognized as a means to minimize procurement expenditure (Victor, 2018).

A study conducted by Mwangi et al. (2019) revealed that out of 500 healthcare professionals surveyed in Kenya, 65% reported experiencing delayed payments to suppliers, leading to disruptions in the supply of essential medical products. Moreover, 72% of respondents identified unethical practices in procurement processes, including favoritism and corruption, which undermined supplier relations. Another study by Cheluget et al. (2018) investigated procurement practices in Kenyan public hospitals and found that 60% of the hospitals experienced frequent stockouts of essential drugs and medical supplies. These stockouts were attributed to inefficient supplier relations, including poor communication, unreliable delivery schedules, and inadequate quality control measures. Furthermore, a research report by Transparency International Kenya (2017) highlighted that the healthcare sector in Kenya faces significant corruption risks, including bribery, kickbacks, and collusion in procurement processes. This corruption not only compromises the selection of appropriate suppliers but also leads to inflated prices and poor-quality products.

Despite the importance of supplier relations management in the healthcare sector, limited research has been conducted to determine the reasons why public hospitals have not been able to achieve streamlined supply chain objectives (Apiyo & Mburu, 2018). Existing research has focused on various procurement aspects, such as procurement planning, budget allocation, and management of devolved funds (Wogube, 2017; Nyumu, 2020; Owalla, 2018). However, there is a lack of information on the state of supply relations management and its influence on hospital performance (Apiyo & Mburu, 2018; Parente, 2019).

Complaints from the general public regarding erratic supplies of essential drugs and medical supplies in most hospitals in the country further highlight the need to examine the state of supply relations management (Chepkwony et al., 2018). The scarcity of literature on this topic and its potential impact on hospital performance provide the rationale for the present study. Thus, this study aims to investigate the role of supplier relations management on the performance of hospitals in Kiambu County, Kenya, specifically exploring the effects of supplier selection, supplier contracting, supplier development, and supplier payment.

General Objective

The general objective of the study is to assess the role of supplier relations management on performance of public hospitals in Kiambu County, Kenya.

Specific Objectives

The study was guided by the following specific objectives;

- i. To establish the role of supplier selection on performance of hospitals in Kiambu County
- ii. To determine the role of supplier payment on performance of hospitals in Kiambu County

Theoretical Review

Theory of Supplier Evaluation and Selection

The Theory of Supplier Evaluation and Selection, proposed by Richard Monczka, Robert Handfield, Larry Giunipero, and James Patterson, is a valuable framework for understanding and implementing supplier selection processes (Monczka et al., 2015). This theory provides insights into the criteria and considerations involved in choosing suppliers that align with the buyer's requirements and contribute to competitive advantage through effective supply chain management.

The authors emphasize the importance of evaluating potential suppliers based on multiple factors such as price, quality, reliability, and strategic fit (Monczka et al., 2015). The theory provides a systematic approach to supplier selection, helping organizations identify suppliers that can meet their specific needs and contribute to their overall business objectives.

By focusing on strategic alignment and competitive advantage, the Theory of Supplier Evaluation and Selection assists in optimizing the supplier selection process. It provides organizations with a structured framework to assess and choose suppliers that align with their strategic goals and enhance their supply chain performance.

However, it is important to note that critiques of this theory exist. Critics argue that the theory may oversimplify the complexities involved in supplier evaluation and selection (Kleindorfer & Saad, 2005). They contend that it may overlook other factors such as social and environmental considerations, as well as the importance of building long-term relationships with suppliers (Walker et al., 2011). Critics highlight the need to consider a broader range of criteria beyond the traditional factors emphasized in this theory.

Despite these critiques, the Theory of Supplier Evaluation and Selection is chosen to explain the supplier selection variable due to its systematic and structured approach to assessing and choosing suppliers. It provides a framework that aligns with the goal of identifying appropriate suppliers for effective supplier relations management. By considering key criteria such as price, quality, and strategic fit, organizations can make informed decisions that support their supply chain objectives.

Theory of Transaction Cost Economics

Transaction Cost Economics (TCE) is a prominent theory developed by Oliver E. Williamson that provides a comprehensive framework for analyzing economic transactions within organizations (Williamson, 1985). The theory was driven by the objective of profit maximization. The basic assumption underlying the theory suggests that relationships between buyers and suppliers' lower transaction costs and facilitate investment in relation-specific asset (Williamson, 1981, 1985). This makes reference to the relative cost of using markets as opposed to firm controlled resources for determining the resource allocation decisions.

According to TCE, transactions are characterized by various costs, including transaction-specific investments, information asymmetry, and opportunistic behavior. The theory suggests that these costs influence the choice of governance structures, such as market exchanges or hierarchical arrangements (Williamson, 1975). TCE emphasizes the role of transaction attributes, such as asset

specificity, uncertainty, and frequency, in determining the most efficient governance structure for a particular transaction.

Critics of TCE argue that it may oversimplify the complexity of real-world transactions and fail to consider social and relational factors. They contend that TCE places too much emphasis on economic factors and overlooks the importance of trust, cooperation, and social norms in shaping transaction outcomes (Granovetter, 1985). Critics also highlight the limitations of TCE in explaining dynamic and evolving business environments, where transactions and relationships are subject to ongoing adjustments and adaptations.

Despite these critiques, TCE remains a valuable theory for understanding transactional behavior and governance choices. It provides insights into the factors that drive transaction costs and helps explain the trade-offs between market-based transactions and internal hierarchical arrangements (Williamson, 1985). TCE has been widely applied across various fields, including supply chain management, organizational behavior, and strategic management, highlighting its relevance and usefulness in understanding economic transactions.

Conceptual Framework

Conceptual framework is a scheme of variables which the study operationalizes in order to achieve the set objectives. A variable being the measurable characteristic that assumes different values among the subjects, independent variables are the ones that the study manipulates in order to determine their effects on another variable. The dependent variable attempts to indicate the total influence arising from the effects of the independent variables. It therefore varies as a function of the independent variables (Mugenda & Mugenda, 2012). The proposed study's conceptual framework is shown below.

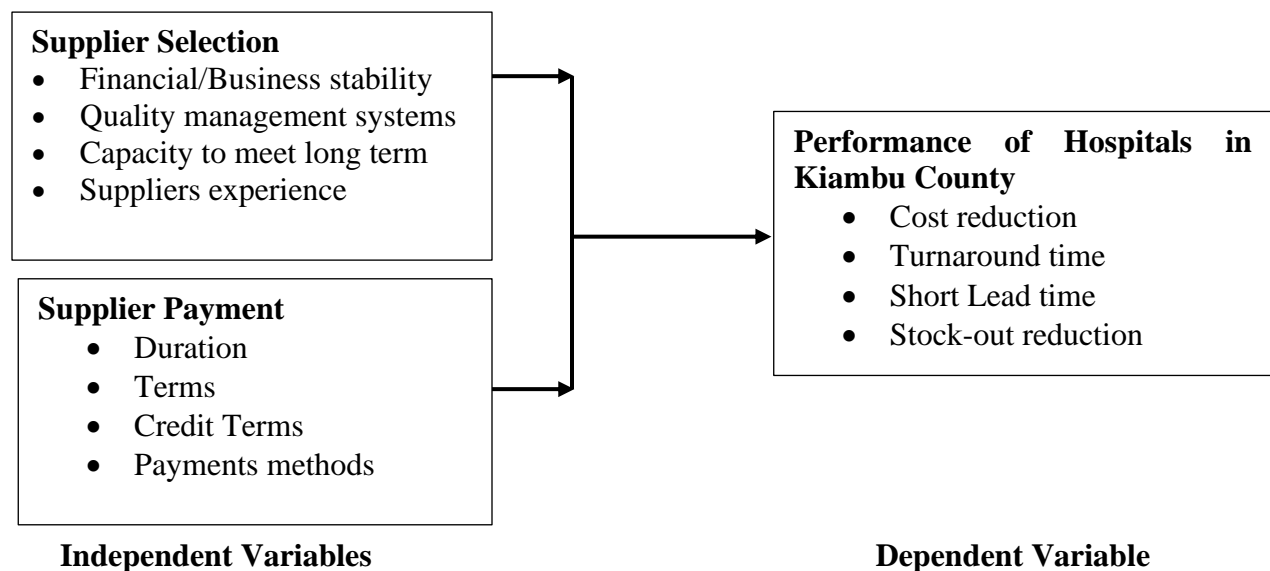


Figure 1: Conceptual Framework

Supplier Selection

Supplier selection is a critical variable in the field of supply chain management. It involves identifying and choosing suppliers who can meet the requirements of the buyer and contribute to the organization's competitive advantage (Monczka et al., 2015). The selection process involves evaluating potential suppliers based on multiple criteria, such as price, quality, reliability, and

strategic fit. The goal is to identify suppliers who can provide high-quality goods or services at a reasonable cost and establish long-term relationships that contribute to the organization's overall objectives (Monczka et al., 2015).

Several factors influence the supplier selection process, including cost, quality, reliability, responsiveness, flexibility, and innovation (Kumar et al., 2018). Organizations consider these factors to assess potential suppliers and make informed decisions. The goal is to identify suppliers that can meet the organization's needs in terms of product/service quality, delivery timeliness, cost-effectiveness, and overall value.

Numerous studies have explored the importance of supplier selection and its impact on organizational performance. For example, research by Croom, Romano, and Giannakis (2020) emphasizes the significance of supplier selection as a strategic decision that can contribute to cost reduction, quality improvement, and enhanced customer satisfaction. The study highlights the need for a structured approach to supplier selection, considering multiple criteria and involving cross-functional collaboration.

Furthermore, Shamsuzzoha, Mohamed, and Shaharoun (2019) emphasize the critical role of supplier selection in achieving supply chain competitiveness. Their research suggests that an effective supplier selection process positively influences operational performance, delivery reliability, and cost reduction. A report by The Hackett Group (2019) emphasizes the need for organizations to adopt a strategic and data-driven approach to supplier selection to optimize supply chain performance and mitigate risks.

Supplier Payment

Supplier payment is a crucial aspect of the buyer-supplier relationship, involving the timely and accurate settlement of financial obligations for goods or services provided by suppliers (Chakraborty & Philip, 2017). Effective management of supplier payments is essential for maintaining good relationships, ensuring supplier satisfaction, and promoting a smooth flow of goods and services within the supply chain. Research studies have recognized the significance of supplier payment practices and their impact on buyer-supplier relationships and overall supply chain performance. Supplier payment terms and practices can influence supplier performance and willingness to cooperate. According to a study by Monczka, Trent, and Handfield (2017), timely payments and favorable payment terms can enhance supplier satisfaction and encourage suppliers to go the extra mile to meet buyer requirements.

Supplier payment practices also have implications for cash flow management and financial stability. A study by Kraljic and Vogt (2018) suggests that effectively managing supplier payment terms can contribute to improved cash flow and financial health for both buyers and suppliers. In addition to financial considerations, supplier payment practices can impact supplier selection and collaboration. A research article by Ellram, Zsidisin, and Siferd (2018) highlights the importance of fair and transparent payment practices in attracting and retaining high-quality suppliers.

Empirical Literature Review

Supplier Selection

Mose, Ombui and Iravo (2018) studied the role of supplier selection criteria on procurement performance in public universities in Kenya; a case of Machakos University. The study adopted a descriptive survey design to find out the role of supplier selection criteria and procurement performance in public universities in Kenya. The study targeted 1200 employees in Procurement department and other four departments like; Finance; Administration, Transport and

ICT, that was divided into three sub population called strata which formed the target population, but only 120 employees were included in the sample population. Stratified and random sampling was used to select the sample size. The primary data was collected through the use of questionnaires. The quantitative data was analyzed by employing descriptive statistics and inferential analysis using statistical package for social science (SPSS) version 22. The finding was presented in table of frequency distribution, pie charts and line graphs. The study revealed that majority of the respondents was in agreement with the supplier selection criteria adopted at Machakos University. The study also revealed that among the numerous criteria adopted, technology was the most important. Additionally, the findings also revealed that there was a significant relationship between supplier selection criteria and procurement performance as the independent variables: technology, supplier profile, quality assessment and price levels were statistically significant at the 95% confidence i.e. $pvalue < 0.05$.

Krop and Iravo (2016) researched on the effects of supplier selection on performance of procurement function in public sector: a case of West Pokot County government. The study adopted a descriptive research design. The target population of this study was 25 procurement staffs within West Pokot County Government that formed the sample size because it was census. Purposive sampling enabled the researcher to determine the composition of a sample by relying on various characteristics of the respondents, thereby assisting the researcher to consider those respondents who were working under the procurement department in West Pokot County Government. Research data for the study was collected using both secondary and primary sources. The collected data was analyzed using descriptive statistics and the relationship between the variables was established using a regression model. The study found out that there are effects of supplier selection on procurement function performance and that all the four dimensions of supplier selections have significantly positive relationships with procurement performance.

Supplier Payment

Handfield and Bechtel (2018) researched on supplier payment practices and performance. This study employed a survey-based approach. Questionnaires were distributed to purchasing professionals across various industries to collect data on supplier payment practices and their impact on performance outcomes. The study revealed that timely and reliable supplier payments positively influence performance outcomes such as supplier responsiveness, product quality, and delivery reliability. It emphasized the importance of establishing trust and maintaining good relationships with suppliers through fair and prompt payment practices.

Wagner and Harland (2019) investigated supplier payment and performance. This study combined a literature review and case study analysis. Existing literature on supplier payment and performance is reviewed, and case studies of organizations' payment practices are analyzed to gain insights into the relationship between payment practices and performance outcomes. The study highlighted the significance of fair and transparent payment practices in achieving positive performance outcomes. It emphasized the need for clear payment terms, effective negotiation processes, and timely payments to ensure supplier satisfaction and foster long-term relationships. Electronic payment methods are also suggested to enhance payment processing efficiency and accuracy.

Ellram and Hendrick (2019) examined supplier payment practices, satisfaction, and performance. This study employed a survey-based methodology. Questionnaires were distributed to purchasing professionals in various industries to examine the relationship between payment practices, supplier satisfaction, and performance outcomes. The study found that consistent and accurate supplier payments positively impact performance outcomes, such as on-time delivery, quality, and

flexibility. It emphasized the importance of maintaining payment reliability to foster positive relationships with suppliers and ensure their commitment to meeting buyer requirements.

RESEARCH METHODOLOGY

Research Design

This study employed a descriptive approach on the role of supplier relations management to the performance of hospitals. The descriptive design is deemed appropriate because the main interest is to establish the relationship and analyze how the influential factors support matters under analysis in the hospitals.

Target Population

Target population refers to the entire group of individuals or objects to which researchers are interested in generalizing the conclusions. The target population usually has varying characteristics and it is also known as the theoretical population. The target population for this research study was all the 115 registered hospitals in Kiambu County.

Sample Size and Sampling Technique

In the present study, a census survey approach was taken in which the target population comprising all the 115 registered hospitals in Kiambu County formed the study sample. Purposive sampling techniques were then be employed whereby the units of analysis was key informants comprising top level officials from procurement departments across the 115 hospitals, bringing the sample size to 115.

Data Collection Instruments

This research used a questionnaire to collect primary data. According to Patton *et. al* (2016), a questionnaire is appropriate in gathering data and measuring it against a particular point of view. It provides a standardized tool for data collection.

Data Collection Procedures

This study adopted the self-administered questionnaire approach. Self-administered questionnaires offer researchers the potential to reach a large number of potential respondents in a variety of locations (Cooper & Schindler, 2017). Before embarking on data collection, relevant approvals were obtained. An introductory letter from the JKUAT Nairobi campus introducing the researcher to relevant authorities for field data collection was first obtained. This letter was used to obtain the permit for research from the National Commission for Science, Technology, and Innovation (NACOSTI). In addition, the researcher sought permission from the respective hospital in order to be allowed to collect data from the institution.

Pilot Testing

The study carried out pilot study to pretest and validate the questionnaire and the interview guide. According to Cooper and Schindler (2014), a pilot study is conducted to detect and review weaknesses in the data collection instrument. Pilot testing allows for the detection and correction of a wide range of potential problems with the research instrument. The pilot test should comprise 10% of the sample (Cooper & Schindler, 2014). For the pilot study, questionnaires were distributed to 15 of the total 115 registered hospitals in Kiambu County. The selected sample was excluded from the final study.

Data Analysis and Presentation

Quantitative data collected using questionnaires shall be analyzed by the use of descriptive statistics using Statistical Package for Social Sciences (Version 22.0) because it has new formulas for statistics and are presented through percentages, means and frequencies. The information was also displayed by use of frequency tables, charts and other figures applicable in data presentation. To test the relationship between the study variables, inferential statistics were computed using correlation and regression analysis.

Correlation was used to determine the strength of relationship between dependent and independent variables. Correlation value of 0 shows no relationship between the independent and dependent variable whereas when the value is not or equal to 1.0, there is a perfect negative or positive relationship respectively. Values shall be interpreted between 0 (no-relationship) and 1.0 (perfect relationship) (Levin & Rubin, 2018). Multiple regression analysis was conducted to give various outputs.

PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

Descriptive Statistics Analysis

Supplier Selection and Performance of Hospitals

The first specific objective of the study was to establish the role of supplier selection on performance of hospitals in Kiambu County. The respondents were requested to indicate their level of agreement on statements relating to supplier selection and performance of hospitals in Kiambu County. A 5 point Likert scale was used where 1 symbolized strongly disagree, 2 symbolized disagree, 3 symbolized neutral, 4 symbolized agree and 5 symbolized strongly agree. The results were as presented in Table 1.

From the results, the respondents agreed that supplier selection criteria are clearly defined and aligned with the specific needs and requirements of their hospital. This is supported by a mean of 3.943 (std. dv = 0.981). In addition, as shown by a mean of 3.926 (std. dv = 0.850), the respondents agreed that the supplier selection process in their hospital is structured and systematic, considering factors such as price, quality, reliability, and service. Further, the respondents agreed that their hospital actively seeks supplier feedback and conducts evaluations to assess their performance in meeting their expectations and requirements. This is shown by a mean of 3.911 (std. dv = 0.914).

The respondents also agreed that they consider the reputation and track record of potential suppliers in terms of their past performance and relationships with other hospitals or healthcare organizations. This is shown by a mean of 3.896 (std. dv = 0.947). With a mean of 3.889 (std. dv = 0.856), the respondents agreed that their hospital values long-term relationships with suppliers and considers their ability to provide ongoing support and collaboration. The respondents agreed that they involve multiple stakeholders (e.g., department heads, procurement team, end-users) in the supplier selection process to ensure a comprehensive evaluation. This is supported by a mean of 3.876 (std. dv = 0.694). In addition, as shown by a mean of 3.764 (std. dv = 0.892), the respondents agreed that the supplier selection process in their hospital includes a thorough assessment of supplier financial stability and capacity to meet our demands consistently.

Table 1: Supplier Selection and Performance of Hospitals

	Mean	Std. Dev.
Supplier selection criteria are clearly defined and aligned with the specific needs and requirements of our hospital.	3.943	0.981
The supplier selection process in our hospital is structured and systematic, considering factors such as price, quality, reliability, and service.	3.926	0.850
Our hospital actively seeks supplier feedback and conducts evaluations to assess their performance in meeting our expectations and requirements.	3.911	0.914
We consider the reputation and track record of potential suppliers in terms of their past performance and relationships with other hospitals or healthcare organizations.	3.896	0.947
Our hospital values long-term relationships with suppliers and considers their ability to provide ongoing support and collaboration.	3.889	0.856
We involve multiple stakeholders (e.g., department heads, procurement team, end-users) in the supplier selection process to ensure a comprehensive evaluation.	3.876	0.694
The supplier selection process in our hospital includes a thorough assessment of supplier financial stability and capacity to meet our demands consistently.	3.764	0.892
Aggregate	3.886	0.868

Supplier Payment and Performance of Hospitals

The fourth specific objective of the study was to determine the role of supplier payment on performance of hospitals in Kiambu County. The respondents were requested to indicate their level of agreement on various statements relating to supplier payment and performance of hospitals in Kiambu County. A 5 point Likert scale was used where 1 symbolized strongly disagree, 2 symbolized disagree, 3 symbolized neutral, 4 symbolized agree and 5 symbolized strongly agree. The results were as presented in Table 2.

From the results, the respondents agreed that their hospital ensures timely and accurate payments to their suppliers. This is supported by a mean of 3.968 (std. dv = 0.905). In addition, as shown by a mean of 3.899 (std. dv = 0.885), the respondents agreed that their hospital maintains transparent and fair payment terms with their suppliers. Further, the respondents agreed that they prioritize establishing trust and maintaining good relationships with suppliers through prompt and consistent payment practices. This is shown by a mean of 3.880 (std. dv = 0.605). With a mean of 3.805 (std. dv = 0.981), the respondents agreed that their hospital utilizes electronic payment methods to enhance payment processing efficiency and accuracy.

From the results, the respondents agreed that they provide clear payment terms and negotiate payment terms that align with both our hospital's needs and their suppliers' financial capabilities. This is supported by a mean of 3.786 (std. dv = 0.786). In addition, as shown by a mean of 3.756 (std. dv = 0.934), the respondents agreed that their hospital offers early payment options or discounts to suppliers to incentivize prompt payment. Further, the respondents agreed that they actively seek feedback from their suppliers regarding their payment practices to ensure their satisfaction and address any concerns or issues promptly. This is shown by a mean of 3.702 (std. dv = 0.873).

Table 2: Supplier Payment and Performance of Hospitals

	Mean	Std. Dev.
Our hospital ensures timely and accurate payments to our suppliers.	3.968	0.905
Our hospital maintains transparent and fair payment terms with our suppliers.	3.899	0.885
We prioritize establishing trust and maintaining good relationships with suppliers through prompt and consistent payment practices.	3.880	0.605
Our hospital utilizes electronic payment methods to enhance payment processing efficiency and accuracy.	3.805	0.981
We provide clear payment terms and negotiate payment terms that align with both our hospital's needs and our suppliers' financial capabilities.	3.786	0.786
Our hospital offers early payment options or discounts to suppliers to incentivize prompt payment.	3.756	0.934
We actively seek feedback from our suppliers regarding our payment practices to ensure their satisfaction and address any concerns or issues promptly.	3.702	0.873
Aggregate	3.819	0.867

Correlation Analysis

The present study used Pearson correlation analysis to determine the strength of association between independent variables (supplier selection and supplier payment) and the dependent variable (performance of hospitals in Kiambu County) dependent variable. Pearson correlation coefficient range between zero and one, where by the strength of association increase with increase in the value of the correlation coefficients.

Table 3: Correlation Coefficients

		Organization Performance	Supplier Selection	Supplier Payment
Organization Performance	Pearson Correlation	1		
	Sig. (2-tailed)			
	N	108		
Supplier Selection	Pearson Correlation	.838**	1	
	Sig. (2-tailed)	.002		
	N	108	108	
Supplier Payment	Pearson Correlation	.853**	.185	1
	Sig. (2-tailed)	.000	.078	
	N	108	108	108

From the results, there was a very strong relationship between supplier selection and performance of hospitals in Kiambu County ($r = 0.838$, p value = 0.002). The relationship was significant since the p value 0.002 was less than 0.05 (significant level). The findings are in line with the findings of Mose, Ombui and Iravo (2018) who indicated that there is a very strong relationship between supplier selection and organization performance.

The results also revealed that there was a very strong relationship between supplier payment and performance of hospitals in Kiambu County ($r = 0.853$, p value = 0.000). The relationship was significant since the p value 0.000 was less than 0.05 (significant level). The findings are in line with the results of Handfield and Bechtel (2018) who revealed that there is a very strong relationship between supplier payment and organization performance

Regression Analysis

Multivariate regression analysis was used to assess the relationship between independent variables (supplier selection and supplier payment) and the dependent variable (performance of hospitals in Kiambu County)

Table 4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.940	.884	.885	.582

a. Predictors: (Constant), supplier selection and supplier payment

The model summary was used to explain the variation in the dependent variable that could be explained by the independent variables. The r-squared for the relationship between the independent variables and the dependent variable was 0.884. This implied that 88.4% of the variation in the dependent variable (performance of hospitals in Kiambu County) could be explained by independent variables (supplier selection and supplier payment).

Table 5: Analysis of Variance

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	12.027	2	3.018	47.38	.000 ^b
Residual	6.568	105	.0637		
Total	18.595	107			

a. Dependent Variable: performance of hospitals in Kiambu County

b. Predictors: (Constant), supplier selection and supplier payment

The ANOVA was used to determine whether the model was a good fit for the data. F calculated was 38.69 while the F critical was 2.480. The p value was 0.000. Since the F-calculated was greater than the F-critical and the p value 0.000 was less than 0.05, the model was considered as a good fit for the data. Therefore, the model can be used to predict the influence of supplier selection and supplier payment on performance of hospitals in Kiambu County.

Table 6: Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	0.322	0.082		3.927	0.003
supplier selection	0.387	0.091	0.388	3.593	0.003
supplier payment	0.392	0.102	0.393	3.843	0.001

a Dependent Variable: performance of hospitals

The regression model was as follows:

$$Y = 0.322 + 0.387X_1 + 0.392X_2 + \varepsilon$$

According to the results, supplier selection has a significant effect on performance of hospitals in Kiambu County ($\beta_1=0.387$, p value= 0.003). The relationship was considered significant since the p value 0.003 was less than the significant level of 0.05. The findings are in line with the findings of Mose, Ombui and Iravo (2018) who indicated that there is a very strong relationship between supplier selection and organization performance.

In addition, the results revealed that supplier payment has significant effect on performance of hospitals in Kiambu County ($\beta_1=0.392$, p value= 0.001). The relationship was considered significant since the p value 0.001 was less than the significant level of 0.05. The findings are in line with the results of Handfield and Bechtel (2018) who revealed that there is a very strong relationship between supplier payment and organization performance

Conclusions

The study concludes that supplier selection has a positive and significant effect on performance of hospitals in Kiambu County. Findings revealed that financial/Business stability, quality management systems, capacity to meet long term and suppliers experience influences performance of hospitals in Kiambu County

The study also concludes that that supplier payment has a positive and significant effect on performance of hospitals in Kiambu County. Findings revealed that duration, terms, credit Terms and payments methods influences performance of hospitals in Kiambu County.

Recommendations

Hospitals in Kiambu County should consider a broader range of criteria when selecting suppliers. In addition to financial stability and experience, they should also evaluate factors such as ethical practices, compliance with regulatory standards, and the ability to adapt to changing healthcare needs.

Invest in training for hospital staff responsible for contract management. They should have a solid understanding of contract terms, dispute resolution procedures, and how to effectively monitor and evaluate supplier performance.

Implement a regular assessment and monitoring system for selected suppliers. This ensures that suppliers maintain their financial stability, quality management systems, and capacity to meet long-term commitments. It also helps identify any red flags or issues early on.

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