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Supplier Evaluation Practices on Sustainable Performance of Selected County Referral Hospitals in Kenya

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ABSTRACT

Purpose: The sustainability of healthcare service delivery in public hospitals is highly dependent on effective procurement and supplier management practices. This study examined the influence of supplier evaluation practices on the sustainable performance of selected County Referral Hospitals in Kenya. Specifically, it focused on four key dimensions of supplier evaluation: supplier appraisal practices, supplier capacity management, supplier relationship management, and supplier commitment.

Methodology: The study adopted a descriptive research design. Primary data was collected using structured questionnaires from procurement staff and departmental heads in selected County Referral Hospitals. A total of 86 respondents participated in the study, yielding a high response rate of 90 percent. Descriptive and inferential statistical analyses were conducted using SPSS version 26.

Findings: The results revealed that all four supplier evaluation dimensions positively and significantly influenced the sustainable performance of County Referral Hospitals. Supplier commitment had the strongest effect, followed by supplier relationship management, supplier appraisal, and supplier capacity management. The findings suggest that structured supplier evaluation enhances procurement efficiency, improves service delivery, and contributes to long-term sustainability in the public health sector. The study concludes that supplier evaluation is a strategic enabler of sustainable hospital performance and not merely an administrative requirement.

Unique Contribution to Theory, Policy and Practice: It recommends that hospitals strengthen supplier appraisal frameworks, institutionalize capacity assessments, cultivate long-term supplier relationships, and prioritize supplier commitment in procurement decisions. Further studies are recommended to explore the role of supplier innovation and ethical sourcing in public healthcare performance. The findings of this study are expected to inform policy formulation, enhance procurement practices, and support sustainable healthcare delivery in Kenya.

Keywords: *Evaluation Practices, Appraisal Practices, Capacity Management Practices, Relationship Management, Commitment Practices, Performance, County Referral Hospitals*

INTRODUCTION

Background of the Study

The concept of supplier evaluation has gained popularity among practitioners and even scholars (Humphreys, 2013). In Malaysia, for instance, Junli (2008) conducted a study to assess the impact of supplier evaluation on business performance among private hospitals. In Nigeria, the study conducted by Akenroye *et al.* (2012) on supply chain practices identified supplier evaluation and a critical supply chain activity that every organization must engage in.

Globalization of a firm's sourcing activity means the establishment of long-term business relationships with often unfamiliar and unproven foreign suppliers. Owing to unfamiliarity and uncertainty involved in global sourcing, international supplier selection is risky and complicated. Besides, many factors influencing international supplier selection decisions are in conflict with one another. For instance, the low price of purchased materials from a certain foreign supplier can be offset by the firm's loose quality standards or chronic financial instability. On the other hand, the availability of more advanced technology from a foreign source can be undermined by the sourcing firm's high purchasing costs and excessive tariffs (Hokey, 2010).

According Chartered Institute Of Procurement And Supply (CIPS) (2018), supplier evaluation is conducted at the tender stage and can be in the form of either a questionnaire, interview or site visit to assess the supplier's capability in terms of capacity, financial stability, quality standards, performance and organizational structure and processes in place. Both existing and potential suppliers are scored on suitability and either approved or rejected to be added onto the approved supplier list (ASL). This helps to improve existing suppliers' performance and also can periodically ensure you have the right sized and fit of suppliers on you approved list.

Nadir (2012), alluded that supplier evaluation is perceived as a tool which provides the buying firm with a better understanding of which suppliers are performing well and which suppliers are not performing well. But studies reveal that even after having carried out an in-depth supplier evaluation plus appraisal coupled with the enactment of Public Procurement and Asset Disposals Act (PPAD) of 2015 and other policies on supplier evaluation, inefficiencies still exist ranging from supplies being made halfway or even termination of contracts before conclusion.

Many organizations in Kenya feel that supplier evaluation does not have much influence on the buying decision since the buying decision is mostly determined by price and politics (Kavale & Mwikali, 2012). Thus, suppliers feel that high scores on the supplier evaluation sheet is more a question of playing games and showmanship than one of dedication to improvement. Effective supplier evaluation is a holistic process and starts with alignment of objectives, data capture and analysis, all the way to communication with suppliers, in a transparent manner thus many organizations together with their suppliers need to uphold this as supplier evaluation is very vital.

Statement of the Problem

County Referral Hospitals in Kenya play a vital role in delivering essential healthcare services, especially to underserved populations. However, these institutions continue to face persistent challenges in achieving sustainable performance outcomes due to inefficiencies in procurement and supply chain management (Waweru & Ngugi, 2014). One critical area contributing to this challenge is supplier evaluation. When suppliers are not properly vetted or managed, the hospitals often suffer from delayed deliveries, poor-quality medical supplies, and escalating operational costs (Ng'ang'a & Nyaoga, 2013).

Despite the existence of procurement regulations under the Public Procurement and Asset Disposal Act (2015), many County Referral Hospitals struggle to implement effective supplier evaluation practices. Poor supplier appraisal, lack of capacity assessment, weak supplier relationships, and minimal supplier commitment have been cited as key contributors to supply chain failures in public health institutions (Gichure, 2018). This ultimately affects not just financial sustainability but also the quality of care provided to patients.

Empirical evidence shows that robust supplier evaluation mechanisms are directly linked to improved performance and service delivery in public institutions (Otieno, Oyugi, & Muturi, 2015). However, in Kenya, there is limited research that specifically examines how supplier evaluation practices influence the sustainable performance of County Referral Hospitals. Most existing studies have focused broadly on procurement practices in the public sector without delving into the nuances of supplier-related evaluation and its strategic implications on hospital sustainability (Kipchilat, 2016).

Report by PPOA in 2015, indicates that up to 30% of procurement inefficiencies in the public sector in Kenya are attributed to supplier's performance issues. There is therefore concern as to what can be done to reduce supplier related procurement issues. One of the ways through which organizations strive to reduce supplier related inefficiencies is through evaluation of suppliers. In ideal situations, supplier evaluation is expected to positively influence procurement performance.

However it puzzling to note that the relation has not been the case as studies reveal mixed findings with some indicating significant positive relationship while other indicate insignificant relationship. Suppliers are important stakeholders whose operations can impact the overall performance of a given procurement function. The choice of an organization's supplier should be guided by an elaborate evaluation of the potential suppliers since the suppliers can impact the performance of any procurement function or process. County referral hospitals in Kenya have been affected by delayed deliveries, poor quality products or services, non-completion of orders and even threats of litigation due to delayed payments is a common scenario experienced in public health institutions. The current study therefore, sought to establish the influence of supplier evaluation practices on sustainable performance of selected County Referral Hospitals in Kenya.

General Objective of the Study

The study sought to establish the supplier evaluation practices on sustainable performance of Selected County Referral Hospitals in Kenya.

Specific Objectives of the Study

The study was based on the following specific objectives; -

i. To establish the influence of supplier appraisal practices on sustainable performance of Selected County Referral Hospitals in Kenya.
ii. To determine the influence of supplier capacity management practices on sustainable performance of Selected County Referral Hospitals in Kenya.
iii. To establish the influence of supplier relationship management practices on sustainable performance of Selected County Referral Hospitals in Kenya.
iv. To find out the influence of supplier commitment practices on sustainable performance of Selected County Referral Hospitals in Kenya.

LITERATURE REVIEW

Theoretical Review

Multiple Attribute Utility Theory

Supplier evaluation is a complex decision-making problem. The complexity stems from a multitude of quantitative and qualitative factors influencing supplier choices as well as the intrinsic difficulty of making numerous trade-offs among these factors (Hokey, 1994). One analytical approach often suggested for solving such complex problems is multiple attribute utility theory (MAUT) (Green & Wind, 2003) for various successful applications of MAUT.

Multiple attribute utility theory (MAUT) enables the decision maker to structure a complex problem in the form of a simple hierarchy and to subjectively evaluate a large number of quantitative and qualitative factors in the presence of risk and uncertainty. The major strength of

MAUT is its ability to deal with both deterministic and stochastic decision environments (Zionts, 1992). The application of MAUT to the complex problem usually involves the following steps as identified by (Edward & Newman, 2002). Identify the objectives or goals of the decision and define the problem scope, define a finite set of relevant attributes affecting the decision outcome and structure them into a hierarchical form called a “value tree”, elicit preference information concerning the attributes from the decision maker(s) and determine the relative importance of the attributes, develop the decision maker’s utility function by establishing functional relationships between the attributes and the utility scores. If these relationships are uncertain, the expected utility score for each attribute it was determined by using the appropriate type of probability distributions. Compute the aggregate (overall) utility score for each decision alternative and rank alternatives in terms of aggregate utility scores. Perform sensitivity analyses. The systematic nature of MAUT in

tackling complex problems under conflicting multiple criteria makes MAUT especially suitable for selecting the most appropriate supplier. Thus state corporations can apply this theory in evaluating and rating suppliers. This enabled County Referral Hospitals to make informed decisions regarding supplier evaluation. This theory guided the study towards making an informed decision on the appropriate supplier appraisal practices.

Grey Systems Theory

According to Grey System Theory, in a practical business environment, in most instances, supplier selection takes place in an environment with less than perfect information. As such, there is some level of uncertainty in the decisions related to supplier selection. In such an environment, it is important to develop certain indicators or criteria; qualitative or quantitative that the supplier can be subjected to before selection. From this theory, the grey correlation analysis model with seven progressive steps was developed (Zou, 2008). These steps include; grey generation aimed at gathering information on grey aspects, grey modeling done to establish a set of grey variation equations and grey differential equations, grey prediction aimed at achieving a qualitative prediction, grey decision, grey relational analysis and grey control (Tsai, 2003).

The theory of Grey System considers the following factors in deciding on the best supplier; Existence of key factors important to the buyer, the numbers of factors are limited and countable and can be directly attributed to potential suppliers, in dependability of factors and factor expandability. The theory applies the principle of series comparability to generate a grey relation. An evaluation matrix may be developed to facilitate this process. The best supplier is selected by choosing a goal and weighting the values of all evaluation factors based on the characteristics of materials to be sourced based on demand patterns (Zou, 2008). In a supplier selection environment, this theory can be applied evaluation of critical performance areas by the procuring entities. This theory guided the study on supplier capacity management.

The Goal-Setting Theory

Goal-setting theory had been proposed by Edwin Locke in the year 1968. The theory began with the early work on levels of aspiration developed by Kurt Lewin and has since been primarily developed by Dr. Edwin Locke, who began goal setting research in the 1960's. The research revealed an inductive relationship between goal setting and improved organizational performance.

A goal is the aim of an action or task that a person consciously desires to achieve or obtain (Locke & Latham, 2002). Goal setting involves the conscious process of establishing levels of performance in order to obtain desirable outcomes. This goal setting theory simply states that the source of motivation is the desire and intention to reach a goal (PSU, 2014). If individuals or teams find that their current performance is not achieving desired goals, they typically become motivated to increase effort or change their strategy (Locke & Latham, 2006).

This theory suggests that the individual goals established by an organization play an important role in motivating its superior performance. This is because the stakeholders keep following their goals.

If these goals are not achieved, they either improve their performance or modify the goals and make them more realistic. In case the performance improves it resulted in achievement of the performance management system aims (Salaman *et al*, 2005). This theory postulates that in an organization, the supplier selection and evaluation team's efforts to achieve sustainable performance in the organization was required to make realistic goals. According to the theory, the objectives of procurement should be realistic and therefore guide the evaluation process towards achievement of these objectives/goals. Specific and clear goals lead to greater output and better performance. Unambiguous, measurable and clear goals accompanied by a deadline for completion avoids misunderstanding (Shahin & Mahbod, 2007). This theory supported the third objective of the study which is to establish the influence of supplier relationship management practices on sustainable performance Selected County Referral Hospitals. This aided in achieving sustainable performance among the key players.

Expectancy Theory

Expectancy theory is about the mental processes regarding choice, or choosing. It explains the processes that an individual undergoes to make choices. Expectancy theory had been proposed by Victor Vroom in 1964. This theory is based on the hypothesis that individuals adjust their behavior in the organization on the basis of anticipated satisfaction of valued goals set by them. The individuals modify their behavior in such a way which is most likely to lead them to attain these goals. This theory underlies the concept of performance management as it is believed that performance is influenced by the expectations concerning future events (Salaman *et al*, 2005).

Vroom's expectancy theory assumes that behavior results from conscious choices among alternatives whose purpose it is to maximize pleasure and to minimize pain. Vroom realized that an entity's performance is based on the factors such as staffs' personality, skills, knowledge, experience and abilities. He stated that effort, performance and motivation are linked in a person's motivation. Expectancy theory proposes that procurement effectiveness is dependent upon the perceived association between performance and outcomes and individuals modify their behavior based on their calculation of anticipated outcomes (Chen & Fang, 2008). This has a practical and positive benefit of improving effectiveness in the evaluation process because it can, and has, helped leaders create effective programs in the selection teams. This theory is crucial in ensuring the key suppliers are committed to the obligated tasks and activities. This theory was anchored on the fourth objective which is to determine the influence of supplier commitment on sustainable performance of Selected County Referral Hospitals.

Conceptual Framework

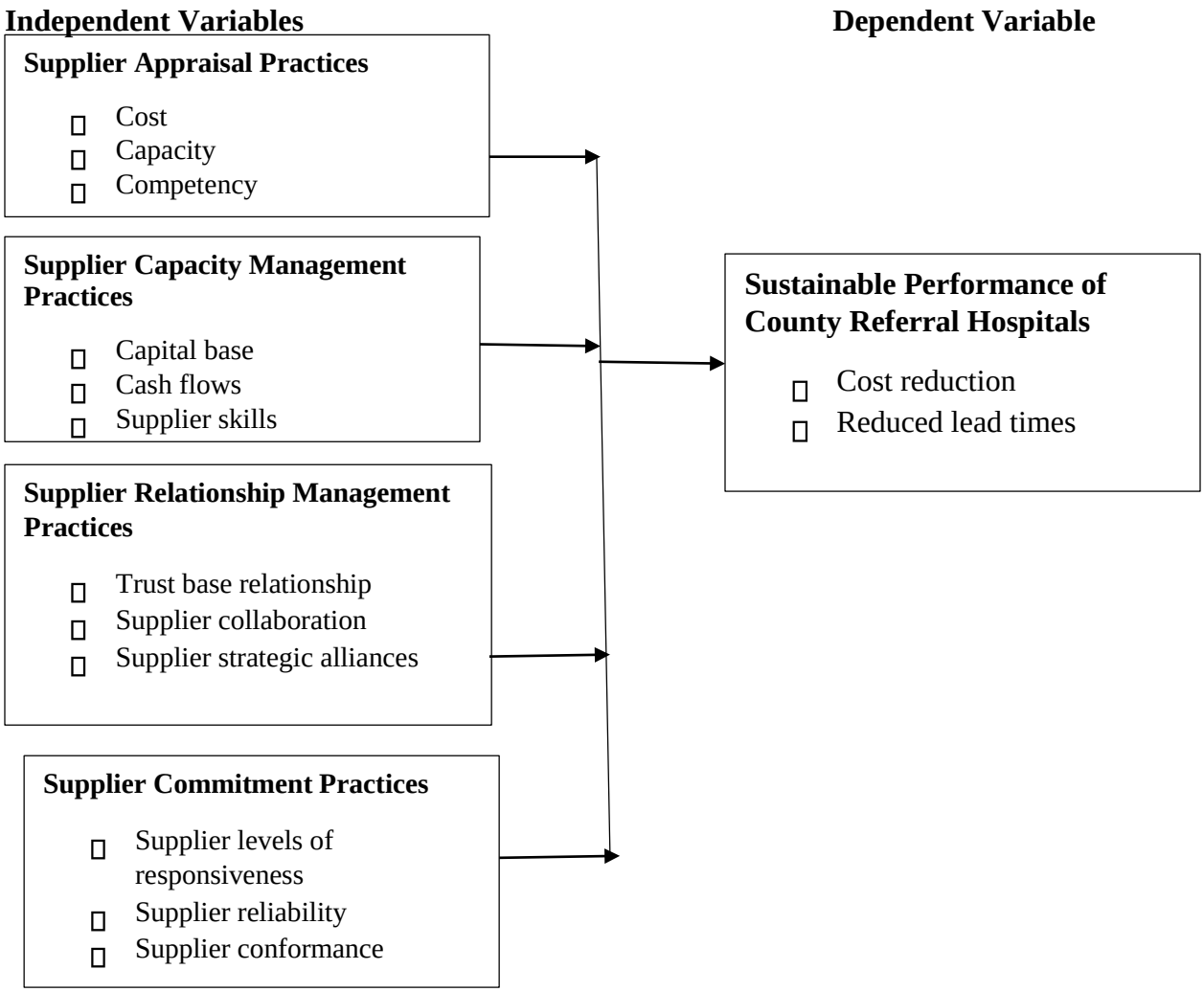

Figure 1: Conceptual Framework

Empirical Review

Supplier Appraisal Practices and Sustainable Performance

Mungai, (2014) the study sought to establish how supplier appraisal criteria influence procurement performance in real estate industry. The study also established that different supplier evaluation criteria are given different importance when selecting potential suppliers with financial stability, technical competence and quality control and management seen as major criteria in selecting suppliers. Kavale & Mwikali (2012) indicated that the choice of criteria in supplier evaluation and selection process has a great influence on procurement performance and management. This study established that the weighted model is the most popular model used to appraise suppliers. The study also found that a good supplier appraisal model should have the following attributes; provide

structures and discipline to the evaluation process, helps avoid selection of unqualified suppliers, reduce subjectivity during the evaluation and should hastens the evaluation and selection process.

According to Albano (2011) the intention of any medical institution supply device is to ensure that there may be enough stock of wanted objects, no shortages in supply of all vital gadgets is maintained fitness care industry in business enterprise that is labor in depth. whilst salaries and fringe blessings account for roughly 60% of working costs in a hospital, 30-35 % of fees are incurred on resources and materials.

Supplier Capacity Management Practices and Sustainable Performance

A study by Kirande & Rotich (2014) on the determinants of public procurement performance. The study established that the main concern of procurement function is to make sure that one buys from the best suppliers and also improve the current suppliers. The organizations therefore choose suppliers with who have the capacity to deliver. The study further observed that supplier evaluation can work as a tool to influence future behavior of both buyer and supplier organization. By connecting procurement targets to certain supplier competence, organizations achieve higher supplier performance thereby leading to improved procurement performance.

Nzau (2014) in his study on factors affecting procurement performance. The study found out that selection of suppliers is done based on certain set criteria and the needs of the procuring entity. He points out that among the factors which affects the procurement performance incudes timely preparation of procurement plan, strategic supplier selection plus buyer supplier relationships among other factors.

Supplier Relationship Management Practices and Sustainable Performance

A study Roushdy *et al.* (2015) tried to determine the impact of Suppliers Relationship Management on Performance of organizations. The study aimed at finding out what does SRM have on supply chain performance in manufacturing organizations. For many firms, building lasting, mutually beneficial relationships between buying organizations and its suppliers was crucial to improve the performance of the supply chain, and reducing costs to help in the organization growth.

A study by Kamau (2011) was carried out to establish the impact of buyer – supplier relationships within large Kenyan manufacturers on their performance. The study had three objectives, to determine the extent to which large manufacturing firms in Kenya have adopted the concept of SRM, to determine the challenges facing SRM and to determine the effect of SRM on organizational performance. The research also looked into the challenges facing buyer - supplier relationships among large manufacturing firms in Kenya. The research confirmed that lack of proper communication between buyers and suppliers, lack of trust, lack of co-operation and poor performance were some of the challenges that were facing buyer – supplier relationships.

Supplier Commitment Practices and Sustainable Performance

A study by Tully (2011) on supplier evaluation and performance of large food and beverage manufacturing firms in Nairobi, Kenya concluded that large food and beverage firms in Nairobi City County evaluate their suppliers using the criteria established: The financial stability of the supplier, quality issues, price factors, environmental friendliness of the supplier, production capacity of the supplier, employee capabilities of the supplier and preference and reservation. Environmental friendliness of the supplier, employ capabilities and price factors of the supplier are the most domineering criteria which mean that firms are keen on producing at minimum costs and the right volumes employing the right expertise to be able to satisfy the available market while being compliant to environmental issues. Supplier evaluation as one of the supply chain practices are able to reap from the benefits associated with it.

A study conducted by Kitheka *et al.,* (2013) on supplier evaluation practices established that supplier performance measurement, supplier audits, supplier development and supplier integration are the most used supplier quality management practices. The study also established that from supplier quality management, an organization may enjoy among other benefits reduced lead times, increased responsiveness to customers', orders and enquiries, customer loyalty, increased profitability, reduced opportunity cost from lost sales and effective communication between the organization suppliers as well as customers. The study further recommended that suppliers should maintain reliable records so as to avoid the problem of poor visibility and traceability and that the organizations must build into their systems quality measures and continuous inspections so that disappointments of customers through discontinuous supply or supply of poor quality products.

RESEARCH METHODOLOGY

This study employed descriptive research design The target population for this study are 127 employees from the selected counties. To be covered in the study are the chief officers, finance officers, information communication technology officers and procurement officers. The study adopted purposive sampling method and Yamane's formula to get a sample size of 96 respondents. Primary data was collected from respondents using self-administered questionnaire. Data from the questionnaire was checked for incompleteness, inconsistencies and mistakes. The data from the questionnaire was coded and the responses was itemized according to the objectives. The qualitative data was analyzed using descriptive statistics (frequencies and statistics) and inferential statistics. Descriptive statistics in form of frequencies, means and standard deviations was used to present the results. Inferential statistics techniques were used to test various hypotheses. The analysis was done using Statistical Package for Social Science (SPSS) version 26. SPSS was used because of its ability to cover a wide range of statistical and graphical data analysis.

RESULTS AND DISCUSSIONS

Response Rate

The study targeted a sample size of 96 respondents drawn from selected County Referral Hospitals in Kenya. Out of the 96 distributed questionnaires, 86 were duly completed and returned, representing a response rate of 89.6%. According to Mugenda and Mugenda (2003), a response rate of 70% and above is considered excellent for survey-based research, making the obtained response rate both adequate and reliable for statistical analysis and generalization of findings.

Table 1: Response Rate

Response Category	Frequency	Percentage (%)
Questionnaires Returned	86	89.6
Questionnaires Not Returned	10	10.4
Total	**96**	**100**

This high response rate was attributed to timely follow-ups, personal delivery of questionnaires, and assurances of confidentiality, which motivated respondents to participate in the study.

Descriptive Analysis of the Study Variables

Supplier Appraisal Practices

This section aimed to assess the extent to which supplier appraisal practices influence the sustainable performance of County Referral Hospitals. Respondents were presented with a series of statements and asked to rate their agreement on a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

Table 2: Descriptive Statistics for Supplier Appraisal Practices

Statement	Mean	Std. Dev
There is supplier due diligence checking during the evaluation process	4.21	0.78
Supplier capital structure is evaluated	4.03	0.85
Supplier financial statements are audited to strengthen their financial strength	4.10	0.81
Supplier liquidity is evaluated	4.18	0.76
Supplier ability to meet current and potential capacity requirements is evaluated	4.26	0.72

The results show strong agreement that supplier appraisal is rigorously conducted in County Referral Hospitals. Key practices include evaluating suppliers' capacity (M = 4.26), due diligence checks (M = 4.21), and assessing financial stability, such as liquidity (M = 4.18) and capital structure (M = 4.03). These findings support existing literature on the importance of financial and operational evaluations in enhancing procurement efficiency and minimizing risks in healthcare procurement (Rotich & Okello, 2015; Munyi, 2024).

Supplier Capacity Management Practices

This section examined the extent to which supplier capacity management practices influence the sustainable performance of County Referral Hospitals.

Table 3: Descriptive Statistics for Supplier Capacity Management Practices

Statement	Mean	Std. Dev
Proper supplier capacity evaluation enhances sustainable performance of County Referral Hospitals	4.30	0.67
Supplier capital base enhances sustainable performance of County Referral Hospitals	4.11	0.78
Supplier performance history is crucial towards enhancing the performance of County Referral Hospitals	4.26	0.74
Supplier skills are important towards enhancing the performance of County Referral Hospitals	4.33	0.69

Respondents strongly emphasized the importance of supplier capacity management for sustainable performance in County Referral Hospitals. The highest mean score (M = 4.33) was for supplier skills, followed by supplier capacity evaluation (M = 4.30) and performance history (M = 4.26). While supplier capital base scored slightly lower (M = 4.11), it remained crucial for large orders and emergency response. These findings align with previous research by Mwangi and Ngugi (2014) and Karanja and Gakure (2015).

Supplier Relationship Management

This section explored the influence of supplier relationship management (SRM) on the sustainable performance of County Referral Hospitals.

Table 4: Descriptive Statistics for Supplier Relationship Management

Statement	Mean	Std. Dev
The county referral hospitals engage with suppliers on a trust-based approach	4.22	0.74
There is supplier collaboration aimed at improving performance of county referral hospitals	4.30	0.71
There is formation of strategic alliances which enhance sustainable procurement performance	4.11	0.79

The analysis highlights the importance of supplier relationship management in enhancing sustainable procurement performance at County Referral Hospitals. Collaborative engagement (M = 4.30) emerged as the key driver of performance, with trust-based relationships (M = 4.22) also emphasized for long-term success. Strategic alliances (M = 4.11) were valued but limited by institutional constraints. These findings align with previous studies emphasizing trust and collaboration in improving supply chain performance and sustainability in public hospitals (Nyaga et al., 2010; Amemba et al., 2019).

Supplier Commitment Practices

This section assessed the extent to which supplier commitment practices influence the sustainable performance of County Referral Hospitals.

Table 5: Descriptive Statistics for Supplier Commitment Practices

Statement	Mean	Std. Dev
Supplier responsiveness leads to improved sustainable performance of County Referral Hospitals	4.34	0.68
Supplier responsiveness improves quality of sustainable performance of County Referral Hospitals	4.29	0.72
Supplier reliability enhances sustainable performance of County Referral Hospitals	4.36	0.66
Supplier conformance improves sustainable performance of County Referral Hospitals	4.25	0.74

The study highlights the crucial role of supplier commitment in sustainable performance at County Referral Hospitals. Key factors include supplier reliability (M = 4.36), responsiveness (M = 4.34), and conformance to standards (M = 4.25), which enhance service continuity, patient outcomes,

and operational efficiency. These findings support previous studies by Kiarie et al. (2021) and Kariuki & Moronge (2018), emphasizing the importance of supplier reliability and responsiveness in public healthcare procurement.

Performance of County Referral Hospitals

This section sought to assess how respondents perceive the overall performance of County Referral Hospitals in relation to supplier evaluation practices. Performance in this context refers to the hospitals' ability to sustainably deliver quality healthcare services, efficiently utilize resources, and maintain continuity in service delivery. The statements focused on whether key supplier evaluation dimensions (appraisal, capacity management, relationship management, and commitment) influence sustainable hospital performance. Respondents rated their agreement on a 5-point Likert scale.

Table 6: Descriptive Statistics for Performance of County Referral Hospitals

Statement	Mean	Std. Dev
Adoption of sustainable performance by County Referral Hospitals	4.24	0.69
Supplier appraisal practices influence sustainable performance of County Referral Hospitals	4.30	0.72
Supplier capacity management practices influence sustainable performance of County Referral Hospitals	4.27	0.75
Supplier relationship management practices influence sustainable performance of County Referral Hospitals	4.33	0.68
Supplier commitment practices influence sustainable performance of County Referral Hospitals	4.35	0.66

The findings indicate that supplier evaluation practices, including commitment (M = 4.35), relationship management (M = 4.33), appraisal (M = 4.30), and capacity management (M = 4.27), significantly influence the sustainable performance of County Referral Hospitals. The high mean score (M = 4.24) for sustainable performance adoption shows hospitals' commitment to long-term goals. These results align with studies by Mugo and Gikonyo (2020) and Omwenga and Otieno (2019) on supplier impact in healthcare.

Correlation Analysis

This section presents the results of Pearson’s correlation analysis, which was conducted to examine the strength and direction of the relationship between the independent variables and the dependent variable.

Table 7: Correlation Matrix

Variables	Sustainable Performance	Supplier Appraisal	Supplier Capacity	Supplier Relationship	Supplier Commitment
Sustainable Performance	1.000				
Supplier Appraisal Practices	0.721**	1.000			
Supplier Capacity Management	0.684**	0.632**	1.000		
Supplier Relationship Management	0.749**	0.715**	0.668**	1.000	
Supplier Commitment	0.763**	0.684**	0.647**	0.729**	1.000

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

The results indicate that all four supplier evaluation practices significantly enhance the sustainable performance of County Referral Hospitals. Supplier Commitment showed the strongest positive correlation ($r = 0.763$, $p < 0.01$), emphasizing the importance of reliable, responsive, and quality-conscious suppliers. Supplier Relationship Management also demonstrated a strong positive relationship ($r = 0.749$, $p < 0.01$), highlighting the role of trust and collaboration in improving hospital performance. Supplier Appraisal Practices ($r = 0.721$, $p < 0.01$) showed that thorough vetting and evaluation during selection are essential for long-term sustainability. Supplier Capacity Management ($r = 0.684$, $p < 0.01$) emphasized the need for assessing a supplier's infrastructure and competencies. These findings align with previous studies, such as Owich (2023), who noted that strategic supplier evaluation boosts supply chain reliability, and Otieno and Were (2021), who highlighted the importance of supplier commitment and capacity in enhancing procurement sustainability in Kenya's public health sector.

Regression Analysis

Regression analysis was conducted to determine the combined and individual effect of the independent variables on the dependent variable.

Table 8: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.837	0.701	0.685	0.432

The model summary indicates that the four independent variables jointly explain 70.1% of the variance in sustainable performance of County Referral Hospitals ($R^2 = 0.701$). The Adjusted $R^2 = 0.685$ shows a minimal shrinkage, indicating a strong model fit. This implies that supplier evaluation practices significantly account for differences in hospital performance.

ANOVA (Analysis of Variance)

The ANOVA test was conducted to determine whether the overall regression model used to predict the sustainable performance of County Referral Hospitals is statistically significant. ANOVA evaluates the null hypothesis that all regression coefficients are equal to zero (i.e., the model has no explanatory power). A significant F-value implies that the model explains a significant amount of variance in the dependent variable.

Table 9: ANOVA Results

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	38.472	5	9.618	47.316	0.000**
Residual	16.430	81	0.203		
Total	**54.902**	**86**			

Note: Significance level (p) < 0.05 indicates statistical significance

The ANOVA results indicate that the regression model is statistically significant, as shown by the F-statistic = 47.316 and a p-value of 0.000, which is less than the conventional threshold of 0.05. This result suggests that the combined effects of supplier appraisal, supplier capacity management, supplier relationship management, and supplier commitment significantly predict the sustainable performance of County Referral Hospitals. This outcome aligns with previous findings by Rotich and Okello (2015), who emphasized that robust supplier management frameworks significantly impact procurement and operational performance in public hospitals in Kenya.

Regression Coefficients

The regression coefficients show the individual contribution of each independent variable to the prediction of sustainable performance. Specifically, the analysis estimates how much a unit change in each variable (supplier appraisal, capacity management, relationship management, and commitment) impacts the dependent variable sustainable performance when all other variables are held constant.

Table 10: Regression Coefficients

Variable	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (Beta)	t-value	Sig. (p-value)
Constant	0.512	0.243	—	2.107	0.038
Supplier Appraisal Practices	0.231	0.078	0.217	2.962	0.004
Supplier Capacity Management	0.198	0.075	0.192	2.640	0.010
Supplier Relationship Mgmt	0.245	0.083	0.236	2.952	0.004
Supplier Commitment	0.281	0.079	0.269	3.557	0.001

Note: Significance level (p) < 0.05 indicates statistical significance

The constant term (B = 0.512) represents the baseline level of sustainable performance when all independent variables are zero. This implies that if all the independent variables are held at zero, the baseline sustainable performance of County Referral Hospitals would be 0.512 units. This value is statistically significant, confirming the model's intercept is meaningful.

Supplier Appraisal Practices (B = 0.231): A one-unit increase in supplier appraisal practices leads to a 0.231-unit increase in sustainable performance, assuming all other variables remain constant. This shows that practices like due diligence and financial vetting positively and significantly influence hospital outcomes.

Supplier Capacity Management (B = 0.198): For every one-unit increase in supplier capacity management practices (i.e., assessing technical ability or capital base), sustainable performance increases by 0.198 units. This demonstrates that hospitals benefit when suppliers possess the operational capacity to meet demand.

Supplier Relationship Management (B = 0.245): A unit increase in trust-based supplier collaboration and strategic partnerships results in a 0.245-unit increase in sustainable performance. This highlights the importance of nurturing cooperative relationships with suppliers.

Supplier Commitment (B = 0.281): This had the highest unstandardized beta, indicating that a unit increase in supplier commitment (i.e., responsiveness, reliability, and quality assurance) results in a 0.281-unit increase in sustainable performance. This makes it the strongest predictor in the model. Amemba, *et al.,* (2013) found that supplier responsiveness, conformance to quality, and reliability were the most significant predictors of sustainable procurement performance in County

hospitals. Suppliers who were proactive and met quality standards consistently improved hospital service delivery.

CONCLUSION AND RECOMMENDATIONS

Conclusions

The study concludes that supplier evaluation practices are crucial for enhancing the sustainable performance of County Referral Hospitals in Kenya. Structured supplier evaluations, such as financial audits and performance assessments, help hospitals engage reliable suppliers, minimizing procurement risks and ensuring service continuity. Effective supplier capacity management positively impacts hospital performance by ensuring vendors meet current and future demands, improving efficiency and preparedness for dynamic healthcare needs. Strong supplier relationship management, based on trust and collaboration, fosters better communication, reduces conflict, and enhances supplier responsiveness, leading to increased operational reliability. Ultimately, supplier commitment is identified as the most influential factor in driving sustainable performance. Suppliers who are reliable, responsive, and aligned with hospital values contribute to improved service delivery, fewer disruptions, and greater procurement sustainability.

Recommendations

To improve the sustainable performance of County Referral Hospitals, several recommendations are proposed. Hospitals should strengthen supplier evaluation by formalizing transparent processes, including rigorous due diligence and performance audits. This will minimize procurement risks and ensure reliable suppliers. Structured supplier capacity management practices should be adopted, focusing on technical competence, financial strength, and past performance, with capacity checks as a contract prerequisite. Hospital management should foster long-term, trust-based relationships with suppliers through regular communication and development programs to ensure service continuity. Procurement officers should prioritize suppliers who demonstrate commitment to quality, timeliness, and service standards during selection and contract renewals. Additionally, policymakers at both county and national levels should create guidelines and training programs to support supplier evaluation and contract management, enhancing procurement professionalism and ensuring value for money in public healthcare procurement.

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