



**PREFERENCE AND RESERVATIONS SCHEME MANAGEMENT AND
PERFORMANCE OF LEVEL 6 HOSPITALS IN KENYA**

¹Mutisya Vincent, ²Dr. Ndeto Charles

¹Masters Student, Jomo Kenyatta University of Agriculture and Technology

²Lecturer, Jomo Kenyatta University of Agriculture and Technology

ABSTRACT

The Preference and Reservation Procurement policy, which was implemented in Kenya in 2013, requires that at least thirty percent (30%) of all Public Procurement budgets including in health facilities be reserved for the women, youth and people with disabilities. However, the management of Preference and reservation scheme in level 6 Hospitals poses a significant challenge to achieving optimal performance and equitable healthcare access. While these schemes are intended to improve the representation of the disadvantaged or unrepresented groups in the health sector, their effectiveness and impact on Hospital performance remain a matter of concern). Therefore, this study sought to examine the influence of preference and reservation scheme management on performance of level 6 hospitals in Kenya. The specific objectives of the study were to examine the influence of procurement planning management and sourcing management on performance of level 6 hospitals in Kenya. The study will adopt a descriptive research design. The target population was 105 heads of stores, procurement, finance, administration, quality assurance, audit department and planning departments and two deputies in the five level 6 health facilities in Kenya. The study utilized a census approach. The study made use of primary data, which was collected by use of semi-structured questionnaires. A pilot study will be conducted in Mama Lucy Level 5 Hospital with 10% of the sample size to assess the validity and reliability of the research instrument. Qualitative data from open ended questions were analyzed using thematic content analysis. Quantitative data was analyzed using both descriptive as well as inferential statistics with the help of statistical software known as Statistical Package for Social Sciences (SPSS version 28). Descriptive statistics comprised of frequency distribution, percentages, standard deviation and mean. Inferential data analysis was carried out using Pearson correlation coefficient and multivariate linear regression. The study found that procurement planning management has a positive and significant influence on performance of level 6 hospitals in Kenya. The study revealed that sourcing management has a positive and significant influence on performance of level 6 hospitals in Kenya. The study recommends that the management of level 6 hospitals should regularly review and update procurement plans, processes, and specifications to maintain alignment with the hospital's needs and industry best practices. In addition, the management of these facilities should foster closer collaboration with key suppliers to exchange knowledge, co-develop innovative solutions, and secure advantageous long-term contracts.

Key Word: Preference and Reservation Scheme Management, Procurement Planning Management and Sourcing Management

Background of the Study

Across the globe, there has been an increase in efforts by public and private institutions to empower marginalized groups including women, the youth and people with disabilities. One of the strategies adopted in different countries is the reservation of a specified proportion of public procurement budget for women, youth, and people with disabilities (Brian & Namusonge, 2022). However, these categories of suppliers are characterized by lack of financial capacity, lack of awareness and lack of technical capacity among others. This considerably impacts the provision of services in public institutions, including health facilities, negatively. The main barriers to the implementation of new social procurement employment requirements include lack of government support, cost of training, inadequate supervision and lack of financial capacity (Loosemore & Alkilani, 2019).

Preference and reservation schemes are strategic initiatives designed to provide targeted preferences or reservations to specific groups or categories of individuals in various sectors, such as education, employment, or healthcare. In the context of healthcare facilities, particularly hospitals, preference and reservation schemes are implemented to address historical disparities, promote inclusivity, and ensure equitable access to healthcare services. The management of these schemes involves a systematic and strategic approach to their planning, implementation, and oversight. Effective Preference and Reservation Scheme Management in the public sector, requires a holistic and inclusive approach. It aims to create a fair and equitable environment, ensuring that historically disadvantaged groups have equal access to healthcare services.

Preference and reservation schemes are strategic initiatives aimed at rectifying historical disparities and fostering inclusivity by providing targeted preferences or reservations to specific groups within the workforce. At the core of this relationship lies the impact on workforce diversity and inclusion. By design, these schemes seek to increase the representation of historically marginalized or disadvantaged groups. A diverse workforce, encompassing individuals from various backgrounds, experiences, and perspectives, can significantly influence organizational performance. The public perception and reputation of an organization are also intertwined with the implementation of preference and reservation schemes. Organizations that prioritize fairness, inclusivity, and equal opportunities tend to build a positive public image. This positive reputation can enhance public trust, garner stakeholder support, and contribute to the overall credibility of the organization, factors that are vital for sustained performance.

In the United States, preference and reservation schemes in procurement are implemented through various programs and initiatives that aim to promote the inclusion of specific groups, such as minority-owned businesses, women-owned businesses, and other disadvantaged groups (Government Accountability Office, 2011). These programs are designed to address historical disparities, foster economic development, and ensure that a diverse range of businesses has equitable access to government procurement opportunities. The Preference and Reservation Scheme (PRS) in procurement in Australia is a government policy that mandates public sector entities to allocate a certain percentage of their procurement contracts to small and medium enterprises (SMEs) and Indigenous-owned businesses (Australian Government, 2023). The scheme was introduced in 2000 to address the economic disparities between these groups and the majority population. While it has helped to increase the participation of SMEs and Indigenous-owned businesses in the Australian economy, it has also been criticized for its potential to increase costs, lower quality, create unfair advantages, and lead to corruption.

In South Africa, the Broad-Based Black Economic Empowerment Act (BBBEE) of 2003 sets targets for the participation of black-owned businesses in various sectors, including procurement.

The BBBEE has been credited with increasing the share of government contracts awarded to black-owned businesses (Gwedla & Shackleton, 2019). The B-BBEE emphasizes Black ownership of businesses, aiming to transfer ownership from historically advantaged to historically disadvantaged individuals. It encourages Black representation at senior management levels and promotes the active participation of Black individuals in decision-making processes. The policy also promotes the training and development of Black individuals to enhance their skills and increase their participation in various sectors, including procurement. B-BBEE encourages the support and development of Black-owned enterprises, including preferential procurement from Black-owned suppliers.

The Public Procurement and Asset Disposal Act (PPADA) of 2015 mandates that 30% of government procurement contracts be awarded to SMEs, WOBs, and youth-owned businesses (YOBs). The implementation of the PRS has faced challenges, but it has also contributed to increased participation of these groups in government contracting. In Kenya, Jepkosgei and Kibet (2019) indicates the 30% of the public procurement budget preference and reservation for women, youth, and people with disabilities has not been achieved fully in Kenya due to lack of technical skills, financial constraints, negligence insufficient public sensitization, lack of policies and regulations in the entire procurement process (Jepkosgei & Kibet, 2019; Kituyia, 2019).

Statement of the Problem

The Preference and Reservation Procurement policy, which was implemented in Kenya in 2013, requires that at least thirty percent (30%) of all Public Procurement budgets including in health facilities be reserved for the women, youth and people with disabilities (Mohajan, 2018). However, the management of Preference and reservation scheme in level 6 Hospitals poses a significant challenge to achieving optimal performance and equitable healthcare access. While these schemes are intended to improve the representation of the disadvantaged or unrepresented groups in the health sector, their effectiveness and impact on Hospital performance remain a matter of concern (Nderitu & Karanja, 2018).

Mulaki and Muchiri (2019) indicate that patient satisfaction, turnaround time and efficiency in health care facilities in Kenya, including the National Referral Hospitals, remain low. The level of patient satisfaction in referral hospitals was 67.8%, the average patient waiting time was 55.3 minutes, which is higher than the expected waiting time of 30 minutes (Moses et al., 2021). In addition, Ojwang, Onguru and Otieno (2021) observed that 82.50% of health facilities in Kenya experienced stock outs in medical supplies, pharmaceutical supplies and medical equipment in 2020. Further, Karimi, Shital and Kayumba (2020) observed that all the facilities had experienced both drug shortages and drug expiries in 2019. Ojwang, Onguru and Otieno (2021) also observed that stock outs were attributed to delays in awarding tenders and the inability of the supplier to meet the contract requirements and finances. It is therefore important to examine the influence of preservation and reservation scheme management on performance of level 6 hospitals in Kenya.

Various studies have been conducted in Kenya on preference and reservations scheme management and performance of public institutions. For instance, Jepkosgei and Kibet (2019) examined the influence of preference and reservation policy on procurement performance in Elgeyo Marakwet County; Kituyia (2019) studied the effect of procurement reservation practices on service delivery public institutions in Kenya; and Brian and Namusonge (2022) examined the effect of reservation procurement practice on service delivery in county governments in the Great Lake Region of Kenya. However, Jepkosgei and Kibet (2019) study was limited to Elgeyo Marakwet County, Namusonge (2022) study was limited to county governments in the Great

Lake Region while Kituyia (2019) used a systematic review of literature. In addition, the three studies made use of a descriptive research design. Therefore, this study sought to examine the influence of preference and reservation scheme management on performance of level 6 hospitals in Kenya.

General Objective

The general objective of the study was to examine the influence of preference and reservation scheme management on performance of level 6 hospitals in Kenya.

Specific Objectives

- i. To examine the influence of procurement planning management on performance of level 6 hospitals in Kenya
- ii. To determine the influence of sourcing management on performance of level 6 hospitals in Kenya

Theoretical Review

Resource Based View Theory

The Resource-Based View (RBV) theory was developed by Birger Wernerfelt in the 1980s (Wernerfelt, 1984). It posits that a firm's competitive advantage and superior performance are primarily determined by its internal resources and capabilities rather than external market conditions alone. It suggests that not all firms have access to the same resources, and those with valuable, rare, inimitable, and non-substitutable (VRIN) resources are more likely to achieve sustainable competitive advantage. The Resource-Based View (RBV) theory is based on several assumptions that underpin its conceptual framework. RBV assumes that firms within an industry or market possess heterogeneous resources and capabilities. The theory has been criticized for overlooking the role of external factors, such as industry dynamics, market conditions, and competitive forces, in shaping competitive advantage (Dubey & Papadopoulos, 2019). Critics argue that a purely resource-focused perspective may fail to recognize the influence of external factors that can significantly impact organizational performance. The RBV theory assumes that resources are heterogeneous (unique to firms) and immobile (difficult to transfer between firms). Collins (2021) argues that these assumptions are not always accurate, as firms can imitate or replicate resources, and some resources can be traded or acquired more easily.

The study used resource based view theory to explain the influence of procurement planning management on performance of level 6 hospitals in Kenya. The RBV theory suggests that a firm's competitive advantage is derived from its unique and valuable resources. In procurement planning, organizations identify and leverage their internal resources, capabilities, and expertise to achieve a competitive edge in the market (Jepkosgei & Kibet, 2019). Effective procurement planning ensures the strategic acquisition and management of these resources, ultimately contributing to the hospitals' competitive advantage and improved performance in delivering healthcare services. In addition, human resources play a crucial role. The planning phase of procurement involves strategically aligning the acquisition of resources with the hospital's goals. In addition, accurate specifications for medical equipment, pharmaceuticals, and other resources contribute to the procurement of high-quality resources, positively impacting the hospital's ability to deliver top-tier healthcare services.

Game Theory

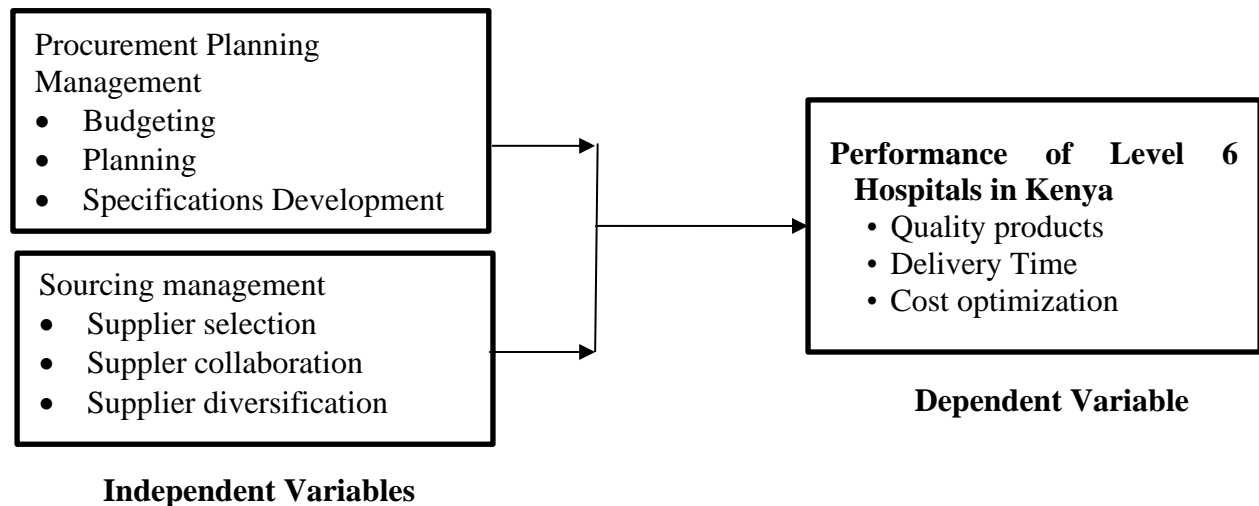
The game theory was founded by John von Neumann and Oskar Morgenstern in the 1940s. Game theory provides mathematical tools to model strategic interactions in which there are several players (decision makers) that want to maximize their benefits by using a certain strategy that considers the strategies of the other players (Maschler, Zamir & Solan, 2020). The key to game theory is that one player's payoff is contingent on the strategy implemented by the other player. The game identifies the players' identities, preferences, and available strategies and how these strategies affect the outcome. Game theory provides tools for analyzing situations in which parties, called players, make decisions that are interdependent. This interdependence causes each player to consider the other player's possible decisions, or strategies, in formulating strategy. A solution to a game describes the optimal decisions of the players, who may have similar, opposed, or mixed interests, and the outcomes that may result from these decisions.

Cooperative and non-cooperative game theories are the most common types of game theory. Cooperative game theory deals with how coalitions, or cooperative groups, interact when only the payoffs are known. It is a game between coalitions of players rather than between individuals, and it questions how groups form and how they allocate the payoff among players (Leyton-Brow & Shoham, 2022). Cooperative game theory is applied in the situation where participants can attain more benefit through cooperating rather than isolating themselves. Non-cooperative game theory deals with how rational economic agents deal with each other to achieve their own goals. A fair tendering process follows the cooperative game theory concept. In non-cooperative games, players are unable to make binding commitments regarding which strategy they will choose and hence they involve themselves in collusion. During the process of bidding, in order to pursue the largest interests, the bidder is possible to surround the bidding with other bidders or collude with the bidding agency vertically to obtain the successful bid. Of course, bidders can also win the bid through low profit quotation and high quality supply in accordance with the law of marginal cost.

The study made use of game theory in explaining the influence of sourcing management on performance of level 6 hospitals in Kenya. Game theory models interactions between different actors (hospitals and suppliers) to analyze decision-making and outcomes. In sourcing, level 6 hospitals must select suppliers for various goods and services. This can be modeled as a game where hospitals aim to choose suppliers that offer the best quality and cost. Game theory helps analyze the strategies and incentives of suppliers to meet hospitals' demands. Hospitals, in turn, evaluate suppliers' offerings, considering quality, cost, and reliability (MacKenzie & DaSilva, 2022). When level 6 hospitals seek bids and negotiate contracts with suppliers, game theory can model these interactions. Hospitals and suppliers engage in strategic behavior, considering factors such as price, delivery terms, and quality. In addition, developing long-term relationships with suppliers is crucial for a stable and efficient supply chain. Game theory can model these collaborative interactions, where both hospitals and suppliers seek to maximize their long-term benefits.

Conceptual Framework

A conceptual framework is a collection of interconnected ideas and concepts that help guide and inform a study (Krishna, 2020). Figure 2.1 shows the relationship between the independent variables (procurement planning management, sourcing management) and the dependent variable (performance of level 6 hospitals in Kenya).

Figure 2. 1: Conceptual Framework

Source: Author (2024)

Procurement Planning Management

Procurement planning management, comprising budgeting, planning, and specifications, is integral to the effective functioning and performance of Level 6 hospitals. Proper budgeting in procurement planning enables Level 6 hospitals to allocate resources efficiently (Aikaruwa, 2019). This involves determining the financial resources needed for acquiring medical equipment, pharmaceuticals, and other essential supplies while maintaining a balance between quality and cost-effectiveness. Procurement planning aligns with the hospital's strategic objectives (Karimi et al., 2020). It involves forecasting the hospital's needs, considering advancements in medical technology, and planning for long-term sustainability. Detailed specifications in procurement ensure that the hospital acquires medical equipment and supplies that meet the necessary quality standards (Kituyia, 2019). This directly influences the quality of healthcare services provided to patients, contributing to positive health outcomes.

At the heart of this orchestrated effort lies budgeting, a financial compass that navigates the organization through the fiscal dimensions of procurement (Oliech & Mwangangi, 2019). Through meticulous cost estimation and resource allocation, budgeting delineates the financial boundaries within which procurement activities must unfold. It not only dictates the permissible expenditures but also serves as a dynamic tool for forecasting and contingency planning, anticipating the financial ebbs and flows that may accompany the procurement journey (Ochom, 2023).

As the organization contemplates its journey into procurement, planning emerges as the roadmap, charting a course for the meticulous execution of each step. Timelines are carefully woven, delineating the inception and culmination of procurement activities (Karimi et al., 2020). Procurement methodologies are strategically chosen, and communication plans are crafted to ensure a seamless flow of information among stakeholders. Quality standards and technical specifications are methodically defined, providing the blueprint against which the procured items will be measured. Planning becomes the compass that guides the organization through the intricate labyrinth of procurement, ensuring that each move is deliberate and purposeful.

Sourcing Management

Sourcing management, encompassing supplier selection, supplier collaboration, and supplier diversification, holds a crucial and intricate relationship with the performance of Level 6 hospitals (Karimi et al., 2020). The process of supplier selection directly influences the quality and reliability of medical supplies, pharmaceuticals, and equipment procured by Level 6 hospitals. Choosing reputable and dependable suppliers ensures that the hospital receives high-quality products crucial for patient care (Jepkosgei & Kibet, 2019). Collaborative relationships with suppliers foster innovation and continuous improvement in the quality of medical products. Supplier collaboration allows Level 6 hospitals to stay abreast of advancements in medical technology and adopt new solutions that enhance patient treatment and care (Aikaruwa, 2019). Diversifying the pool of suppliers helps mitigate risks associated with over-reliance on a single source.

Supplier selection emerges as a pivotal chapter in this narrative, akin to the meticulous casting of characters in a play. The process involves a careful examination of potential suppliers, evaluating their capabilities, reliability, and alignment with organizational needs (Yildiz, 2020). It's a meticulous dance where the organization seeks partners who not only deliver goods or services but become integral contributors to the shared narrative of success. Each supplier, a character in this unfolding drama, is chosen not merely for their products but for the potential synergy that can elevate both parties to new heights (Ghosh, Mandal & Ray, 2022).

RESEARCH METHODOLOGY

Research Design

The study adopted a descriptive research design. Descriptive research design is a type of research methodology that aims to describe and provide a comprehensive overview of a particular phenomenon or topic (Creswell & Creswell, 2022). This approach is used to gather information, facts, and characteristics about the subject of study, without manipulating or altering the variables under investigation. Descriptive research is primarily concerned with answering "what," "who," "where," "when," and "how" questions (Kumar, 2019). Descriptive research helps provide a clear and detailed understanding of a subject, group, or phenomenon. A descriptive research design was the most appropriate in examining the influence of preference and reservation scheme management on performance of level 6 hospitals in Kenya.

Target Population

The target population is the population to which inferences are to be drawn from the sample data (Mukherjee, 2020). The unit of analysis in this study was the five level 6 health facilities in Kenya. The unit of observation was the heads of departments and two deputies in the five level 6 health facilities in Kenya. These departments include be stores, procurement, finance, administration, quality assurance, audit department and planning department. The heads of departments and two deputies in these departments were selected because they are directly involved in the procurement process including the preservation and reservation scheme. The target population was 105 heads of stores, procurement, finance, administration, quality assurance, audit department and planning departments and two deputies in the five level 6 health facilities in Kenya.

Table 3. 1: Target Population

Departments	Hospitals	Target Population
Stores	5	15
Procurement	5	15
Finance	5	15
Administration	5	15
Quality Assurance	5	15
Audit Department	5	15
Planning	5	15
Total	5	105

Sample Size and Sampling Technique

The study utilized a census approach. A census approach refers to a method where data is collected from an entire population or a complete set of individuals or units within a specific group or area, rather than from a sample (Waddell, 2020). It is the opposite of sampling, where data is collected from a subset or sample of the population. Since information is collected from the entire population, the census approach is considered highly accurate in representing the characteristics and attributes of the group. No sampling error associated with the data exists, as every unit in the population is accounted for.

Data Collection Instruments

The study made use of primary data, which was collected by use of semi-structured questionnaires. Semi-structured questionnaires are survey instruments with a blend of structured questions that yield quantitative data and open-ended questions that allow respondents to express their thoughts and perspectives. They provide a compromise between the rigidity of closed-ended surveys and the flexibility of unstructured interviews. Closed-ended questions in semi-structured questionnaires provide standardized response options, making data analysis more straightforward (Krishna, 2020). This standardization allows for quantitative analysis and comparisons across respondents. Open-ended questions in semi-structured questionnaires encourage respondents to elaborate, share their perspectives, and provide detailed explanations. This depth of information can lead to a better understanding of complex topics and issues. Questionnaires was used in this study because they are a time-efficient method of data collection. They allow researchers to gather responses from a large number of participants simultaneously.

Pilot Study

A pilot test, often referred to as a pilot study or pilot research, is a small-scale, preliminary version of a research study that is conducted before the full-scale research project. The primary purpose of a pilot test is to identify and address potential issues, refine the research design, and ensure the feasibility and effectiveness of the research methods (Mukherjee, 2020). A pilot test will be conducted to assess the validity and reliability of the research instrument as well as address ambiguous, misinterpreted or misunderstood questions. The pilot study was conducted in Mama Lucy Level 5 Hospital with 10% of the sample size. According to Babbie (2017), 10% of the sample required for a full study should be used in a sample size.

Data Analysis

Analyzing both qualitative and quantitative data from a questionnaire involves distinct approaches, as these types of data serve different purposes and require different methods of

analysis (Creswell & Creswell, 2022). Qualitative data from open ended questions was analyzed using thematic content analysis. This is a qualitative research method that involves systematically identifying, analyzing, and reporting themes or patterns within textual data. It is a process of discovering and interpreting the underlying meaning and patterns present in the data. Quantitative data was analyzed using both descriptive as well as inferential statistics with the help of statistical software known as Statistical Package for Social Sciences (SPSS version 28). Descriptive statistics comprised of frequency distribution, percentages, standard deviation and mean. Inferential data analysis was carried out using Pearson correlation coefficient and multivariate linear regression.

RESEARCH FINDINGS AND DISCUSSIONS

Descriptive Statistics

Descriptive statistics are a set of techniques used in data analysis and statistics to summarize and describe the main features or characteristics of a dataset. Descriptive statistics in this study include mean, standard deviation and percentages. Closed questions yielded quantitative data, as did items measured on a 5-point Likert scale, with 1 indicating strongly disagree, 2 indicating disagree, 3 indicating moderately agree, 4 indicating agree, 5 indicating strongly agree. Open ended questions yielded qualitative data.

Procurement Planning Management

The respondents were asked to indicate their level of agreement with various statements on procurement planning management in their organizations. The results were as presented in Table 4.1.

Table 4. 1: Aspects of Procurement Planning Management

Statements	N	Mean	Std. Deviation
The procurement department effectively plans and allocates budgets for procurement activities.	88	3.647	.935
The procurement budget is aligned with the organization's overall financial plan.	88	3.784	.964
The procurement department regularly monitors and adjusts the procurement budget as needed.	88	3.761	.787
The procurement department develops comprehensive procurement plans that meet the organization's needs.	88	3.818	.781
The procurement plans are clear, concise, and well-articulated.	88	3.545	1.163
The procurement department considers all relevant factors when developing procurement plans.	88	3.795	.697
The procurement department develops clear and detailed technical specifications for all procurements.	88	3.897	.661
The specifications are tailored to the organization's specific needs and requirements.	88	4.159	.709
The specifications are easy to understand and interpret for potential suppliers.	88	4.102	.678
Aggregate Mean		3.834	.819

With a mean of 4.159 (Std. Deviation = 0.709), the respondents generally agreed that the specifications are tailored to the organization's specific needs and requirements. The respondents agreed with a mean of 4.102 (Std. Deviation = 0.678) with the statement indicating that the

specifications are easy to understand and interpret for potential suppliers. With a mean of 3.818 (Std. Deviation = 0.781), the respondents generally agreed that the procurement department develops comprehensive procurement plans that meet the organization's needs. The findings agree with Changalima et al. (2021) findings that firms should also ensure the development of procurement plans that meet the needs of the organizations.

The respondents, on average, agreed with a mean of 3.897 (Std. Deviation = 0.661) that the procurement department develops clear and detailed technical specifications for all procurements. With a mean of 3.795 (Std. Deviation = 0.697), the respondents generally agreed that the procurement department considers all relevant factors when developing procurement plans. The respondents agreed with a mean of 3.784 (Std. Deviation = 0.964) with the statement indicating that the procurement budget is aligned with the organization's overall financial plan. The findings concur with Gambo and Musonda (2021) findings that procurement budget should be aligned with the financial plan o health facilities.

With a mean of 3.647 (Std. Deviation = 0.935), the respondents generally agreed with the statement that the procurement department effectively plans and allocates budgets for procurement activities. The respondents agreed with a mean of 3.761 (Std. Deviation = 0.787) with the statement indicating that the procurement department regularly monitors and adjusts the procurement budget as needed. The respondents, on average, had a mean of 3.545 (Std. Deviation = 1.163) indicating some variability in responses, but generally agreeing that the procurement plans are clear, concise, and well-articulated. The findings concur with Ochom (2023) findings that procurement plans should be SMART and well-articulated.

The respondents were asked to indicate how else procurement planning management affects performance of level 6 hospitals in Kenya. From the findings, the respondents indicated that effective budgeting and planning allocate resources efficiently, reducing unnecessary expenditure on materials and equipment. This frees up funds for essential medical services and upgrades. They also indicated that precise planning leads to optimized stock levels, minimizing waste and the risk of stockouts, preventing disruptions in patient care. Further, consolidated procurement planning strengthens the hospital's bargaining position with suppliers, leading to better pricing and terms. The respondents indicated that efficient procurement ensures timely access to crucial drugs, equipment, and consumables, improving patient care delivery and outcomes. Further, clear and precise specifications guarantee adherence to quality standards, minimizing risks associated with inferior products and ensuring patient safety. Also, proactive planning can facilitate the acquisition of cutting-edge medical equipment and technologies, improving diagnostic and treatment capabilities. The respondents indicated that streamlined planning and specifications reduce administrative burden and expedite procurement cycles, allowing staff to focus on patient care.

Sourcing Management

The respondents were requested to indicate their level of agreement with various statements on sourcing management in their organizations. The results were as presented in Table 4.5.

Table 4. 2: Aspects of Sourcing Management

Statements	N	Mean	Std. Deviation
Our organization considers supplier performance history when making decisions on supplier selection.	88	4.000	.678
The supplier selection process in our organization ensures fair and transparent practices.	88	4.034	.556
The organization places importance on ethical and sustainable practices when selecting suppliers.	88	4.068	.784
There is effective communication between our organization and its strategic suppliers.	88	3.715	.787
Our organization encourages innovation and continuous improvement through supplier collaboration.	88	3.818	.751
Collaboration with suppliers in our organization extends beyond transactional activities to strategic partnerships.	88	3.920	.698
The organization recognizes the importance of supplier diversification in managing risks.	88	3.818	.597
Efforts to diversify suppliers in our organization are in line with promoting inclusivity.	88	4.306	.463
The organization considers geographical and cultural diversification when selecting suppliers.	88	3.920	.698
Aggregate Mean		3.955	.668

The respondents strongly agreed with a mean of 4.306 (Std. Deviation = 0.463) with the statement indicating that efforts to diversify suppliers in the organization are in line with promoting inclusivity. With a mean of 4.068 (Std. Deviation = 0.784), the respondents agreed with the statement indicating that the organization places importance on ethical and sustainable practices when selecting suppliers. The findings agree with Yildiz (2020) argument that the consideration of sustainable practices is important in the selection of suppliers. The respondents agreed with a mean of 4.034 (Std. Deviation = 0.556) with the statement indicating that the supplier selection process in the organization ensures fair and transparent practices.

With a mean of 4.000 (Std. Deviation = 0.678), the respondents agreed with the statement indicating that the organization considers supplier performance history when making decisions on supplier selection. The findings concur with Ghosh et al. (2022) findings that firms should consider the performance history of suppliers during selection. The respondents agreed with a mean of 3.920 (Std. Deviation = 0.698) with the statement indicating that collaboration with suppliers in the organization extends beyond transactional activities to strategic partnerships. With a mean of 3.920 (Std. Deviation = 0.698), the respondents generally agreed that the organization considers geographical and cultural diversification when selecting suppliers.

With a mean of 3.818 (Std. Deviation = 0.751), the respondents generally agreed that the organization encourages innovation and continuous improvement through supplier collaboration. The findings are in line with Frederico et al. (2021) argument that firms should ensure continuous improvement in their supply chain. With a mean of 3.818 (Std. Deviation = 0.597), the respondents generally agreed that the organization recognizes the importance of supplier diversification in managing risks. The respondents, on average, had a mean of 3.715 (Std. Deviation = 0.787) indicating some variability in responses, but generally agreeing that there is effective communication between the organization and its strategic suppliers.

The respondents were asked to indicate their level of agreement on the effect of sourcing management on the performance of level 6 hospitals in Kenya. From the findings, the

respondents indicated that strategic sourcing involves seeking alternative suppliers and negotiating favorable contracts, leading to cost savings on essential medical supplies and equipment. They also indicated that streamlined sourcing processes minimize administrative expenses and paperwork, freeing up resources for patient care. The respondents indicated that implementing stringent supplier prequalification and evaluation procedures guarantees the quality and reliability of procured products, improving patient safety and treatment outcomes. The study established that strategic sourcing partnerships can secure access to scarce or specialized medical supplies needed for complex treatments, expanding the hospital's service offerings. In addition, they indicated that robust supplier management practices mitigate risks associated with unreliable suppliers, delays, and disruptions, ensuring smooth hospital operations. Further, the respondents indicated that optimizing sourcing channels and logistics can shorten delivery times, accelerating procurement processes and enhancing responsiveness to patient needs.

Inferential Statistics

Inferential statistics is a branch of statistics that involves using sample data to make inferences or draw conclusions about a population. It allows researchers to generalize findings from a sample to a larger population, make predictions, and assess the likelihood that observed relationships or differences are not due to random chance. Inferential statistics included correlation analysis and regression analysis.

Correlation Analysis

Pearson product-moment correlation coefficient was utilized to assess the strength of association between independent variables (procurement planning management) and the dependent variable (performance of level 6 hospitals in Kenya). The findings were as presented in Table 4.3.

Table 4. 3: Correlation Coefficients

		Performance of level 6 Hospitals in Kenya	Procurement Planning Management	Sourcing Management
Performance of level 6 Hospitals in Kenya	Pearson	1		
	Correlation			
	Sig. (2-tailed)			
Procurement Planning Management	N	88		
	Pearson	.873**	1	
	Correlation			
Sourcing Management	Sig. (2-tailed)	.000		
	N	88	88	
	Pearson	.773**	.023	1
	Correlation			
	Sig. (2-tailed)	.000	.853	
	N	88	88	88

As shown in Table 4.3, The study found that there exists a positive and significant relationship between procurement planning management and performance of level 6 hospitals in Kenya ($r=0.873$, $p\text{-value}=0.000$). The study findings agree with Changalima, Mushi and Mwaiseje (2021) suggestion that procurement planning was a strategic tool for public procurement effectiveness in public procuring entities in Dodoma city, Tanzania. The findings also concur with Ochom (2023) findings that there is a positive relationship between procurement planning and performance in Tororo general hospital.

The study established that there exists a positive and significant relationship between sourcing

management and performance of level 6 hospitals in Kenya ($r=0.773$, $p\text{-value}=0.000$). The findings agree with Yildiz (2020) findings that strategic sourcing has a positive influence on the performance of firms in Turkey. The findings are in line with Ghosh et al. (2022) suggestion that strategic sourcing has a significant relationship with the performance of automobile manufacturing units in India.

Regression Analysis

Multivariate regression analysis was carried out to examine the relationship between independent variable (procurement planning management, sourcing management) and dependent variable (performance of level 6 hospitals in Kenya).

Table 4.4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.819 ^a	.670	.659	.17568

a. Predictors: (Constant), procurement planning management, Sourcing Management,

The R Squared value represents the proportion of the variance in the performance of Level 6 hospitals that can be explained by the combination of predictors. In this case, R Square was 0.670, suggesting that approximately 67% of the variability in the performance of Level 6 hospitals is accounted for by the combination of procurement planning management and sourcing management.

Table 4.5: Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	39.609	2	19.805	225.06	.000 ^b
	Residual	7.495	85	.088		
	Total	47.104	87			

a. Dependent Variable: Performance of level 6 Hospitals in Kenya

b. Predictors: (Constant), procurement planning management, Sourcing Management

In this study, the ANOVA was performed to determine if the model was good fit for the data. As shown in Table 4.5, the F-calculated was 225.06 and the F-critical from the F-distribution table was 2.46. The associated significance level (Sig.) was very low (0.000), indicating that the F-Statistic is statistically significant. Therefore, the model can be used in predicting the influence of procurement planning management and sourcing management on the performance of Level 6 hospitals in Kenya.

Table 4. 6: Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error			
1	(Constant)	1.616	0.293		5.515	0.000
	Procurement Planning Management	0.660	0.159	0.693	4.151	0.000
	Sourcing Management	0.784	0.175	0.884	4.480	0.000

a. Dependent Variable: Performance of level 6 Hospitals in Kenya

Regression equation for the unstandardized coefficients was;

$$Y = 1.616 + 0.660X_1 + 0.784X_2$$

The study findings indicated that procurement planning management has a positive and significant influence on performance of level 6 hospitals in Kenya ($\beta_1=0.660$, $p\text{-value}=0.000$). $P\text{-value}$ (0.000) was less than 0.05 (significant level) and hence the effect was considered to be significant. This denotes that an improvement in procurement planning management would lead to 0.660 improvement in the performance of level 6 hospitals in Kenya. The findings concur with Oliech and Mwangangi (2019) suggestion that procurement planning has a positive effect on performance of level five hospitals in Kenya. The findings also concur with Ochom (2023) observation that there is a positive relationship between procurement planning and performance in Tororo general hospital.

In addition, the study found that sourcing management has a positive and significant influence on performance of level 6 hospitals in Kenya ($\beta_2=0.784$, $p\text{-value}=0.000$). $P\text{-value}$ (0.000) was less than 0.05 (significant level) and hence the effect was considered to be significant. This denotes that an improvement in sourcing management would lead to 0.784 improvement in the performance of level 6 hospitals in Kenya. The findings are in concurrence with Ndung'u et al. (2023) findings that strategic sourcing has a positive effect on performance of milk processors in Kenya. The findings also concur with Oloitip (2023) findings that strategic sourcing process has a positive effect on performance of selected cement manufacturing companies in Kenya.

Conclusions

The study concludes that procurement planning management has a positive and significant influence on performance of level 6 hospitals in Kenya. The study found that procurement planning management in terms of budgeting, planning and specifications have an influence on performance of level 6 hospitals in Kenya. These findings imply that an improvement in budgeting, planning and specifications would improve the performance of level 6 hospitals in Kenya.

The study also concludes that sourcing management has a positive and significant influence on performance of level 6 hospitals in Kenya. The study established that sourcing management in terms of supplier selection, supplier collaboration and supplier diversification has an influence on performance of level 6 hospitals in Kenya. These findings imply that an improvement in supplier selection, supplier collaboration and supplier diversification would improve the performance of level 6 hospitals in Kenya.

Recommendations

The study found that procurement planning management has a positive and significant influence on performance of level 6 hospitals in Kenya. As such, the study recommends that the management of level 6 hospitals should regularly review and update procurement plans, processes, and specifications to maintain alignment with the hospital's needs and industry best practices. They should also develop and implement standardized templates and procedures for procurement activities to ensure consistency and efficiency. In addition, the hospitals should integrate procurement planning with other hospital departments to ensure needs are effectively identified and addressed. In addition, the study recommends that the management of the hospitals should build strong relationships with reliable and qualified suppliers to leverage their expertise and negotiate favorable terms.

The study established that sourcing management has a positive and significant influence on performance of level 6 hospitals in Kenya. Therefore, the study recommends that the management of these facilities should foster closer collaboration with key suppliers to exchange knowledge, co-develop innovative solutions, and secure advantageous long-term contracts. They should also refine prequalification and evaluation procedures as well as enhance criteria to include sustainability practices, technological capabilities, and innovation potential alongside traditional factors like price and quality. They should also create dedicated communication channels with strategic suppliers to facilitate information sharing, resolve issues, and foster trust.

REFERENCES

- Abud, N. L. N. (2018). The preference policy for small and micro-enterprises: an analysis of the Brazilian case. *Revista de Administração Contemporânea*, 7(1), 73-84.
- Arunachalam, D. (2023). Knowledge transfer, buyer-supplier relationship and supplier performance in agricultural supply chain: An agency theory perspective. *Journal of Knowledge Management*, 27(3), 738-761.
- Australian Government. (2023). *Small and medium enterprise procurement policy*. Australian Government.
- Bhandari, H. C. (2019). The procurement policy for small scale industries and its impact on the Indian economy. *Economic and Political Weekly*, 41(18)192-202.
- Bhattacharjee, A. (2018). *Social Science Research: Principles, Methods, and Practices*. New York: Free Press.
- Brian, A.O. & Namusonge, E. (2022). Effect of Reservation Procurement Practice on Service Delivery in County Governments in the Great Lake Region of Kenya. *International Journal of Social Sciences and Information Technology*, 8(5), 101-113.
- Changalima, I. A., Mushi, G. O., & Mwiseje, S. S. (2021). Procurement planning as a strategic tool for public procurement effectiveness: experience from selected public procuring entities in Dodoma city, Tanzania. *Journal of Public Procurement*, 21(1), 37-52.
- Chopra, M. (2021). Reservation system in India: advantages and disadvantages. *International journal of economic perspectives*, 15(1), 30-37.
- Creswell, W. & Creswell, D. (2022). *Research design: Qualitative, quantitative, and mixed methods approaches*. New York: SAGE Publications, Inc.
- Dubey, R. & Papadopoulos, T. (2019). Big data and predictive analytics and manufacturing performance: integrating institutional theory, resource-based view and big data culture. *British Journal of Management*, 30(2), 341-361.
- Gambo, N., & Musonda, I. (2021). Procurement planning factors influencing the quality performance of primary healthcare building facilities: A mediation effect of the firm's business partnership. *Cogent Engineering*, 8(1), 1872823.
- Government Accountability Office. (2011). *Small business procurement: Opportunities for further improving agency performance*. Government Accountability Office.
- Government of Tanzania. (2019). *Public Procurement Policy*. Dar es Salaam: Public Procurement Policy Directorate.
- Gwedla, N., & Shackleton, C. M. (2019). Perceptions and preferences for urban trees across multiple socio-economic contexts in the Eastern Cape, South Africa. *Landscape and urban planning*, 189, 225-234.
- Jepkosgei, F. & Kibet, Y. (2019). Influence of Preference and Reservation Policy on Procurement Performance in Elgeyo Marakwet County, Kenya. *IOSR Journal of Business and Management*, 21(10), 38-45.
- MacKenzie, A. B., & DaSilva, L. A. (2022). *Game theory for wireless engineers*. Springer Nature.

- Martinez, L. B. & Guercio, M. B. (2019). SMEs capital structure: trade-off or pecking order theory: a systematic review. *Journal of Small Business and Enterprise Development*, 26(1), 105-132.
- Maschler, M., Zamir, S., & Solan, E. (2020). *Game theory*. Cambridge University Press.
- Matara, V. (2020). *List of All National Referral Hospitals in Kenya*. Retrieved from <https://victormatara.com/list-of-all-national-referral-hospitals-in-kenya/>
- Mohajan, H. (2018). Improvement of Health Sector in Kenya. *American Journal of Public Health Research*, 2, 159-169.
- Moronge, D. O., & Ratemo, B. M. (2022). Determinants of Effective Implementation of Public Procurement Reservation Scheme in Kenya: A Case Study of the County Government of Nakuru. *International Journal of Scientific Research and Management*, 10(4), 3213-3229.
- Nderitu, H. N. & Karanja, K. (2018). Effect of Reserved Tendering on Procurement Performance in State Corporations in Kenya. *International Journal of Social Sciences*, 2(5), 617-647.
- Ndung'u, H. N., Mwirigi, P. M., & Gatimbu, K. K. (2023). Strategic sourcing and performance of milk processors in Kenya. *International Journal of Procurement Management*, 16(3), 396-421.
- Njoki, G. C., Ismail, N., & Osoro, A. (2021). Preferences and Reservations Groups and Performance of State Corporations in Kenya. *Journal of Procurement*, 12, 101-121.
- Ojwang, H., Onguru, D. & Otieno, D. (2021). Essential Drugs Inadequacy is an Impediment to Utilization of Universal Health Coverage; the Case of Seme Sub-County in Kisumu County, Kenya. *Int J Fam Med Prim Care*, 2(1), 1031
- Oloitiptip, S. L. (2023). Strategic Sourcing Process and Performance of Selected Cement Manufacturing Companies in Kenya. *International Journal of Social Sciences Management and Entrepreneurship (IJSSME)*, 7(1), 101-122.
- Sileyew, K. (2019). *Research Design and Methodology*. Washington DC: Intechopen.
- Tesha, A. K., & Nsimbila, P. M. (2021). Determining the participation of the special groups in public procurement opportunities in Tanzania. *African Journal of Applied Research*, 7(1), 1-16.
- Yıldırım, D., & Çelik, A. K. (2021). Testing the pecking order theory of capital structure: Evidence from Turkey using panel quantile regression approach. *Borsa Istanbul Review*, 21(4), 317-331.
- Yildiz, S. (2020). The effects of strategic sourcing on supply chain strategies. *Journal of Global Operations and Strategic Sourcing*, 13(2), 129-148.