



**CONTRACT MANAGEMENT PRACTICES AND PROCUREMENT  
PERFORMANCE OF PUBLIC HEALTH FACILITIES IN NAIROBI CITY  
COUNTY, KENYA**

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**ABSTRACT**

Contract management practice is a vital aspect in any organization that intends to gain a competitive advantage and value for money. A firm's procurement process is incomplete without an effective and efficient contract management practice. Customer dissatisfaction in majority of public organizations and particularly public hospitals in Nairobi County. The study was limited to examination of contract management practices on procurement performance of public health facilities in Nairobi City County, Kenya. The specific objectives were to examine effect of contract planning and contract awarding. The study was guided by the principal-agent theory and virtue ethics theory. The study targeted 84 procurement, 126 administration, 78 finance, 56 stores, and 40 logistics officers. Yamane 1967 formula was used to sample 196 staff. Data was collected using questionnaires. The pilot test was conducted on a total of 10% of the sample population (19 respondents). The study used content and construct validity. Cronbach's Alpha was used to measure internal consistency of the questionnaire. The researcher used SPSS version (V28) to analyse quantitative data collected from the study samples. Descriptive statistics included percentages, frequencies, and means while inferential statistics involved regression and correlation analysis. The validity and reliability of the research instrument were rigorously tested in this study. The study revealed that all variables had a significant positive impact on procurement performance: contract planning ( $B = 0.329$ ,  $p = 0.000$ ) and contract awarding ( $B = 0.388$ ,  $p = 0.000$ ). The findings conclude that effective contract management practices are critical in enhancing procurement performance, with contract awarding having the strongest influence. The study recommends that public health facilities adopt comprehensive planning tools and ensure merit-based contract awarding to improve procurement outcomes and enhance healthcare delivery. Further research is suggested to explore other factors influencing procurement performance, such as technological adoption and supplier management.

**Key Words:** Contract Management Practices Procurement Performance, Public Health Facilities, Contract Planning, Contract Awarding

## **Background of the Study**

According to Klara (2021), contract management is the process of managing contract creation, execution, and analysis to maximize operational and financial performance at an organization, all while reducing. Contract management practices are practices that ensure both parties to a contract fully meet their respective obligations as efficiently and effectively as possible, in order to deliver the business and operational objectives required from the contract and in particular to provide value for money therefore as a result developing and managing contracts is a skill required in order to enhance procurement performance in public institutions. Contract management is not an end in itself and it is important that all contracting decisions and actions focus on the outcomes that entities are seeking to achieve successful and efficient contract management practices are those that meet the needs of the company's stakeholders, achieve optimum conditions and value in regard to the allocation of scarce tax payers resources (best value for money), ensure rational and efficient of funds available(Adrienne Watt, 2018)

The practice of contract management entails monitoring the progression of the awarded contract and determining whether the contractor who was awarded the contract is complying with the regulation of the agreement (Lindholst, Helby Petersen & Houlberg, 2018). Contract management also entails the handling of contract issues such as execution, payments, errors, specs, in addition to attributes that may bring about the path of the settlement execution (Aulich, 2020). The process also allows for the efficient running of the contracts, implementation, evaluation, and analysis to maximize performance and minimize risks. Contract management in an organization is indicated by diverse measures along with well-timed shipping, quality of labour, speed of labour, fee discount, end-person pride, flexibility, efficiency, and supplier dating (Seklecova et al., 2020).

Contract management practice is a vital aspect in any organization that intends to gain a competitive advantage and value for money. A firm's procurement process is incomplete without an effective and efficient contract management practice. Contract management improves an organization's operational performance as indicated by various measures, such as, quality, flexibility, speed, efficiency, and supplier relationship (Olang, 2017).

Contract management improves an organization's operational performance as indicated by various measures, such as, quality, flexibility, speed, efficiency, and supplier relationship (Cho & Pucick, 2015). Aluonzi, Oluca, and Nduhura (2016) noted that contract management involves three diverse aspects; achievement of product quality, delivery on time and within the budget. Hiles and Wells (2015) noted that the main reasons why firms prequalify their contractors are to minimize risk and to reduce the cost associated with procurement. Since one of the main goals is to reduce costs, it is critical to implement a streamlined prequalification process that does not require high out-of-pocket costs and is not resource intensive. Therefore, contract management in public procurement is vital for all public institutions in attainment of value for money. This includes managing contractual relationships and ensuring that deliverables are provided to the required standards within the agreed time frame from the identification of need, preparation and procurement, transition and handover, proactive management and contract service review.

## **Statement of the Problem**

Healthcare is a critical economic sector globally, creating vital linkages with local and international industries (Njeru & Kungu, 2018). In Kenya, public procurement accounts for over 10% of GDP, representing a significant market for suppliers and contractors. Despite the adoption of a devolved governance system intended to improve public service delivery and resource use (Ogwoka, Namada, & Sikalieh, 2017), quality healthcare delivery remains suboptimal. Public healthcare facilities, primarily managed by the Ministry of Health (MOH) and county governments, account for approximately 70% of healthcare services in Kenya, yet face considerable challenges in procurement and contract management.

Studies highlight that between 20% to 50% of healthcare resources in Kenya are used inefficiently (Kirigia, Emrouznejad & Sambo, 2020), with procurement practices identified as a significant contributor to wastage. Devolved governments, which oversee public health procurement, struggle with corruption, inefficiencies, and inadequate contract management, adversely affecting service quality (Kariuki, Makokha, & Namusonge, 2018). The Kenya Institute for Public Policy Research and Analysis (KIPPRA, 2019) reports that 81% of public organizations, including hospitals in Nairobi County, have high levels of customer dissatisfaction, and over 50% of patients at key hospitals such as Mbagathi Hospital rate services as poor (Wanjau, 2018). Additionally, 75% of public health facilities in Nairobi County experience drug shortages and expiries, with drug fill rates ranging from 50% to 70% (Ganatra et al., 2020). The average availability of essential medicines was only 44% in public facilities compared to 72.4% in private facilities in 2020/21 (WHO, 2023).

Existing literature on contract management largely focuses on other sectors, such as telecommunications and state corporations, neglecting the public health sector's unique challenges. Studies like those by Moffat and Mwangangi (2019), Maina and Osoro (2020), and Njoki, Ismail, and Osoro (2021) demonstrate the importance of contract planning, administration, and cost management in organizational performance, yet fail to address how these elements specifically affect public health supply chains. Rotich (2018) highlights general contract management issues in public procurement but does not delve into how these issues manifest in healthcare. This study sought to fill these gaps by specifically examining how contract management practices—such as contract planning and awarding—impact procurement performance in public health facilities in Nairobi City County. By addressing the under-explored links between specific contract management practices and procurement outcomes, this research provides insights critical for improving procurement efficiency, reducing resource wastage, and enhancing service delivery in Kenya's public health sector.

## **Objectives of the Study**

### **General Objective**

To establish the relationship between contract management practices on procurement performance of public health facilities in Nairobi City County, Kenya.

### **Specific Objectives**

- i. To determine the effect of contract planning on procurement performance of public health facilities in Nairobi City County, Kenya.
- ii. To assess the effect of contract awarding on procurement performance of public health facilities in Nairobi City County, Kenya.

## **LITERATURE REVIEW**

### **Theoretical Review**

#### **Principle Agent Theory**

The principal-agent theory was conceptualized in 1976 by American economists, Michael Jensen and William Meckling. According to Cheung and Suen, (2002) an agency relationship is defined as one in which one or more persons (the principal) engage another person (the agent) to perform some service on their behalf which involves delegating some decision-making authority to the agent (Ross, 1973). The cornerstone of agency theory is the assumption that the interests of principals and agents diverge. According to agency theory, the principal can limit divergence from his interests by establishing appropriate incentives for the agent, and by incurring monitoring costs designed to limit opportunistic action by the agent. This study therefore adopts the view that it is prudent to monitor and control the critical factors of project performance (as defined in the Success Factors Model) within a contracting arrangement (as defined in the Agency Theory) to ensure the success of outsourced projects in the organization.

According to the principal-agent theory, the relationship between the two parties also involves self-interest of each party. It is commonly assumed that all participants in the project will work together in order to achieve the same goal (Douglas, 2003). However, there is a potential conflict of interests between the participants because they all have their self-interests too. According to Fink (2006) the underlying principle of the contract administration is that there should be a clear understanding of the needs of the principal and ability of the agent to meet these needs competently. The theory becomes significant to the study as it highlights the need for proper contract planning practices. When a project contract is well defined and planned, the principal and agents will find it easy to meet needs of each other in an efficient way resulting into timely execution of the projects in predetermined service level.

**Virtue Ethics Theory**

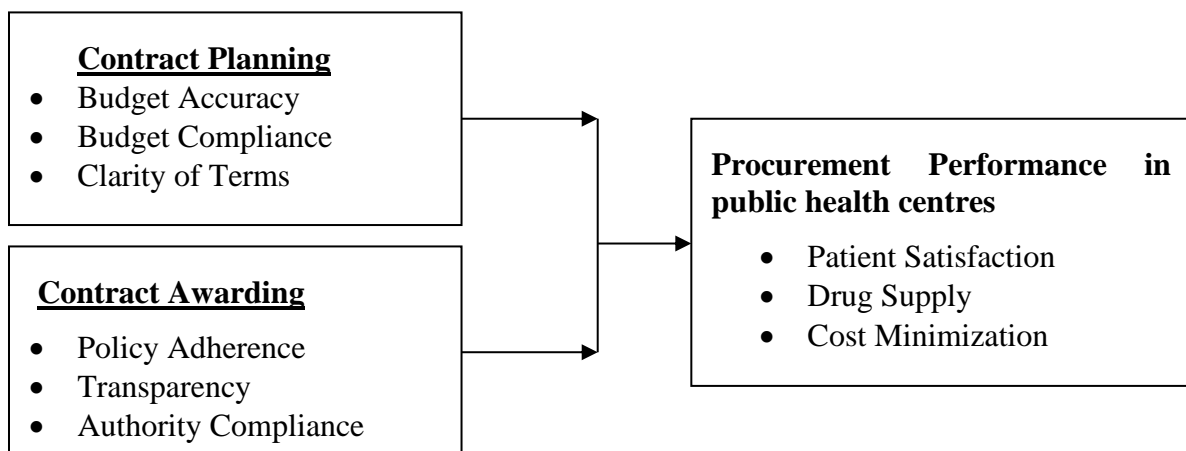
Virtue ethics is a philosophy developed by Aristotle 1958. Virtue Ethics emphasizes on a person’s character regarding ethical thinking. The goal of virtue ethics is to mold humans into morally upright and accountable beings (Bryman, 2015). Learning moral principles does not cause the growth of morals, according to the notion. People should instead learn standards and values in specific situations. The goal of moral problem solving should always be to keep people's relationships intact (Gathoga, 2015). Virtue ethics concentrates on an individual’s characteristics and how these characteristics help to make their lives or other people lives better.

Virtue ethics enables a person to practice good behaviors and respect, show love and compassion to others. Since these virtues are inherent in a person, they motivate him or her to do good deeds for others. Ethics helps people to become change their behaviors and develop willingness to help others be becoming selfless. Virtue ethics is a holistic approach because it includes the whole individual, including abilities, character characteristics, and emotions (Rachels, 2007). The theory has also been criticized based on the challenge in establishing the nature of virtues because of varying opinion of what is morally right or morally wrong since what one person considers as morally right another could view it as morally wrong. This usually happens due to cultural differences (Anna, 2009). Contract awarding is related to virtue ethic theory, which states that all parties involved in procurement should support ethical practices in all of their activities. This ensures that the contract is awarded to only legible people who have successfully passed through the tendering process legitimately.

**Conceptual Framework**

**Independent Variables**

**Dependent Variables**



**Figure 2. 1: Conceptual Framework**

**Contract Planning**

Contract planning is the process of developing a plan to fulfill contractual obligations. Contract planning can encompass anything from developing an initial proposal to negotiating the final agreement (Agama & Huamán, 2021). Contract planning is concerned with identifying and

executing the structure, format and content of the contracting mechanism the organization needs with their partners. Good contract planning formalizes relations between parties within a robust legal framework, but is much more besides; it is an opportunity to define the arrangements that encompass every aspect of what outcomes the organization wants from the supplier and how it wants the relationship to work (Ballou, 2017).

The organization needs to take an active role in the development of the contractual mechanism early on; it should not be left as a supplementary activity post negotiation. At preparation of every contract the level of contribution to contract quality and risk ensuring needs to be weighted. It is not reasonable to use too much time for negotiating on all details. However, being innovative in the development of contract is not only reasonable but also one of the key factors for success (Haapio & Järvinen 2020).

The contract management plan summarizes key information about how the contract will be managed. It confirms systems and processes to ensure that the provider complies with the terms and conditions of the contract, that performance is effectively managed, that communications are managed, and that issues are appropriately escalated. This may include specific actions and obligations for the service directorate team (Kibuuka, 2020). Hendrickson (2020) added that contract planning is a fundamental and challenging activity in the management and execution of construction projects which involves the choice of technology, the definition of work tasks, the estimation of required resources and the duration of individual tasks, and the identification of any interaction among the different work tasks.

### **Contract Awarding**

Contract awarding is the method used during a procurement in order to evaluate the proposals (tender offers) taking part and award the successful bidder (Kinuthia, Odundo & Nyagah 2019). An organization is required to display a notice of the best evaluated bidder within five days of the decision of the contracts committee to award a contract. A notice of best evaluated bidder should be displayed on a notice-board or website and sent to all bidders who participated. This notice remains open for a minimum of ten working days after the contract has been awarded (Macaulay, 2020).

Contracts are awarded by the contracts committee following an evaluation of the bidders. An award is confirmed by a written contract signed by both the service provider and the state department after the period specified elapses and the availability of funding is confirmed by the accounting officer. Contract awarding may be granted to providers who meet the quality, legal and ethical requirements of the entity. Traditionally, awarding a contract was based on the lowest bidder but many state institutions have adjusted to include other criteria, such as quality, to select the winning bid. The process of contract awarding can take a long time, especially for approvals to be performed, which at times affects the quotation of prices (Kalinzi, Ntayi & Kabagambe 2021).

Ngobeni (2016) discovered that most of the political leaders including premiers on provincial level do business with the government. It is evident that system of fairness, equality, and competition is often compromised when officials decide to commit fraud on tender awards. Mchunu (2018) pointed out that there is irregular expenditure relating to procurement in the local government, and instances of tenders awarded to close family members of political officials and public servants. Chilunjika (2018) discovered that tenders in government are awarded to the suppliers who are willing to pay high bribes and disregard qualified suppliers not willing to pay bribes and that undermines the quality of the projects to be executed. France (2019) discovered that senior government officials such as ministers and former prime ministers have been implicated in embezzlement schemes on road construction projects. Millions of dollars were misappropriated, due to opaque procurement processes, and insufficient control system.

## **Performance of Public Health Facilities**

Performance is defined as the set of activities and programs that are conducted to achieve a series of previously established objectives and goals. In a health care system, performance is the ability of health facility to fulfill its mission of attaining the goals established by the government and society as a whole (Lavy & Terzioğlu, 2023). A well-performing county-level public healthcare systems in Kenya is vital to ensuring that every Kenyan has access to essential healthcare services and the limited resources devoted to healthcare are used efficiently. There are challenges in the funding of the healthcare systems in Kenya related to poor budget absorption. The challenges are the major source of healthcare system inefficiency. These include; shortage of funds which creates difficulties with procuring necessary drugs and supplies and the hiring of new staff leading to significant understaffing issues. When faced with limited funds, healthcare facility manager have to make the decision to divert funds from other revenue streams to finance facility operations. The managers prioritize using the limited available funds to pay staff salaries and rely on suppliers' goodwill to extend facilities credit for drugs and necessary supplies (Kapologwe, Kalolo, & Kibusi, 2019).

According to the Kenya Health System Assessment Report (2019), The Kenya Health Policy (KEPH) fourth strategic strategy for the health sector calls for Universal Health Care (UHC). However, KEPH implementation is hindered by a lack of sufficient infrastructure to provide services, as well as persistent regional disparities in access to treatment, healthcare quality, and service use. Poor adherence to clinical protocols, which is exacerbated by insufficient supervision, affects service quality. People seek treatment at a higher level than required due to perceived inadequate quality of care at the primary level, as well as continuing problems with the referral system, adversely affecting the health system's overall performance.

The problem of performance in health sector in Kenya stems from the poor status of healthcare services in most public healthcare facilities, which has resulted in widespread dissatisfaction among patients, as well as significant staff turnover and low morale among employees (Meesala & Paul, 2018). This has made it difficult to provide round the-clock clinical service, compromising patient care and driving up operational expenses, owing to deficiencies and inefficiencies (Munge et al., 2019). Ibahim and Muathe (2021) indicated that the state of infrastructural facilities and capacity development in the health sector in Kenya is of great concern. The ratio of doctors, clinical officers, and nurses to that of patients is small as compared to developed countries. With inconsistencies in service delivery in public hospitals in Kenya, it is estimated by the Kenya Medical Association (2018) that 27% of the deaths in level four public hospitals are caused by lack of medical equipment, 21% are caused by frequent strikes by medical staff, 19% are caused by lack of advanced technologies to perform complex medical procedures such as heart and brain surgeries and 33% of the deaths are caused by negligence of patients to adhere to drug prescriptions and incompetence of the medical staff.

Mwihia, Imunya, Mwabu, and Kioko (2018) found that the total number of beds, doctors, and nurses are the basic fundamental infrastructure for all hospitals. The doctors and nurses were considered the two crucial human resources in a hospital to function considering hospitals are labor intensive. Efficiency depends on how well the available resources are utilized without wastage or misallocation and the professional cadres (doctors & nurses) are responsible for the hospitals' performance. Public hospitals in Nairobi City County are challenged by poor management which have a detrimental influence on the performance. (Barasa et al., 2018). At the Mama Lucy Level Four Hospital there were issues of congestion of patients, lack of adequate equipment, inefficient management policies and procedures as a result of poor management of financial resources. In addition, Pumwani Maternity Hospital made headlines of mismanagement and understaffing due to poor management of its financial resources (Nairobi County Assembly Committee Report, 2018).

## **Empirical Review**

### **Contract Planning and Performance**

Akinradewo, Aigbavboa, and Akinradewo (2019) studied the relationship between contract planning and operational performance of the construction sector in Nigeria. The study was conducted using interview guides and questionnaires. Findings showed that there is a relationship between construction planning and the profit a contractor makes on a particular construction project. Findings also established that a well-planned contract reduces waste on the construction site, ensure efficient use of labour workforce, aids completion to time, cost and quality which will eventually improve the contractor's profit. Issa (2018) studied effect of procurement planning on the performance of projects in humanitarian organizations in Somalia. The study adopted a descriptive research design. The study population was 110 staff. The results revealed that staff competence in procurement planning affects project performance of humanitarian organizations to an extent that is vast. The findings also revealed that budgeting procedures in procurement planning affects project performance of humanitarian organizations to a greater extent as well as to a great extent. The results also revealed the rate to which quality specification on procurement planning affects project performance of humanitarian organizations excellent and good respectively.

Ahmed (2019) assessed the effect of procurement practices on organizational performance in selected telecommunication industry in Somalia. The study adopted a descriptive research design. Questionnaire and interview guides were used to collect data. Finding showed that procurement planning significantly affects the organizational performance in telecommunication industry Hargeisa Somaliland. Salim and Kitheka (2019) sought to determine effect of procurement planning on procurement performance of State Corporations in Mombasa County, Kenya. The study employed a descriptive design. The study concluded that procurement need identification, budget cost, and estimates greatly affected procurement performance of state corporations in Mombasa

Kipkemoi and Makori (2021) sought to establish the influence of contract management practices on operational performance of state corporations in Kenya. The target population was 162 respondents. Primary data was collected using questionnaires. Findings showed that there was a significant relationship between contract planning and operational performance. Kiplel and Chepkesis (2018) studied effect of procurement planning on suppliers performance in public institutions: a case of Moi university. The study adopted an explanatory research design. Questionnaires and interview schedule were used to collect data. The findings indicated that planning enhances value for money, enhance quality, encourages proper utilization of resources, planning enables quick decision making and encourages innovations as it is a problem solving technique and saves time. Procurement planning also enhances supplier's performance in service delivery.

### **Contract Awarding and Performance**

Broms, Dahlström and Fazekas (2017) assessed procurement process in the public sector in Sweden. Results showed that there was manipulation of public procurement processes to benefit a mere few individuals such as political officials of the ruling party, instead of the community. Additionally, ineffective political competition had a negative impact on the public procurement system. Manaka (2021) sought to determine factors contributing to fraudulent awarding of tenders in South African public sector. The study adopted a qualitative research design. Data was collected using interview schedules. The main causes of fraudulent activities in the public procurement systems included greed and self-enrichment, a lack of consequence management, political influence in the awarding of tenders, and the high prevalence of corruption in government institutions.

Ayodeji, Olowolayemo, and Ogunbode (2023) examined the factors influencing award of contracts on the performance of the construction projects. The sample was 71 construction stakeholders. Questionnaires were used to collect data. The study concluded that factors

influencing award of contracts on construction projects were hand picking depending on their relationship with the management. Some contractors lacked technical competence which led to time overrun. Akampurira (2018) examined the effectiveness of contract management on contractor's performance at Ministry of Trade, Industry and Cooperatives in Uganda. The findings revealed that the contract management process is very effective on monitoring contractors' performance and an effective contractor management can enhance supplier performance. The findings further revealed that African countries public procurement entities are facing challenges in ensuring contract execution and delivery of the required services by the contractors because of the way procurement functions and the procurement personnel perform internal and external processes including contract management. Contract awarding activities have a significant positive effect on contractor's performance.

Mwambi and Ngugi (2019) examined the influence of competitive bidding and performance of small and medium food processing enterprises in Kenya. The study adopted a descriptive research design. Primary data was obtained using questionnaires. The study revealed that contracts were awarded to the lowest evaluated bidder. Contract awarding was guided by bidders' compliance to technical requirements, price offered, and evidence of previous contract execution.

### RESEARCH METHODOLOGY

The research design for this study was a descriptive research design. The target population was the public health centres in Nairobi County. The hospitals were the unit of analysis. According to Health Management Information System, Ministry of Health (2024), Nairobi County has a total of 78 public health facilities. The unit of observation was management employees in Procurement Administration, Finance, Stores, and Logistics departments. The study therefore targeted a total of 384 staff in various departments involved in the supply chain as shown in Table 3.1.

**Table 3. 1: Target Population**

Target group	Target population
Procurement officers	84
Administration	126
Finance	78
Stores	56
Logistics	40
<b>Total</b>	<b>384</b>

The sample size of staff was determined using Yamane 1967 formula. Therefore, the sample size for the study was 196 respondents. The study adopted a stratified random sampling technique. The technique eliminates bias since every population element has the same chance of being selected (Wiese, 2013). This study then adopted simple random sampling to select the study sample. According to Bryman and Bell (2016) simple random sampling is efficient, representative, reliable and flexible and takes care of systematic bias that may result from non-respondents.

**Table 3. 2: Sample Size**

Target group	Target population	Sample Size
Procurement officers	84	43
Administration	126	64
Finance	78	40
Stores	56	29
Logistics	40	20
<b>Total</b>	<b>384</b>	<b>196</b>

Data was collected using questionnaires. The researcher used SPSS version (V28) to analyse quantitative data collected from the study samples. This software was preferred because of its



ability to analyse large amount of quantitative data for purposes of making presentation and reporting. The software has a wider spectrum of statistical procedures and it is quite efficient (Martin & Acuma 2012). Descriptive statistics included percentages, frequencies, and means while inferential statistics involved regression and correlation analysis. The study used a multiple linear regression analysis to assess the relationship between the independent and the dependent variables.

## RESEARCH FINDINGS AND DISCUSSION

The study's sample size was 196, out of which 19 respondents were piloted. Therefore, for the final study, the study included 177 respondents from various management departments in Level 4 public health facilities in Nairobi City County. Out of the 177 questionnaires distributed, 156 were returned and deemed valid, resulting in a response rate of 88.1%. This response rate is excellent based on Sekaran and Bougie (2016), who state that a response rate above 70% is considered excellent. This high response rate indicates a strong engagement of the respondents in the study, which enhances the reliability and validity of the findings. The participation level is also indicative of the importance and relevance of the study topic to the targeted respondents.

### Descriptive Analysis

The descriptive analysis presents the respondents' level of agreement with statements related to contract management practices and their impact on procurement performance in public health facilities in Nairobi City County, Kenya. The responses were rated on a five-point Likert scale, with interpretations ranging from strongly disagree (1-1.4), disagree (1.5-2.4), neutral (2.5-3.4), agree (3.5-4.4), to strongly agree (4.5-5.0).

### Contract Planning and Procurement Performance

The first objective of the study was to determine the effect of contract planning on procurement performance of public health facilities in Nairobi City County, Kenya. Respondents were asked to rate their agreement with statements related to contract planning. The findings are summarized in Table 4.1.

**Table 4. 1: Descriptive Statistics on Contract Planning**

Statement	Mean	Std. Dev.
There is adequate budget allocation for contract management	3.875	0.933
Our contract plans include an exhaustive timeline for every milestone	3.870	0.862
The purposes and scope of contracts are well defined and communicated beforehand	3.912	0.803
All necessary components are included in the contract document preparation	4.005	0.789
The contract plan includes details on how deliverables will be executed from start to end	3.788	0.902
All terms and conditions are included during the contract formulation stage	3.940	0.852
Contract documents are maintained throughout the contract period	3.954	0.841
<b>Aggregate Score</b>	<b>3.906</b>	<b>0.855</b>

The findings show that the respondents generally agreed that there is adequate budget allocation for contract management (M= 3.875, SD= 0.933); that their contract plans include an exhaustive timeline for every milestone (M= 3.870, SD= 0.862); that the purposes and scope of contracts are well defined and communicated beforehand (M= 3.912, SD= 0.803); and that all necessary components are included in the contract document preparation (M= 4.005, SD= 0.789). Respondents further agreed that the contract plan includes details on how deliverables will be executed from start to end (M= 3.788, SD= 0.902); that all terms and conditions are included during the contract formulation stage (M= 3.940, SD= 0.852); and that contract documents are maintained throughout the contract period (M= 3.954 SD= 0.841).

The aggregate mean score of 3.906 indicates that respondents generally agreed that effective contract planning positively impacts procurement performance. This supports the findings of Akinradewo, Aigbavboa, and Akinradewo (2019), who found that well-planned contracts reduce wastage and improve project profitability. Additionally, Issa (2018) highlighted that procurement planning significantly affects project performance, reinforcing the critical role of detailed contract planning in public health procurement.

### Contract Awarding and Procurement Performance

The second objective of the study was to assess the effect of contract awarding on procurement performance of public health facilities in Nairobi City County, Kenya. The findings related to contract awarding are shown in Table 4.2.

**Table 4. 2: Descriptive Statistics on Contract Awarding**

Statement	Mean	Std. Dev.
Tenders are awarded based on bidder competency	3.978	0.835
There is a possibility of collusion in tender awarding	3.957	0.813
All bid documents are kept in a locked tender box at the reception	3.914	0.798
Similar controls are followed, like submitting sealed bids in a tender box	3.923	0.812
Tender boxes are opened at specific times by multiple employees	3.890	0.807
The tender evaluation report is signed off by an authorized dignitary	3.935	0.821
Bidders are referred to by symbols/numbers, not names	3.872	0.829
<b>Aggregate Score</b>	<b>3.924</b>	<b>0.830</b>

The findings in Table 4.2 show that the respondents agreed that tenders are awarded based on bidder competency (M= 3.978, SD= 0.835); that there is a possibility of collusion in tender awarding (M= 3.957, SD= 0.813); and that all bid documents are kept in a locked tender box at the reception (M= 3.914, SD= 0.798). Respondents also agreed that similar controls are followed, like submitting sealed bids in a tender box (M= 3.923, SD= 0.812), tender boxes are opened at specific times by multiple employees (M= 3.890, SD= 0.807); that the tender evaluation report is signed off by an authorized dignitary (M= 3.935, SD= 0.821); and that bidders are referred to by symbols/numbers, not names (M= 3.872, SD= 0.829).

The aggregate score of 3.924 suggests strong agreement that proper contract awarding practices enhance procurement performance. This aligns with Ayodeji, Olowolayemo, and Ogunbode (2023), who found that competency-based awards positively affect project performance. Broms, Dahlström, and Fazekas (2017) also noted that transparent awarding processes prevent manipulation, enhancing overall procurement integrity.

### Procurement Performance

The study also evaluated the respondents' level of agreement with statements related to procurement performance in public health facilities. The focus was on key aspects such as service delivery, cost management, timely delivery, and drug availability, which are critical indicators of procurement performance. The descriptive statistics for procurement performance are shown in Table 4.3.

**Table 4. 3: Descriptive Statistics on Procurement Performance**

Statement	Mean	Std. Dev.
Patients are satisfied with the provided service	3.865	0.841
There is an adequate supply of drugs in the hospital	3.796	0.864
Contract management helps minimize procurement costs	3.915	0.822
Goods and services are delivered on time	3.874	0.837
Procurement processes align with set quality standards	3.890	0.829
Procurement enhances operational efficiency of the health facility	3.918	0.812
Procurement supports better resource utilization in the facility	3.939	0.819
<b>Aggregate Score</b>	<b>3.885</b>	<b>0.832</b>

The findings in Table 4.3 show that the respondents generally agreed that patients are satisfied with the provided service (M= 3.865, SD= 0.841); that there is an adequate supply of drugs in the hospital (M= 3.796, SD= 0.864); that contract management helps minimize procurement costs (M= 3.915, SD= 0.822); and goods and services are delivered on time (M= 3.874, SD= 0.837). They were also in agreement that procurement processes align with set quality standards (M= 3.890, SD= 0.829); procurement enhances operational efficiency of the health facility (M= 3.918, SD= 0.812); and that procurement supports better resource utilization in the facility (M= 3.939, SD= 0.819). The aggregate score of 3.885 indicates that respondents generally agreed that procurement performance in public health facilities is positively impacted by effective contract management practices.

These findings align with Moses, Korir, and Zeng (2021), who found that efficient procurement practices directly enhance healthcare delivery by improving resource allocation and minimizing delays. Similarly, Zeng et al. (2022) noted that proper procurement processes significantly impact the availability of essential medicines and overall service quality in public health facilities, supporting the view that robust procurement management is vital for better health outcomes.

### Correlation Analysis

Correlation analysis was conducted to assess the relationships between the independent variables (contract planning and awarding) and the dependent variable (procurement performance). The correlation analysis findings are presented in Table 4.4.

**Table 4.4: Correlation Results**

Variable		Performance	Planning	Awarding
Procurement Performance	Pearson Correlation	1		
	Sig. (2-tailed)			
	N	156		
Contract Planning	Pearson Correlation	0.721**	1	
	Sig. (2-tailed)	0.000		
	N	156	156	
Contract Awarding	Pearson Correlation	0.742**	0.694	1
	Sig. (2-tailed)	0.000	0.072	
	N	156	156	156

The correlation coefficient between procurement performance and contract planning was 0.721 ( $p < 0.05$ ), indicating a strong positive relationship. This suggests that thorough and detailed contract planning significantly enhances procurement performance by aligning resources, schedules, and expectations. This finding is consistent with Ahmed (2019), who found that procurement planning plays a crucial role in improving organizational performance in the telecommunications industry by enhancing planning accuracy and reducing wastage.

The highest correlation was between procurement performance and contract awarding, with a coefficient of 0.742 ( $p < 0.05$ ). This strong positive relationship underscores the importance of merit-based and transparent awarding processes in enhancing procurement performance. The findings are consistent with Ayodeji, Olowolayemo, and Ogunbode (2023), who emphasized that awarding contracts based on competence and technical criteria positively impacts project success, highlighting the critical role of integrity in the awarding process.

### Regression Analysis

Regression analysis was conducted to determine the extent to which contract management practices (contract planning and awarding) influence procurement performance. The analysis included a model summary, ANOVA results, and regression coefficients to interpret the impact of each independent variable on the dependent variable.

## Regression Coefficients

The regression coefficients provide insights into the specific impact of each independent variable on procurement performance.

**Table 4. 5: Regression Coefficients**

Variable	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	t	
(Constant)	-1.150	0.318		-3.616	0.001
Contract Planning	0.329	0.083	0.277	3.964	0.000
Contract Awarding	0.388	0.080	0.337	4.850	0.000

The regression equation representing the relationship between procurement performance (Y) and the independent variables (contract planning, and awarding) is given by:

$$\text{Procurement Performance (Y)} = -1.150 + 0.329 (\text{Planning}) + 0.388 (\text{Awarding})$$

The coefficient for contract planning was 0.329 ( $p = 0.000$ ), indicating a significant positive effect on procurement performance. This implies that effective contract planning, including budget allocation, clear timelines, and comprehensive documentation, enhances procurement efficiency and outcomes. The findings align with Kipkemoi and Makori (2021), who found that contract planning significantly improves operational performance by ensuring that all necessary elements are accounted for, minimizing the risk of delays and cost overruns.

The highest coefficient was observed for contract awarding at 0.388 ( $p = 0.000$ ), indicating a strong positive influence on procurement performance. This highlights the critical role of fair and merit-based awarding processes in ensuring the best suppliers are selected, thereby enhancing overall procurement effectiveness. The findings are consistent with the study by Akampurira (2018), who found that effective contract awarding practices significantly improve contractor performance by promoting accountability and reducing fraudulent activities.

## Conclusions

Effective contract planning is crucial for aligning resources, setting clear expectations, and reducing risks associated with procurement. The study concludes that well-documented and adequately budgeted plans are key drivers of procurement performance.

Merit-based awarding of contracts is paramount in selecting competent suppliers and ensuring procurement success. The study concludes that transparent and fair awarding practices significantly impact procurement performance by promoting accountability and reducing opportunities for fraud.

## Recommendations

### Contract Planning

Public health facilities should enhance their contract planning processes by adopting comprehensive planning tools that include detailed timelines, clear roles, and responsibilities for each procurement stage. There should be a focus on continuous training of staff on best practices in contract planning to improve their capacity in developing realistic budgets, defining contract scopes clearly, and anticipating potential risks. Additionally, integrating technology for planning and monitoring contract implementation can help streamline processes and improve overall efficiency.

### Contract Awarding

To enhance contract awarding processes, public health facilities should implement stricter controls to prevent collusion and ensure that awards are based on bidder competency and merit. Regular reviews of the awarding process should be conducted to identify and address potential gaps in fairness and transparency. Facilities should also consider implementing a grievance handling mechanism to allow bidders to appeal decisions, thereby reinforcing accountability.

Training procurement staff on ethical standards and compliance can further improve the awarding process and procurement outcomes.

### Suggestions for Further Studies

Given that 26.7% of the variance in procurement performance remains unexplained, further research is recommended to investigate other factors that may influence procurement performance in public health facilities, such as supplier relationships, legal frameworks, and technological adoption in procurement processes. Future studies could also explore the long-term impact of contract management practices on overall healthcare service delivery and patient satisfaction.

### REFERENCES

- Agama, P. G. A., Huamán, O. M. D (2021). Administrative management in procurement processes in a public sector entity. *Journal of business and entrepreneurial studies*, 5(3).
- Akampurira, B. (2018). *The Effectiveness of Contract Management on Contractors' Performance*. Ministry of Trade, Industry and Cooperatives. Kyambogo University
- Andika, M., Iravo, M. & Ismael, N. (2021). Influence of Competitive Tendering on the Performance of Devolved System of Governments in Kenya. *International Journal of Management Science and Business Administration*, 7(5), 52-57.
- Aulich, C. (2020). Competitive tendering and contract management. In *Australian Handbook of Public Sector Management* (pp. 150-162). Routledge.
- Barasa, E., Rogo, K., Mwaura, N., & Chuma, J. (2018). Kenya National Hospital Insurance Fund Reforms. *Health Systems & Reform Journal*, 3(4), 56-71.
- Bovis, C. (2019). *The liberalisation of public procurement and its effects on the common market*. Routledge.
- Broms, R., Dahlström, C. & Fazekas, M. (2017) 'Procurement and Competition in Swedish Municipalities', *Quality of Government Working Papers Series*, 5(1), pp. 1– 53.
- Chilunjika, A. (2018). 'From Corporate Mess to Corporate Hygiene: Dealing with Corruption in Zimbabwe's Public Sector. *Journal of Public Administration and Development Alternatives*, 3(2), pp. 52–72
- Cho, H., & Pucik, V. (2015). Relationship between innovativeness, quality, growth, profitability, and market value. *Strategic Management Journal*, 26(6), 555-570
- Crompton, R., Fessehaie, J., Kaziboni, L., & Zengeni, T. (2016) *Railway Locomotives and Transnet: A Case Study*, Centre for Competition Regulation and Economic Development University of Johannesburg. doi: 10.2139/ssrn.2970938
- De Marco, A. (2018). Contract Administration. In *Project Management for Facility Constructions* (pp. 43-54). Springer, Cham
- France, G. (2019). 'Kyrgyzstan : Overview of corruption and anti-corruption', Transparency International Anti-Corruption Helpdesk Answer Kyrgyzstan, pp. 1–15
- Hassan, A. & Omwenga, J. (2023). Contract Management and Procurement Performance of State Corporation in Kenya. *International Journal of Social Science and Humanities Research*, 1(1)47-73.
- Karoki, W. & Mwangani, P. (2020). Influence of Contract Management on Performance of Public Hospitals in Nairobi City County, Kenya. *International Journal of Supply Chain and Logistics*, 4(1) 46 - 69
- Kingot, M. (2021). Effect of Procurement Contract Management On Performance Of Commercial State Corporations In Nairobi City County, Kenya. *International Research Journal Publishers*, 2(1) 182-196,
- Kinuthia, E., Odundo, E. & Nyagah, G. (2019). Components of Procurement Reforms That Influence Expenditure Management in Secondary Schools in Kenya: A Focus on Tender Advertising." *International Journal of Business and Management* 14 (1): 1–16.
- Kipkemoi, T. & Makori, M. (2021). Influence of Contract Management Practices on Operational Performance of State Corporations In Kenya. *International Journal of Social Sciences Management and Entrepreneurship* 4(2): 76-92

- Kyarisiima, J. (2022). Effect of Contract Management Practices on Procurement Performance a Case of Nyarugenge District. *International Journal of Scientific Research and Management*, 10(12) 4293-4302
- Lavy, S., & Terzioğlu, S. (2023). Delivery of healthcare facility management services: A literature review. In *IOP Conference Series: Earth and Environmental Science*, 1176(1)012017
- Macaulay, S. (2020). *An empirical view of contract* (pp. 399-414). Springer International Publishing.
- Manaka, P. (2021). *Fraudulent Award of Tenders And South African Government*. University Of South Africa
- Meesala, A., & Paul, J. (2018). Service quality, consumer satisfaction and loyalty in hospitals: Thinking for the future. *Journal of Retailing and Consumer Services*, 4(2), 261-269.
- Moffat, M. N., & Mwangangi, P. (2019). Influence of contract management practices on performance of Kiambu County. *The Strategic Journal of Business & Change Management*, 6 (1), 661 – 675.
- Mohamoud, G. & Mash, R.(2022). The quality of primary care performance in private sector facilities in Nairobi, Kenya: a cross-sectional descriptive survey. *BMC Primary Care*
- Moses, M. , Korir, J. & Zeng, W. (2021). Performance assessment of the county healthcare systems in Kenya: a mixed-methods analysis. *BMJ Global Health*
- Munge, K., Mulupi, S., Barasa, E., & Chuma, J. (2019). A critical analysis of purchasing arrangements in Kenya: the case of micro health insurance. *BMC health services research*, 19(1), 45.
- Mwendwa, M. & Ochiri, G.(2019). Influence of Contract Management Practices on Performance Of State Corporations In Kenya. *International Journal of Supply Chain and Logistics*, 3(1) 50 – 75
- Mwihia, F., Imunya, J., Mwabu, G. & Kioko, U. (2018). Technical Efficiency in Public Hospitals in Kenya: A Two –Stage Data Envelopment Analysis. *International Journal of Economics and Finance*, 10(6)141-150
- Nderitu, N. & Karanja, K. (2016). Effect Of Reserved Tendering on Procurement Performance In State Corporations In Kenya. *International Journal of Social Sciences and Information Technology*, 2(5) 617-641
- Ngobeni, H. (2016). *An Assessment of the Effectiveness of Strategic Leadership*. (MPA) Public Administration mini-dissertation. University Of Limpopo, Limpopo
- Nyamari, J., Oteki, E. & Muhoro, P. (2023). Electronic Tender Advertisement System on Operational Performance of Small & Medium Enterprises in Kenya. *East African Journal of Business and Economics*. 6(1) 125-136.
- Nyanjala, E. O. (2016). Procurement and Supply Chain Performance of Telecommunication Firms in Kenya (Doctoral dissertation, University of Nairobi)
- Olang, B.A. (2017). The Influence of Conflict Management on Organizational Performance: A Case of Stima Sacco Society Limited. *Unpublished Thesis*, UoN.
- Shalimova, N., & Kuzmenko, H. (2020). Benchmarking Public Procurement as an International Rating System for Evaluation the Effectiveness of Public Procurement System of the Countries.
- Shasho, S. (2020). *Effects of Procurement Practices on Organizational Performance on Jimma University*. Jimma University
- Tengera, T. (2021). *The Public Procurement Management Process And Service Delivery In Rwanda Parastatals*. Kampala International University Kampala, Uganda.
- Tunuguntla, S., & Hoban, P. R. (2021). A near-optimal bidding strategy for real-time display advertising auctions. *Journal of Marketing Research*, 58(1), 1-21.