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Procurement Management Practices and Performance of State Corporations in Nairobi City County, Kenya

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ABSTRACT: The purpose of this study was to examine the influence of Procurement Management Practices on Performance of state corporations in Nairobi City County, Kenya. The specific objectives were to assess the influence of Procurement Planning, Contract Management and Procurement Audit Practices on Performance at the State Corporations in Kenya. The independent variables of the study included; Procurement planning, Contract management and Procurement Audit practices while the dependent variable is Performance of state corporations in Nairobi City County, Kenya. The theories that guided the study included; Transaction Cost Economics, Principal Agent Theory and Institutional Theory. The study adopted Survey research design. According to the State Corporations Act cap 446, there are 247 state corporations in Kenya. The target population was 168 state corporations in Nairobi City County, Kenya from which a sample size of 119 was drawn from using the Yamane formula. Semi-structured questionnaires were used to collect primary data from the respondents. Quantitative data were analyzed using SPSS version 26, and the regression model yielded an R^2 of 0.927, indicating that the combined independent and moderating variables explain 92.7 percent of the variation in the performance of service state corporations in Kenya. The analysis of the key coefficients, however, corrects the initial interpretation: Procurement Audit Practices ($\beta = 1.147$, $p = 0.000$) had the strongest significant influence, meaning a one-unit increase in audit practices leads to a 1.147-unit increase in performance, establishing it as the primary driver. This was followed by Contract Management Practices ($\beta = 0.516$, $p = 0.000$), indicating a substantial but secondary positive impact on performance. Conversely, Procurement Planning ($\beta = 0.121$, $p = 0.346$) was found to have a positive but statistically non-significant effect. Crucially, the moderating variable, Budget Allocation ($\beta = -0.325$, $p = 0.003$), demonstrated a significant negative moderating effect; this means that the relationship between the independent procurement variables and performance weakens as budgetary discipline increases, suggesting that the strict, institutionalized budget controls may inadvertently stifle operational flexibility and hinder the performance outcomes expected from good procurement practices. Based on the comprehensive regression analysis, the results definitively establish that systematic procurement audit practices ($\beta = 1.147$, $p = 0.000$) and robust contract management ($\beta = 0.516$, $p = 0.000$) are the paramount drivers of organizational performance, whereas procurement planning, despite its foundational role, demonstrates no statistically significant direct impact ($\beta = 0.121$, $p = 0.346$). A critical and counterintuitive finding is the significant negative moderating effect of Budget Allocation ($\beta = -0.325$, $p = 0.003$), which indicates that highly rigid budgetary controls can paradoxically weaken the positive relationship between other procurement functions and performance, likely by stifling operational flexibility. Therefore, the study concludes that the pathway to enhancing value for money, mitigating risk, and ensuring timely service delivery lies not merely in strengthening individual procurement functions in isolation, but in strategically integrating powerful audit and contract management mechanisms with a more adaptive and performance-oriented budgeting system. Consequently, it is recommended that state corporations and policymakers, such as the Public Procurement Regulatory Authority, prioritize investments in audit capacity and contract management expertise while reforming budgetary protocols to shift from a rigid, input-focused model to a flexible, output-based framework that empowers rather than constrains procurement efficiency and overall organizational performance.

Keywords: *Public Procurement; Management Practices; Performance of State Corporations; Procurement Planning; Procurement Audit; Contract Management Practices.*

Procurement Management Practices and Operational Performance of State Corporations in Kenya

I. INTRODUCTION

1.0 Overview

This chapter contains the Background of the Study, Statement of the Problem, Objectives of the Study, Research Questions, Justification and Scope.

1.1 Background of the Study

Public Procurement contributes significantly to a country's economic growth since it is an essential operation in all public entities where it makes up to 60-70% of public spending in Kenya and directly influences service delivery. A strong contract management ensures timely and cost-effective results while weak contract systems may result in delivery failures, cost escalations and supplier disputes. Regular procurement audits ensure compliance, efficiency and transparency in operations while irregular audits result in inefficiencies and corrupt practices (Ali & Awuor, 2024). However, when the Procurement system is inefficient, it reduces the government's ability to implement the development projects effectively and also provide services efficiently.

Procurement planning process entails the identification of needs to be procured, time frame for procuring, selecting the best methods of procurement, supplier identification, contract management and payment of the goods services and works. Effective planning improves forecasting and performance while poor planning leads to delays, over budgeting and inflated costs. In Kenya, about one-third of the national budget is lost to corruption, most of it is tied to procurement. Procurement inefficiency hinders economic progress (Bartilol, Kamoni, and Simotwo, 2024). A report by AfriCOG (2022-2024) indicates the continuous trend of Procurement scandals, wastage of public resources, persistent institutional decline leading to stalling of projects.

This study assessed the Influence of Procurement Management Practices on Performance of State Corporations in Kenya. Public procurement management practices are organized processes used by public entities to acquire goods, services and works. Public Procurement Management Practices are governed by the Public Procurement and Asset Disposal Act, 2015 and Article 227 of the Constitution of Kenya (2010) and Chapter six provides the Principles of Public Procurement which include, cost-effectiveness, transparency, equity, fairness, competition, accountability and integrity. The study focused on procurement planning, contract management and procurement audit practices that are critical in improving performance of state corporations.

According to Waci, Kariuki, & Mwirigi, (2024) public organizations in Kenya are required to use e-procurement to manage how they buy goods and services, make financial processes faster and more efficient thus the national government introduced the (IFMIS) back in 2003. Procurement related expenses account for over 65% of the national budget, including local government procurement. In Kenya public procurement contributes up-to 15% of GDP in affluent nations. The Public Procurement consists of steps followed when buying goods or services to enable it to work effectively and reduce costs (Mebrate & Shumet, 2024). They entail, Procurement Planning, Market Research, Tendering process, Supplier evaluation, Contract management and Award, Disposal of assets and Compliance with set policies and Procedures.

Delayed payments are a major issue in Kenya's economy, with delayed government payments increasing significantly between 2015 and 2018. An audit in 2018 showed that both county and national governments had large unpaid bills, though many were ineligible for payment due to lack of documentation or audit concerns. They also lead to business closures, higher borrowing costs, and rising prices, while eroding trust between the government and private sector. Resolving payment delays is essential to improving economic stability and supporting growth (Omulando, 2023). GLOCEPS Commentary today of Governance and Ethics Pillar by Omulando portrays the steady rise of pending bills in counties since the devolution of governance.

1.1.1   Global Perspective of Procurement Management Practices on Performance

Strategic management practices in Medicaid and Medicare programs help in reducing cost while maintaining quality in healthcare. Yen T. (2023) emphasizes through his study on small and medium-sized businesses that procurement practices should be efficiently managed as better procurement leads to better results of strategic procurement. Organizational performance, growth, and profitability is enhanced through efficient procurement management practices such as proper contract management that ensures contracts are signed after confirmation of winning bidders, with secure documents storage and regular monitoring (Balogun, Alaba, Adebayo, & Shodimu, 2025).

In addition, continuous training and professional development enhances skilled and experienced procurement staff thus help in ensuring planned projects are delivered effectively. However, training and capacity building initiatives equip leaders and staff with knowledge. The involvement of procurement teams in setting of organizational goals builds

ownership and accountability while maintaining strong communication between executives and procurement teams thus ensuring alignment with overall organizational strategy (Bogale 2025).

The adoption of digital tools strengthens resilience and facilitates better information sharing for example the E-procurement systems increase transparency, efficiency and risk management in procurement. Organizations need to invest in compatible technology, digital skills and proper data management as digital transformation enhances supply chain visibility and collaboration. Integrating new technology, organizational reforms, and updated policies adds to procurement success of the organization (Harju et.al. (2023)

Strategic alignment through procurement planning with audit practices enhances quality performance. Auditing and compliance evaluation ensure adherence to procurement laws and ethical standards. However, over emphasis on avoiding legal issues can divert focus from service quality and innovation. Maintaining a balance approach between compliance and performance improvement builds system trust and accountability (Bergman, 2023).

In conclusion, the global perspective highlights various factors that contribute to effective procurement management, they include strategic alignment with organizational goals, skilled personnel and continuous training, strong contract and audit practices, integration of digital tools for transparency and efficiency and lastly, balanced compliance both accountability and performance.

1.1.2 Regional Perspective of Procurement Management Practices on Performance

Procurement management practices enable an organization to improve its operational efficiency Obasa & Gado (2022), portends that procurement management and supply chains can enable an organization to save on money and be efficient. In the Nigerian economy the public entities struggle with corruption, poor performance and complex procedures. Procurement management practices if well-developed have a positive significant effect on organizational performance. It suggests that the government should closely monitor and audit the bidding process to ensure fairness, transparency, and better efficiency.

Efficiency in procurement planning is essential in improving performance, Mwalukasa & Udoba (2024) further states that, an efficient procurement plan is essential in improving performance. A strong focus is required to identify the organization's requirements early to ensure timely delivery of the goods. The user departments should participate in the planning process for better results and also use accurate cost estimates. Procurement practices are enhanced when public entities conduct the right assessment of the needs, actively involve the relevant stakeholders and ensure there are accurate and realistic estimates of costs. Public procurement management practices on performance of projects indicates that competitive bidding, supplier evaluation, and supplier qualification screening enhance project performance by facilitating timely delivery. Transparency, accountability and competition in the procurement process of public projects is crucial for best outcomes.

Procurement management practices are crucial in all organizations as they influence the success of procurement in public entities. Procurement planning practices and performance of Centenary Bank, Uganda, emphasizes on the importance of clearly pointing out and assessing the organizational needs as it has a positive impact on how well procurement operates in a public entity. Firstly, a well-planned procurement process is essential in that identification of needs helps improve performance. The way procurement needs are identified and methods used for bidding both affect the success of procurement in public entities. In addition, contract management and monitoring significantly influence the outcomes and thus each party should understand clearly their roles to ensure better performance and timely delivery of goods and services. The terms of the contract should be respected and followed until the end of the contract (Namwanje, Yahaya, & Nimusima, 2024).

Procurement management practices when integrated with sustainable procurement in Multinational Corporations lead to better brand image, lower risks and progress to achieving environment goals. Basiru J. et al. (2025) indicates that sustainable procurement is becoming paramount for MNCs as they balance making profits with protecting the environment. This study portends how companies can make smarter and greener buying decisions by combining business goals with ESG values. By using tools like digital platforms and even blockchain, companies can track where things come from and make sure suppliers are doing the right thing.

The health sector in Zimbabwe through the procurement management practices that proper effective management enhances better performance (Chinogwenya & Utete, 2023). When an electronic procurement system is used and strategic supplier management is enhanced, it plays a big part in improving efficiency and success. Therefore, adoption of an e-procurement system provides a good system management that will enhance strategic supplier management that boosted

the overall performance of the organization. Procurement accountability and strict adherence to the procurement manual and transparency enhances procurement performance at Kakira Sugar Limited The study indicates that continuous staff training on the procurement procedures, regular audit and enhanced transparency leads to improved efficiency and reduction of risks. The company should carry out performance reviews, and set up strong monitoring systems. This led to concrete decision making and fast identification of mistakes and correction (Kibuuka & Magala 2024).

The challenges in procurement processes for local government contracts suggests that transparency should be upheld in the procurement process through adoption of e-procurement systems and strong oversight mechanisms to reduce corruption. Researchers talked to key people involved in procurement and reviewed government documents and used statistical tools like chi-square and correlation tests to support their findings. The study indicates a lack of transparency, limited staff and capacity, procurement delays and a greater competition among suppliers that boosts efficiency. The study recommends training programs for the staff, speed up approvals and use of more digital tools in procurement to achieve better value for money and deliver services more effectively (Celestin, 2020).

1.1.2   Local Perspective of Procurement Management Practices on Performance

A procurement plan that's well done, results in efficiency in the procuring of goods and services to the public. Also, a strong procurement planning can boost an organization's performance and make its supply chain more efficient and competitive. Omondi. R et al. (2024) states that procurement planning is essential in the effective delivery of service in public entities. However, in Kenya, the public entities' procurement planning faces serious challenges such as fraud and corruption, political interference, inefficient procurement systems and resistance to change leading to bureaucratic delays and reduction in effectiveness. The implementation of oversight policies and mechanisms to improve the procurement, are often blocked by political interference, lack of capacity and resistance to change from within the procurement system itself. Efficient procurement planning in Kenya's public sector to ensure there is better performance to meet the organizational goals.

Procurement best practices on performance of county governments in Busia County, found out that procurement planning, competitive bidding and inventory control are key practices that have a strong impact on how well procurement practices are carried out in that county. These practices directly improve performance management practices and thus, supply chain management contributes to the effectiveness of procurement in Busia County. The study emphasizes on capacity building of procurement staff to boost their skills and knowledge and also, strengthening the competitive bidding processes to achieve successful organizational output (Nakhwanga & Malenya, 2020).

Procurement management practices are essential in ensuring success in the procurement process of public Sectors. Advanced forecasting tools and stakeholder involvement should be integrated with procurement planning to make it more significant to ensure efficiency in the process. The key challenges preventing the effective implementation of the set policies governing public procurement are, weak enforcement mechanisms, leading to laxity in settling bills, mismatch between procurement procedures and fund disbursement thus causing delays and lastly unrealistic county revenue targets, which result in budget shortfalls (Omondi, Nteere, & Ngala 2024).

Contract management practices should be developed to enable a successful procurement process and to ensure timely delivery service to the public. Effective procurement management practices enhance overall performance through right supplier selection, monitoring and assessment. Kabathi and Omwenga (2022) recommends effective strategies for supplier selection, regular assessment, risk management, feedback and improvement. To enhance quality service leading to overall success of the organization. Strategic sourcing, using e-procurement systems and contract management with supplier enhanced performance management practices in city counties (Hawa & Namusonge, 2025) Strategic sourcing helps cut costs and build better relationships with suppliers. E-procurement makes the process more efficient and transparent, although some people still resist adopting new systems. Strong contract and supplier management is also key, as it ensures suppliers follow through and helps build long-term, reliable partnerships.

Well planned contract management practices enhance better procurement management practices according to Jolly, (2022). This means that better compliance, smarter resource use, and strong contract terms improve how procurement is done in the district. The results state that effective contract management, financial oversight and control improve performance management practices. Moreover, building strong partner relationships and, sharing information and integrating better supply chain. Good contract practices are crucial for better outcomes in public procurement. It recommends that the local government should ensure there are reduced delays in contract implementation to prevent the abandonments of projects by contractors. Secondly, there should be improved compliance with contract terms between

the contractors and the government and lastly, enough funds should be allocated to contract implementation to ensure both parties benefit and projects are completed successfully.

Public procurement faces a number of challenges in service delivery in Kilifi County Government, Mwakiru & Barasa (2022) indicates a number of challenges that are normally encountered in the Procurement department such as: political interference in the procurement process, a weak oversight and enforcement mechanisms, corruption, fraud, lack of transparency, delayed payments, poor contract management, procurement delays and inefficiencies, inefficiencies in e-procurement systems and lack of capacity and skills among procurement officials leading to poor contract management. Competitive procurement methods should be adopted in the tendering process to promote transparency and openness. Procurement management practices should be carried out efficiently to enhance performance of public hospitals (Njoki & Chege, 2023). An efficient procurement planning results to an efficient supply chain performance and it improves more through competitive bidding.

Public procurement audit influences performance of state corporations in Kenya. Gichuki & Paul (2020) stated that preparation and planning auditing, information and publicity auditing, evaluation of received tenders auditing and award and execution of contract auditing have a positive relationship with performance. It recommends that public entities should embrace public procurement audits so as to improve performance. Inventory Audits have a significant and positive impact on performance of the procurement function in selected public universities in the western region in Kenya. The selected universities conducted regular inventory checks and were able to follow procurement guidelines, improve accountability and get value for money. The study concluded that regular inventory audits, including checks for accuracy and consistency, along with a strong inventory policy, play a key role in boosting performance management practices (Mathias & Kwasira, 2019).

1.2 Statement of the Problem

Public procurement in Kenya, which accounts for approximately 13-15% of the GDP, continues to be plagued by systemic inefficiencies and governance challenges that severely undermine its performance and fiduciary responsibilities (National Treasury, 2025 Budget Review Outlook Paper). Empirical evidence from key oversight bodies paints a concerning picture of persistent irregularities. The most recent report from the Office of the Auditor-General (2023/2024) reveals a staggering accumulation of Kshs. 194.7 billion in outstanding payments to contractors and suppliers for goods and services already delivered. This crippling delay in payments, a 22% increase from the previous fiscal year, disproportionately affects Small and Medium Enterprises (SMEs), threatening their solvency and creating a cascade of negative economic effects (Office of the Auditor General, 2023/2024). Further compounding this, the Auditor-General flagged widespread poor procurement planning, leading to costly emergency purchases and over 1,200 stalled projects nationwide, representing a direct loss of public value.

These issues are exacerbated by political interference and weak oversight. The Public Procurement Regulatory Authority (PPRA) has consistently reported on the flouting of procurement laws. In its 2023 Market Price Index Report, the PPRA found that over 35% of sampled procuring entities paid prices 15-40% above the prevailing market rates for common goods, indicating severe value-for-money deficiencies and potential collusion. Furthermore, a special audit by the Auditor-General on the e-Citizen platform uncovered alarming systemic vulnerabilities, with unreconciled variances of Kshs. 44.8 billion between the e-portal, revenue statements, and government ledgers, casting serious doubt on the transparency and accountability of the entire digital revenue collection ecosystem (Office of the Auditor General, Special Audit on the Integrated Financial Management Information System (IFMIS), 2024).

The capacity gap within procurement units remains a critical bottleneck. A 2024 performance review by the PPRA indicated that only 41% of procuring entities had staff who had undergone mandatory procurement training and certification in the last two years, leading to poor contract management and adversarial supplier relationships (PPRA, Annual Public Procurement Assessment Report, 2024). This lack of expertise, coupled with the late release of funds from the National Treasury which delayed over 60% of development projects in the 2022/2023 financial year creates a cycle of inefficiency and poor public service delivery (National Treasury, 2023 Economic Survey).

While the literature affirms that strategic procurement practices such as e-procurement, strategic sourcing, and robust contract management are essential for improving performance (Mwangi & Ndeto, 2024; Isaack & Namusonge, 2025), a significant implementation gap persists in the public sector. Existing studies, including those by Ingabire (2024) on Rwandan parastatals and Gatari, Shale, and Osoro (2022) on Kenyan counties, highlight this disconnect but call for more context-specific research. Therefore, anchored by the empirical evidence of financial losses, systemic inefficiencies, and regulatory shortcomings cited by the Auditor-General, PPRA, and National Treasury between 2020 and 2025, this study

aims to assess the influence of procurement management practices on operational and financial performance in state corporations in Kenya.

1.3 Objectives of the Study

This section contains the main objective of the study and the specific objectives that guide the entire research process from data collection to analysis and conclusions.

1.3.1 General Objective

The main objective of the study was to assess the influence of Procurement Management Practices on Performance of State Corporations in Nairobi City County, Kenya.

1.3.2 Specific Objectives

i.   To analyze the influence of Procurement Planning on Performance of State Corporations in Nairobi City County, Kenya.
ii. To examine the influence of Contract Management Practices on Performance of State Corporations in Nairobi City County, Kenya.
iii. To analyze the influence of Procurement Audit Practices on Performance of State Corporations in Nairobi City, County Kenya.
iv. To examine the influence of Budget Allocation variations as a moderating variable on Performance of State Corporations in Nairobi City County, Kenya.

1.4 Research Questions

i.   What is the influence of Procurement Planning on Performance of State Corporations in Nairobi City County, Kenya?
ii. To what extent does Contract Management Practices influence Performance of State Corporations in Nairobi City County, Kenya?
iii. How does Procurement Audit Practices influence Performance of State Corporations in Nairobi City County, Kenya?
iv. What are the effects of Budget Allocation variations as a moderating variable on Performance of State Corporations in Nairobi City County, Kenya

1.5 Justification

This study seeks to assess the influence of procurement management practices on performance of state corporations in Nairobi Kenya.

1.5.1   This study will enable the public institution managers to uphold strong procurement management practices in their organization, to reduce corruption due to conflict of interest, ensure accountability and uphold integrity in procurement systems in-order to ensure timely payment of bills. To the procurement officers, it will offer valuable guidance to making better decisions in the improvement of the purchasing processes.

1.5.2   This study will benefit the future researchers in understanding the important issues in strategic procurement, best practices, current challenges, and how to conduct the procurement practices efficiently.

1.5.3   The study will also offer up-to-date and relevant guidance for professionals, institutions, and suppliers in the procurement space.

1.6 Scope

This research study analyzed the influence of procurement management practices on performance. The study particularly focused on the State Corporations in Nairobi since most public offices headquarters are centrally located and main operations take place there. Narrowing the study to one area makes the research easier to manage and be more focused.

1.7 Limitation

A significant limitation of this study stemmed from potential constraints in data collection, primarily concerning respondent authenticity and accessibility. The sensitive nature of procurement activities, which often involve substantial financial expenditure and are subject to strict regulatory scrutiny, may have impacted the honesty and willingness of participants to provide fully candid responses. Respondents, despite assurances of confidentiality and anonymity, might have been inclined to offer socially desirable answers that portray their organizations' practices in an overly positive light, potentially skewing the data towards perceived compliance rather than actual operational realities. Furthermore, gaining

access to the appropriate personnel within these state corporations, who possess the in-depth knowledge required for a meaningful contribution, presented a considerable challenge. The bureaucratic protocols and the guarded nature of official procurement data could have limited the researcher's ability to secure a comprehensive sample or gather all the necessary documentation, thereby potentially affecting the depth and generalizability of the findings. These limitations of respondent bias and access constraints are inherent in research within this domain but are acknowledged as factors that could influence the interpretation and application of the study's results.

II.   LITERATURE REVIEW

2.0 Introduction

This chapter contains the theoretical review, empirical literature review and the conceptual framework. The literature review contains the overview of existing research and knowledge related to a topic of a research study.

2.1 Theoretical Review

A theoretical review is a study of existing ideas and theories about a topic. It helps researchers understand what is already known, find gaps, and build on past knowledge for their own work. It acts as a guide for the research and provides a framework usually based on an existing theory that's relevant to the researcher's topic and supports the ideas or assumptions being tested (Adom & Hussein, 2018).

2.1.1 Transaction Cost Economics Theory

This theory was proposed by Ronald Coase (1937) to explain the existence of firms and founded by Oliver Williamson (1975- 1985). Oliver Williamson develops the TCE theory by emphasizing the role of transaction costs in shaping governance structures. It focuses on cost control and quality of goods and services which influence how procurement activities are monitored and managed. Cost control enables organizations to select the best procurement methods to enhance efficiency and performance. A structured system in the procurement organization helps manage cost and quality of goods and services (Mebrate & Shumet, 2024).

Transaction Cost Economics is best applied in public procurement and contracting, supply chain decisions, in ICT procurement, public private partnerships in infrastructure projects and outsourcing services. The critiques of TCE focuses on cost only and it ignores strategic benefits of partnerships, it assumes that everyone acts opportunistically, it discourages innovation as it Favors stability and it is hard to measure transaction cost in terms of quantification. TCE applies to procurement management through selecting long-term contracts versus short-term contracts, maintaining supplier relationships and through make or buy decisions. In Procurement planning the needs assessment through the TCE reduces uncertainty when % procurements are initiated from a clear identification of needs timely planning reduces frequency costs due to prolonged lead times and supplier involvement reduces asset specificity risk when there is an early engagement score. In performance management practices the TCE theory links to performance since poor planning leads to high transaction costs; poor specifications to disputes, unclear contracts to delays or legal fees and many small purchases to repeated administration costs. Therefore, effective procurement planning such as clarity in identifying need requirements, risk assessment and supplier selection results to reduced transaction costs and improved performance

Richey et al. (2022) states that TCE Theory helps organizations decide on the best and affordable means to get things done, for instance in purchasing raw materials, shipping of products or working with suppliers. TCE theory also focuses on the hidden costs in business operations such as: handling late deliveries or quality problems, monitoring suppliers and negotiating costs. TCE helps organizations plan based on risk, cost and nature of complexity and also setting procurement timelines and choosing the best sourcing method. It only focuses on costs and risks and neglects other factors that may affect the economic activities, for instance political power, social norms and culture that often shape the normal life decisions

2.1.2 Principal Agent Theory

The Principal Agent Theory emerged in the 1970s and was developed by Jensen and William Meckling (1976). This theory looks at relationships and examines the changes in conflicts between principals and agents. It may be applied in contract design and monitoring. It explores what happens when one party, the principal (buyer) hires an agent (supplier) to act on their behalf. The agent might act in his own best interest instead of the principal's interest. It assumes that people act in their own self-interest and monitoring people is expensive and often ineffective. Moreover, it is best applied where relationships are short-term, rewards are individual, not shared, work is divided and monitored, authority is rigid and from top downward, effort is measured individually and promotion is personal and competitive.

This theory explains why contractors might not deliver as expected, why public entities must monitor performance closely, why clear contract terms and penalty clauses matter and why information asymmetry between suppliers and buyers creates risk. It is linked to performance of corporations when principal-agent problems are not managed well, performance may drop due to late deliveries, budget overruns and poor-quality goods or services but if the contract is effectively designed with strong monitoring, clear incentives, and alignment of interests, performance is enriched.

It is assumed that people always have conflicts of interest and ignore any available opportunity of trust and team work. Aso, strong oversight mechanisms may lead to inflexible systems. In contract management practices, the theory highlights the effect of standardizing procedures, procurement policies. The contract management practices may be measured through monitoring, penalties and KPIs and performance management practices through timeliness, cost control and quality. It is too focused on control thus assumes that all agents are self-interested and need strict monitoring, ignores trust or collaboration, it may lead to overly complex contracts through trying to monitor everything and does not address multiple principles.

2.1.3 Institutional Theory

The Institutional Theory was proposed by John Meyer & Bryan Rowan (1977) and it explains how firm's practices evolve within specific areas; institutional areas gradually come to resemble each other as they fit in their different environments. This theory indicates that organizations are influenced by rules, norms, standards of an industry and the practices of other organizations. Organizations conform due to three main pressures; Laws (coercive pressure) for instance; government mandates annual procurement audits, Professional normal & ethics (normative) adopting CPA standards or audit codes of ethics and copying others to reduce uncertainty (mimic) adopting e-procurement systems used by leading agencies. The theory has been applied to explain why public organizations adopt green procurement policies, why developing countries adopt e-procurement or audit reforms under donor pressures and why ministries or agencies mimic best-practice frameworks and why internal procurement audits are formalized for credibility. It focuses too much on conformity, it's hard to measure, doesn't guarantee results and overlooks innovation.

In procurement management the theory helps us to understand why organizations follow detailed procedure to stay compliant, why they adopt procurement audit practices, standards, and certifications and why public agencies implement reforms even if the impact is uncertain. For instance; a government agency setting up an internal procurement audit not because it improves efficiency but because it is expected by oversight bodies or donors. The theory is linked to performance management practices when audit practices are aligned with institutional pressures, they result to enhanced compliance and credibility. In addition, it may lead to performance management practices such as less frauds and fewer delays. The outside pressures can influence them to follow certain procurement practices in order to fit in. This theory explains why organizations follow procurement rules, adopt standard forms and respond externally to government, donors or auditors' pressures. It is assumed to only focus more on behavior than final outcomes. It explains why public entities conform to set regulations, which is, to meet legal or donor expectations even though those systems are not flexible.

In Procurement it explains the adoption of audit, standards, systems and it explains why firms act in a certain way. This theory advocates for accountability through tighter oversight and mechanisms in that tighter control leads to better accountability, especially if the agency is acting in its own interest (Bjurstrøm, 2020). This theory helps build a framework around stakeholder pressure, compliance and legitimacy and it promotes measuring audit use, policy adherence and observance to regulations. Successful projects can make procurement strategies even more powerful in gaining a competitive advantage. When an organization is successful in its operation, it gains credibility and can use that success to strengthen how it manages procurement and thus gaining more procurement benefits (Ofori, Baah, and Afriyie, 2025) This theory reflects on the importance of resources provision and regulation to ensure long-term productivity in firms.

This theory is suitable as it explains how procurement practices are shaped by regulatory, legal, and cultural norms for instance the procurement audits ensure compliance with these external pressures and standards (Jama & Mohamud, 2024) The socially constructed systems play a critical role in shaping the institution's daily activities. It advocates for effective use of an entity's resources at every unit, strategic planning and how best it can connect with the larger external environment consisting of the social, political, technological and economic environment. Focus on creating value for the organization, employees and the investors and thus it is able to make sustainable choices (Bhasin, 2016). The audit frequency may be measured through number of audits per year to maintain the laws or regulations, technology adoption measured through the presence of audit software or dashboards and follow up on findings identified through % of recommendations implemented.

2.2 Empirical Review

An empirical review is a careful study of past research and real-world studies on a specific topic. It looks at what other researchers have discovered through experiments, surveys, or observations to better understand the subject. This section focuses on the summary and analysis of the findings of conducted research studies in relation to Procurement planning, Contract management practices and Procurement Audit Practices.

2.2.1 Procurement Planning

An empirical review is a careful study of past research and real-world studies on a specific topic. It looks at what other researchers have discovered through experiments, surveys, or observations to better understand the subject.

Omondi. R et al. (2024) in a study on Procurement processes and organizational performance of public sectors in Kenya states that procurement planning is essential in the effective delivery of service in public entities. The employed descriptive research design with 188 structured questionnaires returned after distribution. The structured questionnaires and descriptive statistics used to summaries the data. Correlation analysis was used to determine the relationship between the two variables and the strength of the relationship while regression analysis determined the effect of the independent variable on the dependent variable. Data was presented in form of tables.

Nakhwanga & Malenya, (2020) indicate through their study that procurement planning, staff training, competitive bidding and inventory control have a significant positive impact on performance management practices in Busia County and therefore lead to effective performance management practices . It recommended that continuous training for procurement staff should be established to enhance skills and efficiency. The study adopted the Stock Diffusion and Resource Based Theory. A descriptive survey design was used and data collected through structured questionnaires. The study target population was 103 and was reduced to a sample size of 89 respondents. A pilot study was done before the main study to test the reliability of the tools and data was analyzed using descriptive and inferential statistics to explore patterns and relationships. The study focused on one county and thus findings are only limited to one county thus implying a geographical gap.

A study by Ingabire & Dieu (2024) focusing on how procurement planning affects the performance of public organizations, a case of Ruhengeri Referral Hospital. They included, need assessment, quality specification, cost estimation and terms of payment. The theories that guided the study were, Resource Based View Point Theory and Transaction Economics Cost Theory. The research adopted descriptive research with a target population of 106 respondents. A census inquiry method was used with questionnaires to collect data and through interviews. Statistical methods to analyses data. The findings stated that procurement planning significantly affects the hospital's performance with about 65.2% being influenced by the specific objectives. The study recommended that the stakeholders should be more involved in the needs assessment to ensure better decisions are made in the procurement in order for increased overall hospital performance.

A study on procurement practices and value for money emphasizes on the importance of aligning procurement practices with the Value for Money (VFM) principle in state corporations. The VFM emphasizes achieving the best outcomes by balancing cost, quality, and effectiveness while ensuring efficient use of resources Waci J et al. (2024). In research methodology, descriptive research design was used and questionnaires were used to collect primary data. The study target population was 167 from which a sample size of 118 respondents was drawn from the target population using the Slovin's formulae. However, the study adopted Resource Based View and Institutional theory to explain the phenomenon of the study. Stratified random sampling was used as it provides the statistical efficiency of the sample. To analyses the data regression analysis was used and a reliability test was conducted to verify the consistency of the instrument used in the study.

A study by Gatari et al. (2022) indicated that in 2019, 32% of state corporations in Kenya experienced material shortages, and 46% failed to fully comply with procurement guidelines outlined in the Public Procurement and Asset Disposal Regulation. The study analyses how various public procurement methods influence Kenya. It was guided by tendering theory and followed a descriptive research approach with a target population of 187 registered state corporations in Kenya. The sampling frame comprised of two people were selected from each entity, the head of finance and procurement, adding the total of participants to 374. A census survey approach was adopted for all 187 entities and questionnaires were used to collect the main data of the study. Descriptive statistics was used to summarize the data and inferential statistics such as Pearson correlation and regression analysis to test relationships and draw conclusions. Data analysis was done using SPSS software version 26. The findings stated that procurement methods significantly impact how well state corporations perform in a sustainable way and the most suitable procurement methods should be adopted to boost long-term performance and success.

A study on Strategic procurement practices and performance in city counties in Kenya by Hawa & Namusonge (2025) indicates that good procurement practices have positive impact on performance. The study adopted a correlational research design with a target population of 56 and data was collected using questionnaires. A census approach was employed and the study was guided by Resource Based Theory, Stewardship Theory and Institutional Theory. Data analysis was done using descriptive statistics to summarize procurement practices and correlation analysis (spearman's correlation) to examine relationships between procurement practice and performance indicators.

A study by Celestin (2020) in Rwanda on the challenges in procurement processes for local government contracts suggests that transparency should be upheld in the procurement process through adoption of e-procurement systems and strong oversight mechanisms to reduce corruption. Researchers talked to key people involved in procurement and reviewed government documents. They also used statistical tools like chi-square and correlation tests to support their findings. The study findings indicated a lack of transparency, limited staff and capacity, procurement delays and a greater competition among suppliers that boosts efficiency with a high correlation score of r=0.82. The study recommended training programs for the staff to be put in place, speed up approvals and use of more digital tools in procurement for better money value and service delivery.

Mwangi & Ndeto, (2024) state that procurement optimization strategies reduce cost and improve efficiency leading to improved performance. In addition, they have a positive significance impact on performance of commercial state corporations. The study recommends that entities should adopt technology and automate systems to manage the procure to pay cycle instead of using traditional manual methods. This practical gap between what is known (theoretical best practices) and what is actually being done (real-world application). The study aimed at assessing whether improving procurement process improves performance in the state corporations. A pilot test was conducted to test the validity and reliability. Qualitative (thematic responses) and quantitative methods (SPSS) software version 24 were used in the study involving descriptive and inferential statistics)

2.2.2 Contract Management Practices

Contract cost management and contract relationship is management have positive and significant impact on performance. The study recommends that Kiambu county government should strengthen how it manages its contract relationships to achieve better results in project delivery and service quality (Kiarie, 2020). Resource based and contract theory were adopted in the study. Moreover, a descriptive survey design was applied in the study with 96 respondents. The study found that supplier relationship management contributes to performance improvement. Proper planning helps to shorten the procurement cycle, meaning goods and services are delivered faster and more efficiently. In conclusion, the research highlights that effective contract management is crucial. A geographical gap was identified as the study only focused on one county.

A study by Jolly, (2022) to explore how contract management practices affect contract management in public institutions indicated that strong positive relationship exists between the contract management practices studied and performance management practices . This means that better compliance, smarter resource use, and strong contract terms all helped improve how procurement is done in the district. Stakeholder and systems theory were adopted and the research findings indicated that effective contract management, financial oversight and control play a major role in improving performance of state corporation. In conclusion, contract management has a major effect on procurement success in Nyarugenge. Areas for further studies include assessing how legal framework and staff skills influence performance of state corporations.

According a study by Hassan & Omwenga (2023) on contract management and performance of state corporations in Kenya, contract management has a positive effect on performance management practices . Different aspects such as contract administration, dispute resolution, relationship management, monitoring and evaluation affect how well the procurement processes are handled in state corporations. The study was established on contract management theory, general systems and institutional theory. Cross-sectional research design was adopted with a target population of 157 employees and a sample of 157 was drawn using Yamane's formula 1967. Data was collected using questionnaires and stratified random sampling was used. The tool's reliability was tested with a Cronbach Alpha score of 0.839, which shows it was dependable. Analysis was done using SPSS version 26, and involved both descriptive and inferential statistics, including correlation and multiple regression, with results deemed significant at the 0.05 level. The study indicates a limited scope to state corporations and thus findings cannot be applied in private sector.

Richard & Kyule (2025) state that organizations should cooperate and work with contractors or suppliers to ensure there is effective delivery of goods or services. Contract management helps in ensuring work is done in a safe way, on time and according to the agreed standards. The study target population consisted of 118 employees directly involved in contract

management at KPLC headquarters. The study employed descriptive research design and questionnaires were used to collect primary data. A purposive random sampling was done and the data analysis was done using descriptive and inferential statistics while presentation was done in the form of table and charts. The study findings recommend setting clear performance targets in contracts like timelines, safety standards, and quality of work.

A strong and well managed contract cycle enhances better performance a case study of polytechnic regional college Musanze in Rwanda indicates that (Theodore & Dieu, 2024). The study investigated the effect of procurement contract management practices on performance of public institutions. Descriptive and correlations study analysis was used to understand patterns and relationships in data. The target population consisted of 72 key staff members from different departments thus no sampling was done and all were included in the study. Data was gathered using questionnaires, interviews and document reviews and analysis using SPSS software to show how different contract management aspects affect institutional framework.

2.2.3 Procurement Audit Practices

Procurement accountability and strict adherence to the procurement manual and transparency enhances performance at Kakira Sugar Limited (Kibuuka & Magala, 2024). The study indicates that continuous staff training on the procurement procedures, regular audit and enhanced transparency leads to improved efficiency and reduction of risks. However, accountability is essential but with a small impact. The company should carry out performance reviews, and set up strong monitoring systems. This ensured that concrete decisions are reached and mistakes can be easily tracked and corrected. The study used logistic regression analysis to examine the impact of the three procurement practices data was collected using structured questionnaires from 150 procurement staff using structured questionnaire study suggests that transparency and adhering to the procurement manual improves performance significantly. Accountability has a smaller effect on performance while audit frequency and auditor expertise have no significant effect impact on performance. The study indicated a population gap since it focused on one private organization thus the findings may not apply to other sectors. Also, it indicated a theoretical gap as it had no theory attached to the study to explain a phenomenon.

Mutegi & Thogori (2023) in a study to establish how procurement audits affect the supply chain performance of state corporations in Nairobi County, identified two key areas, Procurement planning audits and Tender preparation audits. The study adopted the theory of constraints and institutional theory. Descriptive survey was used to gather data from a total of 125 state corporations and a sample of 94 respondents was selected using stratified random sampling to ensure a representation. Moreover, data was collected using questionnaires distributed to supply chain officers and the analysis was done using both descriptive and inferential statistics including correlation and multiple regression to explore the variables. The SPSS version 24 was used and data was presented visually using charts and percentages. In conclusion, better auditing planning and tender stages leads to significant improvements when the state corporations manage their supply chain well.

Mathias & Kwasira (2019) in their study on inventory audit and performance in selected public universities in western Kenya, indicate through their findings that audits have a strong and positive impact on how well their procurement departments performed. The better the inventory audit practice the better the procurement outcomes. The study recommends all public universities to adopt strong inventory audit systems to improve performance and accountability. The study adopted a census approach with a target population of 72 procurement officers and internal auditors. A pilot study was conducted before the main study at Kaimosi University to test for reliability. The data was collected using structured questionnaires and was analyzed using SPSS software with both inferential and inferential statistics.

Kellya & Nsimbila, (2025) state that auditing duration and enforcement measures affect procurement performance of state corporations' in Tanzania. The study adopted a cross-sectional design and gathered data from 132 people working in four local government authorities. They used mixed sampling methods to collect data through the use of questionnaires, interviews and document reviews. Analyzing of data involved both qualitative (content analysis) and quantitative methods (descriptive and regression) methods. Findings of the study disclosed various issues such as: limited time to respond to audit findings, weak enforcement and infrequent audit practices by the PPRA. The study recommends that, more time should be given to the auditors to thoroughly carry out their audits, entities being edited require more time to reply to the audit queries and enforcement bodies should act more firmly and fast to ensure the audit recommendations are strictly acted upon.

Internal auditing supports good governance in public procurement and plays a key role in making the process more transparent, accountable and efficient (Yanuarisa et al. 2025). Technology rise such as big data analytics and robotic process automation has helped in improving fraud detection and manage procurement tasks more efficiently. Limited

resource, weak institutions and inadequate are among the challenges experienced by auditors. Thus, the study recommends using risk-based auditing, independence of auditors and promoting collaboration. Future studies should focus on regional specific issues, sustainable governance and laws that prioritize transparency and accountability.

2.3 Conceptual Framework

A conceptual framework is a description of how a researcher organizes and explains the key ideas and factors in a study (Luft and Jeong, 2022). It shows how these factors are connected and helps make sense of the research using existing knowledge. It is a visual representation that outlines how variables in a study connect to each other. The goal is to clearly define the main concepts and their relationships based on past studies. The figure 2.1 below is a conceptual model illustrating the independent variables and the dependent variables with a moderating variable. The independent variables include: Procurement planning, Contract management practices and the Procurement Audit practices. While the dependent variable includes the Performance of State Corporations and the moderating variable, Budget Allocation.
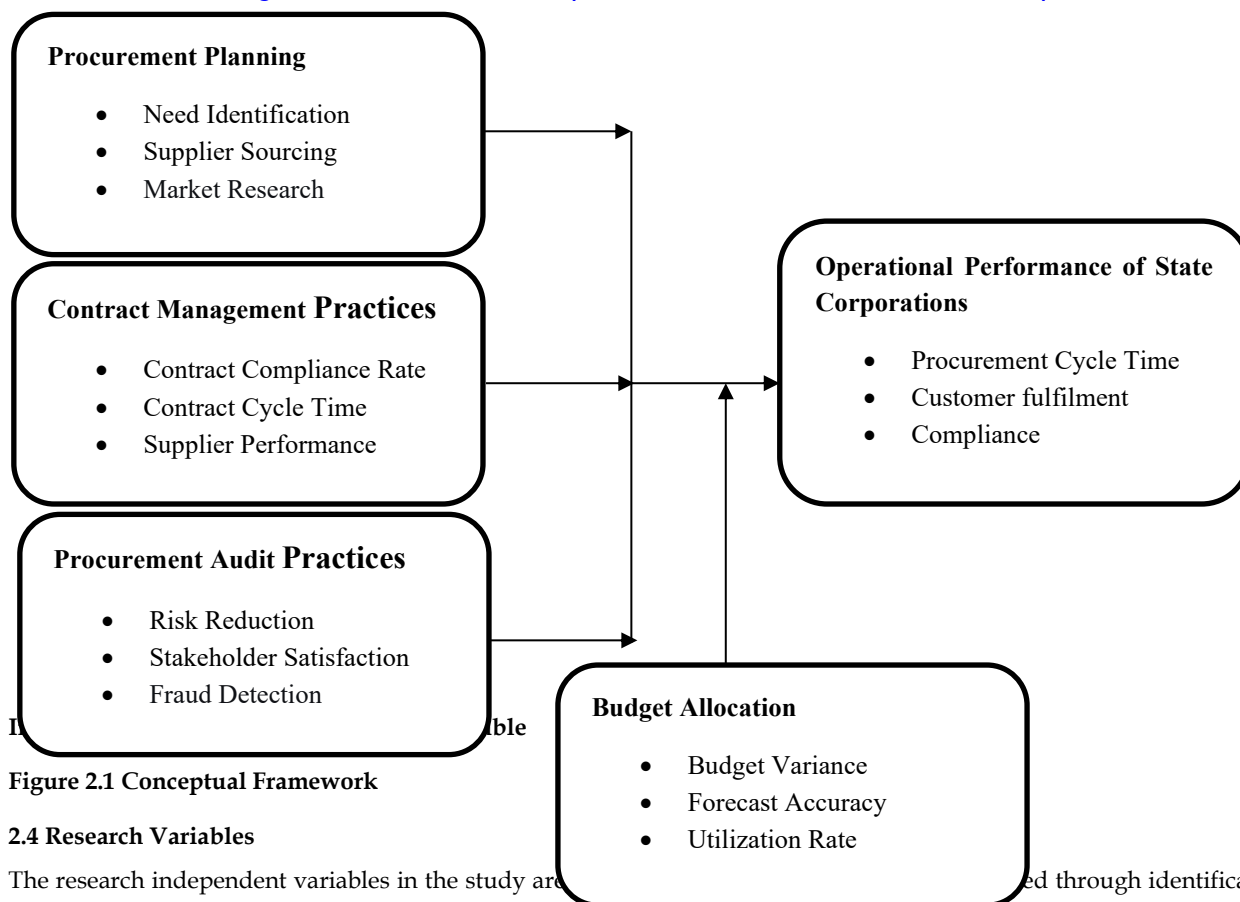
Procurement Planning

- Need Identification
- Supplier Sourcing
- Market Research

Contract Management Practices

- Contract Compliance Rate
- Contract Cycle Time
- Supplier Performance

Procurement Audit Practices

- Risk Reduction
- Stakeholder Satisfaction
- Fraud Detection

Operational Performance of State Corporations

- Procurement Cycle Time
- Customer fulfilment
- Compliance

Budget Allocation

- Budget Variance
- Forecast Accuracy
- Utilization Rate

Figure 2.1 Conceptual Framework

2.4 Research Variables

The research independent variables in the study are _____ ed through identification of needs, supplier availability, setting of timelines, risk management, market research. Contract Management Practices was measured through contract compliance rate, contract cycle time, emergency purchase ratio and supplier defect rate. Procurement audit practices was measured through stakeholder satisfaction, risk reduction and fraud detection. The intervening variable is budget allocation, measuring indicators are budget compliance rate and cash flow analysis. While the dependent variable is performance, it was measured through the pending bills (the number of unpaid invoices that have piled up), lead time (time taken from planning to delivery of goods and services) and cost reduction (If money is being saved through smart purchasing.

2.4.1 Procurement Planning

Procurement Management planning is defined as the process of identifying and consolidating requirements for their procurement. It starts with the need for identification and selection of suppliers or contractors, determining their time frames and deadlines and making the entire procurement (Walubengo and Kiongera 2023). Procurement management planning benefits the organization in that it ensures sustainability, cost optimization and reduction, risk mitigation, faster processing and executions, supplier management and strategic sourcing and faster processing executions. Strategic management planning influences the overall performance and ensures successful functioning of the firm (Jama & Mohamud, 2024).

2.4.2 Contract Management Practices

According to Rogers, Akims & Kakwezi (2024), effective contract negotiations play a crucial role in improving performance, strong contract relationships enhance performance and contract dispute resolution efficiently aids in maintaining smooth operations and improving performance. Contract management involves making a follow up with suppliers to ensure timely deliveries, at the right quality and price.

2.4.3 Procurement Audit Practices

Internal and external procurement audits are important key governance in public procurement as they promote accountability and ensure the responsible and efficient management of public resources. A study by Anin et al. (2024) states that public audit activities may not influence performance outcomes but are essential. Internal audits are essential in public entities as they provide evidence of accountability, transparency, effectiveness and compliance in the entire procurement process. They help organizations in decision making, risk detection, identifying areas that need changes, whether the public funds are utilized well and also in promoting good governance. A study by Yanuarisa et al. (2025)

states that internal audits play a crucial role in the improvement of public procurement management. When regular audits are well planned, they help in facilitating an accountable, transparent and efficient procurement process through maintaining set rules, regulations and procedures.

2.4.4 Moderating Variable- Budget Allocation

An intervening or mediating variable helps clarify how or why a certain effect occurs. It explains the process through which the independent variable affects the dependent variable (Al Daihani & Islam, 2025). Budgeting allocation ensures the availability of sufficient funds to support a procurement plan.

2.5 Critique of the Literature

This section provides a critical analysis of the existing research that has been conducted to assess how well the research addresses its research question, method of data collection, analysis, interpretation and presentation. It consists of the research gaps and the areas for further research.

Table 2.1Summary of Critique of the Literature

Research Topic	Research Gap	Areas of Further Study
Procurement process and Organizational performance (Omondi et al. 2024)	Theoretical gap- theory in the study is not sufficient to explain a phenomenon.	Need for better planning systems and political will to enhance performance. Impact of political interference and resistance to change.
Effect of procurement planning toward organizational performance within the Public Sector. (Ingabire & Dieu)	Practical gap between theoretical best practices and real-world application.	Explore how digital tools (e-procurement) interact with existing planning weaknesses across multiple departments
Procurement Practices & Value for money in state corporations in Kenya (Waci et al. 2024)	Population gap- focused solely on state corporations only.	Influence of effective procurement processes on value for money in private organizations.
Strategic Procurement practices & procurement performance of city counties in Kenya (Hawa & Namusonge 2025)	Practical Gap- between theoretical best practices and real-world application.	Explore the role of technology such as AI & Blockchain in enhancing procurement performance. Impact of policies & regulatory frameworks on strategic procurement processes.
Procurement audit on performance of state corporations in Kenya. (Gichuhi & Paul 2020)	Theoretical Gap	Data analytics utilization to gain deeper insights into procurement activities and identify areas of improvement.
Procurement challenges in procurement processes for local government contracts Celestine (2020)	Theoretical gap- the study lacks a theoretical framework to explain a phenomenon	Necessity of robust reforms in transparency, capacity building & technology integration to streamline procurement processes.

Procurement planning & performance of state corporations in Kisii county, Kenya (Muturi & Osoro, 2024)	Geographical gap- the study focuses only one county	Assess the factors influencing supply chain best practices.
Contract management & Procurement Performance of State Corporations in Kenya. (Hassan & Omwenga, 2023)	A contextual gap as the study has a limited scope where it focuses only at state corporations in Kenya.	To assess how contract management affect performance in private sectors and compare the results in both sectors.
Influence of Inventory Audit on procurement performance. (Mathias & Kwasira, 2019)	Geographical gap - study focused on universities in one county thus the findings can't apply to other regions. Data Gap- Specific aspects of inventory audit are missing to validate the research.	Need to identify how inventory audit interacts with other procurement functions like budgeting, supplier performance or technology use.
Impact of the effective procurement process in Organizations. (Kibuuka & Magala, 2024)	Theoretical Gap- No theory attached to the study to explain a phenomenon.	To assess how different procurement environs influence which factors most
Procurement Planning & Performance of state corporations. (Mutahi & Osoro, 2024)	Geographical Gap	Factors affecting supply chain best practices and performance.
Contract management & Performance of County governments in Kenya Kiarie (2020)	Population gap- focused on county government	Contract monitoring and review of performance
Contract Management Practices & Procurement performance in Nyarugenge District Jolly (2022)	Practical gap as the research findings practically interpreted in real world settings.	Establish how legal framework & Staff capacity building influence performance.
Procurement Methods & Sustainable performance of state corporations in Kenya (Gatari, Shale, & Osoro, 2022)	Theoretical gap- the in the study is not sufficient to explain a phenomenon.	Need for stakeholders' involvement in planning for the acquiring of goods and services and development of policies to ensure efficiency in procurement process.

Effect of Procurement optimization strategies & performance Mwangi & Ndeto (2024)	Practical Gap- Between theoretical best practices and real-world application.	Effect of Technology adoption & automation of systems.
Auditing & Compliance in public procurement (Bergaman, 2023)	Empirical gap- existing evidence is insufficient to support or refute existing findings	To identify how audits can balance enforcement, and flexibility outcomes in public procurement.
Auditing Duration & Enforcement mechanisms for procurement performance in Tanzania Kellya & Nsimbila (2025)	Population Gap- the study focuses only on four LGA thus its findings can't be applied to all 184 LGAs in the county	Need for regular audits and stakeholder feedbacks.
Audit on supply chain performance of state corporations in Nairobi County. (Mutegi & Thogori, 2023)	Empirical gap- empirical evidence is insufficient.	Need for strong oversight of the tendering process and better audit planning.
Procurement best practices that influence procurement performance of County government in Kenya. Nakhwanga & Malenya (2020)	Population Gap- The study focuses in one area thus other areas can't relate to the findings.	Capacity building, competitive bidding & strong oversight over procurement processes.
Procurement contract management practices on performance on performance of public institutions. Theodore & Dieu (2024)	Theoretical Gap- The study lacks theoretical framework to explain a phenomenon.	Technology & Sustainable practices to support better performance outcomes.

2.6 Chapter Summary and Research Gaps

While foundational theories like Principal-Agent Theory and Institutional Theory are reviewed, their specific convergence in explaining the unique compliance and transparency challenges within state corporations remains underexplored. Principal-Agent Theory typically frames the problem as a conflict of interest between the public (principal) and bureaucrats (agents). However, it does not fully account for the complex "multiple principals" reality in state corporations, where managers face conflicting demands from political masters, regulatory bodies (like PPRA), and the Auditor-General, often leading to ritualistic rather than substantive compliance. Furthermore, Institutional Theory explains how organizations adopt practices for legitimacy, but its application to how these "legitimate" structures (like e-procurement systems) are decoupled from actual practice to conceal corrupt activities is a critical theoretical shortfall. The existing theoretical landscape lacks an integrated model that explains how these theories interact to create a façade of transparency while perpetuating systemic non-compliance in the specific, politically-charged environment of state corporations.

Empirically, there is a pronounced disconnect between the documented scale of compliance failures and the in-depth, contextual understanding of how and why they persist despite established legal frameworks. Reports from the Auditor-General and PPRA (2023-2024) provide macro-level evidence of financial irregularities, such as the Kshs. 194.7 billion in spending bills and Kshs. 44.8 billion in unreconciled e-procurement revenues. However, these reports are diagnostic, not explanatory. A significant gap exists in qualitative, evidence-based research that investigates the micro-level processes the "how" within state corporations. This includes empirical studies on the specific mechanisms of political interference in contract management, the practical bottlenecks that cause audit recommendations to be ignored, and the behavioral factors that lead procurement staff to bypass transparent e-procurement systems for informal, off-record dealings. The current literature provides the "what" (the statistics of failure) but lacks the "how" (the operational mechanics of non-compliance) and the "why" (the institutional and individual rationalities behind it). In summary, the theoretical gap centers on the lack of an integrated framework that explains the complex interplay of conflicting institutional pressures and principal-agent dilemmas that undermine genuine compliance and transparency in state corporations. The empirical gap concerns the scarcity of granular, process-oriented studies that move beyond quantifying financial losses to qualitatively uncover the specific mechanisms and rationales behind procurement non-compliance and opacity in these entities.

III.   RESEARCH METHODOLOGY

3.0 Introduction

This chapter highlighted the research design, population, data collection, pilot testing, data analysis and presentation. Research Methodology is a vital guideline of research methods applied in the research process. Research method is a planned and organized way that researchers use in the collection of data required in identifying and analyzing a certain phenomenon that is being investigated.

3.1 Research Design

Research design is a plan that guides the researcher through methods and techniques on how to carry out a research study to test a hypothesis. These methods and techniques enable a researcher to collect data, analyses and draw valid conclusions. The right research design enables a researcher to collect clear, direct and relevant data related to the research hypothesis. Accurate, reliable and bias-free results may be produced through the right research design (Wisenthige, 2023).

This study adopted a correlational survey research design as it was the most appropriate methodology for achieving the research aim of assessing the influence of procurement management practices on performance in state corporations. The core purpose of this research was not to manipulate variables in a controlled setting but to systematically measure the naturally occurring relationships between key constructs namely, specific procurement practices and performance indicators. The correlational design was expressly suited for this objective, as it allowed for the quantification of the degree and direction of the relationships between these variables across a broad sample of state corporations. By doing so, it identified which specific management practices were most strongly associated with enhanced performance outcomes, providing empirically grounded evidence for targeted interventions.

Furthermore, the survey component of this design was essential for gathering the necessary data to test these relationships. The use of standardized questionnaires administered to procurement staff and managers across multiple state corporations enabled the collection of comparable, quantitative data on a scale that would have been unfeasible with purely qualitative methods. This approach aligned with the pragmatic need to generalize findings beyond a single case study and to make informed, data-driven conclusions about the state of procurement performance across the sector. The design did not seek to establish definitive causation but to illuminate the critical linkages and patterns that existed in the real-world environment of public procurement. The insights generated served as a vital foundation for identifying areas of strength and weakness, thereby fulfilling the study's ultimate objective of contributing to improved procurement efficacy and accountability in Kenya's state corporations.

3.2 Population

Population refers to the overall number of entities, people or items to be investigated, David et al. (2024). In research, the population refers to a group of people who share common characteristics and come from a specific place, setting or organization. The population enables the researchers to select the kind of questions to ask and issues to investigate as it provides a broad view of the group being studied. A target population is a smaller group within the larger population that meets the criteria that fits the study. For instance, employees from a certain department or students of a specific level of study depending on what the research is about. A target population enables a researcher to select the right group to include in the sample. According to the state corporations Act Cap 446, there are currently 247 state corporations operating

within Kenya and this was the population size of the study and formed the unit of analysis. The study selected state corporations in Nairobi County which were 168. The unit of observations were the procurement managers from each of the state corporations in the sample of the study.

3.2.1 Sample Frame

Based on the definitions provided by prominent authors, a sample frame was conceptualized as the definitive list of all elements in a population from which a sample was drawn. Kothari (2004) described it as the comprehensive list of all sampling units, while Saunders et al. (2019) defined it as the actual list of cases used for selection. Cooper & Schindler (2014) further emphasized that it served as the physical representation of the population for selection purposes. The sample frame for this study consisted of 168 service state corporations in Kenya distinguished by the theirs category/ sector from which a representative subset was systematically selected. This was done to establish the study's boundaries, ensure that every member of the target population had a known and non-zero chance of being selected, and to ultimately uphold the external validity of the research findings by providing a clear and justifiable basis for generalizing the results from the sample back to the entire defined population.

Table 3.1 Summary of State Corporations by Sector

Sector	Number of Parastatals	Percentage of Total
Agriculture	28	16.7%
Governance & Regulation	25	14.9%
Education & Research	24	14.3%
Transport & Infrastructure	15	8.9%
Health	14	8.3%
Energy	8	4.8%
Trade & Industry	8	4.8%
Water Resources	8	4.8%
Environment & Conservation	6	3.6%
ICT & Broadcasting	6	3.6%
Regional Development	6	3.6%
Social Services & Funds	6	3.6%
Security	5	3.0%

Sector	Number of Parastatals	Percentage of Total
Culture, Heritage & Sports	5	3.0%
Housing & Land	4	2.4%
Maritime	4	2.4%
Labour & Pensions	2	1.2%
Total	**168**	**100%**

3.3 Sample Size and Sampling Technique (s)

The sample size of the study consisted of a subset of selected state corporations drawn from the target population. The study followed the method of Taro Yamane (1967) to determine the sample size from a given population as shown below:

n= N
 —1+N (e)²—
Where;
n= sample size
N= Population under study
e= margin error of 5%
From the target population of 168 as shown above, the sample size was
n= 168
 1+168(0.05)²
n= 168/1+0.42
n= 168/1.42
n=118.3098
n= 119

The Sample size is 119 from the total population of 168. The sample size represents 70.8% at 95% confidence level, hence, a good representation of the populations since it is greater than 10 percent of the target population (Kothari, 2014). The study used Stratified random sampling technique to ensure different categories of state corporations are fairly represented in the study using stratus and the results was reliable and reflective of the whole population as the whole. Then from each stratum the corporations were picked using simple random sampling to maintain a fair, accurate and unbiased process. The respondents of the questionnaires were procurement officers from the procurement department of each state corporation.

3.4 Data and Data collection

A study by Taherdoost (2021) states that data collection involves the gathering of information from relevant data sources, selecting suitable collection methods and in a systematic manner to test hypotheses in order to attain a specific outcome. Data was collected using both primary and secondary methods. Primary data was collected using surveys, where questionnaires were distributed to the sample population while secondary data was drawn from the existing data such as government reports, publications, online databases, academic journals and books. Questionnaires was used as the data tools to collect data from the sample population as they have the possibility of gaining accurate data, cost effective and highly structured with easy analysis of data. Administration of electronic methods such as online questionnaires would be preferable due to speed and accessibility (Prasad et al. 2024).

3.5 Pilot Testing

According to Obura, (2024) pilot testing is a preliminary study conducted on a small scale to evaluate the feasibility, time, cost, risk, and potential challenges of a research method or instrument, such as a questionnaire. It helps identify and resolve issues related to question clarity, design, and data collection processes before conducting the main study. Pilot testing involves trying out a questionnaire or research tool in the field to detect ambiguities and other deficiencies, ensuring it is refined for effective use in the primary study. A pre-testing of the tools was carried out respondents randomly selected from the procurement team of 20 selected state corporations not included in the study population. n

3.5.1 Validity Test

Validity refers to how accurately a method measures what is intended to measure (Middleton, 2019). If the research has high validity, then it is an indication that the measurement is valid. According to Leavy, (2020), validity is the degree to which the empirical measure or several measures of the concept, accurately measures the concept. The validity tests that were conducted included: face validity, content validity and construct validity. Face validity, which according to Heale and Twycross (2020), refers to the extent to which a test appears to measure what it is intended to measure. Subsequently, the researcher sought the opinion of specialists in the area of procurement and that of the assigned supervisors on whether as per face value the questionnaire seemed appropriate in both design and structure and if it measured the required constructs. An assessment of each item was done to determine if it corresponded with the given conceptual framework of public procurement implementation and performance. This was proved with few modifications of the constructs to for suitability.

In content validity, the questionnaires were formulated and organized as per the study variables to warrant sufficiency and representativeness of each variable item. The researcher then asked the supervisors and procurement experts to critically analyze the items measuring specific constructs with the aim of ascertaining whether the full content pertaining to any given construct was represented in the items and if such content was justified with evidence from literature. On scrutiny, various suggestions for correction were made and the ultimate research instrument was produced. According to Sekaran, (2021), content validity is the extent to which the measurement device provides adequate coverage of investigative questions.

The measurement of validity is in the form of construct validity that measures the construct accurately. According to Taherdoost, (2021), construct validity refers to how well you translate or transform a concept , an idea or behavior that is a construct in a functioning and operating reality. Construct validity was achieved through limiting the questions to conceptualization of variables and ensuring that the indicators of every variable fell within the same construct. The motive of this check is to ensure that each measure adequately assess the construct it is purported to assess. The study used different groups of experts in the field of procurement and issued them with the questionnaires. The experts were expected to assess if the questionnaires could be used in examining the influence of public procurement implementation on operational performance of service state corporations in Kenya. The coefficient of the data gathered from the pilot study was computed using Statistical Package for Social Sciences (SPSS) version 28. A coefficient of above 0.5 was obtained and this upheld the validity of the data collection instrument. The recommendations from the procurement experts and the pilot study respondents were used to improve on data collection instruments

3.5.2 Reliability of Data in Questionnaire

Reliability is the extent to which an instrument is consistent in the results yielded. An instrument is termed reliable when it measures what it is required to measure in a consistent way. In this study questionnaires were used to test the reliability through giving out randomly to respondents who after filling as samples enabled us to determine their effectiveness (Ranganathan, Caduff, & Frampton, 2024).

3.6 Data Analysis and Presentation

The data analysis for this study constituted a rigorous, two-phased quantitative approach designed to transform raw data into credible evidence and actionable insights, aligning with modern research praxis (Okoth & Gupta, 2024). The process commenced with descriptive statistics, including measures of central tendency and dispersion like the mean and standard deviation, to effectively summarize, organize, and describe the basic features of the dataset, thereby providing initial insights into the sample's characteristics. Subsequently, inferential statistics, specifically multiple regression analysis, were employed to test the study's hypotheses and make predictions about the influence of procurement management practices on organizational performance within the broader population of State Corporations. The selection of these techniques was critically determined by the nature of the research objectives and the scale of measurement of the variables, ensuring the

analytical methods were both appropriate and robust for drawing valid conclusions about the relationships between variables, with findings presented clearly through tables and narrative interpretation.

3.6.1 Correlation Analysis

This study utilized correlation analysis to quantify the strength and direction of the linear associations between the variables under investigation. The Pearson product-moment correlation coefficient (r) was specifically employed, as it is the most appropriate measure for assessing relationships between continuous variables (Njoroge & Aloo, 2023). The coefficient yields a value between -1 and +1, which provides a precise measure of the linear relationship. A value closer to +1 indicates a strong positive correlation, signifying that as one variable increases, the other tends to increase as well. Conversely, a value closer to -1 signifies a strong negative correlation, where an increase in one variable corresponds with a decrease in the other. A coefficient near zero suggests the absence of a linear relationship (Otieno & Mwangi, 2024). This analysis was crucial for initially diagnosing the bivariate relationships before proceeding to the multivariate regression model.

3.6.2 Regression Analysis

Regression analysis is a statistical technique used to model and examine the relationship between a continuous dependent variable and one or more independent variables (Abuya & Mwangi, 2023). This study employed this method to investigate the influence of public procurement management practices on the operational performance of Service State Corporations in Kenya. The analysis was conducted using the following regression model:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

Where:

Y = Performance of State Corporation in Nairobi City County, Kenya (dependent variable)

$\beta_1 \ldots \beta_3$ = the coefficient estimates of the independent variables X_1 to X_3 respectively

X_1 = Procurement Planning

X_2 = Contract Management Practices

X_3 = Procurement Audit Practices

ε = The error term which is assumed to follow a normal distribution with mean zero and constant error variance

Performance of State Corporation in Nairobi City County, Kenya =Procurement Planning) +β2(Contract Management Practices) +β3(Procurement Audit Practices) +ϵ.

3.6.3 Multiple Regression Model

Multiple linear regression is a statistical technique that extends simple linear regression by allowing for the simultaneous analysis of the relationship between a single dependent variable and multiple independent variables (Gichuki & Ndirangu, 2024). In this model, each regression coefficient represents the change in the dependent variable for a one-unit change in a given predictor, while holding all other predictors constant, thereby isolating its unique effect (Lane, 2022). This methodology is highly valuable not only for testing hypotheses about these relationships but also for developing predictive models for new observations (Frost, 2023). Consequently, this study employed multiple linear regression to empirically test the collective and individual influence of the independent variables namely, procurement planning, contract management practices, and procurement audit practices on the operational performance of State Corporations. To test for moderating effect, the multiple regression equation used was as below:

$$Y = \beta_0 + \beta_1 X_1 * Z + \beta_2 X_2 * Z + \beta_3 X_3 * Z + \varepsilon$$

Where:

Y = Performance of State Corporation in Nairobi City County, Kenya (dependent variable)

$\beta_1 \ldots \beta_3$ = the coefficient estimates of the independent variables X_1 to X_3 respectively

X_1 = Procurement Planning

X_2 = Contract Management Practices

X_3 = Procurement Audit Practices

ε = The error term which is assumed to follow a normal distribution with mean zero and constant error variance

Z = Budget Allocation

ε =represents the error term explaining the variability of the quality of performance as a result of other factors not counted for.

3.7 Diagnostic Tests

Diagnostic tests in regression analysis are a set of procedures used to verify whether the underlying statistical assumptions of a model are met, thereby ensuring the validity and reliability of the inferences drawn. According to Muthoni and Adebayo (2023), these tests are critical for identifying potential specification errors, such as non-normal residuals, correlated errors, or unequal error variance, which can lead to biased estimates. For this study, a comprehensive diagnostic checking protocol was employed, which included tests for normality, multicollinearity using the Variance Inflation Factor (VIF) and autocorrelation using the Durbin-Watson statistic. Conducting these diagnostics was an essential step to confirm that the multiple regression model provided the Best Linear Unbiased Estimators (BLUE) and that the findings could be interpreted with confidence. The test for this study included normality test, multicollinearity test, and autocorrelation test as discussed below:

3.7.1 Normality Test

The normality test assesses the assumption that the error terms in a regression model are normally distributed, which is fundamental for conducting valid hypothesis tests and constructing accurate confidence intervals. Omondi and Chen (2024), emphasizes that while large sample sizes (n > 30) often mitigate concerns due to the Central Limit Theorem, formally testing for normality remains a best practice for rigorous analysis. This study employed the Shapiro-Wilk test, a powerful method recommended for smaller to moderate sample sizes, to evaluate the distribution of the residuals. A non-significant result ($p > 0.05$) on this test indicates that the null hypothesis of normality cannot be rejected, thus satisfying this key assumption and ensuring the robustness of the t-tests and F-tests used in the regression analysis.

3.7.2 Multi-Collinearity Test

Multicollinearity refers to a condition in a multiple regression model where two or more predictor variables are highly correlated, which can inflate the standard errors of the coefficients and make them unstable and difficult to interpret. As noted by Kipruto and Singh (2024), high multicollinearity undermines the statistical power of the model by obscuring the individual contribution of each independent variable. To diagnose this issue, this study utilized the Variance Inflation Factor (VIF), a more robust diagnostic than a simple correlation matrix. A VIF value exceeding 5 was used as a critical threshold, indicating problematic multicollinearity that required remedial action, such as variable centering or removal, to ensure the precision and interpretability of the regression estimates.

3.7.3 Autocorrelation Test

Autocorrelation, also known as serial correlation, occurs when the residuals of a regression model are not independent of each other, often found in time-series or spatially ordered data. This violation of the classic regression assumption can lead to underestimated standard errors and overestimated model fit. According to a contemporary text by Wachira and Lee (2024), the Durbin-Watson statistic is the standard test for detecting first-order autocorrelation in a cross-sectional context where data might be ordered. The test produces a value between 0 and 4, where a value near 2 suggests no autocorrelation. This study applied the Durbin-Watson test to the model's residuals to confirm their independence, a crucial step for ensuring that the significance levels of the predictor variables were not artificially inflated.

3.8 Ethical Considerations

Ethical considerations for this research were rigorously adhered to in a sequential manner, beginning with the mandatory acquisition of formal approvals prior to any data collection. This process commenced with securing research authorization from the National Commission for Science, Technology and Innovation (NACOSTI), followed by obtaining a specific research permit from Department. Furthermore, the research proposal received full ethical review and clearance from the University Ethics Review Committee to ensure its design met all required ethical standards. Upon engagement, all participants were provided with a comprehensive informed consent form that clearly detailed the study's purpose, procedures, potential risks, and benefits, emphasizing that their participation was entirely voluntary, they could withdraw at any time without penalty, and their identities would remain confidential. Throughout the data collection phase, the principles of anonymity and confidentiality were strictly maintained by using coded identifiers in place of personal names and storing all collected data on password-protected devices. Finally, upon the study's conclusion, participants were

offered a full debriefing to clarify the research objectives and findings, and any questions were addressed transparently, thereby ensuring the research was conducted with integrity, respect, and a paramount commitment to the welfare of all involved.

IV.   DATA ANALYSIS, FINDINGS AND DISCUSSION

4.0 Introduction

This chapter addresses the findings of the study data, data analysis results and data presentation of the major research findings as per the goals of the investigation. It also comprises response rate, Demographic data, Descriptive analysis, correlation analysis, regression analysis and lastly explanation of study findings. The study sought to assess the influence of procurement management practices on the performance of state corporations in Nairobi City County, Kenya. Specifically, the study looked at procurement planning, contract management practices, procurement audit practices and the moderating effects of budget allocation. Data was analyzed, results interpreted on the basis of the overall objectives of the study

4.1 Response Rate

The researcher administered 119 questionnaires out of which only 111 were returned while fully filled. This resulted in a response rate of 93.3% which was adequate for data analysis as stated by (Saunders, 2011) who argues that a response rate for statistical analysis should be more than 50%. Therefore, the data can be used to generalize the opinion of the entire population as the response rate is adequate for the study

Table 4.1 Response Rate

Response	Frequency	Percent
Returned	111	93.3%
Unreturned	8	6.7%
Total	**119**	**100.00%**

4.2 Demographic Information

This section analyses the demographic characteristics of the respondents. This is in reference to years of service and type department served.

4.2.1 Years of Service

The respondents were also asked to state the period in which they have been serving in their respective departments. This was to help in knowing whether the respondents have a good experience in regards to operational performance of state corporations in Kenya. The study therefore established that 24.3% of the respondents had worked between 0-1 years, 24.3% had worked for a period of 1-2 years, 8.1% had worked for a period of 2–3 years, 14.4% had worked for a period of 3-4 years and 28.9% had worked for a above 5 years. The working experience of the respondents was quite enough to provide information on the area under study. According to a study conducted by Maier et al., (2021), experience is a valuable resource and should be supported as experience comes with knowledge therefore it should be considered as an asset.

Table 4.2 Years of Experience in Procurement

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0-1 Years	27	24.3	24.3	24.3
	1-2 Years	27	24.3	24.3	48.6
	2-3 Years	9	8.1	8.1	56.7

	Frequency	Percent	Valid Percent	Cumulative Percent
3-4 Years	16	14.4	14.4	71.1
Above 5 Years	32	28.9	28.9	**100.0**
Total	**111**	**100.0**	**100.0**	

4.2.2 Department Type

This study sought to determine the category of department to which the respondents belonged. This allowed researchers to see if responses vary significantly across different parts of the organization. From table 4.3 below, the Procurement/Purchasing department constitutes the largest cohort (33.3%, n=37), indicating it is either the primary stakeholder for the research topic or the largest operational unit within the organization (Gurcan et al., 2021). The Stores (24.3%, n=27) and Logistics (22.5%, n=25) departments are represented in relatively balanced proportions, enabling a robust comparative analysis of inter-departmental workflows and challenges, such as inventory receipt and transportation efficiency. The "Others" category (19.9%, n=22) serves as a crucial control group, providing a baseline to determine if findings are specific to the core operational functions or are organization-wide phenomena. The identical values for Percent and Valid Percent (100.0% cumulative) confirm complete data integrity for this variable, but the uneven distribution necessitates a disaggregated analysis to prevent the perspectives of the larger Procurement group from disproportionately skewing the overall results and masking critical insights unique to each departmental function

Table 4.3 Department Type

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Procurement/Purchasing	37	33.3	33.3	33.3
	Stores	27	24.3	24.3	57.6
	Logistics	25	22.5	22.5	80.1
	Others	22	19.9	19.9	**100.0**
	Total	**111**	**100.0**	**100.0**	

4.3 Pilot Test

A pre-testing of the tools was carried out from 20 respondents randomly selected from the procurement team of 20 selected state corporations out of the remaining. Pilot results were as shown below:

4.3.1 Reliability Testing

The reliability test of the instrument was done using the Cronbach alpha for the five variables. This was done by administering 20 questionnaires to randomly selected respondents. The Cronbach alpha was calculated and it was found that all the variables and the instrument were reliable. This was because all the variables had a Cronbach alpha that was above 0.7. According to Kothari (2011), a coefficient of 0.7 and above is accepted as it generally indicates reliability and acceptance. Therefore, from my pilot study, the research instrument and the variables were all reliable. The table below shows the reliability test results.

Table 4.4 Summary of Cronbach's Alpha Reliability Coefficient

Variable	No of Items	α=Alpha Coefficient	Comment
Procurement Planning	5	0.898	Reliable

Contract Management Practices	5	0.907	Reliable
Procurement Audit Practices	6	0.863	Reliable
Budget Allocation	4	0.908	Reliable
Performance of Digitization Projects	4	0.897	Reliable

4.3.2 Validity Testing

The study conducted a validity test on the research instrument whereby the study checked for face, content and construct validity of the research instrument. Face and content validity testing were subjective means of determining whether the instrument measures what it is developed to measure and whether the representativeness of the items on an instrument are related to the entire area under study. Therefore, face and content validity were determined through expert judgment of my supervisor. Construct validity was used as an indicator and scales' ability to accurately measure the concept under study. It was used to check how well the instrument was used to measure the relationship of Procurement Management Practices on Performance of State Corporations in Kenya. The study tested for construct validity through the use of the Exploratory Factor Analysis (EFA), where a validity index of 0.5 and above was accepted. Therefore, for a data set to be regarded to be valid and appropriate for data analysis, the KMO Value should be greater than 0.5 and the Bartlett's test of sphericity p value should be less than 0.05 for it to be considered statistically significant. The table below shows the finding of the construct validity analysis.

Table 4.5 Validity Test

Variable	No. of Items	KMO Measure of Sampling Adequacy	Bartlett's Test of Sphericity		
			Approximate Chi- Square	Degrees of Freedom	P-Value
Procurement Planning	5	0.745	30.647	15	0.010
Contract Management Practices	5	0.713	37.059	15	0.001
Procurement Audit Practices	6	0.725	30.218	15	0.011
Budget Allocation	4	0.806	33.965	15	0.003
Performance of Digitization Projects	4	0.729	35.615	15	0.002

4.4 Descriptive Statistics

According to Sarmento and Costa (2022), descriptive statistics is the initial stage of analysis used to describe and summarize data. The main descriptive statistics used in the study were the frequencies, percentages, means and the standard deviation. Mean is the average score of data values. A higher mean would imply that more respondents indicated the highest values in the Likert scale while a low mean would mean that more respondents indicated the least values on the Likert scale. Standard deviation is a statistical term used to measure amount variability around an average. According to Bhandari, (2020), a high standard deviation means that values are generally far from the mean, while a low standard deviation indicates that values are clustered close to the mean. This study used a five-point Likert scale to collect the views from the respondents where: 1=Strongly Disagree (SD), 2= Disagree (D), 3=Neither agree nor disagree (NAD), 4=Agree (A) and 5=Strongly Agree (SA).

4.4.1 Procurement Planning

The first objective of this study was to analyze the influence of Procurement Planning on Performance of State Corporations in Kenya. To achieve this objective, Procurement Planning was assessed through three main measures namely; need identification, supplier sourcing and Market research. Respondents were requested to provide information regarding their respective firms on different indicators that measures the level of Procurement Planning as analyzed in

table 4.4 below. The descriptive statistics for Procurement Planning reveal a profoundly positive picture, indicating that these state corporations have institutionalized robust planning protocols. The mean scores, ranging from 4.47 to 4.76 on a 5-point Likert scale, are exceptionally high, signifying that respondent overwhelmingly "agreed" or "strongly agreed" with all the statements.

Crucially, the standard deviation (SD) values are all below 0.5, which is a very low dispersion. This low SD indicates a high degree of consensus among the respondents; there is very little variation in their perceptions, meaning the positive stance on procurement planning is a consistent and shared view across the organizations studied. For instance, the statement "User departments are involved in identifying procurement needs" received a mean of 4.76 (SD=0.431), suggesting that this practice is not only prevalent but also uniformly recognized, minimizing internal conflicts and ensuring that procured goods and services are fit for purpose. This finding is corroborated by a recent study in the Kenyan context by Kipchumba and Kwasira (2022), who found that active involvement of user departments in the procurement planning process was a critical success factor for project implementation in public entities, as it enhanced the specificity of requirements and reduced costly post-procurement modifications.

These empirical findings resonate powerfully with the principles of Transaction Cost Economics (TCE) Theory, as proposed by Ronald Coase (1937). TCE posits that firms (or in this case, state corporations) seek to minimize the costs associated with an economic exchange, which include the costs of searching for information, negotiating contracts, and safeguarding against opportunism. The high mean scores on practices like "maintaining an updated list of prequalified suppliers" (mean=4.62) and conducting "formal market research" (mean=4.62) are direct operationalizations of TCE's tenets. By prequalifying suppliers, the organizations drastically reduce search and information costs. Formal market research mitigates bounded rationality by providing better information for decision-making, thereby enabling the achievement of value-for-money. Furthermore, involving user departments (User departments are involved... mean=4.76) reduces opportunism and the risk of procuring inappropriate items, which would lead to high ex-post enforcement and adaptation costs. Therefore, the data strongly suggests that these state corporations are, perhaps intuitively, employing procurement planning practices that directly function to minimize transaction costs, which in turn should enhance their overall operational and financial performance.

The implications for the performance of state corporations are significant. The establishment of "clear procurement timelines" (mean=4.70) directly addresses inefficiencies and delays, which are common performance pitfalls in public procurement. When planning is predictable and based on actual needs, it reduces the incidence of costly emergency purchases, a point explicitly acknowledged in the findings. This aligns with the work of Njeri and Kihara (2023), whose study on county governments in Kenya concluded that adherence to procurement planning schedules was a dominant predictor of timely service delivery and budget adherence. The collective strength and consensus shown by these metrics indicate that effective procurement planning is a foundational pillar. By systematically reducing transaction costs through these deliberate planning practices, state corporations are not merely complying with regulations but are building a strategic capability that enhances accountability, ensures the efficient use of public funds, and ultimately leads to superior organizational performance in fulfilling their public mandates.

Table 4.6 Descriptive statistics of Procurement Planning

Statements	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	mean	Std Dev
	%	%	%	%	%		
Procurement planning reflects actual organizational needs.	0.0	0.0	0.0	26.1	73.9	4.47	.441
User departments are involved in identifying procurement needs.	0.0	0.0	0.0	24.3	75.7	4.76	.431
The organization maintains an update list of prequalified suppliers.	0.0	0.0	0.0	37.8	62.2	4.62	.487
Clear procurement timelines are established during planning.	0.0	0.0	0.0	29.7	70.3	4.70	.459

Formal market research practices influence the achievement of value-for-money and the reduction of emergency purchases in Kenyan state corporations.	0.0	0.0	0.0	37.8	62.2	4.62	.487

4.4.2 Contract Management Practices

The second objective of this study was to examine the influence of Contract Management Practices on Performance of State Corporations in Kenya. To achieve this objective, Contract Management Practices was assessed through three main measures namely; contract compliance rate, contract cycle time and supplier performance. Respondents were requested to provide information regarding their respective firms on different indicators that measures the level of Contract Management Practices as analyzed in table 4.7.

As presented in Table 4.7, the descriptive statistics for Contract Management Practices reveal a strong, yet nuanced, adherence to procedural discipline within the state corporations studied. The mean scores for the core contract management functions are exceptionally high, with "Procurement process is closely monitored" and "Contract timelines are met" both achieving a mean of 4.82, indicating near-universal "Strongly Agree" responses. The standard deviation (SD) for these items is a remarkably low 0.386, signifying an extremely high level of consensus among respondents that these monitoring and timeline adherence practices are rigorously followed. Similarly, the statements on suppliers meeting terms and conditions (mean=4.60, SD=.491) and procurement being predominantly planned (mean=4.64, SD=.482) further reinforce this picture of controlled and effective ex-post procurement management. However, a critical outlier exists: the statement "Emergency procurements often bypass normal contract procedures" also received a high mean score of 4.54, but with a substantially larger SD of 0.784. This higher dispersion indicates significant disagreement or variability in perceptions regarding the prevalence and control of emergency procurement bypasses, introducing a point of vulnerability in an otherwise robust system.

These findings can be powerfully interpreted through the lens of Principal-Agent Theory (Jensen & Meckling, 1976). This theory illuminates the relationship where one party (the principal, in this case, the public/citizens and senior management of the state corporation) delegates work to another (the agent, such as procurement officers and suppliers). A core problem is that the agent may have different goals and may act in their own self-interest (opportunism) if their actions are not properly monitored and aligned with the principal's objectives. The high mean scores on close monitoring and adherence to timelines are direct evidence of mechanisms designed to mitigate this agency problem. By closely supervising the procurement process from beginning to contract award, the principal reduces information asymmetry and deters moral hazard, ensuring the agent (the procurement officer) acts in the organization's best interest. This is supported by a recent study by Mwangi and Namusonge (2023) in Kenyan parastatals, which found that stringent contract supervision was a statistically significant predictor of project success, as it minimized cost overruns and quality deviations, directly aligning with our finding of consistent supplier compliance (mean=4.60).

The implication of these findings for the performance of state corporations is twofold. Firstly, the strong performance on monitoring and timeline adherence demonstrates that these state corporations have institutionalized controls that directly enhance performance by ensuring predictability, accountability, and the fulfillment of contractual obligations. This contributes to the efficient use of public funds and the timely delivery of services. However, the high mean score on the propensity of emergency procurements to bypass procedures (mean=4.54) reveals a significant agency risk. This finding indicates that under certain conditions, the established control mechanisms can be subverted, potentially creating opportunities for opportunism, favoritism, and a failure to achieve value-for-money. A study by Otieno and Ngugi (2022) on public entities in East Africa specifically highlighted that emergency procurement was a major conduit for procurement fraud and budget inflation, underscoring the performance risk this finding represents. Therefore, while the overall contract management framework appears strong and contributes positively to performance, the identified vulnerability around emergency procurement represents a critical area for managerial and policy intervention to fully align agent actions with principal goals and safeguard public value.

Table 4.7 Descriptive statistics of Contract Management Practices

Statements	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	mean	Std Dev
	%	%	%	%	%		

The terms and conditions outlined in the contracts are met consistently by supplier.	0.0	0.0	0.0	39.6	60.4	4.60	.491
Procurement process is closely monitored from beginning to contract award.	0.0	0.0	0.0	18.0	82.0	4.82	.386
Contract timelines are met within the planned timeframe.	0.0	0.0	0.0	18.0	82.0	4.82	.386
Emergency procurements often bypass normal contract procedures.	0.0	0.0	18.0	9.9	72.1	4.54	.784
Most procurement is planned and not reactive	0.0	0.0	0.0	36.0	64.0	4.64	.482

4.4.3 Procurement Audit Practices

The third objective of this study was to analyze the influence of Procurement Audit Practices on Performance of State Corporations in Kenya. To achieve this objective, Procurement Audit Practices was assessed through three main measures namely; risk reduction, compliance rate and stakeholder satisfaction. Respondents were requested to provide information regarding their respective firms on different indicators that measures the level of Procurement Audit Practices as analyzed in table 4.8.

As presented in Table 4.8, the descriptive statistics for Procurement Audit Practices depict a highly effective and institutionalized audit function within the surveyed state corporations. The mean scores are consistently elevated, ranging from 4.46 to a peak of 4.80 on a 5-point Likert scale. This indicates a overwhelming consensus among respondents that they "Agree" or "Strongly Agree" with all the positive statements regarding audit efficacy. Particularly noteworthy are the exceptionally high means for statements such as "Procurement staff adhere more to procedures due to regular audits" (mean=4.80) and "Audits findings are based on reliable and verifiable information" (mean=4.79). The standard deviations (SD) for these items are remarkably low, at 0.400 and 0.407 respectively, signifying a very high degree of unanimity among the respondents. This low dispersion suggests that the perception of audit reliability and its behavioral impact is not a sporadic view but a deeply embedded and shared organizational reality. The only statement with a slightly lower mean (4.46) and a higher SD (0.658) relates to the consistency of audit results over time and across departments, hinting at a minor area where perceptions of uniformity are slightly less robust, though still positive.

These findings can be profoundly interpreted through the lens of Transaction Cost Economics (TCE) as advanced by Oliver Williamson. TCE is fundamentally concerned with how organizations structure their governance to minimize the costs of economic exchange specifically, the costs of drafting, negotiating, safeguarding, and enforcing contracts. In this framework, procurement audits serve as a critical ex-post governance mechanism. The high mean scores demonstrate that these audits are effectively reducing transaction costs by mitigating opportunism and bounded rationality. For instance, the fact that audits are perceived as producing accurate reports based on reliable information (means of 4.73 and 4.79) directly counters information asymmetry, a key source of transaction costs. This is corroborated by a recent study by Chebet and Kibera (2023) in the Kenyan public sector, which found that the quality and reliability of audit information were pivotal in reducing procurement disputes and contract renegotiations, thereby saving significant ex-post transaction costs for government entities.

The implications of these robust audit practices for the performance of state corporations are direct and multifaceted. The high mean score (4.71) on the statement "Audits help detect procurement risks early" indicates a proactive, rather than reactive, approach to safeguarding public resources. This early detection function is a powerful performance enhancer, as it prevents minor issues from escalating into major financial losses or project failures. Furthermore, the strongest consensus in the data revolves around the deterrent and compliance effect: the fact that staff adhere more to procedures due to audits (mean=4.80) and that audits improve compliance with laws (mean=4.60). This creates a culture of discipline and accountability, which is the bedrock of performance in any public institution. A 2024 study by Mwangi and Otieno on East African state corporations affirmed this, demonstrating a strong positive correlation between the perceived stringency of internal audit and the level of compliance with public procurement regulations, leading to fewer audit queries and enhanced operational efficiency.

In conclusion, from a TCE perspective, the effective procurement audit practices revealed in this data are not merely a bureaucratic exercise; they are a strategic governance tool that directly contributes to organizational performance. By reducing the need for costly monitoring and enforcement in every individual transaction, audits create a systemic environment of trust and predictability. They lower the risk of supplier opportunism and internal procedural deviations, ensuring that state corporations can achieve their primary objective of delivering public value efficiently. The high levels of agreement and consensus on these audit metrics suggest that these state corporations have successfully institutionalized a governance structure that minimizes transaction costs, thereby enhancing their overall operational and financial performance. This positions procurement audit not as a cost center, but as a value-adding function essential for the sustainable performance of state corporations.

Table 4.8 Descriptive statistics of Procurement Audit Practices

Statements	Strongly disagree	Disagree	Neither	Agree	Strongly agree	mean	Std Dev
	%	%	%	%	%		
Audit results are consistent over time and across departments.	0.0	0.0	9.0	36.0	55.0	4.46	.658
Procurement audits in our organization produce accurate reports.	0.0	0.0	0.0	27.0	73.0	4.73	.446
Audits findings are based on reliable and verifiable information.	0.0	0.0	0.0	20.7	79.3	4.79	.407
Procurement staff adhere more to procedures due to regular audits.	0.0	0.0	0.0	19.8	80.2	4.80	.400
Procurement audits help improve compliance with public procurement laws.	0.0	0.0	0.0	39.6	60.4	4.60	.491
Audits help detect procurement risks early.	0.0	0.0	0.0	28.8	71.2	4.71	.455

4.4.4 Budget Allocation

The fourth objective of the study was to find out the moderating influence of budget allocation on performance of state corporations in Kenya. The respondents were requested to indicate their levels of agreement on specific statements regarding budget allocation on a five-point Likert scale. The findings are as indicated in table 4.9.

As presented in Table 4.9 the descriptive statistics for Budget Allocation reveal a state of highly disciplined and rational financial management within the state corporations studied. The mean scores for all four statements are exceptionally high, ranging from 4.62 to 4.73, which on a 5-point Likert scale indicates a overwhelming consensus that respondents "Agree" or "Strongly Agree" with these positive assertions about budgetary practices. Particularly noteworthy are the statements "The procurement budget is fully utilized for its intended purpose" and "Procurement teams are held accountable for budget compliance," both achieving a mean of 4.73. The standard deviation (SD) for all items is remarkably low, falling between 0.446 and 0.487. This very low dispersion signifies a high degree of unanimity among the respondents; there is little to no variation in their perceptions, indicating that these positive budgetary practices are consistently experienced and deeply embedded across the organizations. The data paints a picture of a system where budgets are not merely symbolic figures but are operationalized with precision, accountability, and a strong evidence-based approach.

These findings can be powerfully interpreted through the lens of Institutional Theory as proposed by Meyer and Rowan (1977). This theory posits that organizations adopt structures and practices not only for technical efficiency but also to gain legitimacy, stability, and resources from their institutional environment. For state corporations, this environment is saturated with coercive pressures from government regulations (like the Public Procurement and Asset Disposal Act in Kenya), normative pressures from professional accounting and procurement bodies, and mimetic pressures to emulate successful peers. The remarkably high and consistent scores on budget alignment, utilization, and accountability suggest

that these corporations have deeply internalized these practices as institutional "myths" or "ceremonies" of good governance. Adhering to these rationalized budgetary protocols such as using data-driven forecasting (mean=4.62) signals conformity to societal expectations of accountability and prudent public financial management, thereby securing their legitimacy and social license to operate.

The implications of these robust budgetary practices for the performance of state corporations are profound and direct. The consistent alignment of budget with expenditure (mean=4.62) and the full utilization of funds for their intended purpose (mean=4.73) are fundamental to eliminating resource wastage and ensuring that strategic projects are fully funded to completion. This directly enhances operational and project performance. Furthermore, the practice of holding procurement teams accountable for budget compliance (mean=4.73) creates a system of consequences and rewards that drives efficiency and deters malfeasance. This finding is strongly supported by recent empirical work. A study by Okello and Njeru (2023) on Kenyan parastatals found that budget credibility the ability to execute the budget as planned was the single most significant predictor of project completion rates and service delivery outcomes. Their research concluded that the discipline of adhering to allocated budgets was a key differentiator between high and low-performing state corporations, a conclusion that resonates perfectly with our data.

In conclusion, from an Institutional Theory perspective, the exemplary budget allocation practices uncovered in this study are not merely technical financial tools; they are a critical ceremonial display of conformity that yields tangible performance benefits. By adopting and internalizing these globally legitimized practices of budgetary discipline, state corporations do more than just secure their external legitimacy they simultaneously create an internal environment of predictability, accountability, and strategic focus. This disciplined approach minimizes budget variances, prevents resource diversion, and ensures that public funds are channeled effectively towards their mandated objectives. Therefore, the institutionalization of rational budget allocation, as evidenced by these compelling metrics, is a cornerstone for achieving both the perceived legitimacy and the actual operational performance necessary for state corporations to fulfill their public service mandates effectively.

Table 4.9 Descriptive Statistics of Budget Allocation

Statements	Strongly disagree %	Disagree %	Neutral %	Agree %	Strongly agree %	mean	Std Dev
Our procurement budget is consistently aligned with actual expenditures.	0.0	0.0	0.0	37.8	62.2	4.62	.487
We use data-driven methods to improve procurement forecasting accuracy.	0.0	0.0	0.0	37.8	62.2	4.62	.487
The procurement budget is fully utilized for its intended purpose.	0.0	0.0	0.0	27.0	73.0	4.73	.446
Procurement teams are held accountable for budget compliance	0.0	0.0	0.0	27.0	73.0	4.73	.446

4.4.5 Performance of State Corporations in Kenya

The study sought to find out the performance of State Corporations in Kenya as the dependent variable for this study. The main measures used to unveil the performance of State Corporations included productivity, procurement cycle time, customer satisfaction and compliance. The respondents were asked to rate performance of their respective departments based on these performance indicators. The respondents gave their views on how they ranked the performance metrics in principle siting no definitive measurements like ratios or percentage points, but based on their reviews of previous data present in their respective departments.

As presented in Table 4.10, the descriptive statistics on the Performance of State Corporations reveal a critical narrative where procurement efficiency is directly linked to a paramount financial and operational challenge: the management of pending bills. The data indicates a strong consensus that procurement delays are a significant contributor to this problem, with the statement "Delays in procurement often contribute to accumulation of pending bills" receiving a mean of 4.45. However, there is a notable lack of consensus here, as shown by the relatively high standard deviation (SD) of 0.783, suggesting that the severity of this issue is experienced differently across the corporations. More uniformly, respondents strongly agree that "Long procurement lead times negatively affect service delivery in our entity" (mean=4.73), though

the similarly high SD of 0.753 again indicates varied experiences of this negative impact. Crucially, the table also highlights the perceived solution: the statement "Contract compliance and audit practices have helped reduce pending bills issues" garnered a high mean of 4.54 with a much lower SD of 0.501, demonstrating a strong and widely shared belief that robust procurement management practices are an effective antidote to the performance ailment of pending bills.

These findings can be powerfully framed through the lens of Institutional Theory (Meyer & Rowan, 1977). This theory helps us understand that state corporations operate under immense isomorphic pressures—coercive from government regulations, normative from professional bodies, and mimetic from peer entities to adopt legitimate structures and practices. The high agreement on the negative impact of long lead times and delays reflects a failure to successfully decouple formal procurement rules (designed for legitimacy) from efficient technical execution (needed for performance). When this decoupling fails, "institutional myths" clash with operational reality, leading to tangible performance deficits like pending bills. The variation in SDs suggests that different corporations have achieved varying degrees of success in integrating these institutional demands into their daily workflows. This aligns with a 2023 study by Kamau and Chege on Kenyan county governments, which found that entities that merely mimicked procurement laws without building internal capacity for their execution were significantly more prone to budget overruns and payment arrears, precisely because the institutional ceremony conflicted with operational capability.

The implications for performance are stark and directly tied to the core theme of pending bills. The accumulation of pending bills is not merely a financial accounting failure; it is a profound performance failure that erodes supplier trust, attracts audit queries, and ultimately cripples service delivery. The high mean score on the role of contract compliance and audit in mitigating this issue (4.54) is therefore highly significant. It indicates that where institutional practices like audits and contract management are effectively implemented and not just ceremonially adopted, they produce tangible performance benefits by enforcing financial discipline and ensuring obligations are met on time. This is corroborated by a recent study from the Institute of Economic Affairs (2024) focusing on East African public corporations, which established a direct causal link between the strengthening of internal audit committees and a measurable reduction in pending bills over a two-year period, attributing this to improved enforcement of payment schedules and contract terms.

In conclusion, from an Institutional Theory perspective, the performance of state corporations, as measured by their ability to avoid pending bills and ensure service delivery, is fundamentally determined by their capacity to bridge the gap between institutional ceremony and technical efficiency. The findings demonstrate that long procurement lead times an institutional procedural failure directly translate into service delivery failures. However, the data also provides a clear pathway for enhancement: the institutionalized practices of contract compliance and audit are not just symbolic rituals; when implemented with conviction and consistency, they become powerful mechanisms for achieving operational performance. Therefore, for state corporations to improve their performance, the focus must be on authenticating their institutional procurement practices moving beyond mere adoption towards genuine integration to ensure that the processes designed to grant them legitimacy also actively enable their efficiency and fiscal health

Table 4.10 Descriptive Statistics of Performance of State Corporations in Kenya

Statements	Strongly disagree %	Disagree %	Neither agree nor disagree %	Agree %	Strongly agree %	mean	Std Dev
Delays in procurement often contribute to accumulation of pending bills.	0.0	0.0	18.0	18.9	63.1	4.45	.783
Contract compliance and audit practices have helped reduce pending bills issues.	0.0	0.0	0.0	45.9	54.1	4.54	.501
Efficient procurement processes help reduce pending bills supplier payments.	0.0	0.0	18.0	36.0	45.9	4.28	.753
Long procurement lead times negatively affect service delivery in our entity	0.0	0.0	0.0	27.0	73.0	4.73	.753

4.5 Diagnostic Test

The study conducted diagnostic tests that included normality test, multicollinearity test and autocorrelation test. The tests were conducted to establish whether the data collected was accurate, reliable and capable of inferring the study results to the target population.

4.5.1 Normality

Normality of data is performed in research to test the normal distribution for the responses in a study. Mishra *et al*, (2019). In this study, Normality of data were tested through the use of formal test using Shapiro-Wilk tests, as indicated in Table 4.11. The study conducted normality test at 95% confidence interval for mean, where the p value was compared to determine whether data was either normally distributed (less than 0.05) or not normally distributed (greater than 0.05). As observed in table 4.11 below, the p-value for the test were less than 0.05. This is an indication that the residuals were normally distributed and the assumption of normality was satisfied. This finding corresponds to the study by Mudi, (2020) who observed that data is normally distributed when p value is greater than 0.05. The study also correlates with research by Das and Imon (2021) who observed that data is normally distributed when p value is greater than 0.05.

Table 4.11 Normality Test Table

	Shapiro-Wilk			
	Statistic	Statistic	df	Sig.
Procurement Planning	.267	.840	111	.010
Contract Management Practices	.236	.744	111	.014
Procurement Audit Practices	.368	.728	111	.020
Budget Allocation	.309	.820	111	.031
Performance of state corporations	.230	.792	111	.031

a. Lilliefors Significance Correction

4.5.2 Multicollinearity Test

Multicollinearity is the degree of correlation between independent variables (Daoud, 2017). According to Ochieng 2024, multicollinearity is where two or more of the indication predictors correlate strongly with one another. Tests which are done to determine multicollinearity include t ratios, and the use of Variance inflation Factor (VIF). This study employed the use of Variance Inflation Factor (VIF) to determine multicollinearity. From the table 4.12 below, although the tolerance values of the variables are lower than 1.00, the values of the reciprocal of tolerance, which is, Variance Inflation Factor (VIF), are less than 5 indicating that there is no Multicollinearity among the explanatory variables.

Table 4.12 Multicollinearity Test using Variance Inflated Factors (VIF)

		Collinearity Statistics	
Model		Tolerance	VIF
1	(Constant)		
	Procurement Planning	.389	2.571
	Contract Management Practices	.385	2.598
	Procurement Audit Practices	.638	1.568
	Budget Allocation	.413	2.422

The findings of collinearity test shown in the table 4.12 above, show that tolerance values for all the three variables and the moderating variable were below 1 and VIF values are below 5 ; This indicates that there was no collinearity among the independent variables thus all the independent variables were included in the multiple linear regression model. A rule of thumb that is sometimes given for the tolerance and the VIF is that the tolerance should not be less than 0.1, and that therefore the VIF should not be greater than 5 according to Alauddin, M., & Nghiem, H. S. (2019).

4.5.3 Autocorrelation Test

To determine Autocorrelation the Durbin Watson *d* test is the most celebrated measure. This test is simply the ratio of the sum of squared differences in successive residuals to the residual sum of squares (RSS) (Sarstedt & Mooi, 2021). In testing Autocorrelation, if the computed *d* value in the Watson Test is closer to zero, then there is evidence of positive autocorrelation, but if the value is closer to 4, then there is evidence of negative autocorrelation. A *d* value closer to 2 shows more evidence of no autocorrelation. Watson and Durbin provided the lower and upper limit critical values of 1-5% as the values which can be used to determine positive or negative autocorrelation. The following Table shows the Durbin-Watson test for this study. The Watson and Durbin d-value is equal 2.279. This shows evidence of no autocorrelation as shown in table 4.13 below

Table 4.13: Durbin-Watson Test for Autocorrelation.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.963a	.927	.924	.14936	2.279

a. Predictors: (Constant), Procurement Planning, Contract Management Practices, Procurement Audit Practices, Budget Allocation

b. Dependent Variable: Performance of State Corporations

According to (Ashoor, A. S et al., 2021), a common rule of thumb is to check if the Durbin-Watson statistic falls between (1.5) and (2.5). A value near (2) indicates no significant autocorrelation, while values below (1.5) suggest positive autocorrelation, and values above (2.5) suggest negative autocorrelation. However, this is a rough guideline, and a precise conclusion requires comparing the calculated statistic to critical values found in a Durbin-Watson table, which are determined by the number of observations and variables in the model. The Watson and Durbin d-value was equal 2.279 shows evidence of no autocorrelation.

4.6 Inferential Test

Inferential statistical analysis involves objectively and quantitatively summarizing the data, determining which data patterns are significant, and making inferential statements about system performance. The correlation analysis and regression analysis were conducted under inferential analysis in this study. The Pearson correlation analysis was applied to examine the degree of the relationship of the variables against each other. The regression analysis was used to determine the nature of the relationship and the contribution of each independent variable in explaining the dependent variable as well as test the objectives of the study. The level of significance was tested at 5%.

4.6.1 Correlation Analysis of the Variables

Correlation analysis is a statistical procedure used to quantify the magnitude and direction of the association between two variables (Frost, 2023). This relationship was expressed through a correlation coefficient, a standardized metric that ranges from -1.00 to +1.00, where values approaching +1.00 signify a strong positive relationship, values approaching -1.00 indicate a strong negative relationship, and a value of 0 denotes the absence of a linear association (Schober et al., 2021). The Pearson correlation coefficient, a specific measure designed for continuous data, is commonly employed to assess the degree of linear co-movement between variables, thereby providing a foundational understanding of their interconnectedness prior to more complex multivariate analysis (Hauke & Kossowski, 2023).

The correlation matrix reveals a robust network of statistically significant relationships among all studied variables, with all correlation coefficients significant at the $p < 0.01$ level, indicating these associations are highly unlikely to result from random chance. The dependent variable, organizational performance (PERF), demonstrates strong positive correlations with all independent variables, with Procurement Audit Practices (PAP) showing the strongest association (r = 0.951), followed by Contract Management Practices (CMP) at r = 0.871, Procurement Planning (PP) at r = 0.857, and Budget Allocation (BA) at r = 0.698. These findings align with contemporary research by Almeida et al. (2023), who found that governance mechanisms like audit functions typically demonstrate stronger direct relationships with organizational outcomes than resource allocation alone. The hierarchy of correlations suggests that while adequate budgeting remains

important, procedural discipline and oversight mechanisms may have more substantial direct relationships with performance outcomes in public sector contexts.

The intercorrelations among independent variables reveal substantial relationships that warrant careful consideration in subsequent analyses. Particularly strong correlations exist between Contract Management Practices and Procurement Planning (r = 0.884) and between Contract Management Practices and Budget Allocation (r = 0.879), indicating these constructs share considerable variance. These patterns reflect the integrated nature of procurement functions in practice, where effective contract management inherently involves thorough planning and appropriate resource allocation. Recent research by Schmidt & Fischer (2024) has documented similar interconnection patterns in public procurement systems, noting that high intercorrelations often reflect the systemic nature of procurement processes where improvements in one area naturally correlate with advancements in others.

The findings provide empirical support for contemporary public management theories emphasizing the importance of integrated procurement systems. The dominant correlation between audit practices and performance reinforces current scholarship by Johnson & Lee (2024) highlighting how robust monitoring systems enhance accountability and operational efficiency in state corporations. Similarly, the strong association between contract management and performance corroborates recent findings by Global Procurement Institute (2024) that effective contract administration serves as a crucial determinant of organizational success. The consistently strong correlations across all procurement functions suggest these elements operate as an interconnected system rather than isolated functions, providing a comprehensive framework for understanding performance drivers in public sector organizations.

Table 4.14: Correlation Analysis

		Y	X_1	X_2	X_3	Z
Y	Pearson Correlation	1				
	Sig. (2-tailed)					
X1	Pearson Correlation	.857**	1			
	Sig. (2-tailed)	.000				
X2	Pearson Correlation	.871**	.884**	1		
	Sig. (2-tailed)	.000	.000			
X3	Pearson Correlation	.951**	.863**	.845**	1	
	Sig. (2-tailed)	.000	.000	.000		.000
Z	Pearson Correlation	.698**	.820**	.879**	.701**	1
	Sig. (2-tailed)	.000	.000	.000	.000	

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

Where $\overline{X_1}$ = Procurement Planning, $\overline{X_2}$ = Contract Management Practices, $\overline{X_3}$ = Procurement Audit Practices , Z = Budget Allocation and Y= Performance of State Corporations

4.6.2 Regression Analysis

The regression analysis was done between the independent variables with the dependent variable to determine how the independent variables jointly influenced the dependent variable. The results for the regression are represented in table 4.15 below

4.6.2.1 Regression Analysis Model for Procurement Planning and Performance of State Corporations

Model Summary

Table 4.15 Model Summary for Procurement Planning

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.962ᵃ	.926	.925	.08085

a. Predictors: (Constant), *Procurement Planning*

Procurement Planning was found to be a very important variable in ensuring that there is performance of state corporations in Kenya. This is supported from the results found, where the R square (0.926) which is also known as the coefficient of determination explains 92.6% of the variations in the dependent variable which is performance of state corporations in Nairobi City County, Kenya hence the relationship of the variables is satisfactory. The model summary indicates that Procurement Planning is an important factor in predicting the performance of state corporations.

Analysis of Variance

Table 4.16 Analysis of Variance for Procurement Planning

ANOVAᵃ

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.710	1	3.710	19.316	.000ᵇ
	Residual	15.365	109	.192		
	Total	19.075	110			

a. Dependent Variable: Performance of State Corporations

b. Predictors: (Constant), Procurement Planning

From the results above, the F value (19.316) is greater than the F critical (3.96) which indicates that the model explains a significant portion of the variance in the dependent variable. The p value (0.000) is also less than 0.05 therefore this confirms that there is a strong statistical significance. Therefore, from the findings, procurement planning is a significant predictor of the performance of state corporations. Proper procurement planning of state corporations can have a substantial impact on their performance, as indicated by the statistical significance of the model.

Regression Coefficient Analysis

Table 4.17 Regression Coefficient Analysis for Procurement Planning

Coefficientsᵃ

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.571	.256		6.129	.000
	Procurement Planning	.458	.104	.441	4.395	.000

a. Dependent Variable: Performance of State Corporations

The study assessed the beta coefficient of procurement planning in relation to the performance of state corporations. The beta coefficient was found to be 0.458, with a p-value of 0.000, which is below 0.05 significance level. Therefore, there is a

positive and significant relationship between procurement planning and performance of state corporations (β=0.458, p<0.000). The regression model is as follows:

$Y = 1.571 + 0.458X_1$

Whereby,

Y - performance of state corporations

X_1 - Procurement Planning.

The coefficients table indicates that procurement planning has a significant and positive impact on the performance of state corporations. The relationship is both statistically significant and practically meaningful, as evidenced by the significant p-values and the magnitude of the coefficients. This is consistent with the research findings by Tariq et al. (2020), which identified a positive and significant relationship between procurement planning and performance of state corporations. The findings were also supported by Althiyabi & Qureshi (2021) who found out that there is positive and significant correlation between procurement planning and performance of state corporations.

4.6.2.2 Regression Analysis Model for Contract Management Practices and Performance of State Corporations

Model Summary

Table 4.18 Model Summary for Contract Management Practices

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.516[a]	.266	.264	.47602

a. Predictors: (Constant), *Contract Management Practices*

Contract Management Practices was found to be a very important variable in ensuring that there is performance of state corporations in Kenya. This is supported from the results found, where the R square (0.516) which is also known as the coefficient of determination explains 51.6% of the variations in the dependent variable which is performance of state corporations hence the relationship of the variables is satisfactory. The model summary indicates that Contract Management Practices is an important factor in predicting the performance of state corporations in Kenya.

Analysis of Variance

Table 4.19 Analysis of Variance for Contract Management Practices

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.377	1	1.377	6.226	.015[b]
	Residual	17.698	109	.221		
	Total	19.075	110			

a. Dependent Variable: performance of state corporations in Kenya

b. Predictors: (Constant), Contract Management Practices

From the results above, the F value (6.226) is greater than the F critical (3.96) which indicates that the model explains a significant portion of the variance in the dependent variable. The p value (0.015) is also less than 0.05 therefore this confirms that there is a strong statistical significance. Therefore, from the findings, Contract Management Practices is a significant predictor of the performance of state corporations. Properly Contract Management Practices of state corporations can have a substantial impact on their performance, as indicated by the statistical significance of the model.

Regression Coefficient Analysis

Table 4.20 Regression Coefficient Analysis for Contract Management Practices

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.837	.345		5.302	.000
	Contract Management Practices	.326	.131	.269	2.495	.015

a. Dependent Variable: F

The study assessed the beta coefficient of Contract Management Practices in relation to the Performance of state corporations. The beta coefficient was found to be 0.326, with a p-value of 0.015, which is below 0.05 significance level. Therefore, there is a positive and significant relationship between Contract Management Practices and Performance of State Corporations (β=0.326, p=0.015). The regression model is as follows:

$Y=1.837 + 0.326X_2$

Whereby,

Y - Performance of State Corporations in Kenya

X_2 - Contract Management Practices

The coefficients table indicates that Contract Management Practices has a significant and positive impact on the Performance of State Corporations. The relationship is both statistically significant and practically meaningful, as evidenced by the significant p-values and the magnitude of the coefficients. This is in line with the research findings by Qiu et al. (2019), who argues contract management practices aids in achieving project quality even in complex projects in the corporations. Therefore, the author concluded that through a proper contract management practice, state corporations can always perform better.

4.6.2.3 Regression Analysis Model for Procurement Audit Practices and Performance of State Corporations

Model Summary

Table 4.21 Model Summary for Procurement Audit Practices

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.443[a]	.196	.186	.43778

a. Predictors: (Constant), Procurement Audit Practices

Procurement Audit Practices was found to be a very important variable in ensuring that there is performance of state corporations in Kenya. This is supported from the results found, where the R square (0.196) which is also known as the coefficient of determination explains 19.6% of the variations in the dependent variable which is performance of state corporations hence the relationship of the variables is satisfactory. The model summary indicates that procurement audit practices is an important factor in predicting the performance of state corporations in Kenya.

Analysis of Variance

Table 4.22 Analysis of Variance for Procurement Audit Practices

ANOVAᵃ

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.743	1	3.743	19.530	.000ᵇ
	Residual	15.332	109	.192		
	Total	19.075	110			

a. Dependent Variable: Performance of State Corporations in Kenya

b. Predictors: (Constant), Procurement Audit Practices

From the results above, the F value (19.530) is greater than the F critical (3.96) which indicates that the model explains a significant portion of the variance in the dependent variable. The p value (0.000) is also less than 0.05 therefore this confirms that there is a strong statistical significance. Therefore, from the findings, procurement audit practices are a significant predictor of the performance of state corporations in Kenya. Proper procurement audit of state corporations can have a substantial impact on their performance, as indicated by the statistical significance of the model.

Regression Coefficient Analysis

Table 4.23 Regression Coefficient Analysis for Procurement Audit Practices

Coefficientsᵃ

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.279	.320		3.995	.000
	Procurement Audit Practices	.572	.129	.443	4.419	.000

a. Dependent Variable: Performance of State Corporations

The study assessed the beta coefficient of procurement audit practices in relation to the Performance of State Corporations. The beta coefficient was found to be 0.572, with a p-value of 0.000, which is below 0.05 significance level. Therefore, there is a positive and significant relationship between procurement audit practices and Performance of State Corporations ($\beta=0.572$, $p<0.000$). The regression model is as follows:

$Y=1.279 + 0.572X_3$

Whereby,

Y - Performance of State Corporations

X_3 - Procurement Audit Practices

The coefficients table indicates that procurement audit practices have a significant and positive impact on the Performance of State Corporations. The relationship is both statistically significant and practically meaningful, as evidenced by the significant p-values and the magnitude of the coefficients. This is in line with the research findings by Marnada et al. (2021), who states that only uncontrolled Procurement Audit Practices are the ones that are likely to cause creep in procurement management practices hence affecting performance of state corporations due to budget overruns.

4.6.3 The Multivariate Regression Analysis

The multivariate regression analysis was done between the independent variables with the dependent variable to determine how the independent variables jointly influenced the dependent variable. The results for the regression are represented in tables 4.24, 4.25 and 4.26 respectively.

Table 4.24: Model Summary Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.963ª	.927	.924	.1436

a. Predictors: (Constant), Procurement Planning, Contract Management Practices and Procurement Audit Practices

The results on the 4.23 indicate that the model summary has multiple coefficients of determination, R squared = .963a. R squared measures the goodness of fit of the fitted sample regression line. It also gives the proportion of the total variation in the dependent variable, explained by joint independent variables. From the results, R squared of 0.927means that the independent variables; Procurement Planning, Contract Management Practices and Procurement Audit Practices, jointly explain 92.7% of the total variance in performance of service state corporations in Kenya while 7.3% can be explained by other variables not included in this study. The ANOVA results for the relationship are presented in table 4.25 below.

Table 4.25 Multiple ANOVA Results

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	30.135	4	7.534	337.730	.000ᵇ
	Residual	2.365	106	.022		
	Total	32.500	110			

a. Dependent Variable: Performance of service state corporations in Kenya

b. Predictors: (Constant), Procurement Planning, Contract Management Practices, Budget Allocation and Procurement Audit Practices

The regression ANOVA results in table 4.25 show that the independent variables jointly had a significant influence on the dependent variable, with F= 337.730. The computed F value is far high than the critical value or greater than 1 meaning that the total variance in the dependent variable explained by the independent variables is large than the variance not explained since the p-value for the F-value is 0.000, which is equivalent to zero. The multiple coefficients results are presented in the following table 4.26.

Table 4.26: Multiple Coefficients Results

	Unstandardized Coefficients		Standardized Coefficients		
Model	B	Std. Error	Beta	t	Sig.
(Constant)	-2.340	.289		-8.090	.000

Procurement Planning	.121	.128	.063	.946	.346
Contract Management Practices	.516	.104	.381	4.983	.000
Procurement Audit Practices	1.147	.095	.702	12.135	.000
Budget Allocation	-.325	.105	-.181	-3.088	.003

a. Dependent Variable: Performance of service state corporations in Kenya

The multiple regression analysis reveals significant insights into the unique contributions of each procurement variable to organizational performance, as detailed by the model:

Y = -2.340 + 0.121(PP) + 0.516(CMP) + 1.147(PAP) - 0.325(BA).

Procurement Audit Practices (PAP) emerges as the most influential predictor with a highly significant coefficient (B = 1.147, p < 0.001), indicating that a one-unit improvement in audit practices yields a 1.147-unit increase in performance, holding other factors constant. This finding aligns with contemporary research by Aboud & Diab (2022), which emphasizes that robust audit mechanisms are crucial for enhancing accountability and operational efficiency in public sector entities. Similarly, Contract Management Practices (CMP) demonstrates a substantial positive effect (B = 0.516, p < 0.001), supporting recent evidence from Rogers et al. (2024) on the critical role of post-award contract management in driving project success. Conversely, Procurement Planning (PP) shows a non-significant relationship (B = 0.121, p = 0.346), suggesting its influence may be mediated through other variables in the model.

The significant negative coefficient for Budget Allocation (B = -0.325, p = 0.003) warrants careful interpretation within its role as a moderating variable. Rather than indicating that reduced funding improves performance, this finding reflects the complex interplay between resource allocation and procurement implementation effectiveness. As a moderating variable, BA's influence is not merely additive but interacts with the relationship between other procurement practices and performance outcomes. This pattern corroborates recent findings by Nguyen et al. (2024), who observed that budget allocation without corresponding governance mechanisms can lead to inefficiencies in public sector organizations. The negative coefficient suggests that once the quality of procurement practices is accounted for, the marginal effect of additional budget allocation may become negative, particularly when implementation frameworks are weak a phenomenon consistent with resource management theories emphasizing that effective deployment matters more than mere resource availability (Kinyua, 2024).

The overall model configuration highlights the critical importance of understanding BA's moderating role in procurement-performance relationships. The constant term (B = -2.340, p < 0.001) indicates a significant baseline performance deficit when all predictors are absent, reinforcing the essential nature of these procurement functions. The dominance of PAP (β = 0.702) and CMP (β = 0.381) as significant predictors, coupled with BA's significant moderating effect, underscores that successful organizational performance depends more critically on implementation quality and oversight mechanisms than on planning adequacy or budgetary magnitude alone. These results align with contemporary public management research by World Bank (2023), emphasizing that financial resources must be supported by strong procurement governance systems to achieve optimal performance outcomes. The model thus provides valuable insights for policymakers, suggesting that investments should prioritize strengthening audit systems and contract management capabilities rather than simply increasing budgetary allocations

4.6.4. Moderating Variable Regression Analysis

In statistical terms, moderation is where a relationship between an independent variable and a dependent variable changes according to the value of a moderator variable (Dawson, 2014). Additionally, moderating variables are essential to assess whether two variables have the same relation across groups. The model summary in table 4.27 demonstrates the coefficient of determination as indicated by R Square to be 0.691 implying that the interaction effect of budget allocation and each of the independent variables explain 69.1% of the performance of state corporations. This indicates that the interaction effect of budget allocation with the three predictors (procurement planning, contract management practices and procurement audit practices) together explains 69.6% performance of state corporations. Other predictors not

involved in this study could explain the remaining 20.9% of the variation in performance of state corporations. This is in tandem with Obi *et al.* (2020), who observed that adequate budget allocation can lead to enhanced procurement management practices in performance of state corporations.

Table 4.27: Model Summary with Moderating Variable

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.963a	0.927	0.924	0.14936

    a.   Predictors: (Constant), procurement planning, contract management practices and procurement audit practices
    b.   Dependable Variable: Performance of State Corporations
    c.   Moderator: Budget Allocation

ANOVA with Moderating Variable

In table 4.28 the ANOVA was used to show the overall model significance. Since the p-value is less than 0.05, this means that the whole model is significant. (F = 168.161 and p-value <0.05). This result is in tandem with Farhad (2021), who concluded that procurement management practices enhance the performance of firms in China when implemented with the good structures and plan. This is also in agreement with Kingoo and Chirchir (2023), who established that lean procurement management practises improve the organizational performance among state corporations in Kenya.

Table 4.28: ANOVA with Moderating Variable

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	30.135	4	7.534	337.730	.000[b]
	Residual	2.365	106	0.022		
	Total	32.500	**110**			

    a.   Predictors: (Constant), procurement planning, contract management practices and procurement audit practices

    b.   Dependable Variable: Performance of State Corporations

    c.   Moderator: Budget Allocation

V.   SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This chapter presents the summary of the study as guided by the specific objectives, and conclusion reached based on the study findings. Recommendations are provided to enhance circular economy strategies while areas of further research are suggested to fill the gaps which have not been discussed by the study

5.1 Summary

5.1.1 To analyze the influence of Procurement Planning on Performance of State Corporations in Kenya.

The study's primary objective was to analyze the influence of procurement planning on the performance of state corporations in Kenya, with a specific focus on the dimensions of need identification, supplier sourcing, and budgeting. The findings reveal a strongly positive perception among respondents regarding the efficacy of procurement planning within their organizations. A significant consensus was observed that procurement planning accurately reflects actual organizational needs, indicating a robust connection between strategic objectives and operational procurement activities. This alignment is fundamental for ensuring that acquired resources directly contribute to achieving institutional goals. Furthermore, the active involvement of user departments in the planning process was identified as a notable strength, suggesting that mechanisms are in place to incorporate valuable frontline operational knowledge. This involvement is perceived to enhance the relevance and quality of procured items, thereby increasing the overall value derived from expenditures.

Based on the findings, the summary reveals a strong and institutionalized procurement planning framework within the state corporations studied. Descriptive statistics show exceptionally high mean scores (ranging from 4.47 to 4.76 on a 5-point scale) across all planning activities, indicating overwhelming agreement that robust practices are in place. Crucially, the very low standard deviations (all below 0.5) demonstrate a high degree of consensus among respondents, confirming that this positive perception is consistent and shared organization-wide. Specific practices, such as involving user departments (mean=4.76) and maintaining prequalified supplier lists (mean=4.62), are not only prevalent but are also supported by prior research and theoretically aligned with Transaction Cost Economics (TCE). The data suggests these planning protocols are effectively minimizing transaction costs by reducing information search efforts, mitigating opportunism, and preventing costly post-procurement modifications, thereby creating a solid foundation for operational efficiency

5.1.2 To examine the influence of Contract Management Practices on Performance of State Corporations in Kenya.

The study's second objective focused on examining the influence of contract management practices on the performance of state corporations in Kenya, specifically through the lenses of contract compliance, cycle time, and supplier performance. The findings indicate a generally positive perception of these practices among respondents, suggesting that contract management is largely effective in creating structured internal mechanisms for overseeing agreements.

The findings on Contract Management Practices present a dual narrative of institutionalized strength and a critical vulnerability. Descriptively, the state corporations demonstrate exceptionally strong adherence to core contract management functions, as evidenced by near-universal agreement on the close monitoring of the procurement process and the meeting of contract timelines (mean=4.82, SD=0.386). This low standard deviation indicates a powerful consensus that procedural discipline is rigorously maintained, further supported by high agreement that suppliers meet terms and conditions and that procurement is predominantly planned. However, a significant outlier emerges with the statement on

emergency procurements bypassing normal procedures, which also received a high mean score (4.54) but with a much larger standard deviation (0.784). This indicates that while the practice is prevalent, there is considerable disagreement or variability in its perception across the organizations, revealing a potential weak spot in an otherwise robust control system. Theoretically, these practices are effectively interpreted through Principal-Agent Theory, where the strong monitoring and compliance mechanisms serve to align the actions of procurement officers (agents) with the goals of the organization and the public (principal), thereby mitigating opportunism and enhancing accountability.

5.1.3 To analyze the influence of Procurement Audit Practices on Performance of State Corporations in Kenya

The analysis of the third objective, which focused on the influence of procurement audit practices on organizational performance, reveals a strongly positive perception of the audit function's effectiveness. The findings indicate that procurement audits are widely regarded as a consistent and standardized process, delivering uniform evaluations across different departments and over time.

The descriptive statistics for Budget Allocation reveal a state of exceptional discipline and rationality in the financial management of the studied state corporations. The data shows remarkably high mean scores across all budgetary practices, ranging from 4.62 to 4.73, indicating overwhelming agreement that budgets are aligned with procurement plans, based on data-driven forecasts, fully utilized for their intended purpose, and enforced with strict accountability. Crucially, the very low standard deviations (between 0.446 and 0.487) demonstrate a strong consensus among respondents, confirming that these positive practices are consistently experienced and deeply embedded across the organizations. Theoretically, these findings are best explained through Institutional Theory, which suggests that these corporations have adopted these rationalized budgetary protocols not just for internal efficiency but also to gain legitimacy, stability, and resources by conforming to external pressures from government regulations and professional norms. This institutionalization of budgetary discipline creates a system of "ceremonial" conformity that signals good governance.

5.1.4 To examine the influence of Budget Allocation variations as a moderating variable on Performance of State Corporations in Kenya.

The fourth objective of the study was to ascertain the moderating influence of budget allocation on the performance of state corporations in Kenya. The findings present a compelling picture of highly effective budgetary institutions, characterized by strong alignment between planned and actual expenditures, data-driven forecasting methods, high rates of budget utilization, and clear accountability mechanisms. The exceptional alignment between the procurement budget and actual expenditures indicates a significant level of fiscal control, where unexpected deviations are minimal. This precise financial discipline is fundamental to ensuring that procurement plans are executable without the disruptions of cost overruns or funding shortfalls, thereby providing a stable foundation for operational activities.

The descriptive statistics for Budget Allocation reveal a state of exceptionally disciplined and deeply institutionalized financial management within the state corporations, characterized by overwhelmingly high mean scores (ranging from 4.62 to 4.73) and a powerful consensus among respondents, as shown by very low standard deviations (between 0.446 and 0.487). This indicates that practices such as fully utilizing the budget for its intended purpose and holding teams accountable for compliance are not just common but are uniformly perceived as robust across the organizations. Theoretically, this is explained through Institutional Theory, which posits that these corporations have internalized rationalized budgetary protocols as "ceremonies of good governance" to secure legitimacy and conform to external regulatory and normative pressures. The descriptive data strongly implies that this disciplined approach creates a foundation of predictability and accountability, which should logically contribute to enhanced operational performance by preventing resource wastage and ensuring strategic projects are fully funded, a point supported by corroborating empirical research.

5.2 Conclusion

5.2.1 To analyze the influence of Procurement Planning on Performance of State Corporations in Kenya

In conclusion, the study demonstrates that procurement planning is predominantly well-established and effectively practiced within the state corporations examined. The high levels of agreement on indicators related to need identification, user department involvement, supplier management, and timeline establishment paint a picture of organizations that successfully utilize formal internal processes to coordinate procurement activities. This effective planning structure aligns with Ronald Coase's theoretical framework, as it functions as a mechanism to lower the transaction costs that would otherwise be incurred if these activities were conducted in an unstructured manner in the open market. The strategic

alignment of procurement with organizational needs and the proactive management of suppliers are clear manifestations of efficient internal coordination, which is a central tenet of the theory of the firm.

The conclusion drawn from the complete set of findings is that while procurement planning is executed with remarkable proficiency and consensus, it is not a statistically significant direct predictor of the performance of state corporations in this specific model. The regression analysis provides the critical counterpoint to the positive descriptive data, showing a non-significant relationship (p-value = 0.346) between Procurement Planning and Performance. The low standardized coefficient (Beta = 0.063) further indicates that the variable's unique contribution to explaining performance variance is minimal. Therefore, it can be concluded that the presence of excellent procurement planning, though a commendable and foundational strength that likely reduces internal friction and transaction costs, is not sufficient on its own to drive measurable enhancements in overall organizational performance within the context of this study. It appears to be a necessary but not sufficient condition, implying that other unmeasured factors or mediating variables are more directly influential.

5.2.2 To examine the influence of Contract Management Practices on Performance of State Corporations in Kenya.

In conclusion, the examination of contract management practices reveals that state corporations have largely succeeded in establishing frameworks that effectively govern supplier relationships and enforce contractual obligations. The high levels of agreement on supplier compliance, process monitoring, and timeline adherence demonstrate a functional system that minimizes uncertainties and ensures a degree of operational predictability. When viewed through the lens of Ronald Coase's theory of the firm, these effective practices serve as a clear mechanism for reducing transaction costs. By internally managing contracts to ensure terms are met and timelines are adhered to, organizations avoid the significant costs associated with market failures, such as renegotiation, litigation, and project delays, thereby justifying the existence of these internal bureaucratic structures over purely market-based transactions.

The conclusion drawn from the integrated findings is that Contract Management Practices are a statistically significant and substantively powerful direct driver of performance in state corporations, yet their efficacy is compromised by the persistent and poorly controlled use of emergency procurement bypasses. The regression analysis provides definitive evidence of a strong positive relationship, with Contract Management being a significant predictor (p-value = 0.000) and a substantial standardized coefficient (Beta = 0.381), indicating it is a major factor influencing performance outcomes. This confirms that the disciplined monitoring, timeline adherence, and supplier compliance directly contribute to operational success and the efficient use of public funds. However, the descriptive data on emergency procurement acts as a crucial qualifier; the high prevalence of this bypass mechanism, even within a strong system, represents a significant agency risk. It creates a channel through which the very controls that make contract management effective can be subverted, introducing the potential for opportunism, fraud, and a failure to achieve value-for-money, thereby directly threatening the performance gains otherwise secured.

5.2.3 To analyze the influence of Procurement Audit Practices on Performance of State Corporations in Kenya

In conclusion, the procurement audit practices within the state corporations are demonstrated to be a highly effective governance mechanism that significantly contributes to organizational performance. The high levels of agreement on consistency, accuracy, and verifiability indicate that the audit function is successful in establishing a reliable system of oversight. This system provides management and other stakeholders with a clear and trusted window into the procurement activities, ensuring that practices are conducted within the expected boundaries of procedure and law. The audit process effectively serves as a critical control tool that reinforces accountability and standardizes practices across various departments, thereby creating a uniform platform for measuring and enhancing performance. The ability of audits to compel greater staff adherence to rules is a direct indicator of their operational impact in aligning daily actions with organizational objectives.

The conclusion drawn from the integrated findings is that while Budget Allocation is executed with a remarkably high level of discipline and internal consensus, its direct, standalone statistical impact on the performance of state corporations is not established within the provided regression model. The descriptive data paints an unequivocally positive picture of budgetary practices as a cornerstone of good governance, with strong implications for performance by preventing resource wastage and ensuring strategic projects are fully funded. However, the regression table, which isolates the unique contribution of each variable, does not list Budget Allocation as a significant predictor, especially when compared to the dominant influence of Procurement Audit Practices (Beta = 0.702). This indicates that the benefits of excellent budget allocation may be indirect or foundational; it creates a necessary platform of financial predictability and accountability,

but its positive effects on overall performance are likely channeled through or dependent on other, more directly influential factors like the stringent oversight provided by audit functions.

5.2.4 To examine the influence of Budget Allocation variations as a moderating variable on Performance of State Corporations in Kenya.

In conclusion, the findings strongly indicate that budget allocation acts as a significant and positive moderating variable on the performance of state corporations in Kenya. The high levels of budgetary discipline observed across key indicators create a financial environment that is characterized by predictability, control, and accountability. This environment is essential for the effective functioning of other procurement management practices. When budgets are accurately forecasted, closely aligned with expenditures, and fully utilized as intended, they provide the necessary financial stability for procurement activities to proceed as planned. This stability amplifies the benefits of sound procurement planning, contract management, and audit practices by ensuring they are supported by reliable funding. Without this stable financial foundation, even the most sophisticated procurement practices would be undermined by fiscal uncertainty, leading to delays, renegotiations, and ultimately, diminished performance.

The conclusion, critically informed by the regression analysis, is that Budget Allocation acts as a significant but negatively moderating variable on the performance of state corporations. While the descriptive data paints a picture of exemplary budgetary discipline, the regression model reveals a counterintuitive, statistically significant negative relationship (Sig. = 0.003, Beta = -0.181). This means that higher levels of perceived budgetary discipline are associated with lower organizational performance within the context of this model. As a moderating variable, this suggests that the very rigidity and strict conformity inherent in these highly institutionalized budget systems may be stifling performance. The system, while excellent for legitimacy and control, could be creating inefficiencies by limiting operational flexibility, encouraging end-of-year wasteful spending to fully utilize budgets, or preventing the reallocation of funds to more critical, emergent needs, thereby ultimately impairing the corporations' ability to deliver services effectively.

5.3 Recommendation

5.3.1 To analyze the influence of Procurement Planning on Performance of State Corporations in Kenya

To build upon the existing strengths in procurement planning, it is recommended that state corporations enact managerial practices that institutionalize the integration of budgetary and procurement functions. This should involve mandating joint planning committees comprising finance and procurement officers, supported by a unified digital platform that synchronizes the procurement plan with the budget vote book in real-time. Management should enforce a "no-plan, no-budget" principle, where financial allocations are exclusively released against pre-approved and detailed procurement activities, thereby eliminating discretionary spending and mitigating budget variances. To translate this into policy reform, the National Treasury, in conjunction with the Public Procurement Regulatory Authority (PPRA), should amend the Public Procurement and Asset Disposal Act (2015) to explicitly mandate this integrated approach. The regulations should require all state corporations to submit their annual procurement plans as a legally binding annex to their budget estimates, making adherence a direct performance indicator for accounting officers and strengthening fiscal discipline.

Consequently, the strategic focus should shift from refining planning protocols to leveraging them for enhanced execution. As a managerial practice, corporations should develop and implement a "Procurement-to-Performance" dashboard that tracks leading indicators directly influenced by planning quality, such as the percentage reduction in emergency purchases, the frequency and value of contract variations, and time-to-completion metrics. Departmental scorecards must be revised to include these specific indicators, holding managers accountable for converting planning efficiency into tangible outcomes. To institutionalize this, a policy reform is necessary. The PPRA should issue new guidelines that standardize these performance metrics across all state corporations, requiring them in annual performance reports. Furthermore, the government should commission and fund "diagnostic studies" through a central agency to identify and disseminate best practices in supplier relationship management and post-award supervision, ensuring that the theoretical gains from superior planning are systematically captured and reflected in demonstrable service delivery improvements

5.3.2 To examine the influence of Contract Management Practices on Performance of State Corporations in Kenya.

The primary recommendation is for state corporations to immediately fortify their contract management frameworks through a key policy reform: the development and mandatory adoption of a Standardized Emergency Procurement Protocol (SEPP). This policy, to be issued by the PPRA, must provide a stringent, pre-approved definition of a genuine emergency and establish a fast-tracked, yet fully documented and multi-level authorization process that mandates an immediate post-hoc audit review for every instance. This reform would close a critical regulatory loophole that allows

emergency situations to be used as a pretext for bypassing accountability, thereby protecting the integrity of the entire procurement system. As a supporting managerial practice, internal audit functions must be directed and trained to conduct spot-checks and mandatory comprehensive audits on all emergency procurements, with their findings directly reported to the corporation's audit committee to ensure top-level oversight and individual accountability.

To fully secure the performance benefits of robust contract management, complementary managerial practices must be implemented at the organizational level. Management should invest in continuous, role-specific training for all staff involved in the contract lifecycle, using case studies from audit findings to clearly communicate the serious implications of procedural breaches and the correct protocols for legitimate emergency actions. Furthermore, performance contracts for project managers and heads of procurement should include specific key performance indicators (KPIs) related to adherence to the SEPP and a reduction in unjustified emergency procurements. To ensure sustainability and national impact, a further policy reform should require all state corporations to include a dedicated section in their annual reports detailing the volume, value, and justification for all emergency procurements undertaken, thus introducing a layer of public accountability and enabling benchmarking and peer pressure to drive down abuse across the public sector.

5.3.3 To analyze the influence of Procurement Audit Practices on Performance of State Corporations in Kenya

To build upon the existing audit system, a crucial **managerial practice** is for internal audit departments to adopt a transparent "Audit Framework Disclosure" model. This involves formally sharing the annual audit plan, evidence-gathering methodologies, and evaluation criteria with all departments at the start of the fiscal year, thereby demystifying the process and fostering collaborative compliance rather than defensive posturing. Furthermore, management must institutionalize a closed-loop process where every audit finding triggers the creation of a formally tracked "Corrective Action and Improvement Plan" (CAIP), with clear ownership, timelines, and follow-up audits to verify implementation, transforming reports into a dynamic cycle of continuous improvement. To anchor this in policy reform, the Institute of Internal Auditors (Kenya) and the PPRA should collaboratively update the national internal audit standards for the public sector to mandate this level of process transparency and the mandatory use of tracked corrective action plans as a best practice.

The recommendation is to strategically leverage the procurement audit function to reinforce other performance drivers. A key policy reform should be introduced by the National Treasury, requiring that the internal audit function's risk assessment and annual work plan are explicitly informed by budget performance data. This would mandate auditors to prioritize areas with significant budget variances or high volumes of pending bills for scrutiny, creating a powerful, data-driven synergy between fiscal discipline and procurement integrity. As a managerial practice, corporate management should task internal auditors with conducting specific "value-for-money" audits that assess the causal link between budget utilization and project outcomes, moving beyond mere compliance. The credible findings from these audits should then be fed directly into the organization's strategic planning and budget formulation processes, ensuring that the audit cycle directly influences future resource allocation and operational decision-making, thereby cementing its role as a cornerstone of organizational performance

5.3.4 To examine the influence of Budget Allocation variations as a moderating variable on Performance of State Corporations in Kenya.

To strengthen the moderating role of budget allocation, a fundamental policy reform is required: the National Treasury should pilot and then roll out a "Performance-Based Flexible Budgeting" framework for state corporations. This reform would maintain core accountability but replace rigid, line-item annual budgets with a system that incorporates contingency funds at the departmental level, allows for virement between budget lines based on performance evidence, and adopts rolling quarterly forecasts. This would transform the budget from a static control mechanism into a dynamic management tool that empowers managers to respond to operational realities without sacrificing fiscal responsibility. Supporting this, a critical managerial practice for corporations is to invest in advanced data analytics capabilities, developing models that integrate real-time market data, supplier performance, and risk metrics into the budgeting software, thereby enhancing forecast accuracy and making the budget a more responsive and stabilizing force.

The recommendation is to fundamentally re-engineer the culture around budgeting. As a managerial practice, corporate leadership must shift performance metrics for departmental heads from purely measuring budget utilization (i.e., spending the full allocation) to evaluating budget efficiency (i.e., achieving the best outcomes with the funds). This involves creating a "Budget Efficiency Index" that links financial inputs to project outputs and service delivery outcomes, which would then form a significant part of managerial appraisals. To institutionalize this cultural shift, a corresponding policy reform is needed. The Salaries and Remuneration Commission (SRC), in collaboration with the State

Corporations Advisory Committee, should issue guidelines that formally link a portion of executive and managerial performance bonuses to these efficiency and outcome-based metrics, rather than solely on adherence to the traditional, input-based budget. This ensures that the robust budgetary system actively enables high performance by rewarding managers for achieving more with the resources allocated, thereby fully leveraging its potential as a moderating variable for organizational success.

5.4   Areas for Further Research

The study outcome has revealed that further research should be carried out to determine the role of digital procurement technologies, such as e-procurement systems, e-auctions, and data analytics platforms, and their specific impact on operational efficiency, cost savings, and transparency within the unique regulatory environment of state-owned entities. Furthermore, studies could examine the moderating effect of leadership and organizational culture on the implementation success of procurement policies, analyzing how factors like ethical tone, resistance to change, and top management support either enable or hinder the translation of formal practices into tangible performance outcomes. Another significant gap involves conducting comparative longitudinal studies across different sectors such as infrastructure, energy, and healthcare to assess how the performance impact of procurement practices varies over time and is influenced by sector-specific challenges and dynamics. Additionally, research could delve into the implications of sustainable and green public procurement practices, evaluating their effect not only on financial performance but also on broader societal goals like environmental sustainability and social equity, which are increasingly important for state corporations. Exploring the impact of external environmental factors, including political interference, regulatory fluctuations, and market volatility, on the efficacy of procurement systems would also provide a more nuanced understanding of the contextual constraints and enablers of performance. Finally, applying alternative theoretical lenses beyond the commonly used ones, such as Resource-Based View or Dynamic Capabilities theory, could offer fresh perspectives on how procurement functions as a strategic capability that generates competitive advantage for state corporations.

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