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DISPOSAL MANAGEMENT AND PERFORMANCE OF STATE AGENCIES UNDER THE MINISTRY OF AGRICULTURE AND LIVESTOCK DEVELOPMENT, KENYA

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ABSTRACT

The general objective of the study is to assess the relationship between disposal management and performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya. The study further sought to examine the moderating role of internal integration on the relationship between disposal management and performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya. The study was anchored on Economic Depreciation Theory and Supply Chain Network Theory. The study adopted explanatory research design. Positivist research philosophy was adopted. The target population was therefore 192 procurement assistants, senior procurement assistants, procurement officers, senior procurement officers, deputy directors of supply chain management and directors of supply chain management in 32 state agencies under the Ministry of Agriculture and Livestock Development. The study adopted a census approach and hence the whole population was included in the study. The study used primary as well as secondary data. The questionnaires generated qualitative and quantitative data. Descriptive and inferential statistics were used in analyzing quantitative data with the assistance of statistical software known as Statistical Package for Social Sciences (SPSS) version 25 statistical software. Descriptive statistics comprised of frequency distribution, percentages, standard deviation and mean. Inferential data analysis was carried out using Pearson correlation coefficient, multivariate linear regression, and step-wise regression analysis. The study found that disposal management is positive and statistically significant in explaining performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya. The study concludes that internal integration has significant moderating effect on the relationship between disposal management and performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya. From the findings, the study recommends that the management of state agencies under the Ministry of Agriculture and Livestock Development, Kenya should develop and enforce clear disposal policies and procedures wto ensure that all disposal activities are conducted in a systematic and environmentally responsible manner.

Key Words: Disposal Management, Internal Integration, State Agencies Under The Ministry Of Agriculture And Livestock Development

Background of the Study

Agriculture plays a crucial role in enhancing several Sustainable Development Goals (SDGs) as outlined by the United Nations. The first three goals in the SDGs are directly linked to the agricultural sector. These goals include eradication of poverty, zero hunger, good health and well-being. Agriculture is a primary source of livelihood for a large percentage of the global population, especially in developing countries. It is also at the heart of food production ensuring zero hunger (Eldin, Ragab & El Mokadem, 2019). Further, agriculture influences public health through the food it produces. Promoting sustainable agricultural practices reduces the use of harmful chemicals, enhances food safety, and contributes to a more nutritious and diverse diet, thereby improving the health and well-being of communities (Ali, Saad & Zeb, 2020). State agencies play a crucial role in the agricultural sector by serving as key institutions responsible for planning, regulating, implementing, and supporting various aspects of agricultural development. Their importance stems from their ability to contribute to the overall growth, sustainability, and resilience of the agricultural sector.

Globally, the public sector is currently under pressure from both internal and external sources to demonstrate improvements in their performance through efficient service delivery. Public sector service delivery involves the provision of services by a government to people living within its jurisdiction and making sure they reach those people and places they are intended to (Eldin, Ragab & El Mokadem, 2019). The dimensions of public service performance include quality improvement, cost reduction and efficiency in service delivery, accessibility and equity. Across the world, the public sector records poor performance as compared to private organizations. The public sector, all over the world is less efficient and less effective compared to private sector. According to Akubuko (2019), procurement is one of the main factors affecting performance of public institutions.

Procurement practices encompass methods, processes, and strategies employed by organizations to acquire goods, services, or works from external suppliers or vendors (Al-Shboul, Barber & Garza-Reyes, 2017). These practices are designed to ensure efficient, cost-effective, and high-quality procurement processes. Effective procurement practices help organizations achieve cost savings through strategic sourcing, negotiation with suppliers, and optimizing purchasing decisions. By identifying the best suppliers, negotiating favorable terms, and streamlining procurement processes, organizations can reduce costs, minimize waste, and improve operational efficiency (Chileshe & Phiri, 2022). Procurement practices ensure alignment with organizational goals and strategies. By integrating procurement processes with overall business strategies, organizations can focus on sourcing the right materials, services, and suppliers that support their strategic objectives.

The performance of state agencies under the Ministry of Agriculture and Livestock Development is of paramount importance to the national economy. The performance of these state agencies directly impacts agricultural productivity, which in turn affects food availability, accessibility, and affordability for the population. Efficient and effective state agencies can provide necessary support, resources, and expertise to farmers, leading to increased agricultural production and improved food security. In addition, well-performing state agencies can contribute to the growth and development of the agricultural sector, leading to increased income generation, employment opportunities, and poverty reduction. They play a crucial role in facilitating access to markets,

providing market information, and supporting value addition activities, thereby enhancing the economic well-being of farmers and agribusinesses (Ministry of Agriculture and Livestock Development, 2022). However, the performance of these state agencies has been declining other the years contributing to food insecurity in the country.

Statement of the Problem

Procurement management practices play a crucial role in shaping the performance of public institutions. For instance, effective procurement management practices can lead to cost savings through strategic sourcing, negotiation with suppliers, and bulk purchasing (Nyabuti & Miroga, 2021). By obtaining goods and services at competitive prices, public institutions can optimize their budgets and allocate resources more efficiently, ultimately improving their financial performance (Amenya, Ngacho & Nyaboga, 2022). Procurement practices directly impact the quality of goods and services acquired by public institutions. Through rigorous vendor selection processes, quality assurance measures, and performance evaluations, institutions can ensure that they obtain high-quality products and services that meet their needs and standards (Chileshe & Phiri, 2022). Procurement practices also facilitate collaboration and communication among these stakeholders to ensure efficient and effective operations (Chileshe & Phiri, 2022). In state agencies under the Ministry of Agriculture and Livestock Development, Procurement practices play a key role in the utilization of resources as well as ensuring efficiency in service delivery and customer satisfaction (Public Service Commission, 2020).

State agencies under the Ministry of Agriculture and Livestock Development in Kenya have been experiencing problems in their procurement, which include overstocking, stock-outs, and inefficiencies (Magembe & Mutunga, 2019). State agencies experience challenges in their inventory management, which leads to inefficiencies, delays, and increased costs. Lack of proper inventory management makes it difficult to track inventory levels, monitor supplier performance, and respond to disruptions in a timely manner (Kaaria, Mburugu & Kirima, 2020). In addition, state agencies under the Ministry of Agriculture and Livestock Development have been performing poorly. According to the Public Service Commission (2020), efficiency in service delivery and economic use of resources among state agencies under the Ministry of Agriculture and Livestock Development reduced from 62% in 2018 to 46% in 2019 and 44.6% in 2020. In addition, the quality of services reduced by 23% between the year 2018 and the year 2019 (Public Service Commission, 2019; Public Service Commission, 2020).

To improve performance, public institutions in Kenya have adopted procurement practices such as material acquisition practice, inventory management practice, disposal management practice and procurement records management practice (Linda Ntinyari & Kirima, 2020). Regardless of the implementation of the procurement practices as guided by Public Procurement and Asset Disposal Act, 2015, the performance of state agencies under the Ministry of Agriculture and Livestock Development is still poor as a characterized by inefficient service delivery. Procurement problems such as overstocking, stock-outs, and inefficiencies, lead to reduced budgets, delayed services, increased costs, and decreased quality of service, which can have a negative impact on the public's perception of the institution and its ability to fulfill its mission effectively (Magembe & Mutunga, 2019). Organizational culture plays a key role in the procurement. An organizational culture that values collaboration and teamwork can foster strong relationships between procurement partners (Nakola, 2015).

Various studies have been conducted on procurement practices and organizational performance. For instance, Amenya, Ngacho and Nyaboga (2022) examined the effect of procurement practices and government policies on performance of the infrastructural project in Rongo University; Okok and Mboya (2021) studied the influence of procurement management on procurement performance in Kenya Urban Roads Authority in Kenya; and Nakola (2015) studied the effect of procurement practices on performance of Haco industries limited. However, Amenya, Ngacho and Nyaboga (2022) conceptualized procurement practices in terms of suppler selection and tender evaluation; Okok and Mboya (2021) conceptualized procurement practices in terms of supplier development, supplier evaluation and supplier collaboration; and Nakola (2015) conceptualized procurement practices in terms of supplier relationship management and supplier development. Therefore, this study sought to answer the research question: What is the relationship between procurement management practices and performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya?

Specific Objectives

The specific objectives of the study were;

i. To determine the relationship between disposal management and performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya
ii. To examine the moderating role of internal integration on the relationship between disposal management and performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya

Theoretical Review

Economic Depreciation Theory

Economic depreciation theory was founded by of Hotelling (1925). According to the developer, depreciation is measured in terms of decline in values of fixed assets that are used in production. Value of asset as used in production is determined by the values of services that it contributes towards production throughout its entire service lifecycle. In case the current market prices of fixed assets are equal to the current value of remaining services, then it depicts availability of fixed assets' market (Obicci & Nagitta, 2021).

With respect to perfect forecasting, asset's value is determined by the present value of renting or user's cost (Akparhuere, Anastesia & Ogbu, 2019). Assets may not or may not be sold when they are stored in a particular place and in any case they are sold, then their remaining present values reflect their transaction prices. Besides that, assets that are already used and are not marketable tend have their present values (Tarekegn, 2020). The depreciation theory focuses on how market prices of identical assets tend to vary with time or depends on the item's age. Older assets are considered as less valuable compared to the new once due to two main reasons: the duration for optimal retirement of delivery service by old asset has winded up and the assets may not be cost effective since owners may incur high production cost through maintenance and production of minimal outputs.

Economic depreciation theory, when applied to the relationship between disposal management and the performance of state agencies under the Ministry of Agriculture and Livestock Development

in Kenya, offers insights into optimizing the management of assets at the end of their useful life (Tarekegn, 2020). This theory focuses on the gradual reduction in the economic value of assets over time, reflecting the wear and tear, technological obsolescence, and other factors that diminish their utility. In the context of state agencies managing agricultural assets, disposal management becomes a critical facet of overall performance. Economic depreciation theory suggests that as assets age, their maintenance costs tend to rise, and their operational efficiency may decline (Obicci & Nagitta, 2021). Consequently, effective disposal management becomes essential for mitigating these challenges and ensuring that the state agencies can maintain a fleet of productive and cost-effective assets.

Supply Chain Network Theory

The network theory is one of the grand theories for purchasing and supply management which have been introduced during the 1990s (Harland, 1996). Mainly the network theory is considered to describe the relationships in which companies, suppliers, customers or buyer are engaged. The focus of the theory is on relationships between just two entities (buyers and suppliers) geared towards an approach which entails multiple relationships between different counterparts throughout the supply chain (Hearnshaw & Wilson, 2018).

Supply Chain Network Theory assumes that the network theory is that companies embedded within a network cannot freely decide how to act towards their own aims, nor can they operate in isolation from each other. However, the organizations' actions and operations with other firms in a network are assumed to be fully understood as a fragment of significant counterparts as well as strategic relationships. According to Harland (1996), there are different factors which can be identified as being important while formatting a network, namely the selection of collaborative partners, the establishment of a competitive position, the monitoring of competitors, and the correct management of relationships. Further, Hearnshaw and Wilson (2018) claim that if a organization was able to attract other firms to do business with, and they share a common interest and a certain business environment with each other, the organization is embedded in relationships with other organisations, and thus be part of a network.

Supply Chain Network Theory will be used to explain the moderating role of internal integration on the relationship between procurement practices and the performance of state agencies under the Ministry of Agriculture and Livestock Development in Kenya. This theory posits that effective collaboration and coordination within an organization's internal network can significantly impact the efficiency and effectiveness of its procurement practices, subsequently influencing overall performance (Hearnshaw & Wilson, 2018). In the context of state agencies involved in agriculture and livestock development, Supply Chain Network Theory underscores the interconnectedness of various internal functions, including procurement, inventory management, and logistics. Internal integration becomes a crucial moderating factor that influences how procurement practices translate into performance outcomes (Kumar & Chibuzo, 2019). Supply Chain Network Theory emphasizes that different functions within an organization are interrelated and should be viewed as components of a larger network. In the context of state agencies, internal functions such as procurement, inventory management, and logistics are interconnected. Internal integration ensures that these functions work collaboratively to achieve common goals, optimizing the overall supply chain (Shukor, Newaz & Rahman, 2021).

Conceptual Framework

Conceptual framework is defined as a diagrammatical representation that portrays association between dependent as well as independent study variables (Devi, 2019). The conceptual framework which is shown in Figure 2.1 indicates the relationship between dependent and independent study variables, with independent variable comprising of disposal management. The moderating variable was internal integration. The dependent variable was performance of state agencies under the Ministry of Agriculture and Livestock Development.

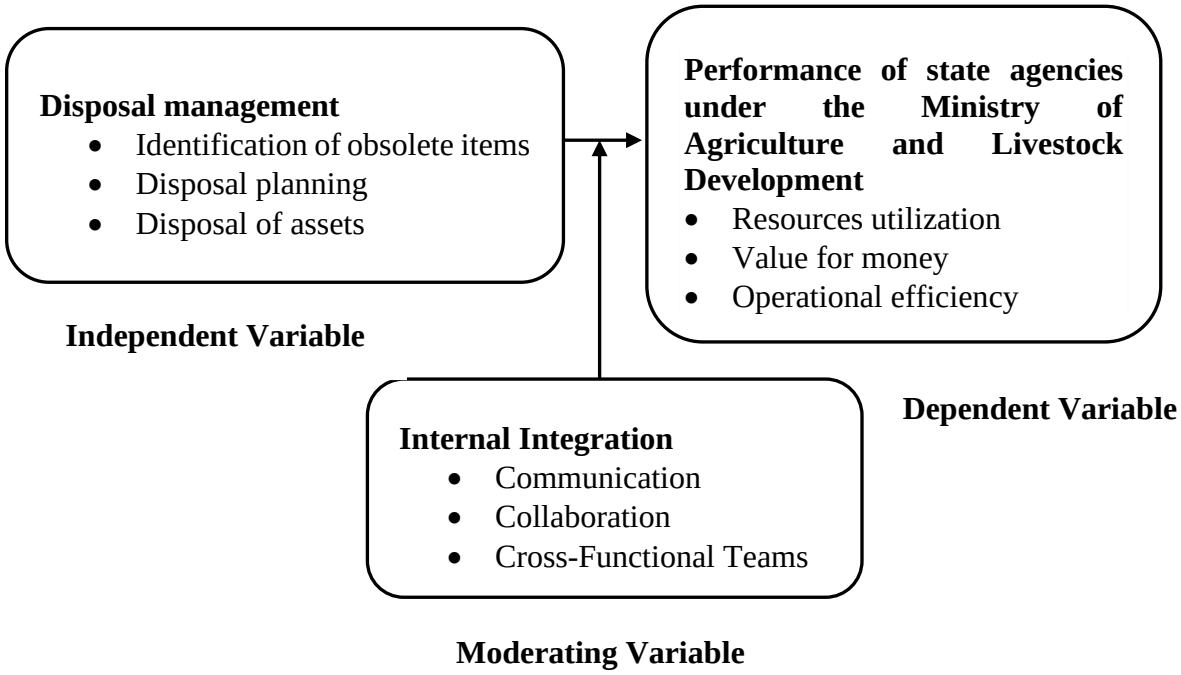

Figure 2. 1: Conceptual Framework

Disposal management

Disposal management in public procurement is a systematic approach adopted by public organizations to handle the disposal of surplus assets, obsolete equipment, or goods that are no longer needed (Obicci & Nagitta, 2021). This process involves a set of procedures and guidelines designed to ensure transparency, accountability, and efficiency in the disposition of assets that have reached the end of their useful life. The primary objective of disposal management is to maximize the value derived from surplus assets, minimize waste, and ensure a responsible and ethical approach to disposal. By implementing these practices, public organizations contribute to efficient resource management, uphold financial accountability, and foster environmental sustainability in the public sector (Akparhuere, Anastesia & Ogbu, 2019). In the realm of public procurement, the identification of obsolete items is a crucial initial step in the disposal management process. Public organizations routinely assess their assets to pinpoint items that are no longer needed or have become surplus. This spans a spectrum of assets, including equipment, vehicles, furniture, electronic devices, or any other items that are no longer in use or have reached the end of their lifecycle (Tarekegn, 2020).

Disposal planning within the realm of public procurement is a strategic and systematic approach to handling the removal of assets, equipment, or goods that are no longer necessary or have become obsolete. This process is critical for public organizations seeking to manage their resources responsibly and efficiently (Tarekegn, 2020). Disposal planning goes beyond the simple act of removal; it involves the development of a comprehensive strategy that ensures efficiency, compliance with regulations, and the minimization of negative impacts associated with disposal. One of the primary objectives of disposal planning is to guarantee that the process is not only efficient but also aligns with legal and regulatory frameworks. Public organizations must navigate the complexities of waste reduction, environmental sustainability, and financial optimization during the disposal process. of managing the removal of assets, equipment, or goods that are deemed obsolete or no longer needed within public organizations (Akparhuere, Anastesia & Ogbu, 2019). This crucial step involves obtaining the necessary authorization or approval from relevant authorities or decision-making bodies before proceeding with the disposal activities. The significance of the approval of disposal lies in its role as a safeguard to ensure that the disposal aligns with established organizational policies, legal requirements, and ethical considerations. It serves as a control mechanism, preventing unauthorized or inappropriate disposal actions that could lead to legal repercussions or ethical concerns (Obicci & Nagitta, 2021).

Internal Integration

Internal integration in organizational management typically refers to the deliberate process of aligning and coordinating different departments, teams, or functions within an organization to enhance overall effectiveness and efficiency (Rafiee, 2022). This alignment is designed to break down silos, reduce duplication of efforts, and improve communication, fostering a cohesive environment that ultimately enhances organizational performance. One of the primary goals of internal integration is to eliminate barriers between various departments, ensuring that functions such as production, procurement, sales, and logistics operate in harmony towards common objectives (Mutwiri, 2019). Communication serves as a linchpin in the fabric of internal integration within an organization, playing a pivotal role in ensuring that information flows seamlessly between different departments, teams, and individuals (Eldin, Ragab & El Mokadem, 2019). The effectiveness of communication is fundamental to achieving alignment and fostering a shared understanding of organizational goals and objectives. Regular and transparent communication is essential for coordinating activities among various teams. It enables teams to share progress updates, exchange insights, and synchronize their efforts towards common goals. This coordination is particularly crucial in complex organizational structures where different units must work collaboratively to achieve overarching objectives (Mutwiri, 2019).

Collaboration stands as a cornerstone of internal integration within an organization, representing the concerted effort of individuals, teams, and departments working together to achieve shared goals and objectives. In a collaborative environment, the synergy created by collective efforts enhances efficiency, creativity, and overall organizational performance (Aljubairi & Mugharbil, 2022). Effective collaboration fosters a sense of unity and shared purpose among employees. This diversity of thought is instrumental in problem-solving, as it encourages innovative approaches and a more comprehensive consideration of challenges. Furthermore, collaboration is a catalyst for organizational success. Cross-functional teams represent a vital and dynamic component of internal integration within an organization. Comprising individuals from diverse departments, functions, or disciplines, these teams are brought together to collaboratively work on specific

projects or initiatives (Molinaro, 2022). The overarching aim of cross-functional teams is to harness the varied expertise and perspectives of team members to achieve common objectives, ultimately contributing to the organization's success. The formation of cross-functional teams is instrumental in breaking down organizational silos and fostering a culture of collaboration. By bringing together individuals with different skill sets and backgrounds, these teams create a synergy that goes beyond the confines of individual departments (Aljubairi & Mugharbil, 2022).

Empirical Review

Disposal Management and Organization Performance

In Norway, Obicci and Nagitta (2021) conducted a study in the relationship between successful disposal of public assets and sustainable public procurement practice. Using a cross-sectional survey among key actors in the public procurement process, three key success factors, namely strategic assets management, strategic planning for assets disposal, and assets disposal mechanisms are identified; their effect on successful asset disposal is examined. The results of this study demonstrate the importance of strategic asset management, strategic asset disposal planning, and the selection of asset disposal mechanisms as key facilitators for the efficient disposal of public assets in public organizations and a prelude to sustainable procurement practices. Disposal planning, however, is by far the most important enabler for successful asset disposal at the micro-level, and as a result, it directly influences sustainable procurement practices.

Akparhuere, Anastesia and Ogbu (2019) examined the relationship between asset management efficiency and the performance of building and construction companies in Nigeria. The study utilized an ex-post facto research design and data was collected using a data collection checklist. The findings of the study indicated that asset management efficiency has a significant effect on performance of building and construction companies. Effective asset management helps building and construction companies in Nigeria controls costs and optimizes resource allocation. Asset management practices that focus on maintenance and upkeep of construction equipment and machinery contribute to their reliability and productivity. Optimal allocation of resources ensures that the right assets are available at the right time, reducing idle time and improving operational efficiency.

Tarekegn (2020) examined the factors affecting disposal practices of common good items in selected Ethiopian public universities. The PPPDSA disposal team leaders at the federal level were interviewed after questionnaires were given to all accountable bodies in the property administration team, purchasing departments, and disposal teams of four sampling universities. The regression results showed that staff competence and the effectiveness of procurement planning have a positive and significant impact on the disposal practices of the sampled universities. The disposal practices of the sampled Ethiopian Public Universities were similarly impacted by the yearly disposal plan and the implementation performance.

Internal Integration and Organization Performance

In the United Kingdom food sector, Kumar and Chibuzo (2019) studied the relationship between internal integration and performance. The study adopted a cross-sectional research design and the results indicated that internal integration has a significant effect supply chain performance (such as production flexibility, inventory turns, order fulfillment rate, total logistics costs, and operational performance). Internal integration involves the coordination, collaboration, and alignment of various departments, processes, and activities within a company.

Masa'deh, Muheisen and Obeidat (2022) examined the relationship between internal integration and operational performance among firms in Jordan. The study used a descriptive research design and data was collected by use of Jordanian food and beverage industry, which were subjected to quantitative research design and regression analysis. Results showed that supply internal integration had a direct significant impact on operational performance in terms of flexibility, delivery, quality and cost. Shukor, Newaz and Rahman (2021) examined the effect of internal integration on supply chain agility and organizational flexibility in manufacturing firms in Malaysia. The data were collected from 526 managers in services and manufacturing industry in Kuala Lumpur. The findings showed that environmental uncertainty and internal integration, are strongly correlated. Integration of the supply chain and organizational ambidexterity are closely related. Internal integrations were shown to improve the company's organizational flexibility and supply chain agility.

Mutwiri (2019) examined the relationship between internal integration and performance of public health supply chains in Kenya. Stratified random sampling technique was used to obtain the sample size of ninety three (93) respondents from various departments of the organization. Primary data was collected through research questionnaire whereas secondary data was obtained from the organization's website and from the ministry of public health. Findings from the research revealed that internal integration have a positive and statistically significant effect on organizational performance. Internal integration involves the coordination and collaboration among various entities and functions involved in the supply chain, including government agencies, healthcare facilities, logistics providers, and suppliers.

RESEARCH METHODOLOGY

Research Design

The study adopted an explanatory research design. Explanatory research design is a type of research methodology that aims to identify and explain causal relationships between variables (Creswell & Creswell, 2022). The study adopted a positivist research philosophy. Positivism research philosophy can be used to explain the existing relationship or realities between elements under investigation, and thus can be used to make predictions (Bhattacherjee, 2018).

Target Population

The target population therefore 192 procurement assistants, senior procurement assistants, procurement officers, senior procurement officers, deputy directors of supply chain management and directors of supply chain management in 32 state agencies under the Ministry of Agriculture and Livestock Development.

Table 3. 1: Target Population

Category	Target Population
Procurement Assistants	32
Senior Procurement Assistants	32
Procurement Officers	32
Senior Procurement Officers	32
Deputy Directors of Supply Chain Management	32
Directors of Supply chain Management	32
Total	**192**

Source: Ministry of Agriculture and Livestock Development (2022)

The sampling frame of this study was 192 respondents comprising of procurement assistants, senior procurement assistants, procurement officers, senior procurement officers, deputy directors of supply chain management and directors of supply chain management.

The study used census approach and hence included all the 192 respondents comprising of procurement assistants, senior procurement assistants, procurement officers, senior procurement officers, deputy directors of supply chain management and directors of supply chain management.

Data Collection Instruments

The study used primary as well as secondary data. Secondary data refers to data that has been previously collected by someone else or for a different purpose than the current research study. It is data that already exists and is available for analysis and interpretation. This data is collected through sources such as research studies, government reports, industry publications, surveys, databases, and other publicly available sources (Mukherjee, 2020). Secondary data was derived from yearly reports of different state agencies under the Ministry of Agriculture and Livestock Development.

Primary data was obtained using semi-structured questionnaires. Structured questions were in the form of a Likert scale as well as nominal scale while unstructured questions were in form of open ended questions. Structured questions were employed in effort to conserve money and time, and also encourage easier analysis since they are in immediate usable form.

The questionnaire contains six sections. The first section contains the respondents' background information. The second to fifth sections include questions on the study's predictor variables, the sixth section covers questions on the moderating variable and seventh section addressed questions about the dependent variable.

Data Analysis and Presentation

The questionnaires generated qualitative and quantitative data. Thematic analysis was used to analyze qualitative data. Thematic analysis is a qualitative research method used to analyze and interpret textual data. It involves identifying patterns, themes, and meanings within the data to gain a deeper understanding of the research topic or research question. The results were presented in a narrative form.

Descriptive and inferential statistics were used in analyzing quantitative data with the assistance of statistical software known as Statistical Package for Social Sciences (SPSS) version 25 statistical software. Descriptive statistics are numerical measures used to summarize and describe the main features of a dataset. Descriptive statistics comprised of frequency distribution, percentages, standard deviation and mean. Inferential data analysis is a statistical approach used to draw conclusions and make inferences about a population based on a sample of data. In this study, inferential data analysis was carried out using Pearson correlation coefficient, multivariate linear regression, and step-wise regression analysis.

Multivariate regression analysis is a statistical method used to explore the relationship between multiple independent variables (predictors) and a single dependent variable (outcome) (Devi, 2019).

$$Y = \beta_0 + \beta_1 X_1 + \varepsilon$$

Stepwise regression analysis was used in the research to determine how internal integration (z) moderates the relationship between the independent variables and the dependent variable. The stepwise regression model was as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_z X + \beta_{1z} X_1 Z + \varepsilon$$

Where:

Y = Performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya;

B_0 = Constant;

β_1 =Coefficients of determination;

X_1 = Disposal management;

Z = Hypothesized moderator (Internal integration);

β_z = Coefficient of X_i*Z the interaction term between internal integration and the predictor variable for i=1and

ε = Error term

PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

Descriptive Statistics Analysis

This section presents findings on Likert scale questions where respondents were asked to indicate their level of agreement on various statements that relate with the relationship between disposal management and the performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya and the moderating role of internal integration . They used a 5-point Likert scale where 1-strongly disagree, 2-disagree, 3-moderate, 4-agree, 5-strongly agree. The means and standard deviations were used to interpret the findings where a mean value of 1-1.4 was strongly disagree, 1.5-2.4 disagree, 2.5-3.4 neutral, 3.5-4.4 agree and 4.5-5 strongly agree (Broemeling, 2019). Standard deviation greater than 2 was considered large meaning responses were widely spread out and not tightly clustered around the mean. In other words, there was a lot of variability in the responses, which may suggest that participants had different interpretations or perceptions of the questions being asked.

Disposal Management and Organization Performance

The fisrt specific objective of the study was to determine the relationship between disposal management and performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya. The respondents were requested to indicate their level of agreement on various statements relating to disposal management and performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya. The results were as presented in Table 4.1.

From the results, the respondents agreed that in their organization identifying obsolete items for disposal is essential for maintaining a streamlined and clutter-free workspace (M=3.936, SD= 0.708). In addition, the respondents agreed that in their organization identification of obsolete items for disposal helps optimize resource utilization and minimize storage space (M=3.928, SD=0.925). Further, the respondents agreed that in their organization Identification of obsolete

items for disposal is necessary for maintaining an effective and productive workspace (M=3.842, SD=0.821). The respondents also agreed that Asset disposal planning is important for public institutions to ensure responsible and efficient use of public resources (M=3.838, SD= 0.809). According to Bérubé and Lee (2020), ineffective asset management practices can lead to the accumulation of surplus or obsolete assets, resulting in increased maintenance costs and decreased operational efficiency. By implementing proactive disposal strategies, organizations can prevent the accumulation of redundant assets and ensure that resources are allocated effectively to support core business activities. In addition, Research by Rong and Akintoye (2019) highlights the role of asset lifecycle management in optimizing resource utilization and minimizing total cost of ownership. By disposing of underutilized or surplus assets, organizations can reduce storage costs, maintenance expenses, and depreciation losses, ultimately enhancing overall financial performance.

The respondents agreed that their organization has a comprehensive asset disposal planning process in place to maximize the value of assets and minimize potential risks and liabilities (M=3.810, SD= 0.981). In addition, the respondents agreed that Asset disposal planning in their organization is unnecessary and saves resources (M=3.767, SD=0.786). Further, the respondents agreed that the disposal of assets helps prevent the accumulation of out-dated or obsolete equipment in their organization (M=3.751, SD= 0.865). The respondents also agreed that the disposal of assets promotes efficiency and cost-effectiveness in their organisation (M=3.726, SD=0.888). In addition, the respondents agreed that the disposal of assets in their organization ensures that resources are utilized effectively (M=3.698, SD=0.667). According to Tang and Chen (2018), asset rationalization practices, including disposal of obsolete or non-performing assets, are essential for maintaining organizational agility and competitiveness. By reallocating capital and human resources from underperforming assets to strategic initiatives, organizations can enhance operational efficiency and drive sustainable growth.

Table 4. 1: Disposal Management and Organization Performance

	1 %	2 %	3 %	4 %	5 %	Mean	Std. Deviation
Identification of obsolete items							
In our organization identifying obsolete items for disposal is essential for maintaining a streamlined and clutter-free workspace.	3.7	6.2	13	53.7	23.5	3.936	0.708
In our organization identification of obsolete items for disposal helps optimize resource utilization and minimize storage space	2.5	13.2	10.1	50.3	23.9	3.928	0.925
In our organization Identification of obsolete items for disposal is necessary for maintaining an effective and productive workspace	0.6	4.5	22	61	11.9	3.842	0.821
Disposal planning							
Asset disposal planning is important for public institutions to ensure responsible and efficient use of public resources.	2.1	4.2	20	60.5	13.2	3.838	0.809
Our organization has a comprehensive asset disposal planning process in place to maximize the value of assets and minimize potential risks and liabilities.	0.6	12.4	13.5	55.6	18	3.810	0.981
Asset disposal planning in our organization is unnecessary and saves resources.	4.7	8.3	15	51.3	20.7	3.767	0.786
Disposal of assets							
The disposal of assets helps prevent the accumulation of out-dated or obsolete equipment in my organization	1	12.8	13.3	55.9	16.9	3.751	0.865
The disposal of assets promotes efficiency and cost-effectiveness in my organisation	1.9	17.7	13.9	48.1	18.4	3.726	0.888
The disposal of assets in our organization ensures that resources are utilized effectively	5.6	4.5	22	46	21.9	3.698	0.667
Aggregate						**3.811**	**0.828**

Internal Integration and Organization Performance

The second specific objective of the study was to examine the moderating role of internal integration on the relationship between disposal management and performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya. The respondents were requested to indicate their level of agreement on various statements relating to internal integration on the relationship between disposal management and performance of state agencies under the

Ministry of Agriculture and Livestock Development, Kenya. The results were as shown in Table 4.2.

From the results, the respondents agreed communication channels are well-established and accessible across different departments in their organization (M=3.885, SD= 0.887). In addition, the respondents agreed that regular communication occurs between different teams and departments in their organization to share information and updates. (M=3.808, SD= 0.745). The respondents also agreed that communication breakdowns between departments in their organization are promptly addressed and resolved (M=3.787, SD= 0.623). Further, the respondents agreed that collaboration is actively encouraged and valued across different departments within their organization (M=3.720, SD= 0.768). Men (2019) found that well-structured internal communication channels enhance employee trust, reduce uncertainty, and improve overall organizational efficiency. The study emphasizes the role of transformational leadership in establishing effective communication frameworks that foster a positive organizational climate and employee satisfaction. In addition, Mazzei (2019) demonstrated that regular communication between departments ensures better coordination and integration of efforts. This constant flow of information helps align departmental goals with organizational objectives, leading to higher efficiency and productivity.

The respondents agreed that employees from different departments in their organization willingly contribute their skills and knowledge to joint initiatives (M=3.719, SD=0.756). The respondents also agreed that collaboration leads to better solutions by considering multiple perspectives and insights in their organization (M=3.704, SD=0.567). In addition, the respondents agreed that cross-functional teams in their organization are regularly formed to address complex organizational challenges (M=3.687, SD=0.897). Further, the respondents agreed that cross-functional teams in their organisation effectively leverage expertise from various departments (M=3.679, SD=0.664). The respondents agreed that cross-functional teams in their organization contribute to better decision-making by considering multiple viewpoints (M=3.664, SD=0.756). Hinds and Mortensen (2019) showed that timely resolution of communication issues improves team performance and satisfaction. Their research underlines the importance of shared identity and context in mitigating conflicts and facilitating smooth communication in geographically distributed teams. In addition, Dyer and Chu (2019) found that organizations fostering a collaborative culture experience enhanced trust and performance outcomes. Their study indicates that collaboration leads to better resource utilization and innovation, driven by collective effort and mutual support among employees. Crossan and Apaydin (2019) highlighted that employees' willingness to share their skills and knowledge is a key driver of innovation. Their multi-dimensional framework shows how knowledge sharing contributes to continuous learning and the development of innovative solutions within organizations.

Respondents agreed that communication channels are well-established and accessible across different departments, as indicated by a mean score of 3.885. The standard deviation of 0.887 suggests moderate variability, indicating that while most respondents recognize the effectiveness of communication channels, there are some who might have differing views. The agreement on regular communication between teams and departments to share information and updates is reflected in a mean score of 3.808. The standard deviation of 0.745 shows moderate variability, implying that while there is general agreement, the consistency of communication practices might vary across the organization.

Respondents also agreed that communication breakdowns are promptly addressed and resolved, with a mean score of 3.787. The standard deviation of 0.623 is relatively low, indicating a high level of agreement and consistency in recognizing the organization's effectiveness in handling communication issues. The mean score of 3.720 indicates agreement that collaboration is actively encouraged and valued across different departments. The standard deviation of 0.768 suggests moderate variability, meaning that while many respondents agree, there is some diversity in perceptions of the encouragement and value placed on collaboration. Respondents agreed that employees willingly contribute their skills and knowledge to joint initiatives, as reflected by a mean score of 3.719. The standard deviation of 0.756 shows moderate variability, indicating that most respondents see a willingness to contribute, although this perception may not be universally held.

The descriptive data reveals several important aspects of communication and collaboration within the organization. Overall, respondents agree on the effectiveness of communication channels and collaboration practices. However, the standard deviations indicate varying levels of agreement, with some aspects showing more consistent responses, such as the resolution of communication breakdowns, and others showing more diversity in opinion, such as the formation of cross-functional teams. The organization appears to be strong in maintaining well-established and accessible communication channels, promptly addressing communication breakdowns, and leveraging collaborative efforts to achieve better solutions and decision-making. These strengths are supported by relatively high mean scores and lower standard deviations in these areas. However, the higher variability in responses regarding the regular formation and perceived effectiveness of cross-functional teams suggests areas where the organization might focus on improving consistency. Ensuring that these teams are uniformly recognized and valued across the organization could enhance their overall impact.

Table 4. 2: Internal Integration and Organization Performance

	1 %	2 %	3 %	4 %	5 %	Mean	Std. Deviation
Communication							
Communication channels are well-established and accessible across different departments in our organization	1	6.4	18.7	55.7	18.2	3.885	0.887
Regular communication occurs between different teams and departments in our organization to share information and updates.	1.5	9.2	14.4	54.9	20	3.808	0.745
Communication breakdowns between departments in our organization are promptly addressed and resolved.	2.8	9.9	10.6	58.2	18.4	3.787	0.623
Collaboration							
Collaboration is actively encouraged and valued across different departments within our organization.	4.7	6.7	17.3	52.7	18.7	3.720	0.768
Employees from different departments in our organization willingly contribute their skills and knowledge to joint initiatives.	1.5	6	23.9	55.2	13.4	3.719	0.756
Collaboration leads to better solutions by considering multiple perspectives and insights in our organization	1.8	9.4	12.4	67.6	8.8	3.704	0.567
Cross-functional teams							
Cross-functional teams in our organization are regularly formed to address complex organizational challenges.	0.9	11.2	19.5	54.4	14	3.687	0.897
Cross-functional teams in our organisation effectively leverage expertise from various departments.	0.6	16.8	12.3	54.2	16.2	3.679	0.664
Cross-functional teams in our organization contribute to better decision-making by considering multiple viewpoints.	1.7	8.5	14.9	53.4	21.5	3.664	0.756
Aggregate						**3.739**	**0.740**

Test for Hypothesis One

The first objective of the study was to determine the relationship between disposal management and performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya. The corresponding hypothesis was:

Ho_1 There is no statistically significant relationship between disposal management and performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya

A univariate analysis was therefore conducted to test the null hypothesis. From the model summary findings in Table 4.3, the r-squared for the relationship between disposal management and performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya was 0.215; this is an indication that at 95% confidence interval, 21.5% variation in performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya can be attributed to changes in disposal management. Therefore, disposal management can be used to explain 21.5% change in performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya. However, the remaining 78.5% variation in performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya suggests that there are other factors other than disposal management that explain performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya

Table 4.3: Model Summary for Disposal Management

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.464[a]	.215	.213	.70838

a. Predictors: (Constant), Disposal Management

The analysis of variance was used to determine whether the regression model is a good fit for the data. From the analysis of variance (ANOVA) findings in Table 4.4, the study found out that that Prob>$F_{1,179}$= 0.000 was less than the selected 0.05 level of significance. This suggests that the model as constituted was fit to predict performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya. Further, the F-calculated, from the table (286.245) was greater than the F-critical, from f-distribution tables (3.894) supporting the findings that disposal management can be used to predict to predict performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya.

Table 4.4: ANOVA for Disposal Management

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	40.933	1	40.933	286.245	.000[b]
	Residual	25.602	179	0.143		
	Total	66.535	180			

a. Dependent Variable: Performance of state agencies
b. Predictors: (Constant), Disposal Management

From the results in table 4.5, the following regression model was fitted.

$$Y = 1.808 + 0.469\ X_3$$

(X_1 is Disposal Management)

The coefficient results showed that the constant had a coefficient of 1.808 suggesting that if disposal management was held constant at zero, performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya would be at 1.808 units. In addition, results showed that disposal management coefficient was 0.469 indicating that a unit increase in disposal management would result in a 0.469 unit improvement in performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya. It was also noted that the P-value for disposal management was 0.000 which is less than the set 0.05 significance level indicating that disposal management was significant. Based on these results, the study rejected the null hypothesis and accepted the alternative that disposal management has positive significant influence performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya.

Table 4.5: Beta Coefficients for Disposal Management

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.808	.215		8.398	.000
	Disposal Management	.469	.052	.464	9.032	.000

a. Dependent Variable: Performance of state agencies

Test for Hypothesis Two

The second objective of the study was to examine the moderating role of internal integration on the relationship between disposal management and performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya. Moderation happens when the relationship between the dependent variable and the independent variables is dependent on a third variable (moderating variable). The effect that this variable has is termed as interaction as it affects the direction or strength of the relationship between the dependent and independent variable. To achieve the second research objective, the study computed moderating effect regression analysis. This (moderating effect regression analysis) also guided the study in testing the second research hypothesis. Internal integration (M) was introduced as the moderating variable.

Ho_2: Internal integration has no statistically significant role on the relationship between disposal management and performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya.

The study combined the variable (disposal management) to form a new variable X. The study then used stepwise regression to establish the moderating effect of Internal integration (M) on the relationship between independent variable (X) and performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya (Y).

From the model summary findings in Table 4.6, the first model for which is the regression between disposal management (X) without moderator, internal integration (M) and interaction, the value of R-squared was 0.336 which suggests that 33.6% change in performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya can be explained by changes in inventory management. The p-value for the first model (0.000) was less than the selected level of

significance (0.05) suggesting that the model was significant. The findings in the second model which constituted disposal management, internal integration and performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya (X*M) as predictors, the r-squared was 0.568. This implies that the introduction of internal integration in the second model led to a 0.232 increase in r-squared, showing that internal integration positively moderates performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya.

Table 4.6: Model Summary for Moderation Effect

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.580[a]	.336	.334	.65170	.336	150.295	1	179	.000
2	.754[b]	.568	.564	.52727	.232	79.360	3	177	.000

a. Predictors: (Constant), Disposal Management
b. Predictors: (Constant), Disposal Management, internal integration, Interaction (X*M)

From the model summary findings in Table 4.6, the F-calculated for the first model, was 527.54 and for the second model was 46.74. Since the F-calculated for the two models were more than the F-critical, 3.894 (first model) and 2.656 (second model), the two models were good fit for the data and hence they could be used in predicting the moderating effect of internal integration on the performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya.

Table 4. 7: ANOVA for Moderation Effect

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	63.832	1	63.832	527.54	.000[b]
	Residual	21.675	179	0.121		
	Total	85.507	180			
2	Regression	107.958	3	35.986	46.74	.000[c]
	Residual	13.622	177	0.770		
	Total	121.58	180			

a. Dependent Variable: Performance of state agencies
b. Predictors: (Constant), Disposal Management
c. Predictors: (Constant), Disposal Management, internal integration, Interaction

Further, by substituting the beta values as well as the constant term from the coefficient's findings for the first step regression modelling, the following regression model will be fitted:

$Y = 1.387 + 0.608 X$

Where X is Disposal Management

The findings show that when disposal management is held to a constant zero, performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya will be at a constant value of 1.387. The findings also show that disposal management has a statistically significant effect on performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya as shown by a regression coefficient of 0.608 (p-value= .000).

By substituting the beta values as well as the constant term from model 2 emanating from the second step in regression modeling the following regression model was fitted:

Y= 3.876 + 0.220 X + 0.325 M + 0.283 X*M

Where X is disposal management; M is internal integration and X*M is the interaction term between disposal management and internal integration.

The findings show that when disposal management, internal integration, interaction (X*M) are held to a constant zero, performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya will be at a constant value of 3.876. The model also indicated that disposal management had a positive and statistically significant effect on performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya as shown by a regression coefficient of 0.220 (p-value= 0.002). It is also seen that internal integration had a positive and significant effect on performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya as shown by a regression coefficient 0.325. On the other hand, interaction of disposal management and internal integration (X*M) also had a positive and significant effect on performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya as shown by a regression coefficient of 0.283 (p-value= 0.000).

It is therefore seen that disposal management on its own has 22% effect on performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya. However, when interacted with internal integration, it has an effect of 28.3%. This is a clear indication that introduction of internal integration as moderating variable has positive influence on performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya. The study therefore rejects the null hypothesis and accepts the alternative that internal integration has significant moderating effect on the relationship between disposal management and performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya.

Table 4.8: Beta Coefficients for Moderation Effect

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.387	.194		7.163	.000
	Disposal Management	.608	.050	.580	12.260	.000
2	(Constant)	3.876	1.009		3.841	.000
	Disposal Management	.220	.067	.782	3.284	.002
	internal integration	.325	.048	.310	6.748	.000
	Interaction (X*M)	.283	.065	1.661	4.357	.000

a. Dependent Variable: Performance of state agencies

CONCLUSION AND RECOMMENDATIONS

Conclusions

Disposal Management and Organization Performance

The fisrt null hypothesis test was ‘There is no statistically significant relationship between disposal management and performance of state agencies under the Ministry of Agriculture and Livestock

Development, Kenya'. The study found that disposal management is statistically significant in explaining performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya'. The influence was found to be positive. This means that unit improvement in disposal management would lead to an increase in performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya''. Based on the findings, the study concluded that disposal management positively and significantly influences performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya.

Internal Integration and Organization Performance

The second research hypothesis tested was that 'Internal integration has no statistically significant role on the relationship between inventory management and performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya'. The study revealed that internal integration is statistically significant in explaining performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya'. It was also found that the interaction between internal integration and inventory management had positive, statistically significant effect on performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya. Based on the findings, the study concludes that internal integration has significant moderating effect on the relationship between inventory management and performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya

Recommendations

Disposal Management

This study recommends that the management of state agencies under the Ministry of Agriculture and Livestock Development, Kenya should develop and enforce clear disposal policies and procedures to ensure that all disposal activities are conducted in a systematic and environmentally responsible manner. This includes establishing guidelines for the safe and efficient disposal of assets, waste, and obsolete materials.

Internal Integration

The study recommends that the management of state agencies under the Ministry of Agriculture and Livestock Development, Kenya should strengthen the coordination and collaboration between the different departments involved in these processes. Internal integration, through effective communication, shared goals, and streamlined processes, can enhance the synergies between tendering, inventory, disposal, and procurement records management. By fostering a culture of collaboration across these functions, agencies can ensure that information flows smoothly, decisions are based on up-to-date and accurate data, and resources are utilized efficiently.

REFERENCES

Akubuko, G. C. (2019). A Re-appraisal of Procurement Management Practices and Vendor Performance: A Case of Oil Producing Firms in Rivers State. *International Journal of Advanced Academic Research, 5*(11), 72-89.

Al-Ghwayeen, W.S. & Abdallah, A.B. (2018). Green procurement and export performance: The mediating role of environmental performance. *Journal of Manufacturing Technology Management, 29*(7), 1233-1252.

Ali, Y., Saad, A. & Zeb, K. (2020). Integration of green procurement practices in construction supply chain of CPEC. *Management of Environmental Quality, 31*(1), 185-200.

Aljubairi, V. & Mugharbil, V. (2022). Measuring the Impact of Supply Chain Practices on Organizational Performance. *Palarch's Journal of Archaeology of Egypt/Egyptology, 18*(15), 239-245.

Bittencourt, O., Verter, V. & Yalovsky, M. (2018). Hospital capacity management based on the queueing theory. International Journal of Productivity and Performance Management, 67(2), 224-238.

Busco, C. & Scapens, R.W. (2019). Management accounting systems and organizational culture: Interpreting their linkages and processes of change. *Qualitative Research in Accounting & Management, 8*(4), 320-357.

Creswell, W. & Creswell, D. (2022). *Research design: Qualitative, quantitative, and mixed methods approaches.* New York: SAGE Publications, Inc.

Dadzie, E.B. (2019). The Impact of Stores Management on the Operations of the Production Industries. *African Journal of Procurement, Logistics & Procurement, 1*(4), 55-76.

Davletshin, M. (2020). *7 Ways Network Theory Is Reshaping Supply Chains.* Retrieved from https://walton.uark.edu

Elijah, Y. D., & Ngugi, P. K. (2021). Inventory management strategies and performance of commercial government entities in Kenya. *The Strategic Journal of Business & Change Management, 8*(2), 87–106.

Gasela, M.M., (2022). The influence of organizational culture on performance in public entities of South Africa. *Africa's Public Service Delivery and Performance Review 10*(1), 563.

Hearnshaw, E. J. & Wilson, M. J. (2013). A complex network approach to supply chain network theory. *International Journal of Operations & Production Management, 33*(4) 443-467.

Hotelling, H. (1925). A general mathematical theory of depreciation. *Journal of the American Statistical Association, 23*, 901-929.

Izzo, F. (2017). Social Network Theory and Management of the Sub-supply Network in Complex Sectors. *International Business Research, Canadian Center of Science and Education, 10*(7) 46-55.

Jia, F., Gao, R. & Wilding, R. (2018). Adaptation of supply management towards a hybrid culture: the case of a Japanese automaker. *Procurement, 21*(1), 45-62.

Kaaria, L., Mburugu, K. & Kirima, L. (2020). The Effect of Procurement Practices on Supply Chain Performance of Selected Public Universities in Kenya. *The Journal of Social Sciences Research, 89*, 954-961.

Latwal, G.S. (2020). *Research Methodology.* Florida: CRC Press.

Leiyan, A. P. (2018). *Procurement Practices and Organizational Performance: Case Study of the University of Nairobi.* Retrieved from http://erepository.uonbi.ac.ke/

Muggy, L. & Heier, J. (2018). Game theory applications in humanitarian operations: a review. *Journal of Humanitarian Logistics and Procurement, 4*(1), 4-23.

Mukherjee, S.P. (2020). A Guide to Research Methodology: An Overview of Research Problems, Tasks and Methods. New York: CRC Press.

Mungai, D. (2019). *Effect of Strategic Procurement Practices on Performance of Commercial Banks in Kenya: A Case of KCB.* Retrieved from http://erepo.usiu.ac.ke/11732/5102

Munyawera, S., Mulyungi, P. & Ismail, N. (2018). Role of Procurement Planning Practices on Performance of State Corporations in Rwanda: A Case of Rwanda Energy Group. International *Journal of Management and Commerce Innovations, 6*(1), 709-718.

Namukasa, J. (2017). Records management and procurement performance: A case of National Agricultural Advisory Services (NAADS) program in the central region of Uganda. *Records Management Journal 27*(3), 00-00

Ndemo, B. M. & Odoyo, A. J. (2020). *Influence of Procurement Key Performance Indicators on the Performance of State Agencies in Kenya.* Retrieved from https://www.researchgate.net/publication/346522762

Njeru, S. W., & Moronge, M. (2018). Effects of Asset Disposal Practices on Perfomance of State Owned Enterprises in Kenya. *The Strategic Journal of Business & Change Management, 5*(4), 1689 – 1708.

Osunsanmi, T.O. & Oke, A.E. (2022). Current Era and Practice of Supply Chain Management in the Construction Industry. *Construction Supply Chain Management, 11*, 19-76.

Putnik, G.D. (2018). Lean vs agile from an organizational sustainability, complexity and learning perspective. *The Learning Organization, 19*(30, 176-182.

Rafiee, M. (2022). Analyzing the Impact of Supply Chain Management Practices on Organizational Performance through Competitive Priorities (Case Study: Iran Pumps Organization). *International Journal of Academic Research in Accounting Finance and Management Sciences, 4*(1), 1-21

Sileyew, K. (2019). *Research Design and Methodology*. Washington DC: Intechopen.

Touray, R. (2021) A Review of Records Management in Organizations. *Open Access Library Journal*, 8, 1-23. doi: 10.4236/oalib.1108107.

Waruguru, E. (2019). Role of Tendering Process on Performance of Public Institutions: A Case Study of Nakuru County Government. *International Journal of Economics, Finance and Management Sciences, 3,* 391-412.