Int Journal of Social Sciences Management and Entrepreneurship 9(1): 202-222 2025

ISSN 2411-7323

www.sagepublishers.com

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

[1] Nzioka Esther, [2] Dr. Odari Samuel, [3] Dr. Ndeto Charles

[1]PhD Student, Jomo Kenyatta University of Agriculture and Technology
[2]Lecturer, Jomo Kenyatta University of Agriculture and Technology
[3]Lecturer, Jomo Kenyatta University of Agriculture and Technology

ABSTRACT

State agencies in Kenya have been experiencing problems in their supply chain, which include overstocking, stock-outs, and inefficiencies. They experience challenges in their inventory management, which leads to inefficiencies, delays, and increased costs. The general objective of the study is to assess the relationship between inventory 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 inventory management and performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya. The study was anchored on lean 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 inventory 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 inventory 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 adopt advanced inventory management systems to help streamline inventory tracking, reduce errors, and provide real-time data on stock levels.

Key Words: Inventory 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 assess the relationship between inventory 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 inventory management and performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya

Theoretical Review

Lean Theory

Lean theory was founded by Henry ford in (1945). The theory is an expansion of notions of just in time. Just in time refers to a pull founded system which is intended to line up the processes of production as well as business across supply chain. The theory reduces waste in process of production and eradicates buffer stock. Inventory leanness (just in time) positively influences the business firms' profitability and is the best tool for inventory control. It is argued that lean theory reduces wastage in production process and eradicates buffer stock (Åhlström, Danese & Hines, 2021).

The theory explains how firms gain flexibility in their ordering decisions, eradicates inventory carrying costs as well as decrease inventory stocks held on site. Studies show that companies fruitfully optimize inventory via use of systems to attain higher levels of customer satisfaction and also asset utilization resulting to enhance organizational development, profitability as well as market share (Putnik, 2018). The theory indicates that entities can have flexibility in their process of ordering through the use of shared product designs, reduced machine set-ups inventory control and raw material requisition. Operational, tactical and strategic benefits of just in time can hence become realized and hence improved organization performance (Dorval & Jobin, 2022).

Lean theory, when applied to the relationship between inventory management and the performance of state agencies under the Ministry of Agriculture and Livestock Development, offers insights into optimizing operational efficiency, reducing waste, and enhancing overall organizational performance. In the context of inventory management, Lean theory focuses on streamlining processes to minimize unnecessary inventory and associated costs (Åhlström et al. 2021). The core principles of Lean, such as just-in-time production and continuous improvement, can be instrumental in shaping the practices of state agencies within the agricultural sector. Lean theory emphasizes the importance of maintaining an optimal level of inventory, avoiding overstocking or understocking situations (Putnik, 2018). In the case of state agencies under the Ministry of

Agriculture and Livestock Development, this means aligning the quantity of agricultural inputs, equipment, and supplies with the actual demand and usage.

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.

Networks contribute to the information sharing among the entities in the supply chain. Strategic network provides a firm with access to information, resources, markets, and technologies; with advantage from learning, scale and scope economies; and allows firms to achieve strategic objectives, such as sharing risks and outsourcing value-chain stages and organizational functions. Izzo (2017) indicates that the location of the organization or firm within the network which is assumed to have an influence on the performance and lead to competitive advantage. The theory helps with the demand planning through the simplification of the resource allocation reached through the settlement of strategic long-term partnerships. Moreover, companies embedded in a network have the ability to choose from a greater set of suppliers and through this can even ensure the supply of critical commodities (Hearnshaw & Wilson, 2018).

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).

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 inventory management. The moderating variable was internal integration. The dependent variable was performance of state agencies under the Ministry of Agriculture and Livestock Development.

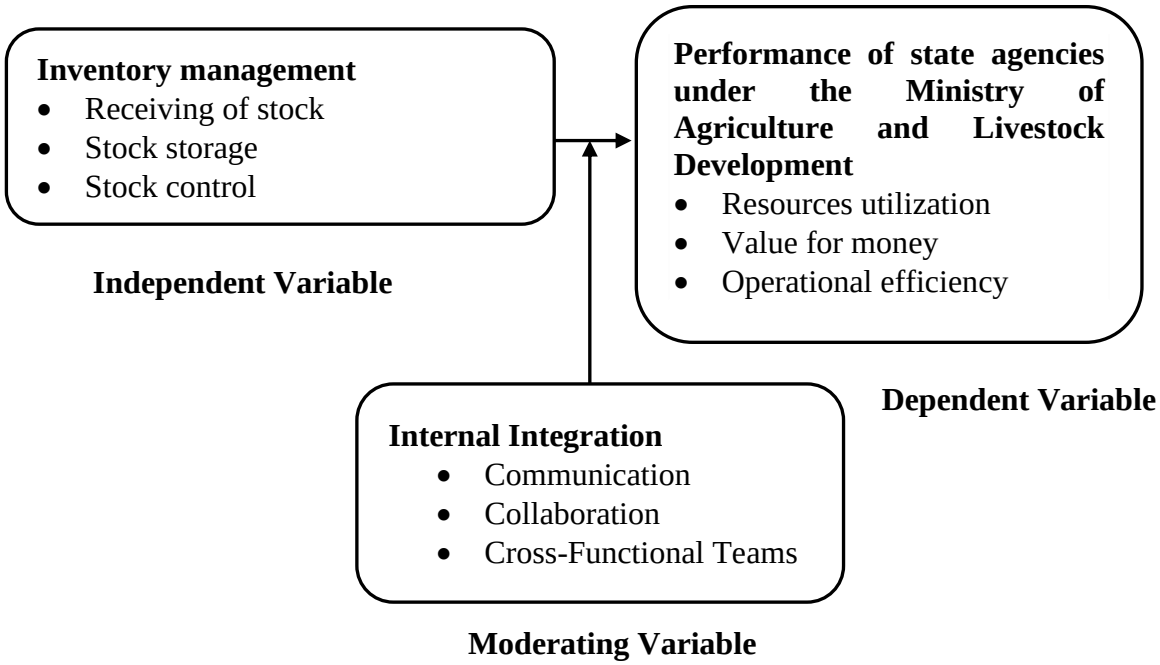

Figure 2. 1: Conceptual Framew

Inventory management

Inventory management is a comprehensive process integral to the effective functioning of an organization, encompassing the strategic handling of ordering, storage, and utilization of its inventory. This multifaceted practice extends to the management of raw materials, components, and finished goods, involving the intricate orchestration of processing activities and warehousing (Kaaria, Mburugu & Kirima, 2020). At its core, inventory management involves several key components, including the inspection and acceptance of goods upon receipt, meticulous management of stores records, and the efficient storage of goods. This multifunctional approach ensures that the organization's inventory is not only well-organized but also aligned with operational needs and demand patterns. The primary objective of inventory management is to minimize the inherent costs associated with stock control at various stages of the inventory lifecycle (Nwamgbebu, Oketa & Nwambe, 2019). Tender award is the conclusive stage in the procurement process where an organization selects and officially grants a contract to the supplier or vendor whose bid or proposal emerged as the winning submission in response to a tender or request for proposal (RFP) (Elijah & Ngugi, 2021).

Inventory storing, often referred to as inventory storage or warehousing, constitutes a crucial phase in the logistics and supply chain management of organizations. This process entails the systematic and secure storage of goods or materials within a designated facility until they are required for use or distribution (Elijah & Ngugi, 2021). The significance of proper inventory storing extends beyond mere spatial considerations, encompassing critical aspects of inventory management that directly impact operational efficiency. An efficiently organized inventory storage system is essential for maintaining the integrity and availability of inventory items. This involves categorizing, labeling, and arranging items in a manner that not only optimizes the available space

but also facilitates easy retrieval when needed (Kaaria, Mburugu & Kirima, 2020). Inventory storing, often referred to as inventory storage or warehousing, constitutes a crucial phase in the logistics and supply chain management of organizations. This process entails the systematic and secure storage of goods or materials within a designated facility until they are required for use or distribution (Elijah & Ngugi, 2021). The significance of proper inventory storing extends beyond mere spatial considerations, encompassing critical aspects of inventory management that directly impact operational efficiency. An efficiently organized inventory storage system is essential for maintaining the integrity and availability of inventory items. This involves categorizing, labeling, and arranging items in a manner that not only optimizes the available space but also facilitates easy retrieval when needed (Kaaria, Mburugu & Kirima, 2020).

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. This interdisciplinary collaboration is particularly effective in addressing complex challenges that require a multifaceted approach. The diverse composition of cross-functional teams encourages innovative problem-solving (Aljubairi & Mugharbil, 2022).

Empirical Review

Inventory management and Organization Performance

In Nigeria, Nwamgbebu, Oketa and Nwambe (2019) conducted a study inventory management system and performance of public health institutions. The study adopted descriptive survey design which made use of primary data obtained from structured questionnaires. The questionnaire were administered to 72 senior staff in pharmacy store, procurement units, internal audit and account department, but only 58 where returned and valid for analysis of the study. The result revealed that inventory shrinkage has negative significant impact on the performance of Federal Teaching Hospital Abakalik; while inventory records accuracy has positive significant impact on the performance of the same hospital.

In Gambia, Touray (2021) conducted a review of records management in organizations using documents review methodology. The findings indicated that records and information are the life blood of every organization and the basis on which decisions are made. Poor management of records does not only hinder the development process of organizations but also leads to ineffectiveness and inefficiency in service delivery. Records, being personal or official, are very important in the life of an organization. The success of any organization depends on effective procurement records management practice that ensures the right records are available at the right time for effective business operations. The need for proper records keeping is indisputable it is an ordinary and necessary component of virtually all business operations. Transparency and accountability can only be achieved if there is a policy that guides the management of records.

Mutinda and Nyang (2018) conducted a study on the role of inventory management strategies on procurement performance in state corporations. The research design used in this study was descriptive in nature which adopted qualitative and quantitative research strategies. The sample of respondents was determined using stratified sampling. A sample size of 123 respondents out of a total frame of 181 target population was interviewed. The research focused on primary data that was collected from questionnaires distributed to the target groups. This study collected both qualitative and quantitative data. The qualitative data collected were subjected to content analysis. On the other hand, the researcher used descriptive and inferential statistics to analyze the quantitative data. The findings revealed that inventory control and inventory accountability had a positive effect on procurement performance. Thus, the disclosure of inventory documents when needed sends the message that the organization is accountable hence they can be relied on to conduct business with.

Jelagat and Nyang'au (2020) conducted a study on the effects of inventory management on the performance of state corporations. The study employed a descriptive research design. Data was collected using self-administered questionnaires. The study employed stratified random sampling technique in coming up with a sample size. Pilot study was carried out to establish the validity and reliability of the research instruments. The data collected was analyzed by use of descriptive and inferential statistics. The data generated was keyed in and analyzed by use of Statistical Package of Social Sciences (SPSS) version 24 to generate information. The findings indicated that, inventory categorization contributed most to the performance of state corporations in Kenya. The findings also indicated that safety stock management, inventory control techniques, information technology integration and demand and supply forecasting have a positive relationship with performance of state corporations.

Internal Integration, Procurement Management Practices 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. In addition, positivism research approach is used to determine the realistic occurrence of events in a particular social construct through application of scientific approaches (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'spredictor 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 = Inventory 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 inventory 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.

`

Inventory Management and Organization Performance

The first specific objective of the study was to assess the relationship between inventory 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

inventory management and performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya. The results were as shown in Table 4.1

From the results, the respondents agreed that in their organization the receiving process ensures that inventory is accurately documented upon arrival (M=3.996, SD= 0.865). In addition, the respondents agreed that in their organization receiving process includes thorough inspection of received inventory for damage or discrepancies (M=3.819, SD=0.945). Further, the respondents agreed that in their organization receiving process ensures that inventory is promptly transferred to the appropriate storage location (M=3.798, SD=0.611). Van der Vorst et al. (2009) highlights the importance of accurate documentation and thorough inspection during the receiving process. By recording received inventory accurately and inspecting for damage or discrepancies, organizations can prevent errors in inventory records and identify potential quality issues early on. According to Chopra and Meindl (2016), efficient receiving processes, including timely put-away procedures, contribute to reduced cycle times and improved inventory visibility. By promptly transferring inventory to designated storage areas, organizations can minimize congestion in receiving docks and ensure timely availability of goods for order fulfillment.

The respondents also agreed that the storage area in their organization is well-organized and labelled, facilitating easy access to inventory items (M=3.731, SD=0.908). Further, the respondents agreed that inventory in their organization is stored in a manner that minimizes the risk of damage, spoilage, or obsolescence (M=3.711, SD=0.776). Research by Kumar and Ozdamar (2019) emphasizes the importance of warehouse layout optimization and effective labeling systems in enhancing warehouse productivity. Clear signage, aisle markings, and bin locations enable warehouse personnel to locate inventory items quickly, reducing picking errors and improving overall operational efficiency. Waters (2020) highlight the significance of appropriate storage conditions, such as temperature control and shelf-life management, in preserving product quality and extending inventory lifespan. By adhering to established storage guidelines and implementing preventive maintenance measures, organizations can mitigate the risk of inventory losses due to deterioration or obsolescence.

The respondents agreed that inventory in their organization is stored in accordance with established guidelines or best practices to maximize efficiency (M=3.675, SD=0.897). In addition, the respondents agreed that in their organization, stock control processes are effective in ensuring accurate inventory levels (M=3.613, SD=0.786). The respondents also agreed that the stock control system in their organization provides accurate and up-to-date information on stock quantities (M=3.608, SD=0.841). In addition, the respondents agreed that in their organization regular stock audits or reconciliations are conducted to ensure the accuracy of stock records (M=3.600, SD=0.567). According to Mentzer *et al.* (2021), periodic physical inventory counts and reconciliation with system records help identify discrepancies due to shrinkage, errors, or process failures. By conducting regular audits and implementing corrective actions, organizations can maintain data integrity and improve the reliability of inventory information for decision-making. Research by Simchi-Levi *et al.* (2019) emphasizes the role of demand forecasting, reorder point optimization, and safety stock management in achieving balanced inventory levels. By aligning inventory policies with demand variability and lead time fluctuations, organizations can minimize stockouts, excess inventory, and carrying costs.

Standard deviation (SD) serves as a crucial indicator of the variability or dispersion within respondents' perceptions of their organization's procurement management practices related to inventory receiving and storage. Accurate Documentation upon Arrival (SD=0.865): The moderate standard deviation suggests that while there is general agreement among respondents regarding

the importance of accurately documenting inventory upon arrival, there are variations in how consistently this practice is perceived to be implemented. Thorough Inspection of Received Inventory (SD=0.945): A higher standard deviation indicates greater variability in perceptions regarding the thoroughness of inspection practices during inventory receipt. This variability suggests that opinions differ significantly among respondents about the extent to which inventory is inspected for damage or discrepancies upon arrival.

Table 4. 1: Inventory Management and Organization Performance

	1 %	2 %	3 %	4 %	5 %	Mean	Std. Dev.
Receiving of stock							
In our organization the receiving process ensures that inventory is accurately documented upon arrival.	2.0	5.3	12.0	62.7	18.0	3.996	0.865
In our organization receiving process includes thorough inspection of received inventory for damage or discrepancies.	2.5	8.3	10.8	55.4	22.9	3.819	0.945
In our organization receiving process ensures that inventory is promptly transferred to the appropriate storage location.	1.7	8.4	15.6	52.0	22.3	3.798	0.611
Stock storage							
The storage area in our organization is well-organized and labelled, facilitating easy access to inventory items.	0.6	6.9	23.6	53.4	15.5	3.731	0.908
Inventory in our organization is stored in a manner that minimizes the risk of damage, spoilage, or obsolescence.	0.6	11.4	14.8	59.7	13.6	3.711	0.776
Inventory in our organization is stored in accordance with established guidelines or best practices to maximize efficiency.	4.3	4.3	20.9	54.0	16.6	3.675	0.897
Stock control							
In our organization, stock control processes are effective in ensuring accurate inventory levels.	1.5	7.4	22.7	57.6	10.8	3.613	0.786
The stock control system in our organization provides accurate and up-to-date information on stock quantities.	1.8	14.2	16.0	51.5	16.6	3.608	0.841
In our organization regular stock audits or reconciliations are conducted to ensure the accuracy of stock records.	3.7	6.4	15.6	51.5	22.8	3.600	0.567
Aggregate						**3.728**	**0.800**

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 inventory 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 inventory 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. Devi.**
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 assess the relationship between inventory 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 inventory 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 inventory management and performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya was 0.269; this is an indication that at 95% confidence interval, 26.9% variation in performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya can be attributed to changes in inventory management. Therefore, inventory management can be used to explain 26.9% change in performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya. However, the remaining 73.1% variation in performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya suggests that there are other factors other than inventory management that explain performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya.

Table 4.3: Model Summary for Inventory Management

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.519[a]	.269	.267	.68365

a. Predictors: (Constant), Performance of State Agencies

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 (109.459) was greater than the F-critical, from f-distribution tables (3.894) supporting the findings that inventory 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 Inventory Management

Model		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
1	Regression	51.159	1	51.159	3.84.65	.000[b]
	Residual	23.817	179	0.133		
	Total	74.976	180			

a. Dependent Variable: Performance of state agencies

b. Predictors: (Constant), Inventory Management

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

$$Y = 1.792 - 0.497\ X_2$$

(X_1 is Inventory Management)

The coefficient results showed that the constant had a coefficient of 1.792 suggesting that if inventory management was held constant at zero, performance of state agencies under the Ministry

of Agriculture and Livestock Development, Kenya would be at 1.792 units. In addition, results showed that inventory management coefficient was 0.497 indicating that a unit increase in inventory management would result in a 0.497 increase in performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya. It was also noted that the P-value for inventory management coefficient was 0.000 which is less than the set 0.05 significance level indicating that inventory management was significant. Based on these results, the study rejected the null hypothesis and accepted the alternative that inventory management has a positive significant influence performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya.

Table 4.5: Beta Coefficients for Inventory Management

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.792	.188		9.523	.000
	Inventory Management	.479	.046	.519	10.462	.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 inventory 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 inventory management and performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya.

The study combined the variable (inventory 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 inventory 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 inventory 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), Inventory Management

b. Predictors: (Constant), Inventory 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), Inventory Management

c. Predictors: (Constant), Inventory 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 Inventory Management

The findings show that when inventory 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 inventory 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 inventory management; M is internal integration and X*M is the interaction term between inventory management and internal integration.

The findings show that when inventory 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 inventory 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 inventory 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 inventory 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 inventory 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
	Inventory Management practices	.608	.050	.580	12.260	.000
2	(Constant)	3.876	1.009		3.841	.000
	Inventory 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

Inventory Management and Organization Performance

The first null hypothesis test was ‘There is no statistically significant relationship between inventory management and performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya’. The study found that inventory 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 inventory 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 inventory 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

Inventory Management

The study recommends that the management of state agencies under the Ministry of Agriculture and Livestock Development, Kenya should adopt advanced inventory management systems to help streamline inventory tracking, reduce errors, and provide real-time data on stock levels. These systems can enhance the accuracy of inventory records, improve order fulfillment, and minimize the risk of stockouts or overstocking. Additionally, it is important to train staff on effective inventory management techniques. Providing regular training and professional development opportunities will equip personnel with the skills and knowledge needed to manage inventory efficiently. This includes understanding inventory control methods, data analysis, and the use of technology in inventory management.

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.