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SUPPLIER MANAGEMENT PRACTICES AND PERFORMANCE OF COMMERCIAL STATE CORPORATIONS IN NAIROBI CITY COUNTY, KENYA

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ABSTRACT

State corporations play a great role in socio-economic development since they are they are responsible or delivering key services to the public but they have been recording poor performance. The general objective of this study was to determine the effect of supplier management practices on performance of commercial state corporations in Nairobi City County, Kenya. The specific objectives were to determine effect of supplier selection and supplier segmentation. The study was guided by the Resource-Based View, and Transaction Cost Economics. The study adopted a descriptive research design. The study target population was 46 commercial state corporations in Nairobi City County, Kenya. The unit of observation was 414 procurement staff in the state corporations. Taro Yamane's 1967 sampling formula was used to sample 203 respondents. The study used stratified sampling technique. The study used primary data collected using questionnaires. A pilot study was conducted with 10% of the sample size hence 20 procurement staff. The study used content and construct validity. To test reliability of the instrument, the researcher used Cronbach alpha. Data was analysed using SPSS Version 28. The study used descriptive and inferential statistics. Descriptive statistics included frequency, percentage, and mean. Inferential statistics include correlations and regressions. Findings were presented in tables. A pilot test involving 20 senior procurement staff was conducted, achieving a 100% response rate. Descriptive analysis revealed that supplier management practices are perceived positively, with supplier selection and segmentation showing the highest effectiveness. Correlation analysis indicated strong positive relationships between each supplier management practice and organizational performance, with regression coefficients confirming significant impacts ($p<0.05$) supplier selection ($B = 0.312$) and supplier segmentation ($B = 0.298$). The study concludes that robust supplier management practices are critical for enhancing performance, with particular emphasis on the strategic selection and segmentation of suppliers. It is recommended that state corporations utilize data-driven segmentation to optimize supplier relationships and achieve sustainable performance improvements. Future research should explore the role of technology in supplier management to further enhance procurement outcomes.

Key Words: Supplier Management Practices, Performance, Commercial State Corporations, Supplier Selection, Supplier Segmentation

Background of the Study

In the modern business landscape, the ability to manage suppliers effectively has emerged as a crucial determinant of organizational success. As companies strive to navigate the complexities of global markets, the role of supplier management becomes increasingly significant (Nguyen et al., 2020). This study delves into the intricate dynamics of supplier management, exploring how strategic interactions with suppliers can drive organizational performance to new heights.

Supplier management refers to the act of finding, obtaining, and managing resources and suppliers that are vital to the operations of an organization (Alshurideh, 2022). Supplier management is a systematic approach to evaluating and partnering with vendors that supply goods, materials and services to an organization, determining each supplier's contribution to success, and developing strategies to improve their performance.

The relationship between suppliers and customers evolves through the spread of supplier innovation across the supply chain and the sharing of information (Chen, 2018). Strategic supplier management is critical to a company's competitive advantage and product differentiation. When buyers and suppliers behave in coordination as part of a unified system, they can achieve several benefits, such as cost reductions, improved inventories, higher order fill rates, enhanced quality, increased customer satisfaction, and greater profitability (Hazen, Russo, Confente, & Pellathy, 2021). A strong relationship between the buyer and its supplier, grounded in mutual trust, joint problem-solving, and fulfilment of pre-specified promises, helps in avoiding complex and lengthy contracts, which are costly to write and difficult to monitor and enforce (Hazen, Russo, Confente, & Pellathy, 2021).

Research indicates that the effective management of supplier relationships significantly influences the operational excellence, and productivity, of an organization. For instance, companies with robust supplier management practices experience improved operational efficiencies and innovation capabilities (Nguyen et al., 2020). Similarly, strategic supplier partnerships contribute to enhanced market competitiveness and resilience against supply chain disruptions (Li et al., 2019). The implementation of robust supplier evaluation and selection processes has been shown to significantly improve supply chain performance by fostering relationships with reliable suppliers, minimizing risks, and ensuring timely delivery of quality materials (Hald & Ellegaard, 2019). Additionally, ongoing supplier performance monitoring and development are critical in maintaining high standards and continuous improvement within the supply chain (Zhu, Sarkis, & Lai, 2020).

Statement of the Problem

State corporations play a great role in socio-economic development since they are they are responsible or delivering key services to the public. The government supports the management of state corporations thorough budgetary allocation and ensuring that there adequate human resources to enhance service delivery. However, the state corporations have been recording poor performance. In the past three years 2020-2023, 33.3% of state corporations in Kenya made losses (KNBS, 2023). The aggregate operational performance of commercial state corporations turned negative in the financial year 2019-2020 for the first time in recent years. Kenya Power recorded Ksh 2,983M in losses in FY2019/20. The company realized profit of 3,269M in FY2017/18 which reduced by 92% in the FY2018/19 whereby the company realized net profits of Ksh in to Ksh.262M (World Bank, 2021).

Even though some state corporations have recorded an improvement in revenue, there is reduced profitability due to rising expenses. National Treasury and Economic Planning (2022) reported that a total of 27 State Corporations representing 84.4% realized KSh. 17,493,707,440.53 pre-tax profit against a target of KSh. 26,302,083,191.88, hence falling short of the annual target by 33.5%. Apunda and Ndede (2020) reported that the commercial state corporations are facing challenges in maintaining the operations and are relying on government support or sustainability. In addition, public organisations have been experiencing

supplier selection and evaluation challenges despite the existence of government regulations to ensure compliance (Mutuku, Ochieng & Sang, 2021).

Various researchers have focused on supplier management; Mwangi, Muturi, and Noor (2018) on influence of supplier management on the performance of manufacturing firms in Kenya, Muo & Omwenga (2018) on role of supplier management practices in optimization of operational performance in Telecommunication service industry in Kenya, and Oteki (2021) on effect of e-supplier management practices on supply chain performance of sugar processing firms in Kenya. None of the studies focused on the commercial state corporations in Nairobi City County, Kenya. The study hence sought to fill the research gap by examining the effect of supplier management practices on performance of commercial state corporations in Nairobi City County, Kenya.

General Objective

To determine the effect of supplier management practices on performance of commercial state corporations in Nairobi City County, Kenya.

Specific Objectives

i. To establish effect of supplier selection on performance of commercial state corporations in Nairobi City County, Kenya.
ii. To determine effect of supplier segmentation on performance of commercial state corporations in Nairobi City County, Kenya.

LITERATURE REVIEW

Theoretical Framework

Resource-Based View

The Resource-Based View (RBV) was developed by Wernerfelt (1984) and further refined by Barney (1991). This theory posits that a firm's sustainable competitive advantage is derived from its ability to acquire and manage valuable, rare, inimitable, and non-substitutable (VRIN) resources (Barney, 1991).). The resource-based view is based on the assumptions that firm resource distributed heterogeneously and remained stable over time. A firm's resources include materials, skills, organizational processes and systems, plus information and data of the organization. This theory ties competitive advantage generation through focusing on fostering the internal resources that the organization owns which most probably are unique and special to the firm, in different words no two organizations have the same exact resources, either tangible or intangible. "If resources and capabilities of a firm are mixed and deployed in a proper way, they can create competitive advantage for the firm. Eventually, only companies themselves can achieve and sustain competitive advantage by innovation and strategically positioning in the market" (Mweru & Muya, 2015).

In the context of supplier management, RBV underscores the importance of selecting suppliers who provide resources that contribute significantly to the firm's strategic objectives. RBV has been widely used in supply chain management research. For instance, Prajogo and Olhager (2012) utilized RBV to explain how firms can gain competitive advantage through strategic supplier relationships and superior supply chain integration. Similarly, Ketchen and Hult (2007) discussed how firms leverage their unique resources and capabilities to enhance supply chain performance and create value. Critiques of RBV argue that the theory lacks specificity regarding how firms can develop and maintain VRIN resources over time. Additionally, some critics contend that RBV does not adequately account for the dynamic nature of competitive environments, where the value of resources can change rapidly (Priem & Butler, 2001).

This theory supports the variable on supplier selection, as it highlights the necessity of choosing suppliers whose resources enhance the firm's competitive positioning and performance. By selecting suppliers with unique capabilities and resources, commercial state corporations can

gain a competitive edge and improve their operational efficiency and effectiveness. Additionally, RBV emphasizes the strategic importance of building long-term relationships with suppliers to secure these valuable resources and capabilities.

Transaction Cost Economics

Transaction Cost Economics (TCE), developed by Williamson (1975, 1985), focuses on the costs associated with economic transactions. TCE posits that firms seek to minimize the costs of transactions by choosing the most efficient governance structures. These costs include search and information costs, bargaining and decision costs, and policing and enforcement costs (Williamson, 1985).Applying transaction cost theory within the field of supply chain management focuses on the decision whether to outsource activities or produce products in-house. This decision process evaluates asset specificity, includes behavioral assumptions of bounded rationality, and considers risks such as opportunistic behavior. Therefore, various costs such as opportunism, contract penalties, long-term relationships, or joint investments of an exchange are included in the decision process on the supplier to source from (Subramani, 2004).

TCE has been extensively applied in supply chain management to explain the governance of inter-firm relationships. For example, Noordewier, John, and Nevin (1990) used TCE to examine the conditions under which firms choose to vertically integrate or outsource activities to external suppliers. Similarly, Rindfleisch and Heide (1997) explored how firms manage transaction costs through various contractual arrangements and relational governance mechanisms. Critiques of TCE highlight its limited consideration of the role of trust and social capital in economic transactions. Critics argue that TCE's emphasis on cost minimization overlooks the potential benefits of relational and cooperative behaviors in long-term supplier relationships (Granovetter, 1985).

This theory supports the variable on supplier segmentation, as it advocates for categorizing suppliers to manage them more effectively. By understanding the transaction costs associated with different suppliers, state corporations can optimize their procurement processes, reduce inefficiencies, and enhance overall performance. TCE also highlights the importance of governance mechanisms such as contracts and relational norms to mitigate transaction costs and ensure efficient supplier management.

Conceptual Framework

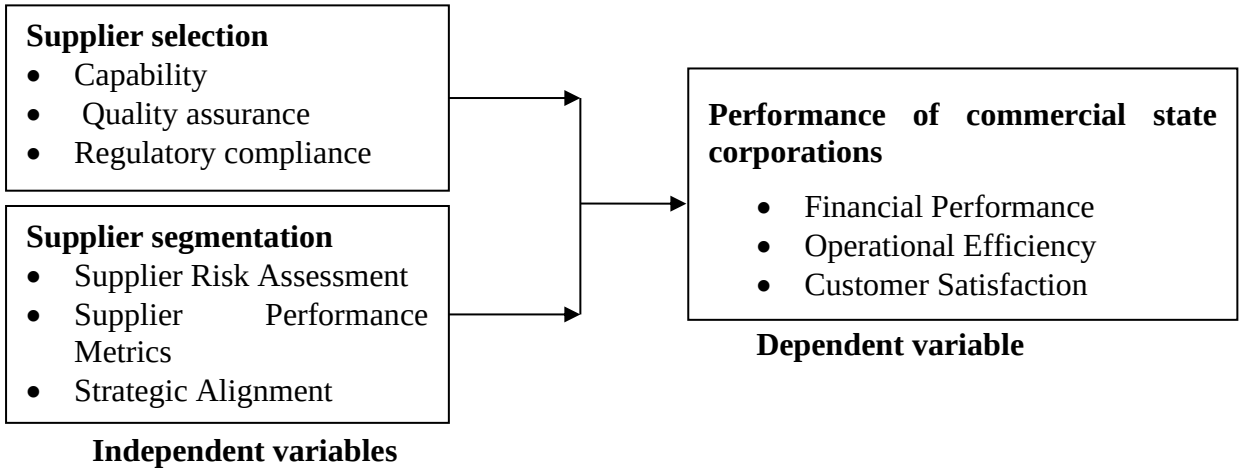

Figure 2. 1: Conceptual Framework

Supplier Selection

Supplier selection is a critical process by which firms identify and contract with suppliers, deploying substantial financial resources to ensure the procurement of essential goods and services. This process is fundamental to supply chain management because it significantly influences organizational performance by affecting factors such as price, quality, delivery

reliability, and product availability (Chai & Ngai, 2020). Proper supplier selection can reduce product and material costs while maintaining high-quality standards and providing excellent after-sales services, thereby contributing to a firm's competitive advantage (Stritch, Pedersen, & Taggart, 2020).

According to Wachiuri (2020), buyers should prioritize suppliers who meet ISO 9001 standards, providing documentary evidence of their manufacturing expertise, including details about the age of machinery and production capacity. This approach ensures that selected suppliers can meet the quality and quantity requirements essential for maintaining the firm's operational efficiency.

Public organizations face unique challenges in supplier selection despite existing government regulations designed to ensure compliance and promote efficiency. The Public Procurement Regulation Authority (PPRA) in Kenya is tasked with overseeing all public-related procurement activities to standardize supplier selection criteria and promote transparency (Onyango, 2021). However, many public organizations still struggle with supplier selection due to factors such as bureaucratic inefficiencies and political influences. Addressing these challenges requires a comprehensive approach that includes stringent evaluation criteria and robust oversight mechanisms to ensure that only capable and reliable suppliers are contracted.

Capability involves evaluating suppliers' production capacity, technological capabilities, and operational efficiency. Quality Assurance ensures that suppliers adhere to high-quality standards and have robust quality control processes in place. Regulatory Compliance assesses suppliers' adherence to relevant laws, regulations, and industry standards, ensuring that they meet all legal and ethical requirements. These sub-variables are essential for a holistic evaluation of potential suppliers, ensuring that the firm selects those who can contribute positively to its operational goals and strategic objectives.

Supplier Segmentation

Vaandrager (2024) defined supplier segmentation as a process that involves dividing suppliers into distinct groups with different needs and characteristics or behaviour. Supplier segmentation includes categorizing suppliers in order to get a comprehensive knowledge of a buyer's supply base and its critical features, as well as making resource allocation modifications in response to the results (Bahameish, 2023). It entails obtaining a more complete and comprehensible image of all suppliers by a buyer though categorizing them into groups, which the buyer may spend their limited engagement resources on the most relevant group. Supplier Segmentation is one of the key activities of supplier relationship management (SRM) for companies with a large number of suppliers (Lajim & Majidi, 2021).

Supplier segmentation is suitable for managing supplier sustainability. Stratification as a process involves categorizing all suppliers on a basis of a distinct set of criteria in order to gain a clear understanding of a buyer’s supply base and its essential aspects, and making adjustments in the resource allocations in reaction to the findings. It involves getting a comprehensible and fuller picture of all the suppliers in order to enable a buyer split them into meaningful groups after which the buyer is able to focus their scarce engagement resources on the appropriate group (Rahiminia, Razmi, Farahani, & Sabbaghnia, 2023). Bongale, Kumar, and Bongale (2023) contend that supplier segmentation can be a valuable means to selecting suppliers and to choosing whether or not to advance in cultivating a sustained partnership with them, based on the considerable importance of the commodity supplied.

Supplier segmentation Matrix was developed by Kraljic (1983). The matrix provides a framework for organizations to identify the items that require the most attention and resources in their procurement process. The matrix consists of four quadrants, each representing a different type of supplier: leverage, strategic, bottleneck, and routine. The position of each supplier on the matrix depends on the value and scarcity of the item they provide, as well as

the level of competition and uncertainty in the supply market. The Kraljic matrix has been largely used in many different industries as an efficient tool for developing differentiated purchasing strategies (Perdana & Mulyono, 2021).

Supplier segmentation has been adopted by many companies globally. Coca-Cola (2017) segments their supply base universe of about 35,000 suppliers to direct (ingredients and packaging suppliers) and indirect (others such as IT, production equipment, spare parts) suppliers. They also segment their suppliers to three segments based on two dimensions criticality and potential opportunities: critical suppliers, those that fulfil criteria such as high percentage of spend, critical components, limited alternatives, and partnership supporting their business strategies; country strategic suppliers, those that have strategic importance at a local or regional level; tactical suppliers, including low-volume and/or low-spend suppliers, suppliers belonging to markets with many alternative supplier.

Empirical Review

Supplier Selection and Firm Performance

Westhuizen, and Ntshingila (2020) examined influence of supplier selection, supplier development and information sharing on firm performance in South Africa. The study adopted a descriptive survey design. The study sample included 300 business owners/managers. Questionnaires were used for data collection. Findings showed that there is a strong significant relationship between supplier selection and business performance. The ability of business owners/managers to select the right supplier influenced business performance to a very great extent. Opotu (2022) studied evaluation of suppliers efficiency in a project management environment. The case study research design method was used in which quantitative data were collected and analysed. The study concluded that in any project environment, there is need to establish methods used to assess supply chain performance so that companies can improve performance from all sides, such as product quality and company resources.

Mchopa (2022) examined the role of supplier selection and supplier monitoring in public procurement efficiency in terms of cost reduction in Tanzania. A structured questionnaire was used to collect cross-sectional survey data from 179 public procuring entities in Tanzania. This study provides procurement practitioners with insights into selecting the proper suppliers and embracing supplier monitoring to achieve procurement efficiency in terms of cost reduction. Nabea and Nondi (2018) sought to determine the effect supplier selection methods on procurement performance in Kenyan public organization. The study target was 225 respondents from various departments and suppliers at Kenya Maritime Authority. Descriptive research design was employed. Questionnaires were used to collect data. Findings showed that supplier appraisal method, competitive bidding method, direct procurement method and competitive negotiation method have significant effect on procurement performance in Kenya Maritime Authority significantly affects firm's procurement performance

Magut (2019) conducted research to assess the impact of supplier relationships on procurement function performance at Moi Teaching and Referral Hospital in Kenya. The study was carried out using a descriptive research methodology. The target group was 120 procurement staff. The sample size was determined using a simple random sampling method. The study's sampling groups included top management officials, procurement officers, and warehouse workers. Research data was gathered using questionnaires having both open and closed ended questions. The study results showed that supplier selection have a favorable and substantial impact on the procurement function's success in the research region.

Mutuku (2021) sought to establish the influence of supplier selection criteria on the performance of public corporations in Kenya, using the case of the Water Resources Authority. The study employed a census survey methodology targeting 55 members of WRA departmental heads. A closed-ended questionnaire was used for primary data collection. The study findings showed a significant influence of supplier regulation compliance on the performance of the Water Resources Authority. The study also established a significant positive correlation

between E-procurement compliance and the performance of the Water Resources Authority. Additionally, the study established that there exited a significant influence of supplier quality assurance and supplier management capacity on the performance of the Water Resources Authority.

Supplier Segmentation and Firm Performance

Li, Meng, Li, Yue, Zhang and Yang (2023) investigated the capacity decisions of complementary suppliers who produce different components of a final product. Data was collected through observations and from firm records. Results showed that suppliers solicit private forecast information from a buyer who has more precise information regarding the market as compared to the suppliers. Suppliers lowered their capacity levels when the number of suppliers increased thereby exacerbating the supplier bottleneck.

Lawson, Tyler, and Potter (2024) investigated how a strategic supplier's technical capabilities impact focal firm new product. The used detailed survey data collected from 153 interorganizational new product development projects in the United Kingdom. Results showed that supplier technical performance have a significant positive impact on new product advantage. Managers recognize that strategic suppliers' with greater technical capabilities perform better regardless of the degree of creativity required by their task; but strategic suppliers with lower technical capabilities may partially compensate (substitute) for their lack of technical capabilities, if they are able to respond to high problem-solving task requirements. The firm’s development of relationship-specific absorptive capacity is much more important when a strategic supplier is less technically capable

Pratono (2023) examined the impact of multiple suppliers on competitive advantage by exploiting digital capabilities. The study conducted an online survey in Indonesia with 450 qualified respondents involving managers and owner-managers. Findings showed that multiple sourcing enhances competitive advantage. Haloukas (2019) explored strategies personal care business supply chain managers used to mitigate supply chain disruption risk. The study targeted 9 supply chain managers working in 5 different consumer packaged goods personal care companies in the northeaster United States who have successfully used strategies to mitigate supply chain disruptions. Data was collected using semi structured interviews. Results revealed that: identification of a qualified alternative supplier is a common strategy in supply chain disruption mitigation plans, and business top management support is essential in the execution of supply chain disruption plans and strategies.

Modungwa, Agigi, Mocke (2023) explored the role of strategic supplier relationships for supply chain innovation in the automotive industry. The study adopted a qualitative approach. Data was collected using semi-structured interviews. The sample for the study was ten middle and six senior managers. Results showed that only a few manufacturers involved their suppliers in the pre-innovation phase indicating that there might be an untapped source of innovation for manufacturers. The involvement of suppliers increases from low to high in the pre-innovation and post-innovation phases. Furthermore, manufacturers stated the need for suppliers who are able to adapt and synchronize with their innovation initiatives. Because many manufacturers share suppliers, transparency might act as an inhibitor of innovation, mainly if the manufacturer aims to compete on the basis of differentiation.

Fourie (2023) studied purchasing, sourcing and supply management approaches used by wholesalers in South Africa. Results showed that choosing suppliers and purchasing products are critical wholesaling activities and often determine the success of wholesalers. The level of sophistication with which wholesalers manage their purchasing, sourcing and supply function may vary from traditional management approaches to advanced integrated management approaches. The use of the new management approaches by businesses is a vital instrument in facilitating change. This leads to the development of more focused, specialised and high-performance organisations.

Chepng'etich, Waiganjo, and Ismael (2020) investigated the influence of strategic supplier relationship on the performance of the devolved system of government in Kenya. The study adopted a cross-sectional survey design. The target population for this study was all employees working in finance and procurement departments in 10 counties. Data was collected using questionnaires. Results showed that there was a positive and significant relationship between strategic supplier relationship and performance of devolved systems of government.

Detela (2020) investigated the influence of product quality certification schemes on product performance in food and beverage manufacturing firms in Nairobi City County, Kenya. The study adopted a descriptive research design. The study target was 65 respondents. Questionnaires were used to collect data. Results showed that for the organization to acquire the standardization mark, manufactured goods are expected to meet quality requirements as specified in the various Kenya/Approved Standards. The study recommends that the organization should set objectives of the processes and systems on what to do and how to do to deliver results

RESEARCH METHODOLOGY

The study adopted a descriptive research design. The target population for this study is the procurement staff of commercial state corporations in Nairobi City County, Kenya. According to the State Corporations Act, there are 46 commercial state corporations in Nairobi City County, Kenya, which serve as the units of analysis for this research. The Public Service Commission (2023) reports that these 46 state corporations collectively employ at least nine procurement staff hence a total of 414 procurement staff. Taro Yamane's 1967 sampling formula was used to calculate the sample size of 203 respondents. The study used stratified sampling technique. The procurement staff were stratified according to their work station. The state corporations served as strata. This ensured that all the 46 state corporations are well represented in the study.

Primary data collection was done using questionnaires. Data analysis is a practice in which raw data is ordered and organized so that useful information can be extracted from it (Gratton, & Jones, 2010). Upon collection and receipt of the filled questionnaires, the researcher proceed with the analysis phase of the data in order to draw inferences. Data collected through the sets of questionnaires were assessed for completeness first then edited. Data was analysed using SPSS Version 28. The study uses using descriptive and inferential statistics. Descriptive statistics include frequency, percentage, and mean. Inferential statistics include correlations and regressions

RESEARCH FINDINGS AND DISCUSSIONS

The response rate for the study was based on the distribution and collection of 203 questionnaires, out of which 150 were returned, representing a response rate of 73.9%. This response rate is considered satisfactory and aligns with the recommendations by Mugenda and Mugenda (2023), who suggest that a response rate of above 70% is excellent for survey-based research. The high response rate indicates a strong engagement from the participants, which enhances the reliability and validity of the study findings. The 26.1% of unreturned questionnaires, accounting for 53 responses, may be attributed to factors such as time constraints, unavailability of respondents, or unwillingness to participate. Despite this, the achieved response rate is robust enough to provide a representative sample of the target population, ensuring that the study's conclusions and recommendations are well-grounded and reflective of the views of procurement staff in commercial state corporations in Kenya.

Descriptive Analysis

This section presents the findings from the Likert scale questions where respondents indicated their level of agreement with various statements regarding supplier management practices and the performance of commercial state corporations in Nairobi City County, Kenya. A 5-point

Likert scale was used, with mean values and standard deviations calculated to interpret the findings. 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. On the other hand, a standard deviation greater than 1.5, suggests that the responses were more diverse, with a wider range of scores across the participants.

Supplier Selection Practices

The first objective of the study was to determine the effect of supplier selection practices on the performance of commercial state corporations in Nairobi City County, Kenya. Descriptive statistics for supplier selection practices are presented in Table 1.

Table 1: Descriptive Analysis for Supplier Selection Practices

Statements	Mean	Standard Deviation
The supplier selection process is designed to evaluate potential suppliers based on established criteria.	4.231	0.892
The organization deals with suppliers who are duly registered with the government.	4.015	0.773
The organization follows the procurement procedure as outlined in the Public Procurement and Asset Disposal Act 2015.	4.102	0.812
Our suppliers comply with minimal lead times between orders and deliveries.	3.846	0.967
Suppliers have adequate human resources to carry out business with the government.	3.689	1.042
The procurement officers have expertise and competence in supplier selection.	3.915	0.891
Our supplier financial management capacity meets the standard requirements.	4.056	0.798
The supplier selection process incorporates risk assessments and compliance checks.	4.112	0.872
Aggregate Score	**4.121**	**0.856**

The findings show that respondents generally agreed that the supplier selection process is designed to evaluate potential suppliers based on established criteria (M= 4.231, SD= 0.892); the organization deals with suppliers who are duly registered with the government (M= 4.015, SD= 0.773); the organization follows the procurement procedure as outlined in the Public Procurement and Asset Disposal Act 2015 (M= 4.102, SD= 0.812); and that their suppliers comply with minimal lead times between orders and deliveries (M= 3.846, SD= 0.967). They were also in agreement that suppliers have adequate human resources to carry out business with the government (M= 3.689, SD= 1.042); the procurement officers have expertise and competence in supplier selection (M= 3.915, SD= 0.891); their supplier financial management capacity meets the standard requirements (M= 4.056, SD= 0.798); and that the supplier selection process incorporates risk assessments and compliance checks (M= 4.112, SD= 0.872).

The overall aggregate mean of 4.121 (SD = 0.856) suggests that supplier selection is viewed as a critical driver of performance in commercial state corporations. This finding is consistent with the study by Westhuizen and Ntshingila (2020), which found a strong and significant relationship between supplier selection and business performance in South Africa. They concluded that the ability to select the right suppliers significantly impacts business success, aligning with the current study's findings that effective supplier selection processes are essential for improving procurement outcomes. Similarly, Mutuku (2021) established that supplier selection criteria, including compliance and quality assurance, have a significant positive influence on the performance of public corporations, further reinforcing the critical role of supplier selection in enhancing organizational performance.

Supplier Segmentation Practices

The second objective of the study was to determine effect of supplier segmentation on performance of commercial state corporations in Nairobi City County, Kenya. Respondents gave their level of agreement with statements on supplier segmentation. Descriptive statistics for supplier segmentation are presented in Table 2.

Table 2: Descriptive Analysis for Supplier Segmentation Practices

Statements	Mean	Standard Deviation
Suppliers are categorized based on their strategic importance and performance metrics.	4.203	0.854
The firm maintains contacts with suppliers that can deliver at any given time to prevent production/service scarcity.	4.001	0.812
The organization has long-term relationships with strategic suppliers.	4.112	0.793
Contracts for core product suppliers are often renewed.	3.982	0.856
Essential products/services are sourced from long-term suppliers.	4.059	0.779
Suppliers are classified according to their ability to deliver on short notice due to customer demands.	3.941	0.889
Suppliers that offer room for negotiations are grouped together.	3.867	0.935
The segmentation process considers suppliers' capacity for innovation and flexibility.	3.972	0.845
Aggregate Score	**4.030**	**0.857**

The findings in Table 2 show all means were above 3.5. this suggests that respondent generally agreed with the statements. They specifically agreed that suppliers are categorized based on their strategic importance and performance metrics (M= 4.203, SD= 0.854); the firm maintains contacts with suppliers that can deliver at any given time to prevent production/service scarcity (M= 4.001, SD= 0.812); that the organization has long-term relationships with strategic suppliers (M= 4.112, SD= 0.793); and that contracts for core product suppliers are often renewed (M= 3.982, SD= 0.856). Respondents were further in agreement that essential products/services are sourced from long-term suppliers (M= 4.059, SD= 0.779); suppliers are classified according to their ability to deliver on short notice due to customer demands (M= 3.941, SD= 0.889); that suppliers that offer room for negotiations are grouped together (M= 3.867, SD= 0.935); and that the segmentation process considers suppliers' capacity for innovation and flexibility (M= 3.972, SD= 0.845).

The aggregate mean of 4.030 (SD = 0.857) suggests that respondents generally agree on the effectiveness of supplier segmentation practices, particularly in maintaining strategic and long-term supplier relationships, which are perceived to enhance organizational performance. The positive aggregate score for supplier segmentation indicates that respondents view this practice as beneficial for organizational performance. This aligns with Pratono (2023), who found that utilizing multiple suppliers enhances competitive advantage, highlighting the importance of strategic supplier segmentation. By categorizing suppliers based on their strategic value, companies can better manage supply chain risks and optimize procurement processes. Additionally, Lawson, Tyler, and Potter (2024) found that segmenting strategic suppliers based on their technical capabilities significantly improves product development outcomes, emphasizing that effective segmentation allows firms to leverage supplier strengths to gain a competitive edge, similar to what is observed in the current study’s context.

Performance of Commercial State Corporations

The descriptive analysis for the dependent variable, Performance of Commercial State Corporations, was conducted. Respondents gave their level of agreement with statements on performance. Table 3 presents summary of findings obtained.

Table 3: Descriptive Analysis for Performance of Commercial State Corporations

Statements	Mean	Standard Deviation
There state corporations delivery quality products	4.012	0.712
Quality of products has continuously improved	3.945	0.764
There has been reduced complains on service delivery from the public	4.021	0.689
The corporations generate reasonable returns of funds allocated	3.879	0.834
The corporations adhere to budgetary constraints in their operations	3.958	0.751
The efficiency of service delivery has increased over the past years.	3.992	0.782
The corporations have a good reputation for meeting set performance targets	4.034	0.701
The overall performance of the corporations has improved over time	3.948	0.810
Aggregate Score	**3.973**	**0.756**

The findings from the study indicate that respondents generally perceive the performance of their state corporations as satisfactory, aligning with literature that highlights the ongoing efforts to improve public sector performance in Kenya. The high mean scores related to the quality of products (M = 4.012, SD = 0.712) and reduced complaints on service delivery (M = 4.021, SD = 0.689) reflect the impact of reforms aimed at enhancing service delivery in public institutions. This is consistent with the study by Nabea and Nondi (2018), who found that improved supplier selection and monitoring practices significantly enhance procurement performance in public organizations, ultimately leading to better service delivery outcomes.

The findings also show that state corporations generate reasonable returns on funds allocated (M = 3.879, SD = 0.834) and adhere to budgetary constraints (M = 3.958, SD = 0.751), highlighting effective financial management practices. This aligns with the study by Mutuku (2021), which established that supplier compliance and financial oversight positively influence the performance of public corporations, emphasizing the need for adherence to financial regulations to achieve organizational goals. Additionally, the observed improvement in service efficiency (M = 3.992, SD = 0.782) and the ability of state corporations to meet performance targets (M = 4.034, SD = 0.701) resonate with findings by Mchopa (2022), who reported that strategic supplier selection and development are key drivers of enhanced efficiency and performance in public procurement.

The aggregate performance score (M = 3.973, SD = 0.756) suggests a general agreement that state corporations in Kenya are improving, consistent with the broader literature on public sector reform and performance enhancement. The positive trends in quality, financial accountability, and service delivery align with ongoing efforts to transform public institutions into high-performing entities that can effectively serve the public and contribute to national development goals.

Correlation Analysis

The correlation analysis was conducted to examine the relationships between the dependent variable (performance of commercial state corporations) and the independent variables (supplier selection, and supplier segmentation). The Pearson correlation coefficients between these variables are presented in Table 4 below. According to Cohen (1988), the strength of the relationship is interpreted as small if the coefficient is between ±0.1 and ±0.29, medium if it is between ±0.3 and ±0.49, and strong if it is ±0.5 or above.

Table 4: Correlation Analysis

Variable		Performance of State Corporations	Supplier Selection	Supplier Segmentation
Performance of State Corporations	Pearson Correlation	1	-	-
	Sig. (2-tailed)			
	N			
Supplier Selection	Pearson Correlation	0.742**	1	
	Sig. (2-tailed)	.000		
	N	150	150	
Supplier Segmentation	Pearson Correlation	0.721**	.478	1
	Sig. (2-tailed)	.000	.123	
	N	150	150	150

Note: **Correlation is significant at the 0.05 level (2-tailed).**

The Pearson correlation coefficient between supplier selection and the performance of state corporations is 0.742, with a p-value of 0.000. This indicates a strong positive and statistically significant relationship between these two variables. The strong correlation suggests that as the effectiveness of supplier selection practices increases, so does the performance of the state corporations. This finding aligns with the literature by Westhuizen and Ntshingila (2020), who highlighted the importance of selecting the right suppliers to enhance business performance.

Supplier segmentation shows a Pearson correlation coefficient of 0.721 with the performance of state corporations, also with a p-value of 0.000. This strong positive and statistically significant relationship underscores the critical role of supplier segmentation in driving organizational success. As indicated by the findings, better segmentation of suppliers is closely associated with improved performance outcomes, which resonates with the findings of Pratono (2023), who demonstrated that multiple sourcing and strategic supplier segmentation enhance competitive advantage.

Multiple Regression Analysis

The regression coefficients section presents the individual contributions of each independent variable—supplier selection, supplier segmentation- to the dependent variable, performance of state corporations. The coefficients indicate the direction and magnitude of the relationship between each practice and organizational performance, along with their statistical significance. This analysis helps identify which specific supplier management practices most strongly influence performance, providing valuable insights for targeted improvements in procurement strategies.

Table 5: Regression Coefficients

Variable	Unstandardized Coefficients (B)		Standardized Coefficients	t	Sig.
	Beta	Standard Error	Beta		
(Constant)	1.078	0.138		7.810	0.000
Supplier Selection	0.312	0.058	0.346	5.379	0.000
Supplier Segmentation	0.298	0.061	0.315	4.885	0.000

The coefficient for supplier selection is 0.312 (p = 0.000), indicating a significant positive impact on performance. This finding aligns with Mchopa (2022), who examined supplier selection in Tanzanian public procurement and found that choosing the right suppliers is crucial for achieving procurement efficiency and cost reduction. This underscores the importance of robust supplier selection processes in enhancing overall organizational performance.

The regression coefficient for supplier segmentation is 0.298 (p = 0.000), demonstrating a positive effect on performance. This is consistent with the findings of Modungwa, Agigi, and

Mocke (2023), who explored strategic supplier relationships in the automotive industry and found that effective segmentation and involvement of suppliers in innovation phases can significantly improve supply chain performance. These insights highlight the strategic value of segmenting suppliers to align with organizational goals and drive performance.

The regression equation derived from the analysis is as follows:

Performance of State Corporations = 1.078 + 0.312 Supplier Selection + 0.298 Supplier Segmentation

These findings confirm that supplier management practices significantly contribute to the performance of commercial state corporations in Kenya, with each practice playing a distinct and impactful role in enhancing organizational outcomes.

Conclusions

The study concludes that supplier selection is a critical determinant of the performance of commercial state corporations in Kenya. The findings consistently demonstrate that rigorous supplier evaluation and selection processes contribute significantly to improved procurement outcomes. By ensuring that only the most capable and compliant suppliers are engaged, organizations can enhance their efficiency, reduce risks, and achieve their performance goals.

Supplier segmentation is integral to the strategic management of suppliers, allowing organizations to allocate resources more effectively and manage supplier relationships based on their strategic value. The study concludes that segmenting suppliers according to their performance and capacity enables state corporations to tailor their procurement strategies, mitigate risks, and achieve better overall performance.

Recommendations

Supplier Selection

State corporations should strengthen their supplier selection processes by implementing standardized evaluation criteria that consider financial stability, compliance with regulatory requirements, and past performance. Training procurement staff on advanced supplier evaluation techniques and incorporating technology-driven assessment tools will further enhance the selection process, ensuring that only the most qualified suppliers are chosen.

Supplier Segmentation

To optimize supplier segmentation, state corporations should develop clear criteria for categorizing suppliers based on strategic importance, performance metrics, and potential for innovation. Regular reviews and updates to segmentation strategies should be conducted to reflect market changes and evolving organizational needs. Additionally, leveraging data analytics can help identify trends and inform decision-making in supplier segmentation.

Suggestions for Further Studies

Future research should explore the impact of emerging technologies, such as artificial intelligence and blockchain, on supplier management practices and their potential to revolutionize procurement performance in state corporations. Additionally, studies could examine the role of supplier collaboration in innovation and how co-development initiatives influence organizational outcomes. Research could also focus on comparing supplier management practices across different sectors to identify best practices that can be adopted by commercial state corporations.

REFERENCES

Alma, M. & Achuora, J. (2021). Supplier Appraisal on Supply Chain Performance among Manufacturing Firms in Nairobi County, Kenya. *Journal of Supply Chain Management*, 5(2) 115-126.

Alshurideh, M. (2022). Does electronic customer relationship management (E-CRM) affect service quality at private hospitals in Jordan?. *Uncertain Supply Chain Management*, *10*(2), 325-332

Bahameish, B. A. S. (2023). *Supplier Segmentation Method Using Supervised Machine Learning: A Case Study of Qatar Foundation* (Doctoral dissertation, Hamad Bin Khalifa University (Qatar)).\

Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120.

Bongale, A., Kumar, S., & Bongale, A. M. (2023). An intelligent method for supply chain finance selection using supplier segmentation: A payment risk portfolio approach. *Cleaner Logistics and Supply Chain*, *8*, 100115.

Borgatti, S. P., & Li, X. (2009). On social network analysis in a supply chain context. *Journal of Supply Chain Management*, 45(2), 5-22.

Burt, R. S. (2000). The network structure of social capital. *Research in Organizational Behavior*, 22, 345-423.

Chai, J., & Ngai, E. W. (2020). Decision-making techniques in supplier selection: Recent accomplishments and what lies ahead. *Expert Systems with Applications*, 140, 112903.

Chepng'etich, C. & Waiganjo, E. & Ismael, N. (2020). Strategic supplier relationship on performance of devolved systems of government in Kenya. *International Journal of Research in Business and Social Science* (2147- 4478). 9(4) 437-443.

Choi, T. Y., & Hong, Y. (2002). Unveiling the structure of supply networks: Case studies in Honda, Acura, and DaimlerChrysler. *Journal of Operations Management*, 20(5), 469-493.

Granovetter, M. (1985). Economic action and social structure: The problem of embeddedness. *American Journal of Sociology*, 91(3), 481-510.

Kobia, M., & Mohammed, N. (2020). Performance Contracting in Kenya: The Experience of Kenya. *International Journal of Productivity and Performance Management*, 69(4), 715-730.

Kurgat, S. (2021). *Effect of supplier relationship management and regulatory policies on the organizational performance of commercial state corporations in Nairobi City County, Kenya* [Thesis, Strathmore University].

Lajim, H. & Majidi, S. (2021). Supplier segmentation: A systematic literature review. *Journal of Supply Chain Management Science*. 2(3-4)

Li, Meng, Li, Yue, Zhang, Yang (2023) *Supplier bottleneck and information dissemination.* Journal of Operations Management, 69 (4). pp. 558-585.

Magut, F. J. (2019). Influence of Supplier Relationship on Performance of Procurement Function at MOI Teaching and Referral Hospital, Kenya. *IOSR Journal of Business and Management, 21*(10), 67-89

Mburugu, K. & Senelwa, A. (2019). Influence of Financing Supplier on Procurement Performance of Public Universities in Mombasa County, Kenya. *International Journal of Social Sciences and Information Technology*, 4(12)10-18

Mchopa, AL. (2022). Effects of supplier selection and supplier monitoring on public procurement efficiency in Tanzania: a cost-reduction perspective. Emerland Publishing Ltd.

Milambo, D. & Phiri, J. (2019). Aircraft Spares Supply Chain Management for the Aviation Industry in Zambia Based on the Supply Chain Operations Reference (SCOR) Model. *Open Journal of Business and Management*, 7, 1183-1195

Muo, C. & Omwenga, J. (2018). Role of Supplier Management Practices in Optimization of Operational Performance in Telecommunication Service Industry in Kenya: A Case of

Safaricom Limited. *International Journal of Social Science and Humanities Research*, 6(1) 224-245)

Mutuku, S. M., Ochieng, V. O., & Sang, W. (2021). Influence of supplier selection criteria on performance of public corporations in Kenya: A case of Water Resources Authoity. *The Strategic Journal of Business & Change Management*, 8 (4), 372 – 387.

Mwangi, W., Muturi, M. & Noor, I. (2018). Supplier Management Practices and the Performance of Manufacturing Firms In Kenya. *International Journal of Recent Research in Interdisciplinary Sciences*, 5(3) 7-15

Nabea, M. & Nondi. R. (2018). Effect Of Supplier Selection Methods on Procurement Performance at Kenya Maritime Authority. *International Journal For Innovative Research In Multidisciplinary Field*, 4(7) 56-64

Noordewier, T. G., John, G., & Nevin, J. R. (1990). Performance outcomes of purchasing arrangements in industrial buyer-vendor relationships. *Journal of Marketing*, 54(4), 80-93.

Okello, J. (2021). Governance and Performance of State Corporations in Kenya. *Journal of Public Administration and Governance*, 10(3), 55-73.

Oteki, B.(2021). E-Supplier Management Practices On Supply Chain Performance Of Sugar Processing Firms In Kenya. *International Journal of Managing Value and Supply Chains*, 12(2)

Prajogo, D., & Olhager, J. (2012). Supply chain integration and performance: The effects of long-term relationships, information technology and sharing, and logistics integration. *International Journal of Production Economics*, 135(2), 514-522.

Pratono, H. (2023). *Multiple flexible suppliers and competitive advantage during market turbulence: the role of digital capabilities*. Universitas Surabaya,

Priem, R. L., & Butler, J. E. (2001). Is the resource-based "view" a useful perspective for strategic management research? *Academy of Management Review*, 26(1), 22-40.

Provan, K. G., Fish, A., & Sydow, J. (2007). Interorganizational networks at the network level: A review of the empirical literature on whole networks. *Journal of Management*, 33(3), 479-516.

Rahman, S. (1998). Theory of constraints: A review of the philosophy and its applications. *International Journal of Operations & Production Management*, 18(4), 336-355.

Rasdien, Z., Pooe, D., & Munyanyi, W.. (2024). Supplier relationship management for enterprise development in the cement industry. *Southern African Journal of Entrepreneurship and Small Business Management*, *16*(1), 1-9.

Reitsma, E., Manfredsson, P., Hilletofth, P. & Andersson, R. (2021). The outcomes of providing lean training to strategic suppliers: a Swedish case study. *The TQM Journal*, 33(5) 1049-1065

Rindfleisch, A., & Heide, J. B. (1997). Transaction cost analysis: Past, present, and future applications. *Journal of Marketing*, 61(4), 30-54.

Simatupang, T. M., Wright, A. C., & Sridharan, R. (2004). Applying the theory of constraints to supply chain collaboration. *Supply Chain Management: An International Journal*, 9(1), 57-70.