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INFLUENCE OF PROCUREMENT PRACTICES ON PERFORMANCE OF STATE CORPORATIONS IN KENYA

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ABSTRACT

Purpose: The purpose of this study was to establish how procurement practices influence performance of state corporations in Kenya. This study specifically sought to establish the influence of relationship management, strategic sourcing, adoption of information technology, and procurement methods on performance of state corporations.

Methodology: The study employed descriptive research design with target population of 146 State Corporations in Kenya and using census. The study used primary data which was collected using a comprehensive questionnaire. Quantitative data collected was analysed by the use of descriptive statistics using SPSS (version 23). Multiple regression analysis was used to establish the relation among the variables.

Results: The study concludes that the set of independent variables are very significant and they therefore need to be considered in any effort to enhance performance of the state corporations in Kenya. From the study findings there is need for the organization to enhance supplier appraisal to improve performance of its suppliers. The organization should focus on building long lasting relationships with suppliers. There is need for the top management in the organization to emphasize the strategic role of the strategic functions. Sourcing long-range plan includes developing relationship with the key suppliers. It was concluded that supplier relationship management, adoption of IT, strategic sourcing and procurement methods had a significant positive relationship with the performance of state corporations in Kenya.

Recommendations: The study recommends that there is need for the adoption of the IT to enhance performance of the state corporation. The study recommends for the organization to ensure that there is adequate IT infrastructure; adequate level of automation for the procurement staff in the organization, enhanced e-procurement to facilitate reduction of costs and the organization should have adequate procurement usage to enhance implementation of rules and regulations.

The study recommends that the organization need to adopt the appropriate procurement methods to reduce in average inventory held. Procurement methods can lead to improved quality for goods, works and services. Effective procurement methods can match the demand and supply for goods and lead to the reduction of complaints from the users. The competitive procurement methods can reduce the overpriced bids and reduce unethical behaviour among the procurement staff.

Key Words: *Relationship Management, Strategic Sourcing, Adoption of Information Technology, Procurement Methods and Performance of State Corporations*

INTRODUCTION

Background of the Study

According to Aliza *et al.* (2011), the influence of procurement practices on efficient and effective service delivery within public sector organizations is undisputable over the years. The existence of sound procurement system requires the existence of competent workforce highly equipped with relevant skills for specified procurement activities (Makabira and Waiganjo, 2014). However, the process on creation of a procurement workforce with the required skills and capabilities poses a challenge, given the various changes that always occur in areas such as procurement processes, the introduction or expansion of alternative contracting approaches, and increased reliance on services provided by the private sector (Mokogi *et al.*, 2015). Procurement processes are considered crucial part of logistics and supply chain that ensures products and services reach destinations promptly within the expected duration at reasonable costs (Muia, 2015). The process is always undertaken by procurement function, which refers to a division within procuring entity where procurement professionals manage the procurement and asset disposal process. In this case, management system helps in the control and regulation of costs that prove efficient. However, there is need for sufficient procedures capable of incorporating the said follow-up results (Smith, 2012).

Observation on the key efficiency means helps in the maximization of profits, therefore, reducing the organization's operation costs. There is sufficient research on alternative procurement processes that can serve better the operations within the technical, operational and structural aspects of organizations. However, the current knowledge on efficiency and strategies on implementation plan on the state corporations seem not sufficient in providing solution to procurement processes (Muia, 2015). There is need for utilization of efficiency gap whereby improvements are made focusing on improving procurement activities that influence performance within state corporations. However, there are different barriers that create a stumbling block in the process of adopting the policies and measures which include lack of capital, hidden costs as well as lack of appropriate information from the state corporations (ABS, 2010).

Global Perspective of Procurement Practices

From the global perspective companies respond to the challenges associated with organizational performance through acute implementation of procurement practices (Lambert and Cooper, 2011). In this case, procurement practices focuses on the provision of the right metrics and key performance indicators capable of aiding the global firm in the process of assessing performance, resources, costs and operational logistics from relocated departments alongside manufacturing facilities. Importantly, procurement practices provides good basis for integration to globalizing companies, however, they do not provide all time quick solutions to all market penetration as well as business infrastructures (Lambert and Cooper, 2011). It is necessary for private sector organizations to ensure that their systems are solidified and streamlined domestically before globalizing their services (Swami and Shah, 2013). This would ensure stability in the process of internationalization their services. However, there is need for full integration of company's internal operations at home level before adding the complications of a global expansion (Swami and Shah, 2013). From the perspective of the United Nations, (2011) the ultimate objective of the private sector, regardless of their character, nature and eventual original purpose, is to make substantial contributions toward the creation of a better and more stable global community. Singhal (2011), states that disruptions in procurement practices at a global level devastate corporate performance. This is because poorly coordinated procurement practices eventually leads to damages in the long-run especially to companies' stock prices and profitability. This requires adequate address by the supply chain continuity planners (Christopher *et al*, 2008).

Regional Perspective of Procurement Practices

From the regional perspective the internationalization process of businesses has led to availability of increased vulnerabilities in the organizational performance. However, at times the unpredictable result of disasters like earthquakes or terrorist acts often could be prevented by better risk management. Many companies in the private sector in Africa as a whole have resolved towards undertaking elaborate steps towards dedicating themselves in the achievement of various goals as outlined by the United Nations (UN, 2011). For the purposes of achieving such objectives, different companies aspire to establish competent structures that ensure efficiency and effectiveness in their service delivery mechanisms (James, 2012). Further, there is some level of importance attached to procurement reform in almost all state corporation settings demonstrated based on its scale and role in terms of performance. There is concern by regional governments especially on the amount of money wasted by existing practices, reduced competition, higher prices due to market perceptions of risk, as well as the demonstrated ability of countries to capture enormous savings through concerted efforts to strengthen their procurement function (Mokogi *et al.*, 2015). In some instances, there is an indication that governments lack the financial and technical capacity to effectively exercise the necessary oversight and control functions, track and report on allocation, disbursement and use of financial resources (Mokogi *et al.*, 2015). There is an elaborate call from global platform on state organizations to observe complete control on environmental degradation, climate change and resource depletion within supply chain management for the purposes of sustainable development.

This calls upon the state organizations to incorporate social and environmental criteria within their procurement processes (Smith, 2012). According to Henry and Essinger (2000), the State Corporations in Africa and the world as a whole have experienced different changes within their operations over time. This can be identified by critical look at the wide range of activities, products and services procured alongside the trend in the client base. It is important to note that the changes experienced on the way state corporations deliver their services is as a result of evolving technology and innovations. However, such changes have not shifted the primary role of such organization in the promotion of the country's economy. In this case, it is important to note that state corporations provide first choice services to the nation, therefore, requires the use of appropriate strategies. In this case, procurement activities are considered fundamental in delivering required results within supply chain.

Local Perspective on Procurement Practices

For the purposes of being competitive in a highly unpredictable working environment, organizations need to appreciate the on-going changes in the environment for the purposes of engaging appropriate knowledge and skills. In so doing, there's need to look at the strengths and opportunities that state corporations are exposed to in order to exploit their strategic abilities, as well as their weaknesses and threats in order to see how to minimize their effects on procurement performance (Mwangi, 2009). Kenya is in the developing stage that recognizes state corporations operations, financing strategies within the market, legal rules and regulations. The financing problem has become one of the obstacles towards development and management of government processes in the Kenyan situation (Mason & Gerard, 2009). According to Levine (2004), the financial system directly affects the rates on investment as well as further development in technology and such aspects have direct impact on growth rates in the long-run. Notably, engaging appropriate activities within organizations helps in defining the processes required for development, utilization and bringing together of the organisational structures, control systems as well as culture to conform to guidelines capable of producing the required performance levels (Sorooshin, Norzima, Yusuf, & Rosnah, 2010). This therefore, requires further look at procurement practices and their influences on performance within state corporations.

In Kenya a public project refers to the project investment that involves the use of public funds by a Government body which is mandated to carry out certain specific missions to achieve specific objectives for the benefit of the greater public majority (Abdi, 2012). Project implementation on the other hand refers to the process of actualizing the investment plan by putting certain specific actions and structures in place in order to operationalize the investment dream and subsequently derive the targeted benefits from the project (Muia, 2015). The last few years have seen the state corporations in Kenya experiencing increasing growth and profitability within various domains such as in assets, deposits, products and services. Such level of growth has been influenced by technological advancement that enables wide branch networking within state corporations. The current growth in state corporations mainly depends on the rate of expansion and ventures into new market segments especially in East Africa, this involves wise management of risks associated with operations as well as enhanced economic prospects. Such growth and investment opportunities have encouraged state corporations to re-examine their operation processes and

develop strategies that enhance service delivery and competitiveness within the market (Muia, 2015). From the perspective of Chandra (2011), public projects such as; investment in a public transport system like construction of a new railway line or expansion of the existing railway infrastructure, building of energy generation plant, Building of new substations, development of public housing, research and development, training, and so on forms the major activities of state corporations. Such public projects can be classified either as strategic investments to address long-term organizational goals with a significant impact on the overall direction of the concerned public entity, or tactical investments to implement a current strategy as efficiently or as profitably as possible (Muia, 2015). Consequently, this study identifies limited gaps in existing empirical literature as it relates to procurement practices and their effects on performance in state corporations. It is against this background that the research aims to fill this gap by evaluating procurement practices influencing performance in State Corporations.

Statement of the Problem

State Corporations in Kenya have not been performing well over the years, and the government is often forced to bear the procurement burden (Cheboi, 2014). The procurement docket is relatively essential and one of the most important aspects or sectors of an organization. According to Karanja and Kiarie (2015), activities within the procurement department often touch on most of corporations operations and hence its significance to performance. The study by Price Water House Coopers PWHC (2009) revealed that a number of public enterprises in Kenya approximately over 50% do not comply with procurement regulations, therefore, creating corruption loopholes and other malpractices on procurement processes. Atieno (2009), outlined the following several attributes that accurately describes the governance of state owned corporations in Kenya: acquisition as well as the provision of low-quality products and services, inefficiency, and finally, enormous financial losses. For instance, report by KISM (2010) shows that the central government spends about KES 234 billion per year on procurement. However, on annual basis, the government losses close to KES 121 billion about 17 per cent of the national budget due to inflated procurement quotations (KISM 2010).

According to Public Procurement and Asset Disposal Act (PPADA, 2015), most of the tendered products/services in many State Corporations have a mark-up of 60 per cent on the market prices. Daniel (2010) reports that the Ministry of Transport lost 4.2 billion Kenyan shillings in the year 2010 and in the year 2011, a total of Ksh. 33,061,925 is said to have been embezzled from the youth funds. Moreover, the study by Tom (2009), shows that there are various acts of inefficiency and ineptness within the overall implementation of procurement performance in many state corporations which in overall contributes to loss of over Ksh.50 million on annual basis. Despite the inefficiencies recorded, procurement expenditure could be minimized through proper implementation of procurement performance (Victor, 2012). The Public Procurement and Asset Disposal Act (PPADA, 2015), conducted a survey on Kenya's public procurement and disposal framework and identified some of the reasons why state owned corporations struggle. Some of the issues cited included: long procurement time, the high cost of procurement operations, bureaucratic procedures with tall hierarchies or big chain of command, and resale of already branded goods.

According to PPOA, these issues are universal, and most of the state owned corporations in Kenya suffer from at least one of the challenges listed above. In a majority of the corporations, procurement is often not prioritized or regarded as an important entity despite its connections to almost all the other aspects. Additionally, technological changes in procurement practice can also be a factor that influences performance (Muia, 2015). In this study, therefore, the sole purpose is to identify the effects procurement practices have on the performance of state corporations while also providing recommendations or solutions for the same.

Objectives of the Study

- i. To establish the influence of supplier relationship management on performance of State Corporations in Kenya
- ii. To examine the influence of Information Technology on performance of State Corporations in Kenya
- iii. To evaluate the influence of strategic sourcing on performance of State Corporations in Kenya
- iv. To determine the influence of procurement methods on performance of State Corporations in Kenya

LITERATURE REVIEW

Theoretical Review

Institutional Theory

The institutional theory is associated with various aspects of social structure that are deeper and more resilient. The theory focuses on the various processes where organizational structures are considered for provision of authoritative guidelines safeguarding social behaviour such as schemes, rules, norms, as well as routines. In this aspect institutions are considered as the source where human interaction levels are devised and structured to suite the intended purpose. Therefore, these rules can either be formal or informal. The institutional theory considers institutions an important element within the society. This is since institutions provide platform that makes it possible for sharing of information, bounded rationality of human nature, as well as high transaction costs within the various exchange mechanisms. Further, such theory considers the way in which structures and schemes operate within the institution. Such schemes include rules, norms as well as routines that become established authoritative guidelines within the social behaviour domain. This theory studies the impact the various effects of rational, regulative and normative structures that safeguard a firms operating environment (Normore, 2016). This theory gives the appropriate justification that underlies the reason as to why state corporations operate as intermediary sectors. This requires enhance of proper relationships (Ngunyi, 2014). The study adopted institutional theory to understand the relationship between supplier relationship management and performance of state corporations in Kenya.

Socio-Economic Theory

This theory focuses on direct and indirect relationship that exists between organization and the society. Such interaction processes are key in determining and understanding government procurement processes (Hui et al., 2011). There is elaborate explanation on socio-economic theory in relation to other social theories that provides the required relevance in this topic. Ngunyi (2014) explain the socio-economic theory of compliance in relation to economic theory by integrating theories from psychology and sociology. This is done for the purposes of incorporating moral obligation and social influence since they influence individuals' decisions on compliance. The progression of any institution is dependent on psychological perspectives that determine the level of success or failure within any organizational compliance (Lisa, 2010). This theory makes it easier for the public to understand the importance of strategic sourcing on performance of the state corporations.

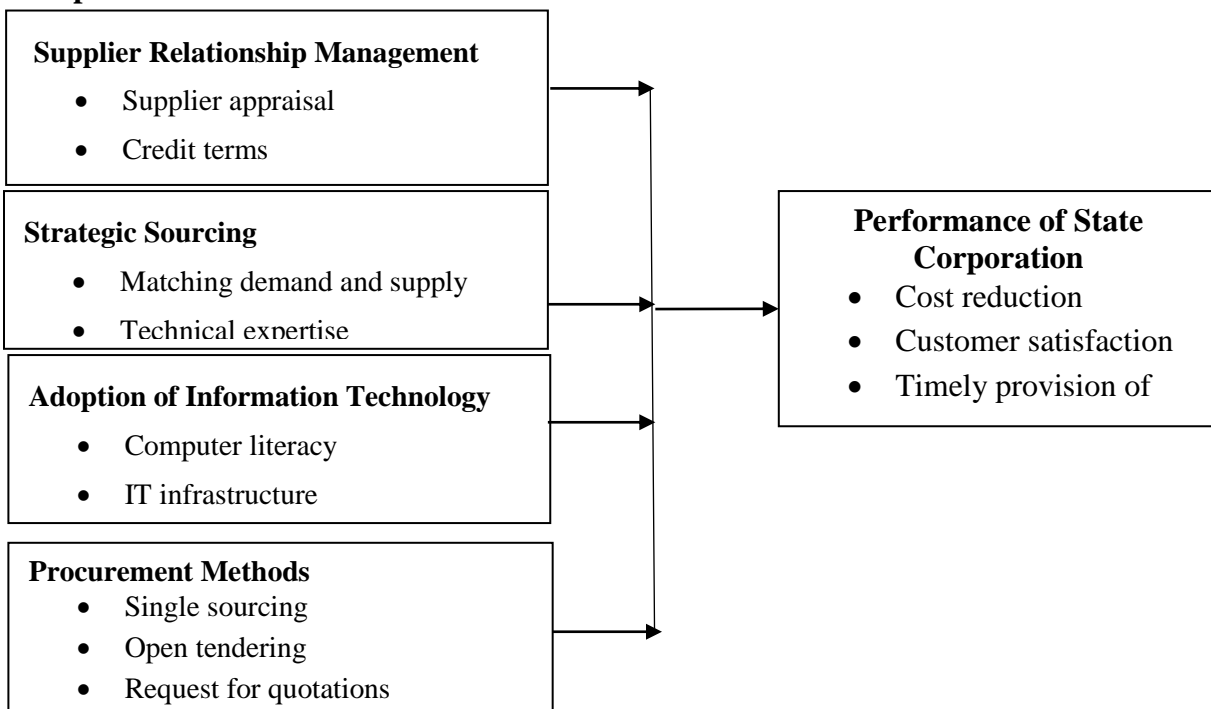
Adaptive Structuration Theory

Based on structuration theory, the study intends to determine the effects of technology on procurement regulatory compliance. Anthony Giddens in his *Constitution of Society* in 1984 addresses issues of human behaviour in the context of technology based on social structure. In other words, the theory looks into the process of human usage of computer systems and at the nature of group-computer interaction (Poole and DeSanctis, 2009). With the main focus of communication using information technology, the theory highlights the concepts of appropriation and structuration. In addition, the AST can be considered as a prime starting point to draw links between individuals and organisational learning. This is due to the core concept in AST that address issues of group interaction with technology as the basis of human activity (DeSanctis and Poole, 2008). AST is a viable approach in studying how information technology affects procurement performance in oil industry as it examines the change from distinct perspectives. Adaptive Structuration Theory (AST) is relevant in today's procurement management practice due to the expanding influence that advancing technologies have had with regard to the human computer interaction aspect of AST and its implications on socio-biologically inspired structuration in security software application (Ramakrishna 2005). AST theory presents specific advances in information technology that are driving organisation changes in the areas of business alignment, IT planning and development that show how AST is being used as a driving force of effective management within organisation. The study will use the theory to investigate the effect of the use of information technology on procurement management According to DeSanctis and Poole (2008), AST is a viable approach for studying the effect of the use of information technology on procurement management. In conclusion AST's appropriation process is a good model to analyze the utilization and penetration of new technologies in organizations.

Auction Theory

This theory will guide the study in investigating the relationship between procurement methods and performance of state corporations in Kenya. According to Gunnar Alexanderson and Staffan Hultén (2006) open tendering when contracting out public services is similar to performing common value auctions with a sealed-bid procedure. However, the price of the bidders may not be the only factor (although often the most important) to take into account. The procuring public authority typically evaluates the competing bids regarding both price and quality once the bidding process has ended. He argues that, competitive tenders combine traits, advantages, disadvantages and risks, of both auctions and beauty contests. Hultkrantz and Nilsson (2011) claim that a pure auction is better than a beauty contest because it offers a more market-oriented, objective and transparent method for awarding licenses. Their strongest argument in favour of open tendering is that firms in the auction process, by means of offering more and more money, reveal information about their estimation of the value of the good. Hultkrantz and Nilsson (2011) point out several disadvantages with beauty contests: the process is slow and cumbersome, in particular if the final decision is challenged in court, it is difficult to achieve transparency, and many criteria are not objective or difficult to quantify. They further suggest that, even when social concerns are important, an open tendering is a better alternative since it can also include minimum requirements and can allow both positive bids in attractive regions and negative bids in unattractive regions. This helps in supply chain performance because the best supplier or bidder depending on the criterion that will be selected.

Conceptual Framework



Independent variables

Dependent Variable

Supplier Relationship Management

According to Tobias and Peter (2009) supplier relationship management is a comprehensive approach to managing organisations interactions with the firms that supplies the products and services it uses. It's the process that defines how an organization interacts with its suppliers. Like dynamic organizational capabilities, dynamic managerial capabilities that safeguards supplier relationships arise from prior learning and experience (Helfat, Finkelstein, Mitchell, Peteraf, Singh, Teece, & Winter, 2010). Rajasekar, (2014) provide useful case descriptions and make brief mention of supply policy, but again, their attention is on supply policy as a lever for government reform. The assertions by Rajasekar (2014) seems contrary from public procurement regulations and rules, whereby the legal environment refers to a broad legal framework that incorporates all business activities that includes research and development (regulations dealing with safety and health of new products). Further it also includes manufacturing (safety and health regulations at work place and pollution control), finance (regulations dealing with disclosure of information), marketing (regulations dealing with deceptive advertising and disclosure of product characteristics), personnel (regulations dealing with equal opportunity for women and minorities), and contract law. In the context of developing countries "contract administration includes all relationships between the Government and the contractor," (Weeks & Namusonge, 2015).

Strategic Sourcing

One of the key determinants as applicable in successful service delivery involves allocation of resources through elaborate decision making processes. Such aspect demands that such key resources as time, financial resources, skills and knowledge are evenly distributed to ensure effective customer relationship management that eventually allows productivity. Strategic sourcing focuses on obtaining value for money for the public sector through partnership working between buying organisations, Centres of Expertise (CoEs) and suppliers. Strategic sourcing draws on expertise across the public sector to leverage volumes and secure benefits from economies of scale through harnessing combined sector purchasing power. The constructs under strategic sourcing will include matching demand and supply, Technical expertise and Value for money (Rajasekar, 2014). Lysons and Farrington (2006), defines strategic sourcing as "concerned with the top- level, longer-term decision relating to high – profit, high supply risk items and low-profit, high supply risk bottleneck product and services". It's also concerned with the formulation of long-term purchasing policies, supplier base, partnership sourcing, reciprocal and intra- Company trading, globalization and countertrade, the purchase of capital equipment and ethical issues. Sourcing costs represent 40 to 80 percent of the cost of goods sold, and 30 to 50 percent of revenues – a ratio that has remained constant in most industries for many years.

Adoption of Information Technology

Information technology plays a crucial role in granting state corporations sufficient access to information and links to major corporations internationally. However, the impact of IT largely depends on different services that the state corporations provide. For instance, inclusion of IT within transaction processing would help in improving productivity as well as reducing cost structure through scale economies. There is tendency on reduction of risk of imperfect information through provision of risk management services that involves transfer and distribution processes (Rajasekar, 2014). As organisations grow and change, they depend more and more on information technology for their survival (Feeny & Willcocks, 2018). Companies today implement and use information technology to find solutions to business problems, to improve management decision-making, enhance productivity and quality, and compete for new markets in our global and aggressive business environment (Porter & Millar, 2015). Moreover, IT can be seen as a powerful force that opens exciting opportunities for organisations to achieve their missions and goals in an effective way. Therefore, leaders in organisations must obtain an overall appreciation of the potential of IT and link the acquisition and utilization of IT to the organizational mission (Hacker & Saxton, 2007).

Procurement Methods

Procurement methods refers to the various procedures that are applicable by an entity in acquiring goods and services that can either be competitive or non-competitive (Muia, 2018). This study looks at three procurement methods that include single sourcing, open tendering and request for quotations. It is important to note that the basic principles underlying a good procurement process entails the element of accountability, transparency and integrity. In this case, these principles ensure that effective mechanisms are put in place for the purposes of enabling procuring entities spend carefully the available limited resources. This is done since they recognize the fact that they are accountable to members of the public and competitive supply that requires the procurement to be carried out through competition. The legal rights and duties of the parties determine the proper course of action. And this is very important since state corporations outsource and sub-contract most of their operations. This aspect shows directly that procurement policy has an influence on performance due to the nature and complexity in politics and law governing all aspects of service delivery from the perspective of the supplier and end user (Maina, 2011).

Performance of State Corporations

It is good to note that a sound procurement system requires the involvement of competent professional workforce. However, the process of creating a procurement workforce with the right skills and capabilities can be a challenge, owing to the various activities such as changes to procurement processes, the review on alternative contracting approaches, and increased reliance on services as provided by the private sector (RoK, 2005). The procurement workforce “permeates virtually every effort within an agency, including successfully acquiring goods and services and executing and monitoring contracts” (Government Accountability Office, 2005).

Lack of flexibility and customer satisfaction can be linked to lack of a high degree of quality of personnel in public procurement, and this eventually impedes compliance. Improved performance will lead to increased productivity, increased profits for the organization and therefore good results of investing in training. The constructs that will be used to measure performance include cost reduction, timing and customer satisfaction.

RESEARCH METHODOLOGY

The study adopted a descriptive research design and targeted 146 all State Corporations in Kenya. The unit of observation comprised of heads of procurement. The study adopted a census approach where all members of the target population were included in the study. The study used structured questionnaires to collect both qualitative and quantitative data captured through a 5-point likert scale. Inferential and descriptive statistics was used to analyze data. Results of the analysis were presented by use of tables and figures. Inferential statistics was used to establish the association between independent variables and dependent variable. The study used the following regression model:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$$

Where; Y =Performance of State Corporations, $\beta_i=1, 2, 3, 4$ = The coefficient for various independent variables, X_1 = Relationship Management, X_2 =Strategic Sourcing, X_3 =Adoption Of Information Technology, X_4 = Procurement Methods and ϵ = Error term

RESULTS

The study administered 146 questionnaires where 98 questionnaires were filled and returned. This represented a response rate of 67.13%. This is an acceptable coverage in a census study because it is more than 50% of the expected coverage (Amin, 2005).

Descriptive Findings and Analysis

Descriptive statistics enables the researcher to use statistics in describing distributions of measures or scores. The study used means percentages and mean standard deviations to present the study findings. The study rated the responses from a scale of 1-5 and presented the mean response per statement for all the study variables. The main focus of the study was to establish the influence of procurement practices on performance of state corporations in Kenya.

Supplier Relationship Management

The study sought to assess the influence of supplier relationship management on performance of state corporations in Kenya. This section presents findings to statements posed in this regard with responses given on a five-point Likert scale (where 1 = Strongly disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; 5= Strongly Agree). Table 4.7 presents the findings. The scores of 'strongly disagree' and 'disagree' have been taken to represent a statement not agreed upon, equivalent to mean score of 0 to 2.5. The score of 'Neutral' has been taken to represent a statement equivalent to a mean score of 2.6 to 3.4. The score of 'agree' and 'strongly agree' have been taken to represent a statement highly agreed upon equivalent to a mean score of 3.5 to 5.0.

Table 1 presents the findings as tabulated, a majority of respondents were found to be neutral with the statement posed in regard to the influence of procurement practices on performance of state corporations in Kenya. The study established that the organization believes in supplier appraisal is important to improve performance of its suppliers (Mean=2.788). The organization focuses on supplier credit terms to enhance service delivery (Mean=2.764). The organization makes timely dispute resolution with suppliers to enhance service delivery (Mean=2.876). The organization conducts supplier base annually to enhance cost reduction (Mean=3.217). The organization has adequate supplier base through supplier appraisals to improve cost reduction (Mean=3.214); the organization dispute resolution with suppliers enhance timely provision of services (Mean=2.908). The study results imply that supplier relationship management influence performance of state corporations in Kenya. The study findings are in agreement with literature review by Ansari (2009) that supplier management allows firm to make better use of their suppliers capabilities and coordinating operational activities through joint planning also results to inventory reduction, smoothing production, improve product quality, and lead time reduction Browne (2004) contends that supplier relationship management is a comprehensive approach to managing an enterprise's interactions with the organizations that supply the goods and services it uses. The goal of supplier relationship management (SRM) is to streamline and make more effective the processes between an enterprise and its suppliers just as customer relationship management (CRM) is intended to streamline and make more effective the processes between an enterprise and its customers.

Table 1: Influence of Supplier Relationship Management on Performance of State Corporation

Supplier Relationship	Mean	Std. Dev
The organization believes in supplier appraisal is important to improve performance of its suppliers	2.456	.435
The organization focuses on supplier credit terms to enhance service delivery	2.764	.231
The organization makes timely dispute resolution with suppliers to enhance service delivery	2.876	.342
The organization conducts supplier appraised annually to enhance supplier performance	3.212	.331
The organization has adequate supplier base to improve cost reduction	3.214	.329
The organization dispute resolution with suppliers enhance timely provision of services	2.908	.548

Strategic Sourcing

The study sought to assess the influence of strategic sourcing on performance of state corporations. This section presents findings to statements posed in this regard with responses given on a five-point likert scale (where 5 = Strongly Agree; 4 = Agree; 3 = Neutral; 2 = Disagree; 1 = Strongly Disagree). Table 2 presents the findings. The scores of 'strongly disagree' and 'disagree' have been taken to represent a statement not agreed upon, equivalent to mean score of 0 to 2.5. The score of 'Neutral' has been taken to represent a statement agreed upon moderately, equivalent to a mean score of 2.6 to 3.4. The score of 'agree' and 'strongly agree' have been taken to represent a statement highly agreed upon equivalent to a mean score of 3.5 to 5.0. Table 4.5 presents the study findings. As tabulated, a majority of respondents were found to disagree that the procured goods in the organization match demand and supply (3.568); Technical expertise is the base for strategic sourcing (3.236); Sourcing functions has active interaction with the other functions (2.908); Matching demand and supply improves cost of reduction (2.134); Value for money in procurement enhance cost of reduction (2.565); Technical expertise sourcing improve customer satisfaction (3.218). The study findings imply that strategic sourcing enhance procurement performance in the public entities in Kenya. The study findings are in agreement with literature review by Walker et al., (2013) notably, public strategic procurement integrates the concept of competitive advantage that is substituted with that of relational rent. In this case, the concept of relational rent is considered as an advantage generated collaboratively in an exchange relationship that cannot be generated by either organization in isolation and can be created only through the joint idiosyncratic contributions of the specific collaborating organizations. Strategic sourcing is well elaborated by the Agency theory that focuses on relationships between firms and organizations. Walker et al., (2013) argue that organizations may benefit more by collaboration than by acting alone because of economies of scale, process, and/or information. Strategic sourcing may reduce waste in the procurement system, achieve better outcomes for taxpayers, and, hence, improve the overall socioeconomic position.

Table 2: Influence of Strategic Sourcing on Performance of State Corporations

Strategic Sourcing	Mean	Std. Dev
The procured goods in the organization match demand and supply	3.568	.439
Technical expertise is the base for strategic sourcing	3.236	.468
Strategic sourcing is based on value for money	2.908	.568
Matching demand and supply improves cost of reduction	2.134	.326
Value for money in procurement enhance cost of reduction	2.565	.580
Technical expertise sourcing improve customer satisfaction	3.218	.328

Adoption of Information Technology

Keeping with the pace in global practices in terms of the increasing use of IT especially in public procurement to any public entity especially when such Technology capabilities is proven to improve implementation levels thereby improving performance. Thus, the study sought to determine the degree of use of IT in the procurement department and more so in the implementation of procurement policies and how this might influence implementation. This was carried out by assessing the perceptions of the procurement staff regarding IT while measuring their responses on a 5-point Likert scale to show the degree of agreement or disagreement with the various IT items. The findings regarding this were presented in Table 3. The findings in Table 4.6 show that 87 (75%) and 29 (25%) of the procurement staff strongly disagreed and disagreed respectively that the organization ensures that procurement staff are computer literate giving a mean response of 1.25 (SD = 0.44) showing strong disagreement by majority of the respondents. In addition, 72 (62.1%) and 28 (24.1%) of the respondents agreed and strongly agreed respectively that the organization has ensured that there is adequate IT infrastructure while 16 (13.8%) held a neutral view thus giving a mean response of 4.10 (SD = 0.61) indicating agreement by majority of the respondents regarding this. The findings further showed that 41 (35.3%) and 38 (32.8%) of the respondents agreed and strongly agreed respectively that there is adequate level of automation for the procurement staff in the organization while 2 (1.7%) and 35 (30.2%) of the respondents disagreed and held a neutral view respectively regarding this giving a mean response of 3.99 (SD = 0.84) indicating agreement by majority of the respondents. In addition, 42 (36.2%) and 19 (16.4%) of the respondents agreed and strongly agreed respectively that the organization has ensured that there is enhanced e-procurement to facilitate reduction of costs while 12 (10.3%) and 43 (37.1%) disagreed and held a neutral view respectively regarding this giving a mean response of 3.59 (SD = 0.89) showing agreement by majority of the respondents. Finally, the findings show that 57 (49.1%) and 49 (42.2%) of the procurement staff agreed and strongly agreed respectively that the organization has adequate procurement usage to enhance implementation of rules and regulations while 10 (8.6%) held a neutral view giving a mean response of 4.34 (SD = 0.63) indicating agreement by majority of the respondents. The overall mean response was 3.75 (SD = 0.35) indicating agreement by majority of the respondents regarding majority of the items on Technology capabilities though there was a gap in terms of the organization ensuring that procurement staff are computer literate. Information Technology (IT) is a technology that involves use of computers, software and internet connections infrastructure for supporting information processing and communication functions (Crompton 2007). The use of information technology in public sector has not been effectively implemented since most of the procurement functions are subjected to manual procedures that are slow, inaccurate and infective. This has negative impact on procurement procedures since the public sector organizations cannot effectively monitor and coordinate procurement procedures of all road construction projects, there is lack of computerized procurement procedures and this subjects much of procurement functions to manual operations which are slow and ineffective.

The use of computerized procurement systems demonstrates efficient use of information technology but in cases where the organization subjects all its procurement functions to manual procedures, the benefits of information technology are not experienced and a high level of inefficiency is experienced during execution of procurement procedures.

Table 3: Influence of IT on Performance of State Corporations

Statement	SD	D	N	A	SA	Mean	SD
The procurement staff are computer literate	75	25	0	0	0	1.25	.440
There is adequate IT infrastructure	0	0	13.8	62.1	24.1	4.10	.061
There is adequate level of automation	2	5	13	60	20	4.21	.008
E-procurement enhance reduction of costs	0	1.7	30.2	35.3	32.8	2.76	.003
Level of automation has enhanced timely delivery of services	3	10	25	40	12	2.67	.098
It infrastructure has improved procurement process	0	0	8.6	49.1	42.2	2.45	.542

Procurement Methods

The study sought to assess the influence of procurement methods on performance of state corporations. This section presents findings to statements posed in this regard with responses given on a five-point Likert scale (where 5 = Strongly Agree; 4 = Agree; 3 = Neutral; 2 = Disagree; 1 = Strongly Disagree). Table 4.7 presents the findings. The scores of 'strongly disagree' and 'disagree' have been taken to represent a statement not agreed upon, equivalent to mean score of 0 to 2.5. The score of 'Neutral' has been taken to represent a statement agreed upon moderately, equivalent to a mean score of 2.6 to 3.4. The score of 'agree' and 'strongly agree' have been taken to represent a statement highly agreed upon equivalent to a mean score of 3.5 to 5.0. Table 4 presents the study findings. As tabulated, a majority of respondents were found to disagree that single sourcing reduces in average inventory held (3.568); Open tendering lead to improved quality for goods, works and services (3.236); request for quotations enhance matching the demand and supply for goods (2.908); open tendering leads to the reduction of complaints from the users (2.134); the competitive procurement methods reduces the overpriced bids (2.565); open tendering reduces unethical behaviour among the procurement staff (3.218). This implies that the procurement methods enhance performance of State Corporation.

The study findings are in agreement with the findings by Kiruja (2014) who established that procurements methods affects procurement performance of state corporations thus recommended that state corporations should apply suitable procurement methods, policy makers in government, practitioners and stakeholders in Kenya should develop their awareness on procurement performance measurement for future procurement endeavours. Awareness on procurement performance should be disseminated to professional bodies, state corporations and governmental agencies so as to monitor procurement performance.

Table 4: Influence of Procurement Methods on Performance of State Corporations

Procurement Methods	Mean	Std. Dev
Single sourcing reduces in average inventory held	3.568	.439
Open tendering lead to improved quality for goods, works and services	3.236	.468
Request for quotations enhance matching the demand and supply for goods	2.908	.568
Open tendering leads to the reduction of complaints from the users	2.134	.326
The competitive procurement methods reduces the overpriced bids	2.565	.580
Open tendering reduces unethical behaviour among the procurement staff	3.218	.328

Performance of State Corporations

The study sought to examine the influence of procurement practices on performance of state corporations in Kenya, attributed to the influence of supplier relationship management, adoption of IT, strategic sourcing and procurement methods. The study was particularly interested in three key indicators, namely reduction of costs, customer satisfaction and timely provision of services. Findings in table 4.8 below reveal improved performance across the 5 year period running from the year 2013 to 2017. On reduction of costs, a majority of respondents affirmed having improved from less than 10% in 2013 (41.9%), to growth by 10% in 2014 (34.8%), then by more than 10% in 2015 (39.0%) and 2018 (36.2%). Customer satisfaction also recorded improvement with a majority affirming to less than 10% in 2013 (42.3%) and 2014 (37.7%), to 10% in 2015 (36.1%) then more than 10% in 2016 (41.1%) and 2017 (37.5%). A similar trend was recorded on timely delivery of services, growing from less than 10% (44.1%) in 2013, to more than 10% in 2014 (36.4%), 2015 (40.4%) and 2018 (37.3%). Supply deficits further recorded positive growth with a majority affirming to less than 10% in 2011 (37.9%) and 2012 (35.9%), to 10% in 2013 (35.9%) and 2014 (35.3%) then by more than 10% in 2015 (36.2%). It can be deduced from the findings that key supply chain areas have considerable improved with the adoption of the procurement practices.

Accordingly Muia (2013) argues that the influence of procurement practices on efficient and effective service delivery within public sector organizations is undisputable over the years. The existence of sound procurement system requires the existence of competent workforce highly equipped with relevant skills for specified procurement activities (Makabira & Waiganjo, 2014). However, the process on creation of a procurement workforce with the required skills and capabilities poses a challenge, given the various changes that always occur in areas such as procurement processes, the introduction or expansion of alternative contracting approaches, and increased reliance on services provided by the private sector (Mokogi et al., 2015).

Table 5: Performance of State Corporations

Reduction of Costs	2013	2014	2015	2016	2017
Improved by less than 10%	41.9	37.9	33.8	29.7	29.1
Improved by 10%	33.2	29.6	34.8	31.3	34.7
Improved by more than 10%	24.9	31.5	31.4	39.0	36.2
Customer Satisfaction	2013	2014	2015	2016	2017
Improved by less than 10%	42.3	37.7	31.6	30.7	29.5
Improved by 10%	31.8	32.9	36.1	28.2	33
Improved by more than 10%	25.9	29.4	32.3	41.1	37.5
Timely provision of services	2013	2014	2015	2016	2017
Improved by less than 10%	44.1	35.2	33.4	25.7	27.1
Improved by 10%	31.7	32.6	30.2	33.9	35.6
Improved by more than 10%	23.5	32.2	36.4	40.4	37.3

Multiple Regression Analysis

The multiple regression analysis was used to establish the relation among the variables and as per the model summary Table 4.9, the coefficient of determination (R^2) is used to measure how far the regression model's ability to explain the variation of the independent variables. The correlation coefficient was 0.833. This indicates a very strong positive relationship between the independent variable and dependent variable. The data showed that the high R square is 0.694. It shows that the independent variables in the study were able to explain 69.40% variation in the performance of the state corporation in Kenya while the remaining 30.60% is explained by the variables or other factors which the study recommends for further study.

This implies the set of independent variables are very significant and they therefore need to be considered in any effort to enhance performance of the state corporation in Kenya.

Table 6: Model Summary

Model	R	R ²	Adjusted R ²	Std. Error of the Estimate
1	.833	.694	.677	.000

ANOVA Results

From the ANOVA statics in Table 7, the study established the regression model had a p-value of $0.000 < 0.05$ which is an indication that the data was ideal for making a conclusion on the population parameters as the value of significance. The calculated value was greater than the critical value ($68.780 > 18.908$) an indication that supplier relationship management, strategic sourcing, IT and procurement methods all influence performance of state corporations in Kenya.

Table 7: ANOVA

Model	Sum Squares	of d.f	Mean Square	F	Sig.
Regression	40.169	4	10.042	68.780	.000 ^a
Residual	17.712	121	.146		
Total	57.881	125			

NB: F-critical Value = 18.908;

Regression Coefficients

The results of multiple regression analysis obtained regression coefficients t value and significance level as indicated in Table 4.11. The study conducted a multiple regression analysis so as to determine the relationship between the dependent variable and independent variables. From the study findings on the regression equation established, taking all factors into account (independent variables) constant at zero performance of state corporation was 15.780. The data findings analysed also shows that taking all other independent variables at zero, a unit increase in supplier relationship would lead to a 0.789 increase in performance of state corporation. Based at 5% level of significance, supplier relationship had a t-value ($4.320 > 1.96$) with a .002 level of significance. The study findings are in agreement with literature review by Ansari (2009) that supplier management allows firm to make better use of their suppliers' capabilities and coordinating operational activities through joint planning also results to inventory reduction, smoothing production, improve product quality, and lead time reduction.

Further, a unit increase in strategic sourcing would lead to a 0.768 increase in performance of state corporation. Based at 5% level of significance, strategic sourcing had a t-value ($4.122 > 1.96$) with a .006 level of significance. The study findings are in agreement with literature review by Walker et al., (2013) notably, public strategic procurement is well elaborated by the Agency theory that focuses on relationships between firms and organizations. Walker et al., (2013) argue that organizations may benefit more by collaboration than by acting alone because of economies of scale, process, and/or information. Strategic sourcing may reduce waste in the procurement system, achieve better outcomes for taxpayers, and, hence, improve the overall socioeconomic position.

Additionally, a unit increase in IT would lead to 0.735 increases in performance of state corporation. Based at 5% level of significance, IT had a t-value ($3.657 > 1.96$) with a .009 level of significance. Information Technology (IT) is a technology that involves use of computers, software and internet connections infrastructure for supporting information processing and communication functions (Crompton 2007). The use of information technology in public sector has not been effectively implemented since most of the procurement functions are subjected to manual procedures that are slow, inaccurate and infective. A unit increase in procurement methods would lead to 0.658 increases in performance of state corporation. Procurement methods had a t-value ($2.890 > 1.96$) with a .011 level of significance. The study findings are in agreement with the findings by Kiruja (2014) who established that procurements methods affects procurement performance of state corporations thus recommended that state corporations should apply suitable procurement methods, policy makers in government, practitioners and stakeholders in Kenya should develop their awareness on procurement performance measurement for future procurement endeavours. Awareness on procurement performance should be disseminated to professional bodies, state corporations and governmental agencies so as to monitor procurement performance.

Table 8: Coefficient Results

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	B	t	Sig.
(Constant)	15.780	2.933		5.380	.000
X ₁ Supplier Relationship	.789	.182	.522	4.320	.002
X ₂ Strategic Sourcing	.768	.186	.458	4.122	.006
X ₃ ICT	.735	.200	.388	3.657	.009
X ₄ Procurement Methods	.658	.227	.376	2.890	.011

The optimal linear regression model for the study therefore becomes:

Performance of State Corporations = 15.780+ 0.789(Supplier Relationship) + 0.768(Strategic Sourcing) + 0.735(ICT) + 0.658(Procurement Methods)

CONCLUSION AND RECOMMENDATION

Conclusion

It was established that the state corporations did not have adequate supplier base which is important to improve performance of its suppliers. The organization rarely focuses on supplier credit terms to enhance service delivery. The organizations do not make timely dispute resolution with suppliers to enhance service delivery. The organization conducts supplier appraisals annually to enhance cost reduction. From the study results it was established that the procured goods in the organizations do not match demand and supply. Technical expertise is the base for strategic sourcing is not adequate. Sourcing functions have no active interaction with the other functions to enhance matching demand and supply improves cost of reduction. Information Technology had a positive and significant effect on performance of the state corporation. More specifically, this is because, the organization has ensured that there is adequate IT infrastructure, there is adequate level of automation for the procurement staff in the organization, there is enhanced e-procurement to facilitate reduction of costs and the organization has adequate procurement usage to enhance implementation of rules and regulations. It was found out that procurement methods influence performance of the state corporation. The study established single sourcing reduces in average inventory held. Open tendering lead to improved quality for goods, works and services. Request for quotations enhance matching the demand and supply for goods. Open tendering leads to the reduction of complaints from the users. The competitive procurement methods reduce the overpriced bids and open tendering reduces unethical behaviour among the procurement staff.

Recommendations of the Study

The study recommends that state corporations should conduct appraisals to suppliers which is important to improve performance of its suppliers. The organization should be concerned with the supplier credit terms to enhance service delivery. The organizations should strive to make timely dispute resolution with suppliers to enhance service delivery. The organization need to conduct supplier appraisals annually to widen the supplier base for competitive bidding hence quality delivery of goods, works and services. There is need for the organizations to ensure that the procured goods match demand and supply. Technical expertise which is the base for strategic sourcing should be adequate to enhance service delivery. Sourcing functions should have active interaction with the other functions to enhance matching demand and supply improves cost of reduction. There is need for the organizations to ensure that there is adequate IT infrastructure, adequate level of automation for the procurement staff in the organization. This will facilitate procurement functions such as E-procurement to reduce procurement costs and enhance procurement usage to improve service delivery. There is need to enhance procurement methods in the organizations which can enhance service delivery Open tendering lead to improved quality for goods, works and services. Request for quotations enhance matching the demand and supply for goods. Open tendering leads to the reduction of complaints from the users.

The competitive procurement methods can reduce the overpriced bids and open tendering reduces unethical behaviour among the procurement staff.

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