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DETERMINANTS OF PROCUREMENT EFFICIENCY IN GOVERNMENT PARASTATALS IN KENYA: A CASE OF NATIONAL WATER CONSERVATION AND PIPELINE CORPORATION

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ABSTRACT

This study sought to establish the determinants of procurement efficiency in government parastatals in Kenya. The study was guided by the following specific objectives:- to establish how financial capacity influence procurement efficiency in government parastatals in Kenya and to determine how inventory management affects influence procurement efficiency in government parastatals in Kenya. Descriptive research design was used for the study. The target population for this study was 86 employees drawn from planning, construction, Human resource & Administration, Legal, Audit and procurement departments. Primary data was collected using questionnaires. The quantitative data was entered into SPSS for analysis. Factor analysis was then applied to reduce the data which was finally used for analysis. Both quantitative and qualitative data analysis techniques were used. Quantitative data was analyzed using descriptive statistics while qualitative data was analyzed by the use of content analysis. The data showed that the high R square was 0.799. It showed that the independent variables in the study were able to explain 63.80% variation in the procurement efficiency while the remaining 36.20% was explained by the variables or other aspects outside the model. This implied that these variables were very significant and they therefore needed to be considered in any effort to boost procurement efficiency in the government parastatals.The study was a milestone for further research in the field of procurement performance in state corporations in Africa and particularly in Kenya. The findings demonstrated the important factors to enhancement of procurement efficiency to include; financial capacity and inventory management. The current study should therefore be expanded further in future in order to determine the effect of procurement legal framework on procurement efficiency in government Parastatals.

Key Terms: *Financial Capacity, Inventory Control Management, Procurement Efficiency*

INTRODUCTION

Procurement efficiency encompasses the whole process of acquiring property and/or services. It begins when an agency has identified a need and decided on its procurement requirement. Procurement continues through the processes of risk assessment, seeking and evaluating alternative solutions, contract award, delivery of and payment for the property and/or services and, where relevant, the ongoing management of a contract and consideration of options related to the contract. Procurement also extends to the ultimate disposal of property at the end of its useful life (Waters, 2004). Procurement efficiency systems are central to the effectiveness of development expenditure. Budgets get translated into services largely through the governments' purchases of goods, services and works. It is estimated that 18.42% of the world's Gross Domestic Product (GDP) is spent through public procurement (Mahmood, 2010).

Procurement efficiency management is the process of planning, implementing, evaluating, and controlling strategic and operating purchasing decisions for directing all activities of the purchasing function toward opportunities consistent with the firm's capabilities to achieve its long term goals, Delivering economically sound solutions and Good business practice with an aim of attaining value for money (Eyaa & Oluka, 2011). In order to maximize procurement efficiency, an organization needs to adjust its structure and management processes to the changes in the outside competitive environment and also to facilitate the necessary cooperation between various parts within the company. The issue of structural design becomes especially relevant as purchasing is a part of a company that lies in the meeting point of those environments. As such, it has to meet both external as well as internal communication requirements (Telgen, 2011).

Procurement is a crucial element in the working functions of any state. It refers to the purchasing of goods and services in the right quality, from the right source and the right price all to meet a specific need. Every government has the obligation to provide essential services to its citizens. In Kenya, procurement consumes 45% of the national budget, excluding local government procurement. The close relationship between procurement and development demonstrates that there is need for transparency and accountability in the manner in which procurement is conducted (Masime, 2009). This study aims at determining factors affecting effective procurement performance in government parastatals in Kenya.

Procurement efficiency is concerned with how public sector organizations spend taxpayers' money on goods and services (Hall 2009). Public procurement is guided by principles of transparency, accountability, and achieving value for money for citizens and taxpayers. Globally, in many developed nations, public sector expenditure is substantial. Government organizations across the world tend to spend between 8 per cent and 25 per cent of GDP on goods and services
(OECD 2006). In the UK, public procurement expenditure is approximately £150 billion (DEFRA 2007). Government is often the single biggest customer within a country, and governments can potentially use this purchasing power to influence the behavior of private sector organizations (Charles 2007). In particular, it has been noted that public procurement can be a lever to deliver broader government objectives, such as stimulating innovation in supply markets, using public money to support environmental or social objectives, and for supporting domestic
markets (McCrudden, 2008).

In Australia, Procurement efficiency provides a basis for effective control and stewardship of resources and demonstrates the value of the procurement function. This was not available in 2005 (Thai, 2011). Citing a report on the review of Purchasing and Logistics in the Queensland Government, (Smee, 2012) reports that forty four percent (44%) of state organizations in Australia reported that they had no performance measures in place for assessing procurement efficiency and effectiveness. Of those that did have measures, many are qualitative statements rather than specific targets to achieve. Only one state agency reported benchmarking against other agencies or external organizations.

In Africa, many public sector organizations view effective procurement as an add-on or an approach that costs more. Truly, sustainable solutions can often cost less over the whole life of the purchase. Some key benefits include: value for money, protection and enhancement of the environment, more efficient use of resources, greater social inclusion, air and ethical trade, support for innovation, better risk management, lower whole-life costs improved supplier relationships, a diverse and flexible supply chain and a competitive edge in your industry (Talluri 2008). Effective implementation of procurement practices procurement policies and practices are critical for good public financial management and effective budget implementation (Zuzana 2012). In many African countries, public procurement accounts for a substantial part of fiscal expenditures, making sound procurement methods central not only for sound public financial management but also for inclusive growth (Zuzana 2012).

In South Africa, Reforms in the public procurement were initiated to promote the principles of good governance, and the National Treasury introduced a preference system to address socio-economic objectives. The reform processes were due to inconsistency in policy application and the lack of accountability and supportive structures as well as fragmented processes (Kakwezi and Nyeko, 2010). A uniform implementation approach to procurement was required, due to a research study on opportunities for reform processes in the South African government conducted by the Joint Country Assessment Review (CPAR) and the World Bank in 2001. The deficiencies and fragmentations in governance, interpretation and implementation of the Preferential Procurement Policy Framework Act (PPPFA) Act No 5 of 2000, resulted in the introduction of Supply Chain Management (SCM) in the public sector as a policy tool (Ambe, 2012).

Procurement efficiency is an important function in the development of Kenya and is governed by an act of parliament, the Public Procurement and disposal Act (2005). The act defines procurement as the acquisition by purchase, lease, hire purchase, rent or any other legal means of goods, services including livestock (PPDA, 2005). Procurement must meet the objective of purchasing of goods and services in the right quality, from the right source and the right price to meet a specific need. This Act does not directly seek to regulate the private sector, though it does regulate its interaction with public entities. The PPDA was established in order to; maximize economy and efficiency, promote competition and ensure that competitors are treated fairly, promote the integrity and fairness of procurement procedures, increase transparency and accountability in those procedures, increase public confidence in those procedures, facilitate the promotion of local industry and economic development (Mathew, 2009). To achieve these objectives, the Act establishes procurement and disposal procedures, and sets up the necessary structures to ensure that the procedures are followed and there is provision of oversight and compliance.

In Kenya for the government to manage effectively and more efficiently the procurement process, procuring entities through the existing legal framework are required to firstly consolidate organizational procurement plans to provide the entity's corporate procurement plan which before its implementation must get the accounting officer's approval. The evaluation or measurement of procurement performance has always been a vexing problem for procurement professionals (Obiero, 2010). Traditionally, firms concentrated on analyzing their own internal trends which did not portray the true picture on how they compare well with competitors. Such an approach ignored what the competitors were doing. This has been the case in the public sector where procuring entities have not been making available their procurement data due to the sensitive nature of the data (Rotich, 2011).

Statement of the Problem

According to Juma (2010), procurement process efficiency is the backbone of a firm's success since it contributes to competitive purchase and acquisition of quality goods that puts its products or services in the competitive edge in the market. However, poor procurement performance has caused financial loss due to delivery of poor quality work materials, loss of value for money and inflated prices and thus has also contributed to decrease of profitability (Juma, 2010). Similar studies by Migai (2010), found poor procurement efficiency is a major hindrance to organizations growth since it causes the delay of delivery, increase of defects, delivery of low quality goods or non-delivery at all. Government parastatals play a major role in the development of the country through provision of public services and have become a strong entity in Kenya and very useful engines to promoting development. The government through sessional paper no. 10 of 1965 established government parastatals by an act of parliament to meet both commercial and social goals, that was to correct market failure, to exploit social and political objectives, provide education, health and redistribute income or develop marginal areas. One aim of making Kenya a newly industrialized, middle income country by providing quality life for all its citizens is by the Kenyan Vision 2030 (R.o.K, 2010).

Rotich (2011) portends that public procurement efficiency is an effective tool to create jobs and provide foundation for economic recovery and sustained growth. Government parastatals experience major challenges in the execution of procurement efficiency. In Kenya, the central government spends about Kshs. 234 billion per year on procurement. However on annual bases, the government losses close to Ksh. 121 billion about 17 per cent of the national budget due to inflated procurement quotations (KISM 2010). According to Public Procurement Oversight Authority (PPOA 2014), most of the tendered products/services in many government parastatals have a mark-up of 60 per cent on the market prices. The inefficiency and ineptness of overall procurement efficiency in many government parastatals contributes to loss of over Ksh.50 million annually (Tom 2009). According to Victor (2012), procurement expenditure could be minimized through proper implementation of procurement perfomance practices. A relatively well-developed body of research by Daniel (2010), Victor (2012) and Tom (2009) explored implementation of procurement practices in public sector organizations, Njeru(2015) examined factors affecting effective implementation of procurement practices in in government parastatals, in general and left a major knowledge gap on determinants of procurement efficiency in government parastatals. It's hence against this background this study was undertaken to examine the determinants of procurement efficiency in government parastatals in Kenya.

Objectives of the Study

The purpose of the study was to establish the determinants of procurement efficiency in government parastatals in Kenya. The specific objectives were:-

- To establish how financial capacity influence procurement efficiency in government parastatals in Kenya.
- To determine how inventory control management affect procurement efficiency in government parastatals in Kenya.

LITERATURE REVIEW

Theoretical Framework

Resource – Based View Theory

RBV is an economic theory that suggests that firm performance is a function of the types of resources and capabilities controlled by firms (Barney & Hesterly, 2008). A resource is a relatively observable, tradable asset that contributes to a firm's market position by improving customer value or lowering cost (or both); and a capability denotes the ability of a firm to accomplish tasks that are linked to higher economic performance by increasing value, decreasing cost, or both. (Walker, 2004). Barney and Hesterly (2008) also describe resources as tangible and intangible assets a firm uses to conceive of and implement its strategies; and capabilities as a subset of resources that enable a firm to take advantage of its other resources. Eisenhardt & Martin (2000) argues that availability of substitute resources tends to depress returns of the holders of a given resource and this justifies the reason why they should be shielded from competitors. By conducting an effective value chain analysis, an organization is able to identify these scarce resources that give it competitive advantage and apply appropriate mechanisms to protect the resources from competitors.

In relation to this study, the theory relates with the specific objective to establish the influence of financial capacity on youth access to government procurement opportunities in the judiciary of Kenya under the framework that public procurement is anchored on a competitive bidding process, embracing transparency and efficiency in the system. In view of the complex competing public expenditure needs relative to the scarce resources, chances are that resources allocation would affect the chance for growth of youth-based organizations' procurement opportunity access. This calls for an objective evaluation process for all submitted bids. Financial capacity of bidders is among the most important consideration. Accordingly, due to the limited financial capacity of most youth owned enterprises and the competitive nature of public procurement processes, access to public sector contracts by such smaller entities, is often seen as a problem, at national and global level (Gichure, 2007). While competences express what a country like Kenya is able to do well, core competencies encompass what the country firm is able to do better than others. Kenya, lately being referred as Africa's Silicon Valley ought to leverage the technological talents herein by offering its main resource, the youth, access to procurement opportunities by youth based enterprises. There is compelling evidence suggesting that most youth owned SME's lack the adequate access to procurement to procurement information as they are not able to fund for reliable information access avenues. Such lack of reliable information access avenues places the country at a competitive disadvantage. The study therefore aimed to find out the effect of access to procurement information and offer recommendations on the reliable information access avenues like print media, company notice boards and websites, radio adverts and social media to ameliorate the situation. The study thus would use this theory to find out the

influence of financial capacity on procurement efficiency in government parastatals in Kenya.

Just In Time Model

The JIT is a philosophy of manufacturing based on planned elimination of all waste and on continuous improvement of productivity (Mehra & Inman, 2007). It also has been described as an approach with the objective of producing the right part in the right place at the right time. Waste results from any activity that adds cost without adding value, such as the unnecessary moving of materials, the accumulation of excess inventory, or the use of faulty production methods that create products requiring subsequent rework. JIT also known as lean production or stockless production) should improve profits and return on investment by reducing inventory levels, reducing variability, improving product quality, reducing production and delivery lead times, and reducing other costs (such as those associated with machine setup and equipment breakdown). In a JIT system, underutilized (excess) capacity is used instead of buffer inventories to hedge against problems that may arise (Patricia, Dale & Michael 2012). The basic elements of JIT were developed by Toyota in the 1950s, and became known as the Toyota Production System (TPS). JIT was well-established in many Japanese factories by the early 1970s. JIT began to be adopted in U.S.A in the 1980's (General Electric was an early adopter), and the JIT/lean concepts are now widely accepted and used (Patricia, Dale & Michael 2012). Daugherty & Spencer (2005) proposed that JIT "is adaptable to any productive system, a transportation system, an administrative system, or a manufacturing system". To illustrate their views, they developed a functional model comprising three components which they assert are needed to support the goal of elimination of waste through a process of continual improvement (Wantuck 2009). The three components are: respect of the people within the system; the execution system;

the planning process prerequisites for continuous improvements to the system. The first component, respect for the people within the system, appears to be critical to the success of a JIT programme. The second component of the functional model is the execution system. The execution system is proposed to consist of two elements: the Kanban method of pull-through production and the inventory buffers. The supermarket buffer is a transitional buffer between the

fabrication areas and the assembly areas. The purpose of the buffer is to provide the inventory necessary to maintain operations as improvements are made in the production process to reduce the inventory levels (Mehra & Inman 2007).

Conceptual Framework

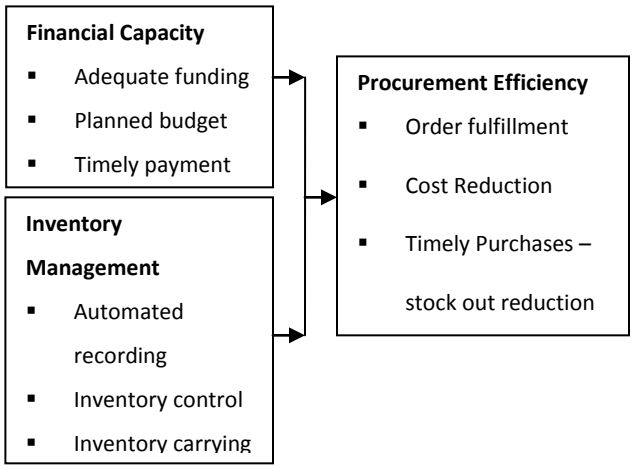

Figure 1: Conceptual Framework

Financial capacity

In Kenya, Overall spending is estimated to nominally increase by 8% from Kshs 1.64 trillion in 2013/14 to Ksh 1.77 trillion in 2014/15. 76% is proposed to be spent to the 10 MTEF sectors and in turn, the respective Ministries, Departments and Agencies (MDAs) out of Ksh 1.54 trillion national government

budget. The big spenders are the education sector, 20%, Energy, Infrastructure and ICT, 16.6%, Public Administration and International relations 12.6%. Education, health and the infrastructure sectors together account for over 40% of the national budget; and hence a source of fiscal pressure in the medium term. There is need to emphasize on the scope for improving quality of spending for better outcomes that would put focus on the youth. (IEA, 2014)

According to Thai (2001), in order to get value for money, public procurement is anchored on a competitive bidding process, embracing transparency and efficiency in the system. This calls for an objective evaluation process for all submitted bids. Financial capacity of bidders is among the most important consideration. Accordingly, due to the limited financial capacity and the competitive nature of public procurement processes, access to public sector contracts by smaller entities, including from the bidders, is often seen as a problem, at national and global level (Gichure 2007).

Government Reports indicate very low youth access in government procurement. This is, in fact, the reason for preferential treatment policy enacted in 2013 where procuring entities are supposed to set aside 30% of total procurement for the youth. Moreover, the establishment of the Uwezo fund is an endeavor to remedy to the above scenario (ROK, 2013). Financial capacity include current and capital assets, as well as access to credit. Ndhlovu & Twala (2007) found that access to government financial support is a problem in South Africa due to lack of interest, and lack of information and existence of such funds as well as the disbursement mechanism. Mass and Herrington (2006) agree that most youths are not aware of the various support programs available and as a result, youths with entrepreneurial tendencies perceive that there is no support from government.

Inventory Management

Inventory management is the application of data collection, demand and forecasting, lean and operational principles to manage the total amount of inventory within the supply chain at any point in time and manage inventory holding costs (Sharafali 2007). The scope of inventory management concerns the fine lines between replenishment lead time, carrying costs of inventory, asset management, inventory forecasting, inventory valuation, inventory visibility, future inventory price forecasting, physical inventory, available physical space for inventory, quality management, replenishment, returns and defective goods, and demand forecasting. Balancing these competing requirements leads to optimal inventory levels, which is an on-going process as the business needs shift and react to the wider environment (Riggs & Sharon 2008). Application of effective inventory management methods such as economic order quantity and just in time greatly supports implementation of effective procurement practices.

Procurement Efficiency

Smith and Conway (1993) identified seven key success factors which influence procurement, namely; a clear procurement strategy, effective management information and control systems, development of expertise, a role in corporate management, an entrepreneurial and proactive approach, co-ordination and focused efforts. An eighth is fundamental; communicate the key success factors to all levels of the organization and set out a procurement strategy to achieve continuous improvement in value for money. This should be based on total cost, quality, and enhancement of competitiveness of suppliers using best procurement practice.

Supplier performance has an impact on procurement performance. According to Leenders

and Fearon (2002), decisions to buy instead of make to improve quality, lower inventories, integrate supplier and buyer systems, and create co-operative relations underline need for good supplier performance. Recent trends are to fewer suppliers; long-term contracts, e-procurement, and continuing improvement in quality, price, and service require closer co-ordination and communication between key procurement partners. Supplier switching for lower prices may not result in the best long-term value. Sharing information and assisting suppliers to improve performance is a necessity for world-class performance.

Lardenoije, van Raaij and van Weele (2005) asserted that basing on financial performance and neglecting non-financial performance cannot improve the procurement operations because only partial performance is considered. Realisation of procurement goals is influenced by internal and external forces. Interactions between various elements; professionalism, staffing levels and budget resources, procurement organizational structure, regulations, rules, and guidance, and internal control policies, all need attention and influence procurement performance.

Christopher (2005) distinguished features of a responsive organization. Major transformations are; from functions to process, profit to performance, products to customers, inventory to information, and transactions to relationships. Critical measures of procurement performance need to be continuously monitored. The idea of 'Key Performance Indicators' (KPI) framework suggests that whereas there are many measures of procurement performance to be deployed in an organization, only a small number of critical dimensions contribute more than proportionately to success or failure. A balanced scorecard can provide guidance on critical areas where action may be needed to ensure achievement of goals. Three key outcomes of success are: better, faster, and cheaper. The goals combine customer-based measures of performance in terms of total quality with internal measures of resource and asset utilization. Benchmarking helps identify current best practice and then focuses on how processes could be re-engineered and managed to achieve excellence in critical procurement areas.

Emphasis should be on search for strategies that provide superior value in the eyes of customers seeking greater responsiveness and reliability. Van Weele (2006) maintained that there is a link between procurement process, efficiency, effectiveness and performance. Procurement performance starts from purchasing efficiency and effectiveness in the procurement function in order to change from being reactive to being proactive to attain set performance levels in an entity. Performance provides the basis for an organization to assess how well it is progressing towards its predetermined objectives, identifies areas of strengths and weaknesses and decides on future initiatives with the goal of how to initiate performance improvements.

Procurement performance is not an end in itself but a means to control and monitor the procurement function. For any organization to change its focus and become more competitive, performance is a key driver to improving quality of services. Batenburg and Versendaal (2006) noted that use of inappropriate means can be a barrier to change and may lead to deterioration of procurement operations. Organizations which do not have performance means in their processes, procedures, and plans experience lower performance and higher customer dissatisfaction and employee turnover. Measuring procurement performance yields benefits to organizations such as cost reduction, enhanced profitability, assured supplies, quality improvements and competitive advantage.

Electronic processes have replaced physical and paper-based processes. E-procurement moves tendering, negotiation and purchasing processes to websites. Improvement to a PE's procurement performance can be realized through reduced costs and wider choice availed.

Empirical Review

Financial Capacity

According to a report on global wage by the International Labor Organization (ILO, 2010), the Kenyan youth in the age bracket, 18-35, are highly financial dependent with the unemployment rate among the youth standing at 40% in 2013. This means that the level of savings is also particularly low especially considering the high unemployment rate. This was confirmed by Deshpande et al (2010) in a study on youth saving trends. This paints a gloomy picture of the Kenyan youth ability to startup businesses and as such limits their access in government procurement.

Kimondo (2012) in a survey in Kigumo district in Muranga County on youth enterprise fund (YEF), identified lack of capital as the main hindrance to youths towards starting businesses and getting meaningful returns. A similar scenario has been witnessed more recently in a survey by the Treasury. The Republic of Kenya launched the Uwezo fund with initial allocation of Ksh. 6 Billion to fund enterprises and support youth engage in government procurement opportunities (ROK, 2013). Report by the cabinet secretary of finance however indicate very low uptake to the fund by the youth out of hindrances such as lack of awareness and stringent rules (ROK, 2014).

Talal (2014) interrogated the constraints facing the youth in accessing the public procurement process. The study titled " systemic constraints to market access" found that the government directive to have 30% of procurement to be set aside for special interest groups was a strategic move aimed at motivating the access of special interest groups. The study however established that access to funding, and lack of collateral, was the main hindrances to actualizing this plan by the government. In a related study, Gatere and Shale (2014) sought to examine the challenges affecting the implementation of access to government procurement opportunities for special interest groups in Nairobi County. The study established that funding was an important factor in special group's access in government procurement.

Ngigi, Wanyoike and Mwangi (2014) did a similar study on access to credit facilities as a major factor hindering access to public procurement contracts by youth entrepreneurs in government ministries in ol kalou sub-county, Kenya. The study hypothesized that the major cause of non-access of youth in public procurement was access to credit facility. The study surveyed 25 youth owned enterprises and Results revealed that access to credit was hindering access to public procurement contracts by youth-owned enterprises by denying them a level playing field in bidding for the contracts. The study recommended increasing access to credit to youth entrepreneurs to enable them access public procurement contracts**.**

In another empirical study on 'realizing equal opportunities among youth groups in accessing government financial credit facilities', Ibuathu *et al.,* (2013) interrogated opportunities available to organized youth groups in accessing government funding to ensure equity in facing life challenges. The study established that apart from awareness, the lack of funding is actually due to the negative perception by the banking system on youth and partially lack of collateral and viable business ideas worth funding by banks. Further, the authors note that the disbursement mechanism, attitude by banks and lack of capital may limit access to funding in rural Kenya such as Tigania.

Wanjohi (2012) performed a study on the challenges in access to financial services by micro enterprises, and argued that the Banking system in developing nations is somewhat wary of lending to SMEs. The loan applications are heavily scrutinized and their capital base not tangible to appeal to lending institutions. Wanjohi (2012) further argues that financial constraints operate in variety of ways, where undeveloped capital market forces entrepreneurs to rely on self-financing or borrowing from friends or relatives with commercial banks tending to concentrate on established enterprises. There are various other financial challenges that face small enterprises. They include the high cost of credit, high bank charges and fees.

Inventory Management

Hunja (2010) notes that inventory management problems that affect implementation of effective procurement practices in many public institutions in Canada include; lack of application of economic order quantity principle, application of poor stores management practices, long lead time and higher inventory costs. Elliot (2007) found that many government training institutions in India employed ineffective inventory management practices as a result of lack of application of economic order quantity principle, application of poor stores management practices, long lead time and higher inventory costs. Shalle, Guyo, and Amuhaya (2014) conducted a study on role of inventory optimization on e-procurement performance in State Parastatals in Kenya. The findings of the study emphasize that continuous inventory replenishment policy takes a regular order. The time of a replenishment decision is called an order point and the arrival of an order is regeneration point.

Procurement Efficiency

A study by Wanyama (2010) revealed that public sector lose huge amounts of funds annually as result of implementation of ineffective procurement practices which are not in tandem with the public and disposal regulations. Mugo (2011) notes that low level of compliance with procurement regulations, lack of transparency and accountability of procurement funds lowers the level of effectiveness in procurement practices in the public sector. Mugo (2011) established that the major factors that determine the extent to which effective procurement practices are employed in public sector in Kenya include; the level of compliance with procurement regulations, minimization of procurement expenditure, transparency and accountability of procurement funds and quality of procured goods and services.

Velnampy (2010) conducted a study on evaluation of factors influencing effective procurement management system of public sector organizations. The study found that low level of compliance with procurement regulations and lack of high degree of transparency and accountability hinder execution of effective procurement practices. A study by Sanjeeve (2009) found that implementation of ICT based procurement methods in public sector in Africa is hindered by lack of e-procurement methods, lack of automated procurement systems, lack of supportive ICT infrastructure and absence of ICT skills amongst procurement staff. A study by Tanzi (2009) found that in Canada, innovation in technology has played a major role in enhancing many organizations to adopt effective procurement practices. A study by George (2008) found that in Kenya's public sector fail to succeed in embracing effective procurement practices due to lack of effective waste recycling technology and effective technology.

RESEARCH METHODOLOGY

The target population of study has also been discussed and the reason as to why the choice impacted on the study is discussed. The study adopted a descriptive research design. The target population in this study was 86 employees and targeted each division that was involved in the supply chain management at the NWCPC. The study selected six categories classified as planning, construction, human resource & administration, legal& audit, finance and procurement department. The study used primary data for statistical analysis. The use of closed-end and open-end questionnaires contributed towards gathering of both quantitative and qualitative data. Qualitative data was analyzed by the use of the content analysis. Descriptive statistics methods were applied to analyze quantitative data where data was scored by calculating the percentages, mean and STD deviation. This was done using Statistical Package for Social Sciences (SPSS) computer software.

RESEARCH FINDINGS AND PRESENTATION

A total of 86 questionnaires were distributed to the targeted respondents. Out of the population covered, 62 were responsive representing a response rate of 72.09%. The study also determined the gender of the respondents. 57% were male and 43% female. The study determined the number of years the respondents had worked in the parastatals. From the findings, majority of the respondents had worked at the institution for less than 5 years representing 30% and only 40 % had worked at the organization between 6-10 years. The respondents were asked to state their highest level of education. The results indicated that a majority (45%) of the respondents had university degree, 30% of the respondents had diploma, 15% had masters degrees and the rest 10% of the respondents had secondary certificate.

Procurement Efficiency

The study sought to determine procurement efficiency in the government parastatals with reference to NWSCPC, attributed to the influence of financial capacity, inventory management, ethical issues and supplier management. The study was particularly interested in three key indicators, namely order fulfillment, cost reduction and timely purchases-stock out reduction, with all the three studied over a 5 year period, running from 2012 to 2016. Findings in Table 1 revealed improved procurement efficiency in the organization across the 5 year period running from the year 2012 to 2016. Order fulfillment recorded positive improvement with a majority affirming to less than 10% in 2012 (42.3%) and 2013(37.7%), to 10% in 2014 (36.1%) then more than 10% in 2015 (41.1%) and 2016 (37.5%). A similar trend was recorded in cost reduction, growing from less than 10% (44.1%) in 2012, to more than 10% in 2013 (36.4%), 2014 (40.4%) and 2016 (37.3%). Timely Purchases-stock out reduction further recorded positive improvement with a majority affirming to less than 10% in 2012 (37.9%) and 2013 (35.9%), to 10% in 2014 (35.9%) and 2015(35.3%) then by more than 10% in 2016 (36.2%). It can be deduced from the findings that key procurement efficiency indicators have considerably improved as influenced by among other procurement efficiency attributes, the influence of financial capacity and inventory management. Order fulfillment and Timely Purchases-stock out reduction had particularly improved by at least 10 percent across most of the institutions pointing to the significance of supplier relations management in the supply chain process.

Table 1: Procurement Efficiency

Quality of Goods Purchased	**2012**	**2013**	**2014**	**2015**	**2016**
Increased by less than 10%	42.3	37.7	31.6	30.7	29.5
Increased by 10%	31.8	32.9	36.1	28.2	33
Increased by more than 10%	25.9	29.4	32.3	41.1	37.5
Cost Reduction	**2012**	**2013**	**2014**	**2015**	**2016**
Increased by less than 10%	44.1	35.2	33.4	25.7	27.1
Increased by 10%	31.7	32.6	30.2	33.9	35.6
Increased by more than 10%	23.5	32.2	36.4	40.4	37.3
Timely Purchases-Stock out Reduction	**2012**	**2013**	**2014**	**2015**	**2016**
Increased by less than 10%	37.9	35.9	31.2	25.7	33.1
Increased by 10%	36.2	31.3	35.9	35.3	30.7
Increased by more than 10%	25.9	32.8	32.9	39	36.2

Financial capacity

The study sought to assess the influence of financial capacity on procurement efficiency in the organization. This section presented 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 2 presented 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 4.7 presents the findings. As tabulated, a majority of respondents were found to highly agree that there is provision of competitive wages and benefits for procurement personnel (3.112); there is adequate funding for procurement processes (3.103); all activities are captured in the planned budget (3.009); Fund disbursement for procurement processes is timely (3.765); the organization uses IT in our Procurement process (3.198). The firm ensured that orders processing was in time to enhance customer satisfaction (3.210); there was timely processing of payment to suppliers (3.012). Most bidders had adequate capital to undertake contracts they bid for (3.009); most bidders had capital resources to finance contract if awarded (3.113); the organization timely pays for tenders performed (3.005); the organization fund provides capacity for most tenders (3.090).

This was in tandem with Bedey (2008) who asserts that overall, enterprises employing organized procedures, resources and systems to consistently employ and align all procurement strategies in a consistent and integrated method outperformed peers in cost savings, expenditure under management, compliance, supplier integration, and greater contribution to enterprise value. Simms (2008) adds that most of the public entities lack clear accountability on how the resources provided impact on their performance therefore going against the fundamental principles of public procurement.

Table 2: Influence of Financial capacity on Procurement Efficiency

Financial capacity	Mean	Std. Dev
There is provision of competitive wages and benefits for procurement personnel	3.112	.568
There is adequate funding for procurement processes	3.103	.613
All activities are captured in the planned budget	3.009	.432
Fund disbursement for procurement processes is timely	3.765	.210
The organization uses IT in our Procurement process	3.198	.458
There is timely processing of payment to suppliers	3.210	.003
Most bidders have adequate capital to undertake contracts they bid for.	3.012	.621
Most bidders have capital resources to finance contract if awarded	3.009	.525
The organization timely pays for tenders performed	3.113	.903
The organization fund provides capacity for most tenders	3.005	.560

Inventory Management

The study sought to assess the influence of inventory management on procurement efficiency in the organization. This section presented 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 3 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 3 presents the findings. As tabulated, a majority of respondents were found to highly agree that the organization has ensured that there is use

inventory management system to improve cost reduction (3.7682); The firm has automated recording systems to enhance timely deliveries to improve customer satisfaction (3.4981); The firm has the cycle counting system that can enhance cost reduction and facilitate timely deliveries to the customers (4.2153); The organization has ensured that there is Inventory control system to improve timely deliveries (4.7854); The firm has adopted the Use of E.O.G model to enhance timely deliveries and improve customer satisfaction (4.6522). There is replenishment level/ reorder level management in the firm at all times to improve cost reduction (4.2318); The firm has ensured that there is a continuous periodic review to improve cost reduction, enhance timely deliveries and improve customer satisfaction (4.7659). This implied that on average the organization had implemented inventory control management effectively to enhance supply chain performance. This finding supports Holmstrom et al., (2012) that inventory management could have had a major impact upon the procurement efficiency of an organization. If inventory levels are too low then there is the risk of stock outs, which is the inability to meet an order. Managing stocks involves balancing two sets of costs: Inventory carrying costs and order processing costs. Inventory management to a computer based system designed to support operations, management and decision functions of an organizations production system. Inventory management systems in supply management enables manufacturing of quality products in line with customer requirements; besides encouraging close and open communication between the organization and its customers as well as the organization and its suppliers. Inventory management systems enable organizations to effectively compete in a dynamic and turbulent environment by having an information edge above competitors (Holmstrom *et al.,* 2012).

Table 4: Inventory Management on Procurement Efficiency

Inventory Management	Mean	Std. Dev
The organization has ensured that there is use of inventory management system to improve cost reduction	3.7682	.4352
The firm has automated recording systems to enhance timely deliveries to improve customer satisfaction	3.4981	3.768
The firm has the cycle counting system that can enhance cost reduction and facilitate timely deliveries to the customers	4.2153	.7654
The organization has ensured that there is Inventory control system to improve timely deliveries	4.7854	.5432
The firm has adopted the Use of E.O.G model to enhance timely deliveries and improve customer satisfaction	4.6522	.4321
There is replenishment level/ reorder level management in the firm at all times to improve cost reduction	4.2318	.9876
The firm has ensured that there is a continuous periodic review to improve cost reduction, enhance timely deliveries and improve customer satisfaction	4.7659	.6536

SUMMARY, CONCLUSION AND RECOMMENDATIONS

The study sought to assess the influence of financial capacity on procurement efficiency in the organization. The study established to a moderate extent that there was provision of competitive wages and benefits for procurement personnel. There was adequate funding for procurement processes and all activities are captured in the planned budget. The fund disbursement for procurement processes was timely. To a small extent there was timely processing of payment to suppliers and most bidders have adequate capital to undertake contracts they bid for as they had capital resources to finance contract if awarded.

The study sought to assess the influence of inventory management on procurement efficiency in the organization. A majority of respondents were to a moderate extent that the organization has ensured that there is use inventory management system, the organization has automated recording, the firm has the cycle counting, the organization has ensured that there is Inventory control; the organization has adopted the Use of E.O.G. There is replenishment level/ reorder level management in the firm and ensured that there is a continuous periodic review. This implies that on average the organization has implemented inventory control management effectively to enhance procurement efficiency.

The study sought to determine procurement efficiency, attributed to the influence of financial resources and inventory management. Reduction of costs recorded positive improvement, timely purchases-stock out reduction further recorded positive improvement. A positive correlation was seen between each determinant variable and procurement efficiency. The strongest correlation was established between financial capacity and procurement efficiency. All the independent variables were found to have a statistically significant association with the dependent variable at ninety-five level of confidence. Analysis of variance was further done and it was established that there was a significant mean. This was since the p values of their coefficients were all less than 0.05.

Conclusions

Based on the study findings, the study concluded that procurement efficiency in government parastatals in Kenya was affected by financial capacity and inventory management as the major factors that mostly influence procurement efficiency in government parastatals in Kenya.

The study concluded that financial capacity was the first important factor that affected procurement efficiency in government parastatals in Kenya. The regression coefficients of the study showed that financial capacity had a significant influence on procurement efficiency in government parastatals in Kenya. This implied that increasing levels of financial capacity would increase the levels of procurement efficiency in government parastatals in Kenya. This showed that financial capacity had a strong positive influence on procurement efficiency in government parastatals in Kenya

Inventory management was the second important factor that affected procurement efficiency in government parastatals in Kenya. The regression coefficients of the study showed that inventory management had a significant influence on procurement efficiency in government parastatals in Kenya. This implied that increasing levels of inventory management would increase the levels of procurement efficiency in government parastatals in Kenya. This showed that inventory management

had a positive influence on procurement efficiency in government parastatals in Kenya

Recommendations of the Study

The study recommended for adequate financial capacity to enhance procurement efficiency in the organization. There was need to have adequate provision of competitive wages and benefits for procurement personnel. There was need for adequate funding for procurement processes and all activities should be captured in the planned budget. The fund disbursement for procurement processes should be timely. There was need to have a timely processing of payment to suppliers and bidders should have adequate capital to undertake contracts they are awarded.

The study recommended for the organization to ensure that there is use inventory management system and automated recording, cycle counting Inventory control; use of E.O.G. There is need to have replenishment level/ reorder level management in the firm and ensure that there is a continuous periodic review. This would enhance procurement efficiency in the government parastatals in Kenya.

Areas for Further Research

The study was a milestone for further research in the field of procurement performance in state corporations in Africa and particularly in Kenya. The findings demonstrated the important factors to enhancement of procurement efficiency to include; financial capacity, inventory management, ethical issues and supplier management. The current study should therefore be expanded further in future in order to determine the effect of procurement legal framework on procurement efficiency in government parastatals. Existing literature indicates that as a future avenue of research, there is need to undertake similar research in other government institutions and public sector organizations in Kenya and other countries in order to establish whether the explored factors can be generalized to affect procurement efficiency in the public sector.

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