Effects of Procurement Practices on the Performance of Commercial State Owned Enterprises in Nairobi County

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Abstract- Procurement practices are a set of activities undertaken by an organization to promote effective management of its supply chain (Sollish & Semanik, 2012). The main purpose of the study was to establish the effect of procurement practices on performance of commercial state owned enterprises in Nairobi County. The specific objectives of the study were to establish the effect of buyer-supplier relationships on performance of commercial state owned enterprises in Nairobi County, to establish the effect of supplier selection procedures on performance of commercial state owned enterprises in Nairobi County, to determine how organizational capacity affects performance of commercial state owned enterprises in Nairobi County and to ascertain the effect of procurement process management on performance of commercial state owned enterprises in Nairobi County. The study adopted a descriptive survey design. Primary data was collected using questionnaires targeting managers in Finance, Procurement, Production and Sales and Marketing departments in each enterprise. The study achieved 80% response rate since ninety six (96) out of the 120 questionnaires administered were filled and returned. The population of the study comprised of thirty eight (38) commercial state owned enterprises operating in Nairobi County. A random sample of thirty (30) enterprises representing 78.95% was selected. The study findings revealed that buyer-supplier relationships, supplier selection procedures, organizational capacity and procurement process management practices had a strong impact on the performance of commercial state owned enterprises studied. The study recommends that all commercial state owned enterprises must implement efficient procurement practices in order to become more efficient in their operations and overall service delivery to their customers.

Index Terms- Procurement practices, Organizational Performance

I. INTRODUCTION

Around the world, public sector organizations are experiencing an unprecedented pace of change and as a result, they are rapidly re-evaluating their operating models and market strategies not just to withstand these market forces, but capitalize on them. Clearly, procurement has a significant role to play in helping the public sector achieve their objectives and prepare for the uncertainty ahead. In part, this will require procurement to focus on driving costs out of the cost base. But the opportunity also exists for the function to add value in a much more strategic way (Leenders et al., 2008). Thai (2001) describes two types of goals in the procurement system: non-procurement goals and procurement goals. Procurement goals are primarily associated with quality, reduction of financial and technical risks, and protection over competition and integrity in the system. Non-procurement goals usually involve the economic, social, and political goals within the system.

Achieving efficiency in public procurement is an ambitious task, as procurement faces numerous challenges, especially due to the market structure, the legal framework and the political environment that procurers face (Thai, 2004). Pegnato (2003) estimated United States federal procurement at around $200 billion per annum, and Coggburn (2003) put the combined procurement for state and local governments at more than $1 trillion. Thai and Grimm (2000) estimated government’s collective purchasing at around 20 percent of Gross Domestic Product (GDP), and for developing countries, Nicol (2003) put the figure at 15 percent of GDP. For Russia, federal procurement in 2004 was expected to amount to about 40 percent of the country’s budget (Fradkov, 2004). The Organization for Economic Co-operation and Development (OECD), Development Assistance Committee (DAC) (2006) estimated the volume of global public sector procurement at 8 percent ($3.2 trillion) of the worldwide GDP of $40 trillion.

The African public sector has been grappling with poverty and provision of effective services. Tackling the poverty challenge is the responsibility of the public sector in collaboration with other stakeholders. However, the state will deliver more effectively to all citizens, and to poor people in particular if certain mechanisms are in place to man the running of government operations. Public procurement in developing countries is said to account for up to 25 percent of their GDP. For a number of years the rate in industrialized countries has remained at around 10 percent. Though in absolute terms, the procurement market trade volume in developing countries may not be significant, the relative higher ratio it has on total GDP is an incentive big enough for formation of any economic alliance which most international trade organizations would not afford to easily let go, this is besides also the political impact it may pose (Arrowsmith, 2010).

In the Middle East and Africa in general, central government purchases range from 9 to 13 percent (Gul, 2010). This indicates that public procurement plays a vital role in a country (Odhiambo & Kamau, 2003). Public procurement therefore has important economic and political
implications, and ensuring that the process is economical and efficient is crucial. This requires in part that the whole procurement process should be well understood by the actors: government, the procuring entities and the business community or suppliers and other stakeholders, including professional associations, academic entities and the general public.

Since independence, the Government has sought to rationalize procurement in public institutions through various instruments; mainly the 1967 Supplies manual, circulars from the Treasury issued from time to time and, at times, the involvement of the Crown agents. In the year 2001, the government came up with Procurement regulations (Exchequer and Audit Rules) to replace the circulars. These were slightly amended in the year 2002 to accommodate certain concerns. This was an improvement, but an insufficient move to fill in the existing gaps. The answer to the prevailing shortcoming in the procurement of goods and services in the public sector was seen to lie in enacting an Act of Parliament to govern the whole public process. This was realized in October, 2005; paving the way for the Minister of Finance to gazette the Public Procurement and Disposal Regulations, 2006 through Legal Notice No. 174 of 29th December, 2006 which was effected in 2007 (RoK, 2007).

While the Public Procurement and Disposal Act, 2005 was meant to address the challenges identified, experience suggests that the results have not entirely been as expected. The Public Procurement Act is important in the way the procurement processes are managed, and has sought to minimize cases of interference from players outside the concerned committees while at the same time discouraging fraudulent practices through debarment, transfer of procurements to other procuring entities and introduction of deterrent penalties. Article 227 of the Constitution of Kenya, 2010 has established a new framework to guide the public procurement and disposal process, which looks into ensuring that the Government Owned entities are agile enough to respond to opportunities in the market to grow value for the Kenyan public (RoK, 2010).

II. STATEMENT OF THE PROBLEM

Government owned enterprises’ operations in Kenya have become inefficient and non-profitable requiring the Government to shoulder major procurement burdens (SCAC, 2013). In a study carried out on parastatal governance problems in Kenya, the following characteristics emerged: inefficiency in operations, huge financial losses and the provision of poor products and services (Atieno, 2009). She attributed this to: poor governance, poor public sector financial management, bureaucratic wastage and pilferage in the management of parastatals, all of which subsequently lead to heavy budgetary burden to the public. The Public Procurement and Disposal Act 2005 provides a standardized framework for the procurement of goods and services across all public sector entities. This one size fits all approach has created challenges for many Government Owned entities.

A review conducted by the PPOA, while recognizing some strengths, identified a number of challenges including the cost of the procurement process, the long time to procure or reaction time to business opportunities, challenges of negotiation with suppliers, external approval processes and the issue of resale of branded items (PPOA, 2009). A research study is therefore needed to analyze and establish the best public procurement practices in commercial state owned enterprises because of the highlighted deficiencies. Further still, in spite of having various studies undertaken on procurement practices by various researchers, none of the studies have particularly addressed the effect of procurement practices on performance of commercial state owned enterprises in Nairobi county. This has created a significant knowledge gap and therefore forms the basis for this study.

III. OBJECTIVES OF THE STUDY

The general objective of this study was to establish the effects of procurement practices on performance of commercial state owned enterprises in Nairobi County. The specific objectives were;

1. To examine the extent to which buyer-supplier relationships affect performance of commercial state owned enterprises in Nairobi County.
2. To establish how supplier selection procedures affect performance of commercial state owned enterprises in Nairobi County.
3. To determine how organizational capacity affect performance of commercial state owned enterprises in Nairobi County.
4. To ascertain the extent to which procurement process management affect performance of commercial state owned enterprises in Nairobi County.

IV. RESEARCH QUESTIONS

The study aimed to answer the following research questions;

1. How does buyer-supplier relationships affect performance of commercial state owned enterprises in Nairobi County?
2. Which supplier selection procedures affect performance of commercial state owned enterprises in Nairobi County?
3. What effect does organizational capacity have on performance of commercial state owned enterprises in Nairobi County?
4. How does procurement process management affect performance of commercial state owned enterprises in Nairobi County?

V. LITERATURE REVIEW

Theoretical Framework
Resource Based View (RBV) Theory

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The RBV developed as a complement to the industrial organization view with Bain (1968) and Porter (1985) as some of its main proponents. With its focus on the structure-conduct-performance paradigm, the industrial organization view put the determinants of firm performance outside the firm, in its industry's structure. Being positioned against this view, the RBV explicitly looks for the internal sources of sustained competitive advantage and aims to explain why firms in the same industry might differ in performance. As such, the RBV does not replace the industrial organization view, rather it complements it (Peteraf & Barney, 2003).

RBV proponents argue that simultaneously valuable, rare, inimitable and non-substitutable resources can be a source of superior performance and may enable the firm to achieve sustained competitive advantage. The RBV of the firm is therefore a suitable approach to understanding the competitive dynamics whereby resources are intangible and tangible assets linked to the firm in a semi-permanent way, including: technological, human and physical assets. However, having resources alone is not sufficient, therefore, RBV theory adds a category of capabilities which result from complex patterns of interactions and coordination between resources (Wong & Karia, 2010).

RBV maintains that resources and capabilities are often synergistic in nature and can be more valuable when combined. RBV proposes that firms have different resource endowments, and that the manner in which they require, develop, maintain, bundle and apply them leads to the development of competitive advantage and superior performance over time. RBV tenets prescribe that resources and capabilities, for instance bundle of resources need to be valuable, rare, inimitable and organizationally utilizable, for example a firm has complementary resources to leverage and maximize capabilities to drive sustainable competitive advantage. In general, RBV theory indicates that exploiting a firm’s non-imitable resources enables a firm to create long-lasting competitive capabilities and to generate a competitive advantage (Paulraj, 2011).

Partner Selection Theory
Partner selection literature is very limited and focused on the criteria for choosing partners rather than on the process of partner selection (Saffu & Mamman, 2000). Most articles assume a rational decision-making process based on very specific selection criteria. Existing partner selection literature assumes a straight-line start-to-finish selection process (Saffu & Mamman, 2000). Depending on the motivation of the alliance as a whole, specific partner characteristics will be more or less valuable. A logical selection criteria is developed, often prioritizing the partner characteristics of interest. Finally, a partner is rationally selected, meeting all of the criteria. Some business alliances form as a result of personal ties between key decision makers (Barringer & Harrison, 2000).

Angeles and Nath (2000) used questionnaires to gather data from 152 respondent firms on their trading partner selection criteria. Six factors appeared to be most important including strategic commitment, trading partner flexibility, and communications. A number of articles and theories have been developed regarding partner selection in international alliances. Resource-based and organizational learning theory support observed partner selection among emerging and developed markets in North America and Europe (Hitt & Dacin, 2000). Emerging market firms from Mexico, Poland and Romania looked for financial assets, technical capabilities, intangible assets, and a willingness to share expertise in their selection of partners. Developed market firms from Canada, France and the USA chose their partners based on unique competencies and local market knowledge and access (Saffu & Mamman, 2000).

Stakeholder Theory
The origins of stakeholder theory draw on four key academic fields: sociology, economics, politics and ethics and especially the literature on corporate planning, systems theory, corporate social responsibility and organizational theory. Freeman (1984), over the course of his work entitled Strategic Management: a Stakeholder approach, generally accepted as launching the stakeholder theory concepts, defines how stakeholders with similar interests or rights form a group. What Freeman was seeking to explain was the relationship between the company and its external environment and its behavior within this environment. The author set out his model as if a chart in which the company is positioned at the center and is involved with stakeholders connected with the company. In this model, the company-stakeholder relationships are dyadic and mutually independent (Freeman, 1999).

According Savage et al. (2004), the basic premises of Stakeholder theory are: the organization enters into relationships with many groups that influence or are influenced by the company, i.e. “stakeholders” in accordance with Freeman terminology; the theory focuses on the nature of these relationships in terms of processes and results for the company and for stakeholders, the interests of all legitimate stakeholder are of intrinsic value and it is assumed that there is no single prevailing set of interests.

The theory focuses upon management decision making, explains how stakeholders try and influence organizational decision making processes so as to be consistent with their needs and priorities. In terms of organizations, these should attempt to understand and balance the interests of the various participants. Taking these premises into consideration, and according to Baldwin (2002), the concept of stakeholder management was developed so that organizations could recognize, analyze and examine the characteristics of partners being influenced by organizational behavior. Thus, management is carried out over three levels: the identification of stakeholders, the development of processes identifying and interpreting their needs and interests and the construction of relationships with the entire process structured around the organization’s respective objectives.

Transaction Cost Economics (TCE) Theory
This theory views firms as organizations comprising of people with different views and objectives. It assumes that
the firm has outgrown to the extent that it substitutes for the market in determining the allocation of resources. This means the organization and structure of the firm determine price and production, with the unit of analysis being the transaction. The theory suggests that managers are opportunists and arrange firms’ transactions to their interest (Williamson, 1996).

The main body of existing empirical work does not specifically or directly calculate transaction costs, but uses statistical methods in order to obtain the answers to their research questions. Such indirect operationalization methods define transaction costs or the research question directly as dependent variable. They define transaction dimensions, or even other sub-categories of them, as independent. All of these direct and indirect calculations of transaction costs are of ex post character, which represents another point of critique of TCE (Dyer, 1996).

Other points of critique come from Goshal and Moran (1996) who dedicate an entire article to the critiques of TCE: in “Bad for practice: A critique of the transaction cost theory”, they particularly discuss the non-economic aspects of organizations, such as learning effects in an organization, trust and creating innovations. Additionally, other authors describe the longing for power of actors as an example of the non-economic aspects that TCE does not consider.

Coase (1988) raised the issue on why business organizations exist, with entrepreneurs making decisions on resource allocation independently, next to markets where buyers and suppliers allocate resources on the basis of the price mechanism. In a study done by Nooteboom (1999), he stressed that a transaction is part of an exchange process, with a history of events taking place before and after that moment at which an agreement is reached and property or user rights are transferred. The production of goods involved, or the actual transfer and delivery may well take place after some time. The time factor thus plays an important role in the transaction process. Transaction costs will rise with increasing uncertainty about possible deviations between expectations and realization of these expectations, because of turbulence and demand uncertainty, technology, competition or the policy environment.

**Conceptual Framework**

The analysis of the dependent variable and its influence on the independent variables, makes it possible to find answers to the research problem represented in form of a model known as a conceptual framework (Sekaran, 2009). In this study, the independent variables are: buyer-supplier relationships, supplier selection procedures, organizational capacity and procurement process management while the dependent variable is the effect of procurement practices on organizational performance as shown in Figure 1.
VI. RESEARCH METHODOLOGY

This study adopted a survey design to collect descriptive data at a particular time from a sample selected from the larger population. The data collected describes things as they were at that time of the study. A cross sectional survey of commercial state owned enterprises in Nairobi County was carried out to establish the relationship between procurement practices and their effect on performance.

The researcher randomly selected 30 enterprises based in Nairobi county. Burns and Grove (2003) define sampling as a process of selecting a group of people, events or behavior with which to conduct a study. A total of 120 of the respondents representing management in: Production, Procurement, Finance and Sales and Marketing departments in each enterprise were issued with the research instrument. Neuman (2006) suggests the general principal of the smaller the population, the bigger the ratio of the sample size to population size; for example, a ratio of about 30:100 (30 percent) for smaller populations (under 1000). This study targeted over 78.95 percent of the total population.

The study was facilitated by the use of primary data collected using questionnaires consisting of both structured and unstructured questions. Research data for the study was collected using both secondary and primary sources. Secondary data was collected through documentary review of published records, journals, textbooks and Government documents, industry and annual reports, while primary data was collected using a self-administered structured and unstructured questionnaire. The questionnaires were distributed to the respondents in each organization using drop and pick method.

Research data was analyzed using descriptive statistics and the relationship between the variables established using the following linear regression model:

\[ Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon \]

Where \( Y \) is the dependent variable, \( \beta_0 \) is the intercept, \( \varepsilon \) is the error term and \( X_1, X_2, X_3 \) and \( X_4 \) represented the four independent variables of the study. The researcher utilized Statistical Package for Social Sciences (SPSS) as the main descriptive statistical tool to analyze the data and determine the extent of relationships between the independent and dependent variables. The results of the processed data were presented using percentages, means, standard deviations, frequencies, pie charts and tables for easy understanding.

VII. RESULTS
Based on the descriptive statistics, the distribution of data points in the data set was established. Low standard deviation values presented shows that the data points are centered around the mean. Our illustrative empirical evidence has clearly shown that relationships and in particular buyer-supplier relationships, are key intangible organizational resources, thus confirming the earlier work by Ni, (2006).

The mean and standard deviation of various indicators shown in Table 1 indicate higher means on strong buyer-supplier relationships (4.19), existence of partnerships with key suppliers (4.15) and cost cutting strategies (4.07) as having the greatest impact on buyer-supplier relationships. The standard deviation values also indicate that most of the respondents agree to the attributes. The low mean registered in information sharing (3.41), negative impact of sharing information (2.33) and high acquisition prices (1.31) had a low impact on the buyer-supplier relationships.

### Results of Regression Analysis

The model equation; \( Y = \beta_1X_1 + \varepsilon \) explained 19% as measured by the goodness of fit as shown in Table 2. The results indicate that buyer-supplier relationships explained 19% of the variation on performance of commercial state owned enterprises in Nairobi County as shown by the adjusted \( R^2 \). This therefore implies that 19% of the corresponding change on performance can be explained by a unit change in the buyer-supplier relationship. Therefore the empirical evidence thus establishes that relations, especially buyer-supplier relationships are key intangible organizational resources as confirmed by Ni, (2006) in his earlier study.

### Regression Analysis

### Table 1: Response means and standard deviations of buyer-supplier relationships

<table>
<thead>
<tr>
<th>No.</th>
<th>Statements</th>
<th>Mean</th>
<th>Standard. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Strong buyer-supplier relations and timely deliveries</td>
<td>4.19</td>
<td>0.92</td>
</tr>
<tr>
<td>2</td>
<td>Supplier partnerships influence in quality control</td>
<td>4.15</td>
<td>0.91</td>
</tr>
<tr>
<td>3</td>
<td>Regular and timely sharing of critical supply chain information</td>
<td>3.41</td>
<td>1.14</td>
</tr>
<tr>
<td>4</td>
<td>Perceived negative impact of information sharing</td>
<td>2.33</td>
<td>0.99</td>
</tr>
<tr>
<td>5</td>
<td>Procurement of requirements at above prevailing market prices</td>
<td>1.31</td>
<td>1.29</td>
</tr>
<tr>
<td>6</td>
<td>Existence of cost cutting strategies</td>
<td>4.07</td>
<td>1.02</td>
</tr>
</tbody>
</table>

### Table 2: Model Summary on Buyer-Supplier Relationships

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>( R^2 )</th>
<th>Adjusted ( R^2 )</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.21</td>
<td>0.13</td>
<td>0.19</td>
<td>1.24</td>
</tr>
</tbody>
</table>

### Supplier Selection Procedures

### Table 3: Response means and standard deviations of supplier selection procedures

<table>
<thead>
<tr>
<th>No.</th>
<th>Statements</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Supplier selection done as per the Act and Regulations</td>
<td>4.59</td>
<td>1.35</td>
</tr>
<tr>
<td>2</td>
<td>Need for supplier prequalification process to be amended</td>
<td>1.72</td>
<td>1.13</td>
</tr>
<tr>
<td>3</td>
<td>Existence of supplier development measures</td>
<td>2.32</td>
<td>1.04</td>
</tr>
<tr>
<td>4</td>
<td>Need for supplier development strategies</td>
<td>3.46</td>
<td>1.15</td>
</tr>
<tr>
<td>5</td>
<td>Use of JIT (Just-in-Time) strategies</td>
<td>4.33</td>
<td>1.24</td>
</tr>
<tr>
<td>6</td>
<td>Level of use of information strategies in the country</td>
<td>2.20</td>
<td>0.98</td>
</tr>
</tbody>
</table>

The mean and standard deviation of various indicators shown in Table 3 indicate higher means on legal requirements (4.59), supplier development (3.46) and JIT implementation (4.33) have the greatest impact on supplier selection procedures. The standard deviation values also indicate that most of the respondents agree to the attributes. The low mean registered in amendment of the existing laws on prequalification process (1.72), supplier development measures in place (2.32) and application of information tools corresponding to the level of economic development of a country (2.20) registered a low impact on the supplier selection procedures.

However these findings differ slightly to what Ho et al., (2010) established in their study where they identified quality, delivery and cost as the main attributes to be considered when selecting suppliers. The findings further concur with Musuga and Namusonge (2013) findings on JIT as a pivot element for achieving Kenya’s Ministry of
Health’s mission by effectively addressing the supply of critical medical products as well as managing demand and supply. They further noted that JIT minimizes waste in form of storage costs and control the high operating costs.

**Results of Regression Analysis**

The model equation; $Y = \beta_3X_3 + \epsilon$ explained 20% as measured by the goodness of fit as shown in Table 6. The results indicate that organizational capacity explained 20% of the variation on performance of commercial state owned enterprises in Nairobi County as shown by the adjusted $R^2$. This therefore implies that 18% of the corresponding change on performance can be explained by a unit change in the supplier selection procedures. Supplier development was identified as one of the practices that affected performance. This was in line with a previous study by Johnson et al., (2004) who found a positive relationship between supplier development and performance.

**Regression Analysis**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>$R^2$</th>
<th>Adjusted $R^2$</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.20</td>
<td>0.17</td>
<td>0.18</td>
<td>0.63</td>
</tr>
</tbody>
</table>

**Table 4: Model Summary on Supplier Selection Procedures**

<table>
<thead>
<tr>
<th>No.</th>
<th>Statements</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Level of experience and knowledge of the procurement laws and regulations by procurement staff enhances efficiency</td>
<td>3.46</td>
<td>0.99</td>
</tr>
<tr>
<td>2.</td>
<td>Skills and professional qualifications of procurement staff</td>
<td>1.98</td>
<td>1.18</td>
</tr>
<tr>
<td>3.</td>
<td>Efficiency of a small supply base</td>
<td>2.57</td>
<td>1.12</td>
</tr>
<tr>
<td>4.</td>
<td>Influence of supply base on performance</td>
<td>1.52</td>
<td>1.05</td>
</tr>
<tr>
<td>5.</td>
<td>Use of information technology (IT) tools and strategies</td>
<td>1.93</td>
<td>1.15</td>
</tr>
<tr>
<td>6.</td>
<td>High cost of deploying and maintaining IT tools hinders their implementation</td>
<td>2.04</td>
<td>0.88</td>
</tr>
</tbody>
</table>

**Organizational Capacity**

The mean and standard deviation of various indicators shown in Table 5 indicate higher means on level of knowledge and experience of the procurement laws and regulations by the procurement staff (3.46) and efficiency of a small supply base (2.57) have the greatest impact on organizational capacity. These results were consistent with Kiage (2013) who studied factors affecting procurement performance in the Ministry of Energy. In his findings, he established that procurement staff competencies affected procurement performance because they carry out their responsibilities unprofessionally leading to wastage of resources. The corresponding standard deviation values also indicate that most of the respondents agree to the attributes. The low mean registered in staff skills and their professional qualifications (1.98), supply base influence on performance (1.52), use of ERP and IT strategies (1.93) as well as the high cost of ERP implementation (2.04) had a minimal impact on organizational capacity.

**Results of Regression Analysis**

The model equation; $Y = \beta_3X_3 + \epsilon$ explained 20% as measured by the goodness of fit as shown in Table 6. The results indicate that organizational capacity explained 20% of the variation on performance of commercial state owned enterprises in Nairobi County as shown by the adjusted $R^2$. This therefore implies that 20% of the corresponding change on performance can be explained by a unit change in the organizational capacity. Although lack of use IT tools was attributed to the high cost of acquisition and maintenance, a study on implementation of ERP systems in Kenyan universities, found that the implementation of ERP in Masinde Muliro University improved service delivery by 85% among the integrated departments: Human Resource, Finance, Procurement, Students Affairs and Computer Science.
Regression Analysis

Table 6: Model Summary on Organizational Capacity

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.19</td>
<td>0.12</td>
<td>0.20</td>
<td>0.74</td>
</tr>
</tbody>
</table>

Procurement Process Management

Table 7: Response means and standard deviations of procurement process management

<table>
<thead>
<tr>
<th>No.</th>
<th>Statements</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Procurement plans in place as per the Procurement Act</td>
<td>2.48</td>
<td>1.12</td>
</tr>
<tr>
<td>2.</td>
<td>Unplanned purchases due to poor budgeting</td>
<td>2.04</td>
<td>1.01</td>
</tr>
<tr>
<td>3.</td>
<td>Long procurement processes that hinder production schedules</td>
<td>2.48</td>
<td>1.18</td>
</tr>
<tr>
<td>4.</td>
<td>Use of Request for Quotations (RFQ) as the most common procurement method</td>
<td>2.04</td>
<td>1.01</td>
</tr>
<tr>
<td>5.</td>
<td>Subcontracting of orders due to lack of internal production capacity</td>
<td>2.48</td>
<td>1.18</td>
</tr>
<tr>
<td>6.</td>
<td>Subcontracting practices gradually erodes your client base</td>
<td>2.04</td>
<td>1.01</td>
</tr>
</tbody>
</table>

The mean and standard deviation of various indicators shown in Table 7 indicate slightly higher means on preparation of annual procurement plans as per the Act (2.48), long procurement process that interrupts production schedules (2.48) and subcontracting due to limited internal production capacity (2.48) have a significant impact on procurement process management. The corresponding standard deviation values also indicate that most of the respondents agree to the attributes. The low mean registered in unplanned purchases due to poor budgeting (2.04), rampant use of RFQs as the main procurement method (2.04) and erosion of clients due to subcontracting activities (2.04) had a lesser impact on procurement process management. Van Weele (2006) studied the efficient use of limited organizational resources such as personnel, budgets, time and equipment to meet varied goals and objectives. Van Weele (2006) continued to establish that effective resource utilization was facilitated by proper planning and budgeting controls which this study results has also established.

Results of Regression Analysis

The model equation; \( Y = \beta_4X_4 + \varepsilon \) explained 21% as measured by the goodness of fit as shown in Table 8. The results indicate that procurement process management explained 21% of the variation on performance of commercial state owned enterprises in Nairobi County as shown by the adjusted \( R^2 \). This therefore implies that 21% of the corresponding change on performance can be explained by a unit change in the procurement process management. This results were similar to Budi (2012), who studied challenges in the management of procurement process within Kenya Rural Roads Authority where he established that most of the delays in completion of road projects was a result of long, rigid and bureaucratic procurement processes. He noted that this in turn affected the overall budgeted costs for most of the road construction projects.

Regression Analysis

Table 8: Model Summary on Procurement Process Management

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.14</td>
<td>0.16</td>
<td>0.21</td>
<td>0.91</td>
</tr>
</tbody>
</table>

Regression Analysis Results of the Independent Variables

A regression analysis was used to establish how buyer-supplier relationships, supplier selection procedures, organizational capacity and procurement process management affect performance of commercial state owned enterprises in Nairobi County. The model equation; \( Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon \) explained 92% as measured by the goodness of fit as shown in Table 4.14. The results indicate that all the independent variables combined explained 92% of the variation on performance of commercial state owned enterprises in Nairobi County as shown by the adjusted \( R^2 \). This therefore implies that other factors not covered in the study represented 8%. The results therefore established a statistical significance in predicting how procurement
practices affect performance of commercial state owned enterprises in Nairobi County as given in Table 9 below:

**Regression Analysis**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.98</td>
<td>0.96</td>
<td>0.92</td>
<td>0.91</td>
</tr>
</tbody>
</table>

**VIII. DISCUSSION**

**Buyer-Supplier Relationships**
This study set out to establish the extent to which buyer-supplier relationships influenced procurement practices and performance of commercial state owned enterprises in Nairobi county. The study revealed that majority of the respondents were in agreement that these enterprises did not have strong buyer-supplier relationship practices in place which contributed to the late deliveries reported from suppliers a regular basis. Most respondents also confirmed limited sharing of supply chain information and data between the buying organizations and the suppliers. The low performance noted in these organizations was a result of poor coordination between the two parties, leading to delayed production schedules and delayed customer deliveries. Another key outcome of the study was that majority of the respondents concurred with the fact that Government owned entities procured their requirements at highly exaggerated prices, making them uncompetitive leading to dismal performances. Respondents also agreed to a greater extent that commercial state owned enterprises surveyed did not employ strategies to control costs.

**Supplier Selection Procedures**
This study intended to establish the extent to which supplier selection procedures impacted on the procurement practices and performance of commercial state owned enterprises in Nairobi county. The results from the respondents clearly indicated that the supplier selection procedures as guided by the Public Procurement and Disposal Act 2005 and Regulations 2006 had serious shortcomings especially when it came to commercially-oriented state firms which compete with the private sector counterparts. The study revealed that the process mainly resulted in listing of general and unspecialized suppliers or “briefcase suppliers” contributing greatly to poor performance.

The study further determined the need for the current procurement laws and regulations to be amended to better fit the needs of the commercially-oriented state firms. A significant number of respondents confirmed the need to incorporate supplier development strategies to enhance professionalism, ownership and strategic participation of all key stakeholders in the procurement processes of those enterprises. The respondents specifically established the need for Government owned enterprises to implement JIT as a crucial strategy to promote efficiency and cost controls.

**Organizational Capacity**
The study findings determined that organizational capacity in terms of quality and experience of the procurement staff contributed significantly to the performance of the procurement functions and the organization in general. Majority of the respondents confirmed that procurement staff in Government owned enterprises did not have the right set of skills, experience and integrity to effectively execute their duties. These findings contravene the basic Public Procurement and Disposal Acts’ requirement calling for all public procurement staff to have professional qualifications including being members of professional bodies in supply chain management. This finding explains the inefficiencies and ineffective procurement practices seen in majority of the organizations surveyed.

The study also revealed that most of the enterprises surveyed did not maintain a small supply base similar to the practice in the private sector, leading to widespread inefficiencies and poor performance. The study established that there was none or slow uptake of information technology tools to streamline and manage the main functions of these organizations including procurement. Majority of the respondents were in agreement that the implementation of e-procurement, use of ERP and lately IFMIS systems would help the surveyed organizations to become more efficient, accountable of the use public funds and promote integrity in the procurement processes. The respondents concurred that such measures would definitely lead to better performance in the long run.

**Procurement Process Management**
The study findings revealed that poor management of procurement processes including planning, budgeting, length of time involved, use of quotations and subcontracting directly led to inefficiencies which led to missed targets and eventual poor performance. The respondents unanimously agreed that regular procurement planning was done annually as per the Public Procurement and Disposal Act, but lacked regular monitoring to offset changes in priorities.

Notably, majority of the respondents noted with concern the long procurement process courtesy of the current public procurement system because of its many weaknesses. They also took note of the amendment to the regulations which was done in 2013 that reduced the number of days for most tendering procedures but reiterated that more needed to be done. Additionally, respondents largely agreed that there was indiscriminate use of Request for Quotation (RFQ) procurement method in all of the sampled
enterprises. They concurred that a lot of valuable time and other resources were lost in processing quotations. They therefore recommended the full scale use of term contracts, which a few of the surveyed organizations had already started implementing.

The respondents also revealed that some organizations employed subcontracting strategies on a large scale due to the lack of internal capacities in form of equipment and personnel. A good number of the respondents confirmed that subcontracting jobs to third party organization ate into their profits and in the long run resulted in massive loss of clients, hence directly resulting in poor performance.

IX. CONCLUSION

The study concludes that majority of the commercial state owned enterprises in Nairobi County employ various procurement practices in their operations. Buyer-supplier relationships, supplier selection procedures, organizational capacities and procurement process management have assisted those enterprises to enhance the performance of their organizations. This was supported by the results from a regression analysis conducted that indicated that there was a strong relationship between procurement practices and organizational performance.

ACKNOWLEDGMENT

The successful completion of this research project was made possible with the advice, assistance and support of other people. I sincerely thank my supervisor, Dr. Mairura for his support, supervision, motivation, constructive criticism and guidance the entire time, the teaching staff and non-teaching staff of JKUAT, all the respondents to the research instrument, the organizations sampled, my colleagues and friends for their academic input and support. I am also grateful for my mum, brothers and sisters for their continuous encouragement and support.

RECOMMENDATION

The study has confirmed that procurement practices are very significant in enhancing the performance of commercial state owned enterprises in Nairobi County. It is therefore important that all state corporations both commercial and non-commercial to employ the optimum procurement practices to enhance performance, competitiveness and improve their effectiveness in the service delivery to the public. A further research is appropriate in establishing the effect of procurement practices in non-commercial entities in Kenya.

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