



**DETERMINANTS OF PROCUREMENT PLANNING IN STATE OWNED ENTERPRISES IN KENYA**

**Kitaka, F. W., & Moronge, M.**

---

**DETERMINANTS OF PROCUREMENT PLANNING IN STATE OWNED ENTERPRISES IN KENYA**

**Kitaka, F. W.,<sup>1\*</sup> & Moronge, M.<sup>2</sup>**

<sup>1\*</sup> Msc. Candidate, Jomo Kenyatta University of Agriculture and Technology [JKUAT], Kenya

<sup>2</sup> Ph.D, Lecturer, Jomo Kenyatta University of Agriculture and Technology [JKUAT], Kenya

**Accepted: October 12, 2020**

---

**ABSTRACT**

*The purpose of this study was to establish the determinants of procurement planning in the state owned enterprises in Kenya. The study was anchored on Institutional Theory, Accounting Theory and Cognitive Moral Development Theory. The study sought to be guided by the following specific objectives: To examine the effect of staff competence on procurement planning in the state owned enterprises in Kenya; To determine the effect of budgeting procedures on procurement planning in the state owned enterprises in Kenya; To establish the effect of demand forecasting on procurement planning in the state owned enterprises in Kenya; To explore the effect of ethics in procurement processes on procurement planning in the state owned enterprises in Kenya. The study targets all the 187 state owned enterprises senior procurement officers. A descriptive research design was adopted. Data was collected through questionnaires. The data showed that the high R square is 0.799. It showed that the independent variables in the study were able to explain 63.80% variation in the procurement planning while the remaining 36.20% was explained by the variables or other aspects outside the model. This implied that these variables are very significant and they therefore need to be considered in any effort to boost procurement planning in the state enterprises. The study therefore identified variables as critical elements of procurement planning in state owned enterprises in Kenya. The study findings revealed that staff competence affects procurement planning; therefore we recommended that state owned enterprises should come up with a standard checklist showing the skills and competency level needed by all personnel undertaking procurement planning. There is need to ensure that there is budgetary control, differences between budget and actual results are analyzed periodically and actions taken. The study further recommended that there should be laid down policies on procurement ethics practices and practice implementation to avoid malice and malpractices that would lead to unsuccessful adoption of the same within state owned enterprises. Based on the findings, it is for the state owned enterprises highly recommendable to build a stable demand forecasting metric which will contribute to a more accurate decision-making process, and at the same time present decision makers (management team) the impact of forecasting errors.*

**Key Words:** Staff Competence, Budgeting Procedures, Demand Forecasting, Procurement Ethics

---

**CITATION:** Kitaka, F. W., & Moronge, M. (2020). Determinants of procurement planning in state owned enterprises in Kenya. *The Strategic Journal of Business & Change Management*, 7(4), 240 – 261.

---

## INTRODUCTION

Procurement is a core activity that cuts across all departments in an organization and as such it has implications on the operations of an organization. Procurement is no longer a process but a strategic function which promotes cost reduction and maximum savings for the organization (Kipkemoi, 2017). Public procurement is the process by which government departments or agencies purchase goods, works and services from the private sector (Uwadede, 2016). Procurement planning is the process of determining the procurement needs and the timing of their acquisition and funding such that the entire operations are met as required in an efficient way. Procurement planning is part and parcel of the traditional planning already familiar in state corporations: - notably, development planning and budgeting. Economic commission of Africa (2013) defines procurement planning as the purchasing function through which organizations obtain products and services from external suppliers. Procurement planning is one of the primary functions of procurement with a potential to contribute to the success of public institution's operations and improved service delivery (Sikolia & Muthini, 2019). It is a function that sets in motion the entire acquisition/procurement process of public institutions.

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, 2016). The close relationship between procurement and development demonstrates that there is need for effective procurement planning that is transparent and accountable in the manner in which procurement processes and procedures are conducted (Muindi, 2014). A key factor that affects effective implementation of procurement practices is making an entire organization department well

prepared and responsible in some way for procurement (Simpson & Power, 2017). According to Roodhooft and Abbeele (2016), public bodies have always been big purchasers, dealing with huge budgets. Mahmood, (2010) also reiterated that public procurement represents 21.879% of the world GDP. In the UK, public procurement expenditure is approximately £150 billion (DEFRA, 2017). 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, 2017)..

In developing countries, public procurement is increasingly recognized as essential in service delivery (Basheka & Bisangabasaija, 2010), and it accounts for a high proportion of total expenditure. For example, public procurement accounts for 60% in Kenya, 58% in Angola, 40% in Malawi and 70% of Uganda's public spending (Mwangi, 2014); Government of Uganda, 2006) as cited in Basheka and Bisangabasaija (2010) and public procurement spending represents 29 per cent of South Africa's GDP (Letsoalo, 2013). These are extremely huge figures compared to the global average of 12-20%. The competitiveness of the government at both the central and in the devolved structure is affected by the procurement function (Kariuki, 2013).

In Kenya, procurement planning is part and parcel of the traditional planning already familiar in local government notably, development planning and budgeting. The mandate for planning in local governments is derived from Regulation 62 of the local government (PPDA, 2006). User department prepare an annual work plan for procurement based on the approved budget, which shall be submitted to the procurement and disposal unit to facilitate orderly execution of annual procurement activities. It is also states that a procurement plan should be integrated into the annual sector expenditure program to enhance financial predictability accounting and control over procurement budgets. The combined work plan for the procuring and disposing entity will include details of

activities of works, service or supplies to be procured, a schedule of 2 procurement requirements in order of priority a statement of required resources supported by a schedule of the projected funding).

State Corporations in Kenya are formed by the government to meet both commercial and social goals. They exist for various reasons including: to correct market failures, to exploit social and political objectives, provide education, health, redistribute income or develop marginal areas. In 2013, the Presidential Task Force on Parastatal Reforms (PTFPR) published a list of all state-owned enterprises (SOEs) and recommended proposals to reduce the number of State Corporations from 262 to 187 in order to eliminate redundant functions between parastatals, close or dispose of non-performing organizations, consolidate functions wherever possible, and reduce the workforce. However, progress is slow.

According to Guidelines on State Corporations from the Office of the President (2010), state corporations in Kenya being classified into eight broad functional categories based on mandate and core functions. The eight categories are Financial; Commercial; Regulatory; Public Universities; Training and Research; Service; Regional Development Authorities; and, Tertiary Education (Mulili, & Wong, 2011). However State corporations in Kenya have gone under a lot of reforms through government task forces and seasonal papers to make them more efficient, effective in the performance of their mandate and to reduce the financial burden of the corporations on the public offers. Regulatory State corporations are the major culprits on this as they heavily rely on support of the government for their survival. Their main source of revenue is the levy of license fees and other regulatory charges (Mulili, & Wong, 2011).

### **Statement of the Problem**

The public procurement is crucial and accounts for a sizeable proportion of the GDP since the public procurement account for 10% of the GDP in Kenya. It is further estimated that public procurement accounts for 9%–13% of the GDP of the economies of developing countries (Ogubala & Kiarie, 2014). A study by the World Bank (2013a) reported that about 50-70% of the national budget (after personal emoluments) is procurement related. Therefore an efficient public procurement planning system could ensure value for money in government expenditure, which is essential to a country facing enormous developmental challenges. The ultimate goal of procurement planning is coordinated and integrated action to fulfill a need for goods, services or works in a timely manner and at a reasonable cost. Therefore, it is important for state owned enterprises to have exceptional procurement planning to enhance service delivery.

A review of existing literature shows that while Mutoro, Makokha and Namisonge (2018) sought to examine the factors affecting procurement planning in Bungoma County government in Kenya analyzed institutional culture, legal framework, competency of staff and information communication technology. Nganu and Mwangangi (2019) sought to establish how procurement practices influence performance of state corporations in Kenya. This study specifically sought to establish the influence of relationship management, strategic sourcing, adoption of information technology, and procurement methods on performance of state corporations. Mburu (2017) examined the factors that affect procurement planning in County Governments in Kenya a case study of Nairobi City County with an aim of making recommendations on proper procurement planning. The study aimed to establish how management support, staff competence, Information Communication Technology (ICT) tools, and budgeting procedure affect procurement planning. The study did not however show how procurement planning was affected by staff competence, budgeting procedures,

demand forecasting and ethics in procurement processes. It is against this background therefore, that this research study sought to assess the determinants of procurement planning in state owned enterprises in Kenya. Hence, the study sought to fill this gap by conducting an assessment of the determinants of procurement planning in state owned enterprises in Kenya.

### **Study Objectives**

The general objective of this study was to establish the determinants of procurement planning in the state owned enterprises in Kenya. The study sought to be guided by the following specific objectives:

- To examine the effect of staff competence on procurement planning in the state owned enterprises in Kenya
- To determine the effect of budgeting procedures on procurement planning in the state owned enterprises in Kenya
- To establish the effect of demand forecasting on procurement planning in the state owned enterprises in Kenya
- To explore the effect of ethics in procurement processes on procurement planning in the state owned enterprises in Kenya

## **LITERATURE REVIEW**

### **Theoretical Review**

#### **Institutional Theory**

The institutional theory is the traditional approach that is used to examine elements of public procurement (Obanda, 2010). Scott (2004) identifies three pillars of institutions as regulatory, normative and cultural cognitive. The regulatory pillar emphasizes the use of rules, laws and sanctions as enforcement mechanism, with expedience as basis for compliance. Institutional Theory by Meyer and Rowan (1977), states that the institutional environment strongly influences the development of formal structures in an organization more than market pressures. To improve efficiency

in organizations, innovative structures are legitimized. This means that organizations must maintain certain structures and procedures so as to maintain legitimacy in the institutional environment. Institutional theory has effects on procurement and supply chain performance.

The institutional theory highlight that procedures must be observed in order to ensure that all the stakeholders involved in the procurement exercise obtain fair treatment. The procedures include; planning for the required procurement over a given period, identifying the source of the items, highlighting specifications of procurement, determining procurement procedures, Sourcing (soliciting) offers, evaluation, post qualification, commencement of contract, contract performance (delivery) and management, record keeping and accountability, payment and post contract performance. If the institution follows the procedures then the procurement and supply chain performance will be increased.

#### **Accounting Theory**

Kaplan and Norton (1996) assert that the accounting theory is aimed towards provision of a coherent set of logical principles that form the general frame of reference for the evaluation and development of sound accounting practices and policy development. Norreklit and Mitchell (2010) exemplifies that the purpose in developing a theory of accounting is to establish Standard for judging the acceptability of accounting methods. Horvath (2009) argues that the accounting methods that fail to meet the standard should be rejected. Accounting theory helps in explaining and guiding management actions in identifying and locating information necessary to be used in budget preparation.

The money measurement concept in accounting has contributed to a greater extent in providing yardstick for quantifying, conversion and translating various inputs in relation to materials, and machines required in the preparation of budget (Horvath et.al.,2009). The

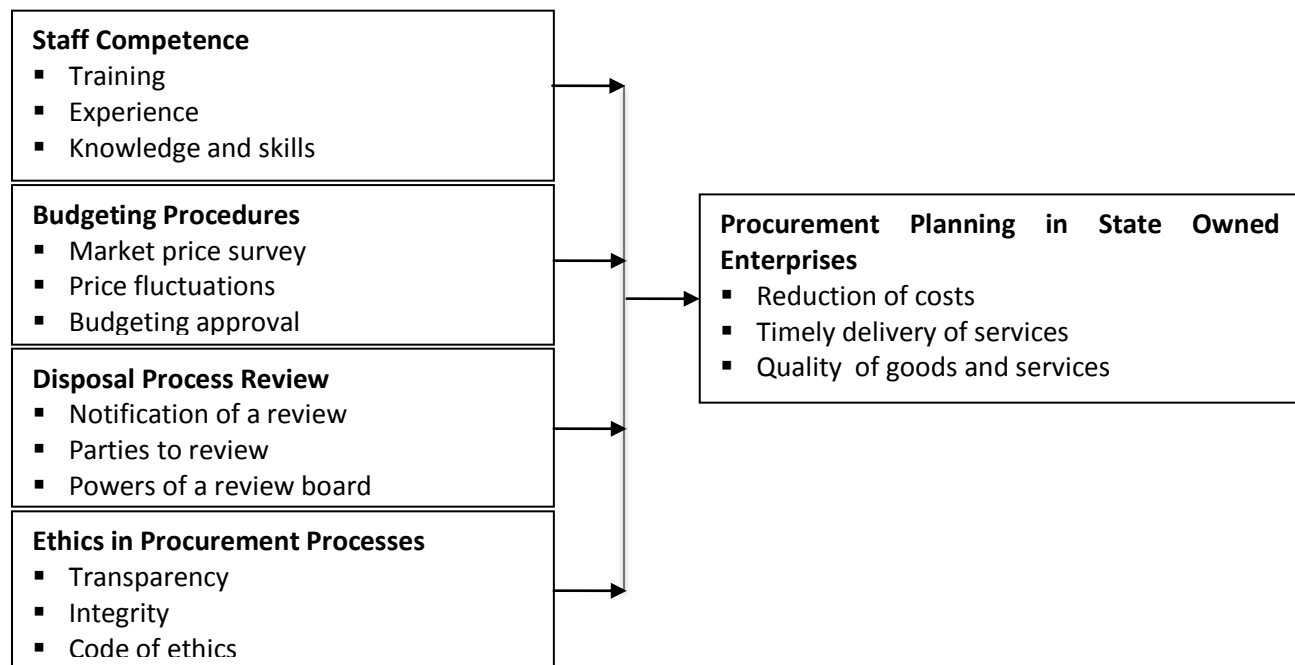


accounting theory has an important normative role in the evaluation of budget and control procedures to be adopted. It has assisted in making predictions of the likely outcome of budget action in a given set of circumstance and effect of any change in circumstances. Qi (2010) argues that accounting theory view a firm as a separate entity in which its activities are distinct from its owners. This principle serves as an impetus to the general philosophy of budget itself as a tool for effective management (Qi, 2010).

### Cognitive Moral Development Theory

Cognitive Moral Development Theory argues that if organizations do not include concerns about ethical

behaviour into performance appraisals, then organizations will be unable to articulate values-orientation that is integrated across the organization (Van der Elst, 2012). Ethical behaviour involves principles such as fairness, honesty and concern for others. Ethical leadership thus refrains from any concerns that may cause harm to others (Yang, Bui & Truong, 2017). When unethical situations arise, there might be suspicion among employees that some individuals are not accountable to ethical ideals postulated in the company's policy. With leaders being the key figures for the achievement of organizational goal, they should thus set the tone for ethical behaviour including promotions, appraisals and strategies (Manduku, 2016).



### Independent Variables

### Dependent Variable

Figure 1: Conceptual Framework

### Empirical Review

Ogubala and Kiarie (2014), in the study titled factors affecting procurement planning in County Governments in Kenya; methodology used descriptive statistics in analyzing data and adopted a descriptive research design as a result the study revealed that competencies of procurement staff,

lack of management support, ICT tools, and budgeting procedures affect procurement planning. It is on that context, a researcher adopted the same study, methodology and but in Tanzania specifically stresses on assessing the effect of competencies, budgeting procedures and compliance to legal frame work

governing procurement planning so as to assess the consistency of the results.

Adera and Senelwa (2019) sought to determine effect of procurement training practices on the implementation of procurement practices in Public institutions in Kenya. The study was guided by Resource Based View theory. The study used simple random technique to select 120 employees from population of 400 staff drawn from Procurement department in National Youth Service. Data was collected using structured questionnaires. The findings of the study showed that implementation of procurement practices in public institutions in Kenya are highly influenced by training. It is thus concluded that training in procurement practices improves implementation of procurement practices in public institutions in Kenya. Therefore, for a successful implementation of procurement practices in Kenya, the study recommends that management of public entities should invest extensively in employees training to ensure staff skills, competency and proficiency; all suppliers involved in procurement activities with all public institutions in Kenya.

Toroitich, Mburugu and Waweru (2017) study focused on the influence of employee competence on the implementation of electronic procurement in the selected county governments in Kenya. The study found that employee competence has a significant positive influence on the implementation of e-procurement in county governments. County governments should therefore train staff on the use of e-procurement tools in order to enhance the implementation of e-procurement. The institutions should also employ qualified staff and avail them with electronic procurement manual to guide on e-procurement processes and assist in the implementation of e procurement.

Bwire (2019) study focused on the streamlining of budgeting activities and procurement practices in

manufacturing firms. The areas of concern for the study concentrate on the impact of budgeting approaches, budget reviews, budgeting ethics and expense forecasts on procurement performance. The researcher used the stratified random sampling technique to select the manufacturing firms that were involved in the study. The findings of the study indicated that the independent variables; budgeting approaches, budget reviews, budgeting ethics and expense forecasts had a statistically significant relationship with the dependent variable, procurement performance. The results from the multiple regression analysis revealed that of the four independent variables, only budgeting approaches and budgeting ethics had a statistically significant impact on procurement performance

Willy and Njeru (2014), in the study titled, Effects of procurement planning on procurement performance in Kenya; methodology used descriptive statistics in analyzing data and adopted a descriptive research design as a result the study revealed that strong relationship between procurement planning and procurement performance, presence of procurement portfolio, efficient logistic management and adherence to procurement planning positively affects procurement performance. It is on that context, a researcher adopted the same study, methodology and but in Tanzania specifically stressed to assess factors influencing procurement planning in local government authorities

Muturo, Makokha and Namisonge (2018) sought to establish determine factors affecting procurement planning in Bungoma County Government in Kenya. The specific objective was to determine the effect of service delivery standards on procurement planning in Bungoma County Government. Theories on which the study was grounded included institutional theory, linear policy model theory and Hegelian Dialectic theory. A descriptive survey research design was used in this study. A target population census of forty three included procurement County officers and staff from Bungoma County Government. The hypothesis stated;

service delivery had no significant influence on procurement planning in Bungoma County. The study rejected the null hypothesis because of the calculated P value. The conclusion was that service delivery had significant positive influence on procurement planning in Bungoma County.

In a study by Kiage (2013) on Factors Affecting Procurement Performance: The ideals of planning suggest that development and public infrastructure can be implemented in an atmosphere of complete harmony and that environmental, social and economic disruptions can be minimized and this assumes that there is full knowledge of the social, economic, political and physical systems within which such development is operating. Despite the numerous studies on implementation of procurement practices, the aspect of service delivery in relation to procurement planning has been largely neglected. It is against this background that the current study determined the factors affecting procurement planning in Bungoma County Government, Kenya.

A relatively well-developed body of research by Daniel (2010), Onyinkwa (2013), Ombuki et al., (2014), Ouma and Kilonzo (2014), Maina and Omboto (2016), Maurice (2014) and Patrick and Wallace (2016) explored implementation of procurement practices in public sector organizations in general and left a major knowledge gap on factors affecting procurement planning in public institutions. However, the environment in which procurement planning is conducted may not be supported by some of the important systems such as ICT tools. Therefore, very little research has been conducted specifically at the state owned enterprises touching on factors affecting procurement planning.

Patrick and Wallace (2016) study was to establish the factors that influence procurement planning in public secondary schools in Migori County. The

specific objectives of the study were to determine the effect of staff competency, budgeting procedures, cost estimation and forecasting and ethics in procurement processes on procurement planning in public secondary schools in Migori County. Questionnaires targeting 176 public secondary were issued and the target groups were the principals, deputy principals, HoDs, bursa and clerks. The study had a sample size of 123 secondary schools. Consensus method was used to select schools in different sub counties, descriptive statistics analysis and multiple regressions were used to analyze data. The results indicated that staff competence, ethics in procurement processes, budgeting procedures, cost estimation and forecasting influence procurement planning in secondary schools.

Sikolia and Muthini (2019) sought to examine the determinants of performance of procurement committees in public secondary schools in Kenya: A case of Khwisero sub-county. The study adopted the descriptive survey research design. The target population comprised of 104 procurement officers from 26 schools in Khwisero sub-county where Yamame's formula was used to get a sample size of 83 respondents who were selected through simple random sampling technique. Multiple regression analysis and correlation analysis were used to measure the relationship between independent and dependent variables. Both descriptive and inferential analyses revealed that all independent variables (professional training, procurement ethics, and compliance with government regulations) significantly influenced procurement committee performance of public secondary schools in Khwisero sub-county.

According to Obadia and Iravo (2016) cite that procurement process should be limited by ethical standards and that secondary schools are expected to be accountable in their procurement functions. The research further indicate that ethical conduct is important in public procurement as it involves the expenditure of public money, and is subject to public scrutiny. The study discovered out those professional



ethical practices ought to be considered members of the tender committee. More so, procurement ethics promotes confidentiality of bids to suppliers and reduce the cost of managing risks of improper behavior. The findings further reveal a significant relationship between professional ethics practice and management of procurement function in public secondary schools in Tinderet Sub-County, Kenya.

Brahim et al.,(2014) in the study titled, implementation of procurement planning in parastatal organizations at Tanzania postal bank , methodology used was descriptive statistics in analyzing data and adopted a descriptive research design as a result the study revealed that implementation of procurement planning requires interdepartmental relationship between the PMU and other user departments. In order gain the desired goals, it is strongly recommended that all procurement activities should be exercised diligently with compliance to prevailing procurement laws and regulations. It is on that context, a researcher interested to assess the effect of competencies and knowledge, budgeting procedures and compliance to legal frame work to procurement planning so as to assess if yields the same results.

Basing on NAOT (2014), the shown percentages in procurement plans were not showing the real and actual figures on percentages that were revealed within the financial year. Audit findings claims that in financial year 2013/2014, 45 percent of the procured projects of procuring entities have no approved budget and about to 47 percent were not included in the respective annual procurement plans. Furthermore in financial year 2012/2013, many local government authorities failed to complete their procurement projects caused by inadequate funds resulted from unrealistic cost estimates.

Jackson and Ombui (2018) objective of the study was to assess the effect of procurement planning on service delivery in state corporations in Kenya: a case of Kenya Agricultural and Livestock Research Organization. The target population for this study was 90 comprising of the procurement officer, and the finance officers of the Kenya Agricultural and Livestock Research Organization. Based on the study findings, the study concluded that procurement planning had a positive and significant effect on service delivery in state corporations in Kenya. The study also concluded that procurement portfolio and service delivery were positively and significantly related. Further, the study concluded that procurement policies and procedures and service delivery were positively and significantly related. In addition, the study concluded that logistics management and service delivery were positively and significantly related. Finally, the study concluded that procurement budgeting procedures and service delivery were positively and significantly related. The study recommended the procurement officials to always develop a full and comprehensive procurement portfolio of the procurement needs of the organization before embarking onto any procurement activity. The portfolio should include among many other things, spend analysis, risk analysis and procurement strategies.

Nyamongo and Ombui (2015) carried a study on the impacts of procurement moral practices on the performance of commercial state owned enterprises in Nairobi County with the objective of ascertaining the influence of procurement process management on performance of commercial state owned enterprises. From the study finding, it was evident that ethical practices in all procurement processes had a robust effect on the performance of commercial state owned enterprises. The study findings proposed that all state owned corporations should implement efficient and moral practices for the purpose of ensuring more supply chain efficiency especially on operations and more so on service delivery to their customers.

Seroney, Wanyoike and Langat (2019) main study was to establish the influence of demand forecasting on procurement performance of Petroleum marketing companies in Nakuru County, Kenya. The study used a descriptive survey research design. 147 supply chain managers and the procurement officers working with the petroleum marketing companies in Nakuru County, Kenya constituted the target population. The study used a structured questionnaire and the findings were presented in tables. The results indicated that there was a positive correlation ( $r=.285$ ) between demand forecasting and supply chain performance. The hypothesis test results showed that demand forecasting had a statistically significant influence on supply chain performance.

Demeter, Forslund and Jonsson (2007) study focused on the impact of forecast information quality on supply chain performance. Methodologically, the analysis was based on a survey of the most important suppliers of 136 Swedish companies. Findings show that a large proportion of the suppliers receive customer forecasts, but that the forecast information quality is lower further upstream in the supply chain and, in some variables, lower for make-to-order suppliers. The greatest information quality deficiency of the forecast was that it was considered unreliable. The only significant difference in supply chain performance found between make-to-stock suppliers with and without access to forecast was related to the use of safety stock in finished goods inventory.

## METHODOLOGY

The study used a descriptive survey design to help in indicating trends in attitudes and behaviors and enable generalization of the findings of the research study to be done. The population of the study was 187 chief procurement officers drawn from the state owned enterprises as per List of Kenyan State

Corporations 2017. The study used primary forms of data. To ascertain the primary data from various respondents the study used self-administered questionnaires. Reliability analysis was used to assess internal consistency among the variables of study. The study collected both qualitative and quantitative data and was analyzed using both quantitative and qualitative methods with the help of (SPSS). The qualitative data was analyzed by the use of content analysis which helped the study in giving recommendation in line with the conclusions drawn for the whole population under study. The collected data was coded and entered into SPSS to create a data sheet that was used for analysis. The responses were then coded with numbers. The data collected was screened and cleaned to correct any errors.

Quantitative data was analyzed using descriptive statistics involving percentages and mean scores to determine varying degrees of response-concentration regarding determinants of procurement planning. Equation below shows the linear regression model of the independent variables against the dependent variable that was adopted by the study.

$$Y = \theta_0 + \theta_1 X_1 + \theta_2 X_2 + \theta_3 X_3 + \theta_4 X_4 + \epsilon$$

Where:

Y = dependent variable (Procurement Planning in state owned enterprises).

$X_1$  = Staff Competence

$X_2$  = Budgeting Procedures

$X_3$  = Demand Forecasting

$X_4$  = Ethics in Procurement Processes

$\epsilon$  = Error term, which is assumed to be normally distributed with mean zero and constant variance.

## FINDINGS

### Descriptive Statistics

The study set out to examine the determinants of procurement planning in state owned enterprises in Kenya. To this end, four variables were conceptualized as key determinants of procurement planning and these include: staff competence, budgeting procedures,

demand forecasting and ethics in procurement processes.

### Staff Competence

The study sought to establish the extent to which respondents agreed with the statements relating to whether staff competence influences procurement planning in state owned enterprises in Kenya. A scale of 1-5, the scores were as follows: The scores “Strongly disagree=SD” and “Disagree=D” were represented by mean score, equivalent to 1 to 2.5 on the continuous Likert scale ( $1 \leq \text{Disagree} \leq 2.5$ ). The scores of ‘Neutral’ were represented by a score equivalent to 2.6 to 3.5 on the Likert scale ( $2.6 \leq \text{Neutral=N} \leq 3.5$ ). The score of “Agree=A” and “Strongly agree=SA” were represented by a mean score equivalent to 3.6 to 5.0 on the Likert Scale ( $3.6 \leq \text{Agree} \leq 5.0$ ). The results were presented in mean and standard deviation as illustrated in Table 1.

Table below presented the percentages, means and standard deviation statistics relating to the information measuring the respondents’ level of agreement as to how the given indicators of staff

competence influenced procurement planning in state owned enterprises in Kenya. The value that had the highest frequency scores among the respondents was the occurrence, agree (value of 4.00 on the monadic scale), as all the indicators for staff competence under this column had high numbers of respondents. This implied that most respondents were in agreement that the indicators listed for staff competence influenced procurement planning in state owned enterprises in Kenya.

Table below also gave the mean values for individual indicators of staff competence and the respondent’s level of agreement on their influence on procurement planning in state owned enterprises in Kenya. These were arranged in order from the largest to the smallest mean values. The first three mean values all had values greater than 3.5 and rounded off to a mean of 4.00 (which corresponded to agree on the monadic measurement scale). Thus, the respondents generally agreed on the perceived influence of staff competence indicators on procurement planning in state owned enterprises in Kenya, and these had the highest ranking among all the respondents.

**Table 1: Staff Competence and Procurement Planning**

Statement	Mean	Std
There is a continuous professional training on procurement function to improve procurement planning	4.213	.908
Lack of staff training and capacity building affects procurement planning.	3.987	.565
A challenge of getting experienced staff affects procurement planning	3.678	.543
There are regular staff training programmes on procurement procedures	3.543	1.975
Effective procurement activities is dependent on skills and experience of the employees	4.127	.094
An academic and professional qualification affects procurement planning.	4.098	.654
<b>Composite Mean</b>	<b>3.941</b>	

Mean values lower than 3.50 rounded off to a mean of 3.00, indicating that these respondents disagreed on the influence of these scope management indicators on performance of county funded construction projects. The standard deviations showed the extent to which the responses were dispersed around the mean values. The lower the standard deviation values, the closer the scores

clustered together and this was easily observed by comparing the scores for each staff competence indicators. Likewise, there is regular staff training programmes on procurement procedures, had the lowest perceived influence on procurement planning in state owned enterprises in Kenya.

### Budgeting Procedures

The study sought to establish the extent to which respondents agreed with the statements relating to whether budgeting procedures influences procurement planning in state owned enterprises in Kenya. A scale of 1-5, the scores were as follows: The scores “Strongly disagree=SD” and “Disagree=D” were represented by mean score, equivalent to 1 to 2.5 on the continuous Likert scale ( $1 \leq \text{Disagree} \leq 2.5$ ). The scores of ‘Neutral’ were represented by a score equivalent to 2.6 to 3.5 on the Likert scale ( $2.6 \leq \text{Neutral}=\text{N} \leq 3.5$ ). The score of “Agree=A” and “Strongly agree=SA” were represented by a mean score equivalent to 3.6 to 5.0 on the Likert Scale ( $3.6 \leq \text{Agree} \leq 5.0$ ). The results were presented in mean and standard deviation.

Table 2 presented the percentages, means and standard deviation statistics relating to the information measuring the respondents’ level of agreement as to how the given indicators of budgeting procedures influenced procurement planning in state owned enterprises in Kenya. The

value that had the highest frequency scores among the respondents was the occurrence, agree (value of 4.00 on the monadic scale), as all the indicators for budgeting under this column had high numbers of respondents. This implied that most respondents were in agreement that the indicators listed for budgeting procedures influenced procurement planning in state owned enterprises in Kenya.

The table also gave the mean values for individual indicators of budgeting procedures and the respondent’s level of agreement on their influence on procurement planning in state owned enterprises in Kenya. These were arranged in order from the largest to the smallest mean values. The first three mean values all had values greater than 3.5 and rounded off to a mean of 4.00 (which corresponded to agree on the monadic measurement scale). Thus, the respondents generally agreed on the perceived influence of budgeting procedures indicators on procurement planning in state owned enterprises in Kenya, and these had the highest ranking among all the respondents.

**Table 2: Budgeting Procedures and Procurement Planning**

Statement	Mean	Std
Budgeting procedures have caused delays in decision making in organization	4.567	.543
Budgeting procedures have caused delays in Quality service delivery in organization	4.215	.654
Cost estimations affect procurement planning.	4.321	.215
Clear budgeting procedures affect procurement planning.	3.235	.329
Lack of market price survey and price fluctuations affect procurement planning.	4.890	.093
Budget approval affects procurement planning	4.908	.387
<b>Composite Mean</b>	<b>4.356</b>	

Mean values lower than 3.50 rounded off to a mean of 3.00, indicating that these respondents disagreed on the influence of these budgeting procedures indicators on procurement planning in state owned enterprises in Kenya. The standard deviations show the extent to which the responses were dispersed around the mean values. The lower the standard deviation values, the closer the scores clustered together and this was easily observed by comparing

the scores for each budgeting procedures indicators. Therefore, it was established that clear budgeting procedures affect procurement planning, had the lowest perceived influence on procurement planning in state owned enterprises in Kenya.

### Demand Forecasting

The study sought to establish the extent to which respondents agreed with the statements relating to

whether demand forecasting influences procurement planning in state owned enterprises in Kenya. A scale of 1-5, the scores were as follows: The scores “Strongly disagree=SD” and “Disagree=D” were represented by mean score, equivalent to 1 to 2.5 on the continuous Likert scale ( $1 \leq \text{Disagree} \leq 2.5$ ). The scores of ‘Neutral’ were represented by a score equivalent to 2.6 to 3.5 on the Likert scale ( $2.6 \leq \text{Neutral}=\text{N} \leq 3.5$ ). The score of “Agree=A” and “Strongly agree=SA” were represented by a mean score equivalent to 3.6 to 5.0 on the Likert Scale ( $3.6 \leq \text{Agree} \leq 5.0$ ). The results were presented in mean and standard deviation as illustrated in Table 3. which presents the percentages, means and standard deviation statistics relating to the information measuring the respondents’ level of agreement as to how the given indicators of demand forecasting influenced procurement planning in state owned enterprises in Kenya. The value that had the highest frequency scores among the respondents was the occurrence,

agree (value of 4.00 on the monadic scale), as all the indicators for demand forecasting under this column had high numbers of respondents. This implied that most respondents were in agreement that the indicators listed for demand forecasting influenced procurement planning in state owned enterprises in Kenya.

Table below also gave the mean values for individual indicators of demand forecasting and the respondent’s level of agreement on their influence on procurement planning in state owned enterprises in Kenya. These were arranged in order from the largest to the smallest mean values. The first three mean values all had values greater than 3.5 and rounded off to a mean of 4.00 (which corresponded to agree on the monadic measurement scale). Thus, the respondents generally agreed on the perceived influence of demand forecasting indicators on procurement planning in state owned enterprises in Kenya, and these had the highest ranking among all the respondents.

**Table 3: Demand Forecasting and Procurement Planning**

Statement	Mean	Std
The procurement department follow a demand pattern to reduce forecast errors	4.567	.543
The procurement department is advised well on the demand patterns to improve supply chain responsiveness	4.215	.654
The forecast design adopted has enhanced health collaboration between supply chain partners	4.321	.215
Forecasting process is paramount to ensure that there is accuracy to enhance decision making	3.235	.329
The forecast accuracy has created a win-win and value of money results for the organization	4.890	.093
The procurement department follow a demand pattern to reduce forecast errors	4.908	.387
<b>Composite Mean</b>	<b>4.356</b>	

Mean values lower than 3.50 rounded off to a mean of 3.00, indicating that these respondents disagreed on the influence of these demand forecasting indicators on procurement planning in state owned enterprises in Kenya. The standard deviations showed the extent to which the responses were dispersed around the mean values. The lower the standard deviation values, the closer the scores clustered together and this was easily observed by comparing the scores for each demand forecasting

indicators. Therefore, it was established that forecasting process is paramount to ensure that there is accuracy to enhance decision making affect procurement planning, had the lowest perceived influence on procurement planning in state owned enterprises in Kenya.

#### **Ethics in Procurement Processes**

The study sought to establish the extent to which respondents agreed with the statements relating to whether ethics in procurement processes influences



procurement planning in state owned enterprises in Kenya. A scale of 1-5, the scores were as follows: The scores “Strongly disagree=SD” and “Disagree=D” were represented by mean score, equivalent to 1 to 2.5 on the continuous Likert scale ( $1 \leq \text{Disagree} \leq 2.5$ ). The scores of ‘Neutral’ were represented by a score equivalent to 2.6 to 3.5 on the Likert scale ( $2.6 \leq \text{Neutral}=\text{N} \leq 3.5$ ). The score of “Agree=A” and “Strongly agree=SA” were represented by a mean score equivalent to 3.6 to 5.0 on the Likert Scale ( $3.6 \leq \text{Agree} \leq 5.0$ ). The results were presented in mean and standard deviation as illustrated below.

Table below presented the percentages, means and standard deviation statistics relating to the information measuring the respondents’ level of agreement as to how the given indicators of ethics in procurement processes influenced procurement planning in state owned enterprises in Kenya. The value that had the highest frequency scores among the respondents was the occurrence, agree (value

of 4.00 on the monadic scale), as all the indicators for budgeting under this column had high numbers of respondents. This implied that most respondents were in agreement that the indicators listed for ethics in procurement processes influenced procurement planning in state owned enterprises in Kenya.

Table 4 also gave the mean values for individual indicators of ethics in procurement processes and the respondent’s level of agreement on their influence on procurement planning in state owned enterprises in Kenya. These were arranged in order from the largest to the smallest mean values. The first three mean values all had values greater than 3.5 and rounded off to a mean of 4.00 (which corresponded to agree on the monadic measurement scale). Thus, the respondents generally agreed on the perceived influence of ethics in procurement processes indicators on procurement planning in state owned enterprises in Kenya, and these had the highest ranking among all the respondents.

**Table 4: Ethics in Procurement Processes and Procurement Planning**

Statement	Mean	Std
All procurement transactions and processes are subject to scrutiny	4.187	1.432
Transparency is considered paramount in all procurement activities	4.123	1.098
All procurement officials are liable to unethical practices	3.876	1.543
The purchase is competitively based, with the award going to the lowest responsive and responsible bidder	3.765	1.432
Procurement officers understand what the procurement laws or rules are intended to accomplish.	3.234	1.209
Procurement officials understand the rules and regulations pertaining to his or her profession and organization	2.908	1.862
<b>Composite Mean</b>	<b>3.682</b>	

Mean values lower than 3.50 rounded off to a mean of 3.00, indicating that these respondents disagreed on the influence of these ethics in procurement processes indicators on procurement planning in state owned enterprises in Kenya. The standard deviations showed the extent to which the responses were dispersed around the mean values. The lower the standard deviation values, the closer the scores clustered together and this was easily

observed by comparing the scores for each ethics in procurement processes indicators. Therefore, it was established that procurement officers understand what the procurement laws or rules are intended to accomplish affect procurement planning, had the lowest perceived influence on procurement planning in state owned enterprises in Kenya.

### Procurement Planning in State Owned Enterprises

On the extent to which procurement planning in the organization, respondents were asked to indicate the extent to which the factors determined the procurement planning. The data was collected from the different indicators of the variable procurement planning which was ordinal categorical. The data was therefore presented in frequency tables with the median being used as the appropriate measure of central tendency. The first indicator for the dependent variable required to know what the organizations level procurement planning was compliance with procurement regulations was, 0% of the respondents had 0-10%, 50% had 20-30%, 45% had 30-40%, 3% had 40-50%, 2% had had over 50%. The modal class is of the respondents who had over 20%-30% compliance. The median was found to be 2 which imply that on average the organizations level of compliance with procurement regulations is 20%-30%.

The next indicator required the respondents to state the level of minimization of procurement expenditure in the organization, 10% of the respondents had 0%-20%, 70% had 20%-30%, 17%

had 30%-40%, 1% had 40-50%, 3% had over 50%. The modal class is of the respondents who had over 20%-30%. The median was found to be 2 which imply that on average firm's levels of minimization of procurement expenditure was 20%-30%. When the respondents were asked what the level of transparency and accountability of procurement funds was, 0% of the respondents 0-20%, 3% had 20-30%, 3% had 30-40%, 34% had 40-50%, 60% had over 50%. The modal class is of the respondents who had over 50% transparency. The median was found to be 5 which imply that on average the level of transparency and accountability of procurement funds in organizations is over 50%.

Finally, the respondents were asked what the level of quality of procured goods and services offered was, 67% of the respondents indicated 0%-20%, 13% had 20%-30%, 6% had 30%-40%, 9% had 40%-50%, 5% had over 50%. The modal class is of the respondents who had between 0%-20% quality levels. The median was found to be 1 which implied that on average the level of quality of procured goods and services offered is between 0%-20%.

**Table 5: Procurement Planning**

Statement	0%-10%	11%-20%	21%-40%	41%-50%	Over 50%	Mode
What is the level of compliance with procurement regulations?	0	50	45	3	2	2
What is the level of minimization of procurement expenditure?	10	70	17	1	3	2
What is the level of transparency and accountability of procurement funds	35	55	8	1	1	2
What is the level of quality of procured goods and services offered?	67	13	6	9	5	1

### Multiple Regression Analysis

The study adopted a multiple regression analysis so as to establish the relationship of independent variables and dependent variables. According to the model summary results, the coefficient of determination ( $R^2$ ) is used to measure how far the

regression model's ability to explain the variation of the independent variables. The coefficient of determination is between zero and one. 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

planning 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 need to be

considered in any effort to boost procurement planning in the state enterprises. The study therefore identified variables as critical elements of procurement planning in state owned enterprises in Kenya.

**Table 6: Model Summary**

Model	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	Std. Error of the Estimate
	.799	.638	.618	.08654

**F-Test Results**

The F-statistic test basically shows whether all the independent variables included in the model jointly influence on the dependent variable. Based on the study results of the ANOVA Test or F-test in the results obtained F-count was 66.171 greater the F-

critical (13.543) with significance of 0.000. Since the significance level of 0.000 < 0.05 we concluded that the set of independent variables affect the procurement planning in state enterprises in Kenya (Y-dependent variable) and this showed that the overall model was significant.

**Table 7: ANOVA**

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	80.465	4	20.116	66.171	.000
Residual	45.656	150	.304		
Total	126.121	154			

NB: F-critical Value = 13.543

The results of multiple regression analysis obtained regression coefficients t value and significance level as indicated in Table 8. The study conducted a multiple regression analysis so as to determine the relationship between the dependent variable and independent variables. The general form of the equation was to predict procurement planning from staff competence, budgeting procedures, demand forecasting and ethics in procurement processes is:  $(Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \epsilon)$  becomes:  $Y = 3.786 + 0.785X_1 + 0.763X_2 + 0.654X_3 + 0.559X_4$ . From the study findings on the regression equation established, taking all factors into account (independent variables) constant at zero procurement planning will be 3.786. The data findings analyzed also showed that taking all other independent variables at zero, a unit increase in

staff competence would lead to a 0.785 increase in procurement planning; a unit increase in budgeting procedures will lead to a 0.763 increase in procurement planning, a unit increase in demand forecasting will lead to 0.654 increase in procurement planning and a unit increase in ethics in procurement processes will lead to an increase in 0.559 increase in procurement planning. This inferred that staff competence contributed most to procurement planning. Based at 5% level of significance, staff competence had a .000 level of significance; budgeting procedures showed a .001 level of significance, demand forecasting show a .003 level of significance and ethics in procurement processes show a .007 level of significance hence the most significant factor was staff competence.

**Table 8: Coefficient Results**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	$\beta$		
(Constant)	3.786	.654		5.789	.000
Staff Competence	.785	.095	.732	8.263	.000
Budgeting Procedures	.763	.110	.676	6.936	.001
Demand Forecasting	.654	.236	.527	2.763	.003
Ethics in Procurement Processes.	.559	.251	.487	2.227	.007

**T-Test Results**

To determine the significance of the effect of independent variables (staff competence, budgeting procedures, demand forecasting and ethics in procurement processes) on the procurement planning as the dependent variable is the T-test. The results of t-test were as follows: The T-value for staff competence (8.263) has a significance level of 0.000 thus the value of less than 0.05. Thus research question one is concluded that the staff competence has significant positive influence on the procurement planning in the state enterprises. The T-value for valuation methods (6.936) has a significance level of 0.001 thus the value of less than 0.05. Thus research question two is concluded that the budgeting procedures have significant positive influence on the procurement planning in the state enterprises. The T-value for demand forecasting (2.763) has a significance level of 0.003 thus the value of less than 0.05. Thus research question three is concluded that the demand forecasting has significant positive influence on the procurement planning in the state enterprises. The T-value for s in procurement processes (2.763) has a significance level of 0.007 thus the value of less than 0.05. Thus research question four is concluded that the ethics in procurement processes has significant positive influence on the procurement planning in the state enterprises.

**CONCLUSION AND RECOMMENDATIONS**

Based on the study findings the regression coefficients results showed that staff competence has a significant positive effect on the procurement planning in the state owned enterprises in Kenya. This implied that increasing levels staff competence would increase the levels of procurement planning in the state owned enterprises in Kenya. Therefore, it can be concluded that staff competence has a strong and significant effect on the procurement planning in the state owned enterprises in Kenya.

According to the study findings the regression coefficients of the indicated that budgeting procedures has a significant positive effect on the procurement planning in the state owned enterprises in Kenya. This implied that increasing levels staff competence would increase the levels of budgeting procedures in the state owned enterprises in Kenya. Therefore, it can be concluded that budgeting procedures has a strong and significant effect on the procurement planning in the state owned enterprises in Kenya.

Form the study results the regression coefficients showed that ethics in procurement processes has a significant positive effect on the procurement planning in the state owned enterprises in Kenya. This implied that increasing levels of ethics in procurement processes would increase the levels of procurement planning in the state owned enterprises in Kenya. Therefore, it can be concluded that ethics in procurement processes has a strong and significant

effect on the procurement planning in the state owned enterprises in Kenya

Based on the study results the regression coefficients indicated that demand forecasting has a significant positive effect on the demand forecasting in the state owned enterprises in Kenya. This implied that increasing levels of ethics in procurement processes would increase the levels of demand forecasting in the state owned enterprises in Kenya. Therefore, it can be concluded that demand forecasting has a strong and significant effect on the procurement planning in the state owned enterprises in Kenya

The study findings revealed that staff competence affects procurement planning; therefore we recommended that state owned enterprises should come up with a standard checklist showing the skills and competency level needed by all personnel undertaking procurement planning. The institutions should strive to promote competence of staff/employees in all departments with emphasis in the procurement department. This should be so for all the procurement department employees to acquire experience, knowledge and skills to improve procurement planning in the organizations.

There is need to ensure that there is budgetary control, differences between budget and actual results are analyzed periodically and actions taken. The study recommended that state owned enterprises should have budgeting procedures in place in order to avoid delays in decision making and service delivery. The procurement management unit should comply to legal framework given the fact that expenditure incurred is the taxpayers' money which demands value for money achievement.

The study further recommended that there should be laid down policies on procurement ethics practices and practice implementation to avoid

malice and malpractices that would lead to unsuccessful adoption of the same within state owned enterprises. This will eventually elevate the credibility of information captured and aid optimal decision making within this firms which will translate to increased flexibility, customer satisfaction and reduced cost of operations to improve procurement planning in the state owned enterprises.

Based on the findings, it is for the state owned enterprises highly recommendable to build a stable demand forecasting metric which will contribute to a more accurate decision-making process, and at the same time present decision makers (management team) the impact of forecasting errors. By implementing advanced and collaborative KPI dashboards, the organization can access their success indicators in real time manner in order to make decisions toward achieving long-term goals to improve procurement planning in the state corporations

#### **Areas for Further Research**

The study contributes the body of knowledge by examining the determinants of procurement planning in the state owned enterprises in Kenya. The procurement planning in the state owned enterprises is greatly affected by staff competence, ethics in procurement processes, demand forecasting and budgeting procedures. The study contributes to the existing literature in the field of public procurement by elaborating exiting theories, models and empirical studies on procurement planning in the state owned enterprises in Kenya. The current study should therefore be expanded in future in order to determine the other factors hindering procurement planning of the state owned enterprises in Kenya. Existing literature indicates that as a future avenue of research, there is need to undertake similar research in other state enterprises and other countries in order to establish whether the explored factors can be generalized to procurement planning in the public sector in Kenya.



## REFERENCES

- Jackson, J. G., & Ombui, K. (2018). Effects of Procurement Planning On Service Delivery In State Corporations In Kenya: A Case Of Kenya Agricultural And Livestock Research Organization. *The Strategic Journal of Business and Change Management*, 5(2), 1326-1359.
- Kamau, J. K., Rotich, G., & Anyango, W. (2017). Effect of budgeting process on budget performance of state corporations in Kenya: A case of Kenyatta National Hospital. *International Academic Journal of Human Resource and Business Administration*, 2(3), 255-281.
- Kipkech, N. J. & Kwasira, J. (2015). Influence of Human Capital Competency in the Implementation of the Public Procurement Procedures in Sub Counties of Uasingishu County, Kenya. *IOSR Journal of Business and Management (IOSR-JBM)*. 17(5),(44-48
- Maina, W.D & Omboto, D. (2016). Factors Affecting the Implementation of the Public Procurement and Asset Disposal Act 2015 in Kenya (A Survey in Public Universities in Mombasa County). *The International Journal Of Business & Management*. 4(8), 139-158.
- Mutoro, W. J., Makokha, E. N., & Namisonge, G. (2018). Factors affecting procurement planning in Bungoma County government in Kenya. *European Journal of Business*.
- NAOT, (2014), *A Study on Cost Control in Public Procurement*, A case study of Air Ticketing and Construction of Buildings.
- Ndumbi, C. W., & Okello, B. (2015). Effect of Staff Training on Level of Compliance to Public Procurement System in Parastatals in Kenya. *International Journal of Economics, Commerce and Management*, 613-626
- Toroitich, J. K., Mburugu, K. N., & Waweru, L. (2017). Influence of employee competence on the implementation of electronic procurement in the selected county governments in Kenya. *International Academic Journal of Human Resource and Business Administration*, 2(3), 242-254.
- Patrick, O. J. & Wallace, N. A. (2016). Factors Affecting Procurement Planning In Public Secondary Schools in Kenya: A Case Study of Secondary Schools in Migori County. *Imperial Journal of Interdisciplinary Research (IJIR)*. 2(8),326-338
- Wanyonyi, S. C., & Muturi, W. (2015). Factors affecting performance of procurement function among public technical training institutions in Kisumu County, Kenya. *International Journal of Economics, Commerce and Management*, 3(5), 325-337.
- Willy, K., & Njeru, A. (2014). Effects of Procurement Planning On Procurement Performance: A case Study of Agricultural Development Corporation, Nairobi. *International Journal of Business and Commerce*, 3(1), 12-58.
- Alala, O. B., & Deya, F. O. (2013). Effectiveness and efficiency of public procurement and disposal Act in shaping competitive purchasing and disposal in the civil service in Kenya. *International Journal of Innovative Research and Development*, 2(6), 628-640.
- Allen, R. and Radev, D., (2007). "Managing and Controlling Extrabudgetary Funds". *OECD Journal on Budgeting*, 6 (4), 1-30.

- Arena, M. and Azzone, G. (2009), "Identifying Organizational Drivers of Internal Audit Effectiveness", *International Journal of Auditing*, Vol. 13, pp. 43-60.
- Atiga, O., Adafula, C. J., & Nyeadi, J. D. (2015). Statutory compliance in assets disposal practices in the public sector: evidence from Ghana: original research. *Journal of Transport and Supply Chain Management*, 9(1), 1-6.
- Baily, P. (2005). *Purchasing principles and management*. Pearson Education.
- Barasa, F. O. (2013). Ethnicity: Reflecting on the Challenges and Opportunities in Kenya. In: *International Journal of Professional Practice*, 4(1&2), 26-38.
- Chang, S., & Jin, S. Y. (2016). The performance of state owned enterprises in China: An empirical analysis of ownership control through SASACs. Retrieved from: <http://bschool.nus.edu/Portals/0/docs/CGIO/soe-china-research-report-2016.pdf>
- Cho, S., Woods, R. H., Jang, S. S., & Erdem, M. (2006). Measuring the impact of human resource management practices on hospitality firms' performances. *International Journal of Hospitality Management*, 25(2), 262-277.
- Cooksey, B, A. Mullei & G. Mwabu. (2010). Forms and Causes of Corruption. In: Mullei, A (ed). *The Link between Corruption and Poverty: Lessons from Kenya Case Studies*. Nairobi: African Center for Economic Growth
- Cooper, D.R., & Schindler, P.S. (2011). *Business Research Methods* (11th ed.). New Delhi-India. McGraw-Hill Publishing, Co. Ltd.
- Crawford, M. & Stein, W. (2014). *Enterprise risk management –integrated framework. Executive summary & framework*. Committee of Sponsoring Organizations of the Tread way Commission (COSO)
- Davis, James H., & Lex Donaldson, (1991); Stewardship Theory or Agency Theory: CEO Governance and Shareholder Returns' *Australian Journal of Management*, 16(1), 49
- Delaney, J. T., & Huselid, M. A. (1996). The impact of human resource management practices on perceptions of organizational performance. *Academy of Management journal*, 39(4), 949-969.
- Efird, N.,(2010); *the State Owned Enterprise as a Vehicle for Stability*: Strategic Studies Institute.
- Eisendrath, Allen (2013), *Water Utility Corporatization*, United States Agency for International Development (USAID) (<http://www.energytoolbox.org/>).
- Eisenhardt, K. M., (1985); Control: Organizational and economic approaches' *Management Science*, 31(2), 134.
- Elkington, J. (2013). *Cannibals with forks: the triple bottom line of 21<sup>st</sup> century business*. Gabriola Island: Capstone Publishing
- English, L. and Guthrie, J., (2010). "Driving privately financed projects in Australia: what makes them tick?". *Accounting, Auditing and Accountability Journal*, 16 (3), 493-511.

- Fama, Eugene, and Michael Jensen, (1983); Agency Problems and Residual Claims' *Journal of Law and Economics* 26, 327
- Githinji, R. M. (2013) Factors influencing performamnce of audit committees in state corporations: a case of the Kenya Urban Roads Authority.
- Gonzalez-Longatt, F. (2015). Wind Resource Potential in Los Taques-Venezuela. *IEEE Latin America Transactions*, 13(5), 1429-1437.
- Green, K. W., & Inman, R. A. (2007). The impact of JIT-II-selling on organizational performance. *Industrial Management & Data Systems*, 107(7), 1018-1035.
- Grubišić, M., Nušinović, M., & Roje, G. (2009). Towards efficient public sector asset management. *Financial theory and practice*, 33(3), 329-362.
- Hoque, Z., & James, W. (2000). Linking balanced scorecard measures to size and market factors: impact on organizational performance. *Journal of management accounting research*, 12(1), 1-17.
- Hubbard, G. (2009). Measuring firm's performance: beyond the triple bottom line. *Business Strategy and the Environment*, 19: 177–191.
- Jensen, Michael C, & William H. Meckling (1976), 'Theory of the Firm, Managerial Behavior, Agency Costs, and Ownership Structure' *Journal of Financial Economics* 3, 305.
- Kaganova, O., & McKellar, J. (Eds.). (2006). *Managing government property assets: international experiences*. The Urban Insitute.
- Kaki, V. (2011) *Controlling Disposal Process*, Edition, Mcgraw-Hill Publisher.
- Kamal, M, (2010) Corporate Governance and State-owned Enterprises: A Study of Indonesia's Code of Corporate Governance, *Journal of International Commercial Law and Technology* Vol. 5, Issue 4
- Kamal, M. (2010). Corporate Governance and State-owned Enterprises: A Study of Indonesia's Code of Corporate Governance, *Journal of International Commercial Law and Technology* Vol. 5, Issue 4.
- Kaplan, R.S. and Norton, D.P. (2012). The balanced scorecard: measures that drive performance. *Harvard Business Review*, 62(4):95-101
- Kibet, P. K. (2008). A survey on the role of internal audit in promoting good corporate governance in SOEs. *Unpublished MBA Project*.
- Kimeu, J., & Were, S. (2013) factors affecting disposal of unserviceable assets in public sector in Kenya: a case of Nairobi city county.
- Kothari, C. (2004). *Research methodology: Methods & techniques* (2nded). New Delhi, India: New age International Publishers
- Kutosi, M. A., Muhwezi, M., & Eya, S. (2015). Behavioural practices and procurement performance in Uganda. *International Journal of Social Science and Economics Invention*, 1(1), 1-12.
- Kyalo, B. M. (2015). *Relationship between executive compensation and financial performance of commercial state owned enterprises in the energy sector in Kenya* (Doctoral dissertation, University of Nairobi).

- Lin, C. H., Peng, C. H., & Kao, D. T. (2008). The innovativeness effect of market orientation and learning orientation on business performance. *International Journal of Manpower*, 29(8), 752-772.
- Linyiru, B. M. (2015). *Influence of Corporate Entrepreneurship on the Performance of State Corporations in Kenya* (Doctoral dissertation, JKUAT).
- Meah, K., & Ula, A. S. (2008, April). On-Site Wind Energy Measurement and Preliminary Transmission Assessment: Case Studies in Wyoming. In *Region 5 Conference, 2008 IEEE* (pp. 1-6). IEEE.
- Mensah, M. K. (2014). *Strategies for effective disposal of goods and equipment in public institutions* (Doctoral dissertation).
- Mugenda, O. M., & Mugenda, A.G. (2008). *Research Methods: Quantitative and Qualitative Approaches*. Nairobi.: Acts Press.
- Mwaura, K, (2007). 'The Failure of Corporate Governance in State-Owned Enterprises and the Need for Restructured Governance in Fully and Partially Privatized Enterprises; *Fordham International Law Journal*, 31(1), 73
- Mwaura, K, (2007).The Failure of Corporate Governance in State-Owned Enterprises and the Need for Restructured Governance in Fully and Partially Privatized Enterprises: The Case of Kenya,' *Fordham International Law Journal*, 31(1), 73
- Ndosi, K. E. (2013). *Disposal of assets in government executive agencies: The case of Tanzania Institute of Accountancy (TIA)–Dar Es Salaam* (Doctoral dissertation, Mzumbe University).
- Ngumi, S. M. (2013). The effect of lending interest rates on financial performance of deposit taking micro finance institutions in Kenya (Masters dissertation, University of Nairobi).
- Nguyen, L. T. T. (2013). *Valuation methods and implications in Vietnams equitization process* (Doctoral dissertation).
- Odoyo, F. S., Omwono, G. A., & Okinyi, N. O. (2014). An Analysis of the Role of Internal Audit in Implementing Risk Management-a Study of State Corporations in Kenya. *International Journal of Business and Social Science*, 5(6).
- OECD (Organisation for Economic Co-operation and Development) (2012), "Meeting the Water Reform Challenge", OECD Studies on Water, OECD Publishing (<http://www.oecd-ilibrary.org/>).
- Opoku, D. (2010). *The Politics of Government-Business Relations in Ghana, 1982-2008*. Springer.
- Polit, D., & Beck, C. (2003). *Nursing Research: Principles & Methods* (7th ed.). Lippincott. Williams & Wilkins, United States of America.
- Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research Methods for Business Students*. (5th ed.). Harlow: Prentice Hall
- Sergio, M. (2010) *Assessment Of Disposal Challenges*, Prentice Hall, New Mexico

- Susan, A. M., & Namusonge, G. S. (2014). Factors affecting the rate of disposal of assets in public sector organizations: A case study of Yatta Sub-County-Kenya. *International Journal of Academic Research in Business and Social Sciences*, 4(5), 1.
- Tomasic & Fu, (2005). Government-Owned companies and corporate governance in Australia and China: Beyond Fragmented Governance.
- Tsamenyi, Shahzad & Uddin (2008), Introduction to corporate governance in less developed and emerging economies, in Mathew Tsamenyi, Shahzad Uddin (ed.) *Corporate Governance in Less Developed and Emerging Economies (Research in Accounting in Emerging Economies, Volume 8)* Emerald Group Publishing Limited
- UNCTAD (United Nations Conference on Trade and Development). 2007. World Investment Report 2007: Transnational Corporations, Extractive Industries and Development. Geneva: UNCTAD.
- Wahome, E. W. (2015). The effects of unserviceable asset disposal on performance of government ministries in Kenya; A case of the national treasury. *Strategic Journal of Business & Change Management*, 2(1).
- Walumbwa, F. O., Avolio, B. J., & Aryee, S. (2011). Leadership and management research in Africa: A synthesis and suggestions for future research. *Journal of Occupational and Organizational Psychology*, 84(3), 425-439.
- Warganegara, D. L., Alamsjah, F., & Soentoro, M. (2015). The impact of governance practices on the operating performance: A study on the Indonesian state-owned enterprises. *International Research Journal of Business Studies*, 5(1)35-55.
- Wiersma, W., & Jurs, S. G. (2009). *Research Methods in Education*. New York: Pearson Education Inc
- Yaffey, M. (2011). Financial analysis project or portfolio. *Project Rehabilitation in Developing Countries*, London: Routledge, 121-139.
- Zhao, J, (2014). Accounting for the Corporate Cash Increase, State University of New York (SUNY), Stony Brook, *Department of Economics*,
- Zikmund, G.W., Babin, B.J., Carr, C.J., & Griffin, M. (2010). *Business Research Methods* (8th ed.). South-Western: Cengage Learning.