

# Determinants of Public Procurement Procedures Implementation in Universities: A Case of Public Universities in Kiambu County, Kenya

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**Abstract:** The purpose of the study was to establish the determinants of public procurement procedures implementation in universities in Kiambu County. Various countries have instituted procurement reforms involving laws and regulations. Procurement in Kenyan public universities has been recognized as essential in service delivery. The major obstacle, however, has been inadequate regulatory compliance. The study's objectives were to find out the effect of strategic planning on implementation of public procurement procedures; the effect of organizational culture on implementation of public procurement procedures; the role of staff competence on implementation of public procurement procedures; the effect of top management support on implementation of public procurement procedures and to assess the effect of organizational culture on implementation of public procurement procedures by public universities. A conceptual framework was developed to guide the study. The study was grounded on Rational Model of Decision Making and Resource Dependence Theory. The study used descriptive survey design and sampled 21 participants. Questionnaires were used to collect data which was analyzed according to the research objectives. The study found out that the strategic planning, staff competence, support from top management and organizational culture plays an important role in enhancing implementation of procurement procedures in public universities. The study recommends that management of public universities to accord staff maximum support in order to enhance procurement procedures implementation. Top management also need to steer head cultural practices in their organizations and frequently monitor the practices so as to effectively manage them so as to boost its implementation of procurement procedures.

**Keywords:** public procurement, procurement procedures implementation.

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## 1. INTRODUCTION

### 1.1 Background:

Procurement is the process of acquiring goods and services in the right amount and quality at the most cost effective way possible (Lysons & Farrington, 2006). Procurement is an essential service in any institution. Hence, public institutions are known to be involved in the procurement of a range of items from simple items or services, to large projects such as the construction of building and acquisition of equipment and facilities. With this kind of expenditure, universities are obligated to take basic measures in order to curb waste and ensure that quality and value for money are achieved.

In 2001 the Government introduced the Exchequer and Audit (Public Procurement) Regulations to address the challenges experienced under the earlier procurement approaches (Gelderman et al., 2006). The enactment of the 2001 regulations led to the establishment of Public Procurement Directorate and Public Procurement Complaints, Review, and Appeals

Board. In order to strengthen the PPD and PPCRB operations, the Public Procurement and Disposal Act, 2005 were enacted (Agaba & Shipman, 2007). The Act became operational in 2007; subsequently, under the same Act, the Government established the Public Procurement Oversight Authority, Public Procurement Oversight Advisory Board and Public Procurement Administrative Review Board. All these have come a long way to enhance efficiency, economy, transparency, and accountability, controls and provide a level ground for government suppliers. According to the PPOA's website 51 cases were decided in 2013 by PPARB, this has also strengthened the appeals mechanism and given suppliers with genuine complaints redress (Wanyama, 2010).

There are various challenges that occur during the procedure implementation process. These challenges are important because they render even the best policies ineffective. In a developed or developing country, public procurement practitioners have and will face always many challenges. Each country has its own economic, social, cultural and political environment, and each country's public procurement practitioners face different types of challenges or the same types of challenges but at different levels from their counterparts in other countries. (Krol, 2012).

Although a number of studies have been done on public procurement procedures and policy implementation, a knowledge gap still exists on the determinants of the implementation of procurement procedures in Kenyan universities. It is in the background of these issues that this research study will fill the gap by answering the question; what are the determinants of procurement procedures implementation in Kenya universities?

### 1.1.1 Procurement in public universities in Kenya:

Procurement in universities in Kenya can be traced back in 1961 with the origin of university education in Kenya. This was the time when then Royal College, Nairobi was elevated to university college status. After independence, there was a rapid expansion of the education sector with consequent heavy budget allocation to university education in order to develop adequate manpower base to enhance national development and provide solutions to such problems as, diseases, poverty, and illiteracy. This expansion meant that there was the need to acquire goods and services to drive this expansion. These complex procurements are mostly accompanied by challenges (Shesan, 2013).

### 1.2 Statement of the Problem:

The current economic crisis puts pressure on public universities to cut spending and reduce deficits (Krol, 2012). However, the enormous challenges facing provision of products and services in universities require heavy investments. Those responsibilities are bestowed upon these institutions where the procurement departments are expected to play a very vital role in acquisition of products, equipment, goods, and services. Procurement departments are known to be lucrative places where quick money can easily be made. For instance, public procurement is thought to account for 10-15 percent of a country's GDP and up to 65% of public sector budgets (Krol, 2012).

Kenyan universities also have large incomes running into billions of shillings. According to the Commission for University Education (2016), in 2015, public universities had a combined income of 279 billion and an expenditure of 281 billion while private universities had an income of 66 billion and an expenditure of 73 billion. Procurement departments, therefore, attract all manner of people with the aim of making quick deals to enrich themselves. These departments are prone to misappropriation of money by scrupulous people in collaboration with staff working in the departments. Public institutions are known to misappropriate funds through procurement processes. Anomalies noted include failure to adhere to procurement laws, breach of Public Finance Management Act, disparities in revenue collection and the amount taken to banks and abuse of office by county executives and assemblies are cited in the reports tabled in the Senate by the Public Accounts and Investment Committee.

Several studies that have been carried out about procurement are in other government agencies and not universities. Those studies also addressed variables that are different from those in this study. For instance, Ngari (2012) carried out a research on effects of Public Procurement and Disposal Act on procurement in parastatals in Kenya. According to Roodhooft and Abbeele (2006), Public procurement in Kenya has evolved over time. In the 1970s and 80s, the government used supplies manuals supplemented by treasury circulars. As echoed by Wanyama (2010) the public procurement lacked transparency and fair competition; procurement staff were not adequately trained and lacked professionalism and that lack of a professional body that would oversee and instill discipline among procurement officers made them vulnerable to corruption.

A study by Odhiambo and Kamau (2013) reveal that even after the enactment of regulations to streamline procurement operations, there are losses of public funds that can be attributed to public procurement. A study by (KPMG, 2008) established that there was a low share of procurements that were done through open tendering and also the public procurement still suffers from fraud and misconduct. A further study by KACC, also noted that public officials distort the laws to restrict the participation of interested firms in procurement, or still direct the outcome of others (Odhiambo & Kamau, 2013). This study will, therefore, seek to establish the determinants of public procurement procedures implementation in public universities in Kenya. Although a number of studies have been done on public procurement procedures and policy implementation, a knowledge gap still exists on the determinants of procurement procedures implementation in Kenyan public universities.

### 1.3 Objectives of the Study:

#### 1.3.1 General Objective:

The general objective of the study is to find out the determinants of public procurement procedures implementation in universities: A case of public universities in Kiambu County.

#### 1.3.2 Specific Objectives:

The specific objectives of the study are as follows:

- a) To find out the effect of strategic planning on the implementation of public procurement procedures by public universities in Kiambu county, Kenya.
- b) To find out the role of staff competence on implementation of public procurement procedures by public universities in Kiambu county, Kenya.
- c) To assess the effect of top management support on the implementation of public procurement procedures by public universities in Kiambu County, Kenya
- d) To assess the effect of organizational culture on implementation of public procurement procedures by public universities in Kiambu county, Kenya.

## 2. LITERATURE REVIEW

### 2.1 Introduction:

The chapter presents literature relevant to this study and to provide a theoretical framework. An Empirical literature review and a critique of the literature will also be reviewed in order to identify gaps in literature.

### 2.2 Theoretical framework:

A theoretical framework refers to how the researcher develops thoughts on what the possible answers could be. These thoughts and theories are then clustered into themes that frame the subject. This research mainly focused on determinants of procurement procedures implementation in universities. The foundation of this study is based on following theories: Rational Model of Decision Making, Resource Dependence Theory, Institutional Theory and System Theory.

#### 2.2.1 Resource Dependence Theory:

Resource Dependence Theory (RDT) is the study of how the external resources of organizations affect the behaviour of the organization. The procurement of external resources is an important function for both the strategic and tactical management of any company. This theory is concerned with how organizational behaviour is affected by external resources the organization utilizes, such as raw materials. The theory informs the current study by calling upon procurement departments in public institutions of higher learning to the realization that acquisition of resources at competitive prices than the competitors helps to give an edge over other institutions. The theory originated in the 1970s from Jeffrey Pfeffer and Gerald R. Salancik writings.

Resource Dependency Theory is based on the understanding that resources are key to institutions' success and that access and control over those resources is a basis of power. Procuring quality resources at competitive prices than the competitors helps to give an organization an edge over other organizations. Hence, strategies must be put in place in order to maintain open access to resources. The theory therefore discourages single sourcing and recommends liaising with multiple suppliers (Davis & Cobb, 2009).

### 2.2.2 Institutional Theory:

The institutional theory is the traditional approach that is used to examine elements of public procurement (Luhmann, 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. According to Scott (2004), institutions are composed of cultural-cognitive and regulative elements that, together with associated activities and resources give meaning to life. In Kenya, public procurement is guided by the PPDA Act 2005, regulations and guidelines which are from time to time issued by the Public Procurement Oversight Authority only and which must public institutions of higher learning must comply with to the letter (Barrett, 2010). Institutional theory states that there should be compliance with Public procurement regulations to ensure competitive bidding, transparency, and professionalism in procurement process (Andrew, 2008). This applies procurement in public institutions of higher learning as well.

### 2.2.3 System Theory:

Systems theory is an interdisciplinary theory about every system in nature, in society and in many scientific domains as well as a framework with which we can investigate phenomena from a holistic approach (Barrett, 2010). According to PPOA (2007), the public procurement system in Kenya has been undergoing reforms consistent with the global trend since the mid 1990s, most notably within the periods covering 1997-2001 and 2005. According to (Ebrahim, 2010), before these reforms, the legal framework governing public procurement was very amorphous, providing a conducive environment for the perpetration of various malpractices in public procurement including the endemic corruption that characterized the system. This was realized through the creation of the Public Procurement Directorate (PPD) system to oversee the public procurement process in Kenya and the Public Procurement Complaints, Review and Appeals Board (PPCRAB) to handle tendering disputes Act (Public Procurement, Regulations, 2007). The theory informs the current study by suggesting that the institutions of higher learning should put measures in place to oversee development and implementation of the public procurement policy.

### 2.3 Conceptual Framework:

A conceptual framework is the schematic diagram, which shows the variables included in the study (Kombo & Tromp, 2006). This study's conceptual framework involves both independent and dependent variables. Independent variables for this study are the strategic planning, staff competence, top management support and organizational culture while the dependent variable is implementation of public procurement procedures.

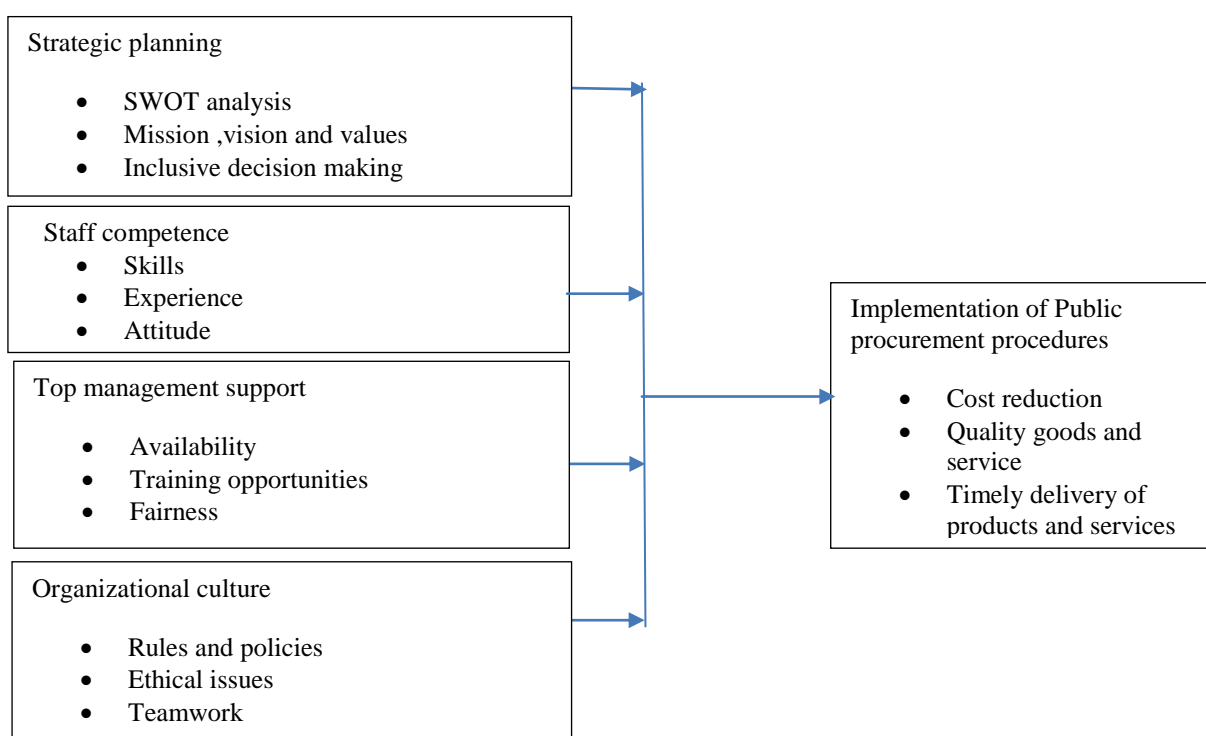


Figure 2.1: Conceptual framework

**2.3.1 Strategic Planning:**

According to Basheka (2008) procurement planning is the primary function that sets the stage for subsequent procurement activities. A mistake in procurement planning has wide implications for local governance, measured from the two indicators of accountability and participation. According to James (2004), the ideals of planning suggest that procurement planning can be implemented in an atmosphere of complete harmony. He adds that, as a function, procurement planning endeavors to answer the questions of what do you want to procure; when to procure it; where to procure them from; when the resources be available; the methods of procurement to be use; how timely procurement or failure will affect the user of the item(s); the procuring and disposing entity; efficient in the procurement process; and the people to be involved in the procurement. A good procurement plan will go one step further by describing the process one will go through to appoint those suppliers contractually.

**2.3.2 Staff Competence:**

According to Raymond (2008), quality of personnel in public procurement relates not only to the levels of education and qualifications of the workforce but also to the professional approach in the conduct of business activities. If the workforce is not adequately educated in procurement matters, serious consequences; including, breaches of codes of conduct occur. Raymond (2008) also linked lack of a high degree of quality of personnel in public procurement to corruption, which ultimately impedes compliance. The procurement officers must be trained and aware about all regulations in relation to procurement and related procedures (Hui et al 2011).

**2.3.3 Top Management Support:**

The importance of top management support for successful procurement planning implementation has for a long time been recognized in the Supply Chain Management literature (Lincioni, 2000; Matchette and Lewinski, 2005; Gibson et al, 2005; Lambert and Cooper, 2000; Andraski; 1998; Moberg et al; 2003; Mangan and Christopher, 2005; Slone et al, 2007). The need for top management support is also well established among other practitioners. In a recently conducted survey (Larson et al., 2007) among senior members of the council of supply chain management professionals, top management support is identified as the most important facilitator for implementation of procurement planning.

Despite top management support importance in implementation of procurement planning activities, the commitment for procurement planning issues from top management is however in adequate (Faweett et al., 2006; Sandberg, 2007; Faweett and Magnan, 2002). Top management not often has an effective role when it comes to procurement planning and supply chain management issues.

**2.3.4 Organizational Culture:**

According to study by Yasuhiko (2003), a system theoretic law insists that system must have at least the same degree of behavioral variety as its environment does in order to survive. The study asserts that a surviving organization has functions to decrease the variety of environmental input by some market research mechanism to reduce information input according to organizational objective and to increase the variety of organizational behavior by appropriate market means. Chandan (2006) indicated that, rules, operating procedures and performance standards are set for employees to enable understand what is expected of them. Procedure of collecting and evaluating information to help managers make decisions and solve problems are defined through the organizational structure.

**3. RESEARCH METHODOLOGY****3.0 Introduction:**

This chapter highlights the methodology that was used in collecting, interpreting and presenting data. It focuses on the following aspects of the research: the research design, study area, target population, sample size, data collection instruments, data collection procedures, validity, reliability of instruments and data analysis and presentations.

**3.1 Research Design:**

Research design is a scheme or an outline or a plan used to generate answers to the research problem (Orodho, 2003). This study used descriptive survey design. Mugenda and Mugenda (2003) describes survey design as ideal for collecting data that is intended to describe a population's characteristics that is too large to observe directly.

### 3.2 Target Population:

A population is defined as a complete set of individual, cases or objects with some common observable characteristics Kamau et al, (2014). The target population for this study is the staff working in public universities in Kiambu County. The population comprised of all the 64 staff and head of departments working in the procurement department at the public universities.

### 3.3 The Sample and Sampling Procedure:

A sample is a set of respondents selected from a large population for the purpose of survey (Mugenda and Mugenda, 2003). A total of 24 respondents were randomly sampled from a population of 64 procurement officers. Out of this number, 21 procurement staff were selected by getting a 30% from each university sampled as recommended by Bell (2010). Similarly, a total of 3 head of departments were purposively sampled. Purposive sampling method for head of departments was used as the target population was not big enough to warrant use of random sampling. To ensure that an equal, known and non-zero chance when selecting the participants, probability sampling was employed to get the procurement staff sample. Staff in each university was numbered and those numbers written on small pieces of paper and put in different containers. Using simple random sampling, the required number of staff was selected from each university by picking odd numbers only until the desired number was arrived at.

### 3.4 Instruments:

Research instruments are data collection tools that a researcher uses to collect data scientifically. They include questionnaires, interview guides and observations, among others. However, this study only used questionnaires. According to Kasomo (2007), a questionnaire is a carefully designed instrument used for collecting data directly from the people. This study prefers to use questionnaires because they are relatively cheap to prepare and easy to administer as compared to other methods used for data collection. Both structured and open ended questionnaires were used.

### 3.5 Data Collection Procedures:

The researcher systematically followed the recommended data collection procedures. To begin with, the research authorization letters were sought from the relevant authorities at the researcher's university and government agencies. These letters were obtained at least two weeks before the data collection exercise. The letters were presented to the authorities of the selected public universities under study. Upon being granted permission to carry out data collection, the researcher prepared to start data collection exercise in the next four days.

The researcher visited the public universities in person, met the respondents and made introductions. It is at this meeting when the researcher briefed the respondents about the purpose of the study and at the same time assured them that any information they would provide would be treated with utmost confidentiality and even request them not to write their names on the questionnaire forms. The researcher proceeded to administer the questionnaires and collected most of them immediately to minimize cases of unanswered questionnaires. However, some questionnaires had to be collected afterwards. This exercise took a week as room had to be given to those who required more time. The collected questionnaires were then be sorted out ready for data analysis.

### 3.6 Pilot Study:

Kothari (2004) argues that before using a questionnaire as a data collection tool, it is always advisable to conduct pilot study. This helps to bring into light the weaknesses (if any) of the questionnaire and the experience gained in this way can be used to effect improvement. Piloting was done in one college that was not part of the study. Ten questionnaires were distributed. The reliability coefficient for staff competency was 1.7000; that of organizational culture was 1.8000; that of top management support was 1.8000; that of strategic planning was 7.300, while that of implementation of procurement procedures was 7.500. The Cronbach Alpha was 0.7287. This showed that all the variables tested exceeded the minimum recommended.

#### 3.6.1 Validation of the Research Instruments:

Validity refers to whether or not something actually measures what it claims to measure (Robson, 2012). To ensure validity of the research instruments, the content of the data collection tools is critical. Hence, the questionnaires were constructed with suitable questions that enabled the researcher to collect only the desirable data. To ensure that the data collection instruments were valid, the researcher piloted them in one college that was not be part of the study to see whether they could actually collect the required data.. The pre-test helped to improve face validity and content of the

instruments. The internal validity which involved controlling the extraneous variables in the structure was done through the administration of the questionnaire. As such, the researcher sought assistance from the supervisor in order to help improve content validity of the instrument. Anomalies noted in the queries were rectified before commencement of the actual data collection exercise

### 3.6.2 Reliability of the Research Instruments:

Reliability refers to the extent to which a test or procedure produces similar results under constant conditions on all occasions (Bell, 2010). To enhance the reliability of the instrument, a pre-test was conducted. The aim of pre-testing was to gauge the clarity and relevance of the instrument items so that those items found to be inadequate for measuring variables were either discarded or modified to improve the quality of the research instruments. This was to ensure that the instrument captured all the required data. The procedure for extracting an estimate of reliability was obtained from the administration of split half reliability method. The method involves splitting each instrument into two halves (odd and even items) then calculating the Pearson's correlation coefficient (r) between the responses (scores) of the two halves. The scores for all odd and even numbered items for each of the 12 respondents in the pilot study was computed separately. The correlation obtained represented the reliability coefficient of only half of the instrument. Hence a correction was made to obtain reliability of the entire instrument. Coefficient of 0.7 is a commonly accepted rule of thumb that indicates acceptable reliability (Mugenda, 2008). A composite Cronbach Alpha of 0.814 was established for all the questions indicating that the questionnaire was reliable as its reliability values exceeded the prescribed threshold (0.7) of acceptable reliability (Mugenda, 2008).

### 3.7 Data Analysis and Interpretation:

According to Kombo and Tromp (2006), data analysis refers to examining the collected data in a survey in order to make deduction and an inference. After data collection, data analysis commenced. The data collected from the field by use of questionnaires was assessed and comparison made so as to select the most accurate and quality data without inconsistencies. The data was then coded using numbers in an excel sheet in order to categorize put them in few category. The data was analyzed using SPSS version 21. Descriptive statistics such as mean, standard deviation, frequency distribution and percentages was used to summarize and present d Regression analysis was conducted to show the strength of the relationship between the dependent and independent variables.

The regression model was:

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon$$

Where:

Y = Procurement procedures implementation

$\beta_0$  = Constant Term

$\beta_1, \beta_2, \beta_3,$  and  $\beta_4$  = Beta coefficients

X1= Strategic planning

X2= Staff competence

X3= Top management support

X4= Organization culture

$\varepsilon$  = Error term

## 4. RESULTS AND DISCUSSION

### 4.0 Introduction:

This chapter analyses, presents, interprets and discusses data findings. The data analysis was based on the research objectives. Data collected from the field were presented and analyzed using frequency tables, pie charts, mean standard deviation, percentages and texts.

#### 4.1 Distribution of Questionnaires and the Return Rate:

The study targeted 24 respondents out of which 19 questionnaires were filled and returned giving a response rate of 79%. This response rate was good and representative and conforms to Mugenda and Mugenda (1999) stipulation that a response rate of 50% is adequate for analysis and reporting; a rate of 60% is good and a response rate of 70% and over is excellent.

Table 4.1 below presents the number of respondents who participated in the study.

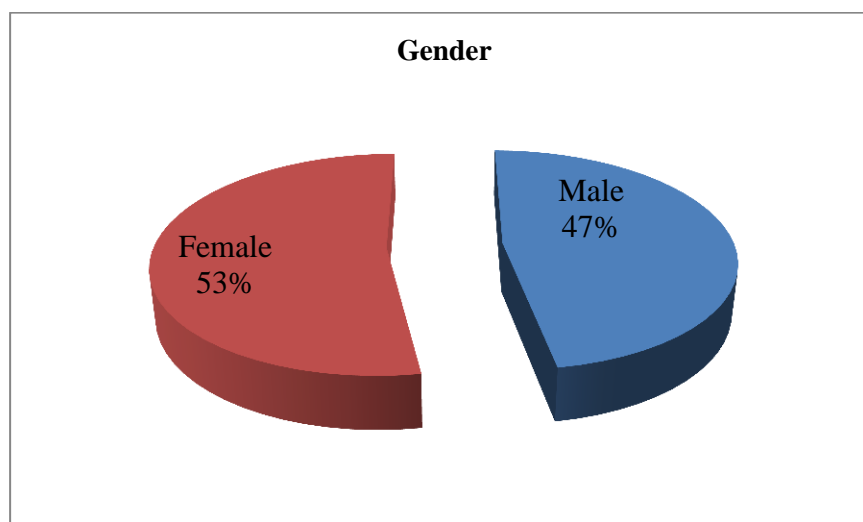
**Table 4.1: Response return rate**

Respondent Type	Targeted Questionnaires		Returned Questionnaires	
	Frequency	%	Frequency	%
Staff	24	100	19	79
Total	24	100	19	100

#### 4.2 Demographic Information of the Participants:

The study sought to establish the demographic information of the respondents such as gender, age, education and work experience. This was to enable the study place the participants in their right perspective.

##### 4.2.1 Gender Distribution of the Respondents:



**Figure 4.1: Gender of the respondents**

Figure 4.1 shows that there were 53% female participants while 47% were male. This is an indication that female participants outnumbered their male counterparts. Nevertheless, this disparity had no negative effect on the outcome of the study. Hence, one can safely say that both genders were well represented.

##### 4.2.2 Age Distribution of the Respondents:

The study sought to establish the age of the respondents. Table 4.2 below represent those findings.

**Table 4.2: Age distribution**

Age	Frequency	Percentage
20-24	4	21
25-35	12	63
35-45	2	11
45-55	1	5
Total	19	100



Table 4.2 shows that 63% of the participants were in the age bracket of 25-35 years, 21% were in the age bracket of 20-24 years, 11% were in 35-45 age bracket while 5% were in the age bracket of 45-55. Therefore, the majority of the participants were between ages 25 – 35 years. This implies that majority of the staff were young and probably not very experienced.

#### 4.2.3 Educational Level of the Participants:

The study sought to establish the academic qualification of the respondents. Their responses are presented in Figure 4.2 below.

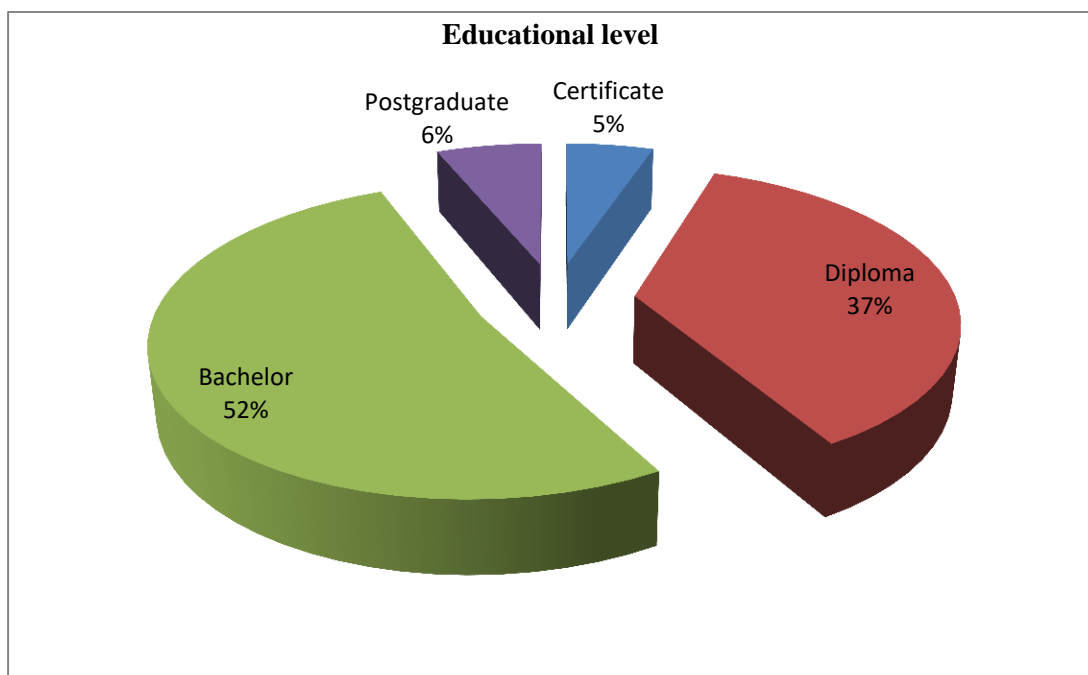


Figure 4.2: Educational Level of the respondents

The study shows that those who had attained bachelors degree were the majority at 52% followed by diploma level at 37%, postgraduate at 6% while those with certificate qualification constituted 5% of the participants. This implies that participants had varied levels of education qualifications and therefore there was diversification in ideas and views.

#### 4.2.4 Work Experience:

The study sought to establish the work experience of the participants. Table 4.3 shows their responses

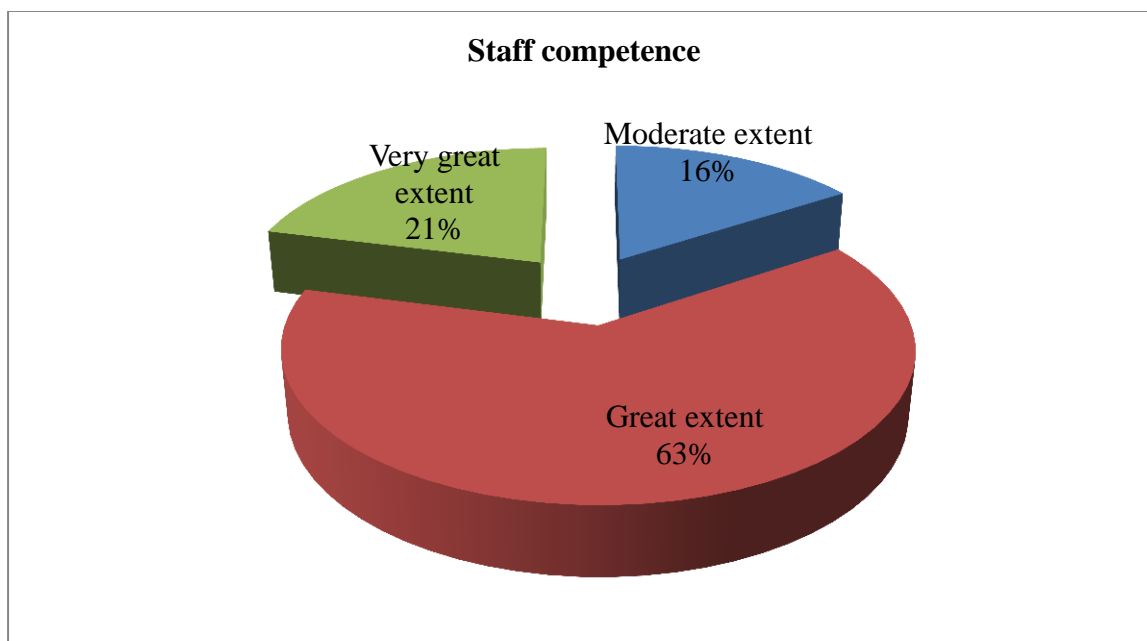
Table 4.3: Work experience of the respondents

Years	Frequency	Percentage
5 & Below	12	63
6-10	6	32
20 & above	1	5
Total	19	100

The study showed that the participants who had five years of experience and below were the majority constituting 63% of the participants, 32% had between 6 and 10 years of experience while those with 20 and above years of experience were 5%. Hence majority of the participants had work experience of at most 5 years. This implies that, majority of the participants had little experience which could have impacted negatively on the quality of their work out put.

#### 4.3 Staff Competence:

The study sought to examine the extent to which the respondents thought about staff competence as an influencing factor on procurement procedures implementation. The results are presented in Figure 4.3



**Figure 4.3: Staff competence**

From the findings 63% of the participants agreed to a great extent, 21% to a very great extent while 16% moderate extent. This translated to a majority of the participants affirmed that staff competence to a great extent affects the implementation of procurement procedures.

The study also sought to determine the level of agreement on various statements. The findings are as shown in Table 4.4

**Table 4.4: Response return rate Level of Agreement on Various Statement Based on Staff competence**

Statements	Mean	Std deviation
Majority of Procurement staff are competent and capable of performing their duties	4.04	0.34202
Staff members are well Acquaintance with Procurement Act	4.05	0.62052
New Employees receive induction training on procurement procedures	3.84	0.56291
My education is Adequate of Education to cope with my work	4.43	0.29942
Most staff are experienced in their work	3.12	1.02746
Procurement staff appointments are done on competitive basis	3.0	0.47654

The findings deduced that the respondents agreed to a great extent that procurement staffs are acquainted with procurement Act, Majority of Procurement staff are competent and capable of performing their duties and that procurement staff had adequate education to do their work as expressed by a mean score of 4.05, 4.04 and 4.43 respectively. The respondents agreed to a moderate extent that they were experienced in their work as expressed and that appointments were done on competitive basis as expressed by a mean score of 3.12 and 3.0 respectively.

#### 4.4 Organizational Culture:

The study sought to examine the extent to which Organizational Culture influence procurement procedures implementation in universities. The findings are as shown in Table 4.5.

**Table 4.5: Extent to which Organizational Culture influence procurement procedures implementation**

Statements	Frequency	Percentage
Small extent	1	5
Moderate extent	5	26
Great extent	6	32
Very great extent	7	37

The study deduced that 32% of the respondents agreed to a great extent, 37% to very great extent while 26% agreed to a moderate extent and those agreed to a small extent were 5%. Majority of the respondents therefore agreed that organizational culture affects implementation of procurement procedures.

The study also sought to determine the level of agreement on various statements based on organizational culture. The findings are as shown in Table 4.6.

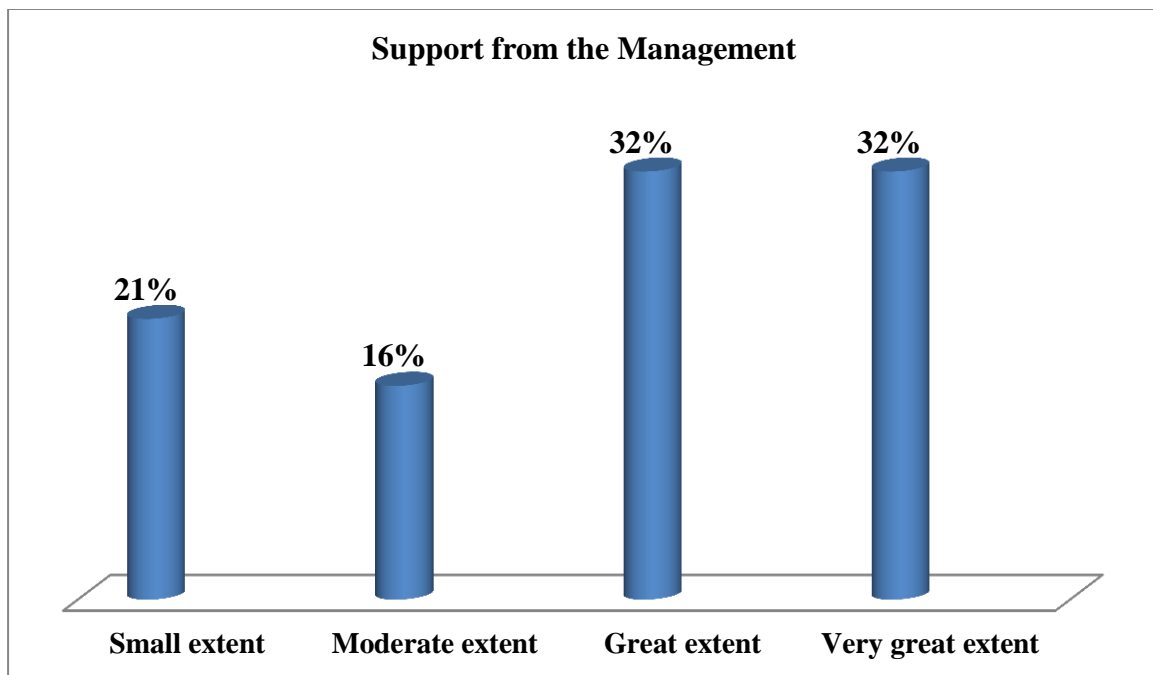
**Table 4.6: Level of Agreement on Various Statement Based on Organization culture**

Statements	Mean	Std. deviation
Procurement staff in our organization practices professionalism, accountability ,and efficiency in the procurement process	4.025	0.345
Our institutional values makes us unique from other Institutions	4.053	3.723
Employees are held on high Regard in this institution	3.43	0.4395
Most employees feel Motivated to work here	3.50	0.55299
Staff Burnout is a mojour problem here	2.63	1.4749
The institution does not nurture my desire for growth	2.16	0.72921

From the findings, majority of the respondents indicated that they strongly agreed that institutional values make institutions unique from others and that Procurement staff in their organization practices professionalism, accountability and efficiency in the procurement process as expressed by a mean score of 4.053 and 4.025 respectively. They also moderately agreed that Employees are held on high regard in their institutions and that staff felt motivated to work in their institutions as expressed by a mean score of 3.43 and 3.50 respectively. However, some respondents were on opinion that some had staff burn out as expressed by a mean of 2.63 an disagreed that institutions does not nurture their desire for growth as expressed by mean of 2.16. Majority of the respondents therefore agreed that institutional values make institutions unique from others. Uniqueness is important in distinguishing the service delivery rendered by institutions of higher learning. Specifically, this would be advantageous to institutions that strive to improve their services by outdoing their competitors.

#### 4.5 Support from the Top Management:

The study sought to rate the support from the top management to the staff. The responses are presented on Figure 4.4.



**Figure 4.4: Support from top management**

Asked to rate the management support in their institution, those who agreed to a very great extent were 32%, great extent 32%, small extent 21% while 16% agreed at a moderate extent. Therefore, going by the majority, the management of the institutions is seen to be ready to support employees while performing their duties. This is a desirable attribute that can make employees feel appreciated and therefore likely to increase their job output or improve the quality of their services. This also implies that implementation of procurement procedures is likely to get a boost.

The study also sought to determine the level of agreement on various statements based on top management support. The findings are as shown in Table 4.7

**Table 4.7: Level of Agreement on Various Statement Based on Top management support**

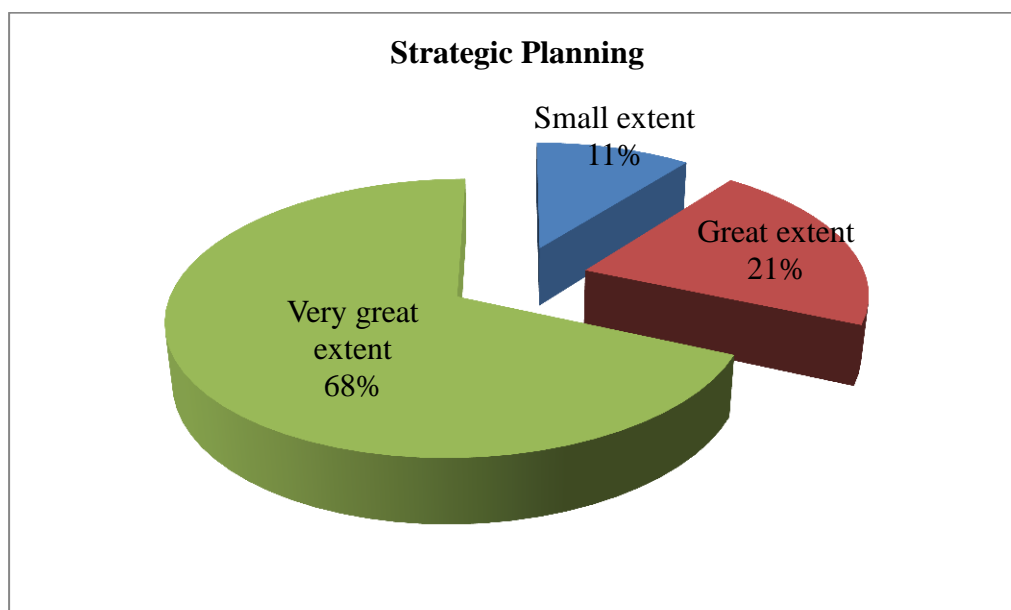
Statements	Mean	Std deviation
Our management is readily available to help when need arises	4.42	0.92904
Communication from the Management is efficient	3.72	0.56620
The management involves employees when making significant changes	2.88	1.04823
Employees are continuously developed through Training ,educatin and opportunities for promotion	4.02	0.47492
Senior Managers Mentors Junior Employees	2.78	0.55969
Our Management encourage and support compliance with existing procurement procedures	3.51	0.95312

From the findings, majority of the respondents indicated that they strongly agreed that top management is available to help when need arises and also employees training was regularly done as expressed by a mean score of 4.42, and 4.02 respectively. They also moderately agreed that there was efficient communication from top management and that top management encourage and support compliance with procurement procedures as expressed by a mean score of 3.72 and

3.5 respectively. However, majority of respondents was on a view that management does not fully involve them when making significant changes and also senior managers does not mentor their juniors as expressed by a mean score of 2.88 and 2.78 respectively.

#### 4.6 Strategic Planning:

The study sought to determine the extent at which strategic planning affects implementation of procurement procedures. The responses are presented below



**Figure 4.5: Extent at which strategic planning affects implementation of procurement procedures**

Asked to rate the extent in which strategic planning affects the procurement procedures implementation, those who agreed to very great extent were 68%, 21% agreed to a great extent and 11% to a small extent. This implies that strategic planning affects the implementation of procurement procedures to a great extent

**Table 4.8: Level of Agreement on Various Statement Based on Strategic planning**

Statements	Mean	Std. deviation
The institution has a mission ,vision ,and values statement	4.87	0.4368
Institution has a Specialized Staff for Planning and Scheduling	4.47	0.55288
The staff understands the strategic plan	3.47	0.46824
Plans Considers technical, financial, managerial and implementation Constraints	3.68	2.46832
Strategic Planning is not a top priority in the institution	2.57	0.55291
The institution has a strategic plan with specified goals and actions	4.82	0.95311

The findings deduced that the respondents strongly agreed that the institutions had a mission, vision, and values statement and a strategic plan with specified goals and action as expressed by a mean of 4.87 and 4.82 respectively. They also strongly agreed that the institutions had specialized staff for planning and scheduling as expressed by a mean score of 4.47. The respondents moderately agreed that staff understands the institution strategic plan and that plans considers technical, financial, and managerial implementation constraints as expressed by a mean score of 3.47 and 3.68 respectively. However majority disagreed that strategic planning was not a top priority in their institution as expressed by mean of 2.57

#### 4.7 Regression Analysis:

In this study, a multiple regression analysis was conducted to test the influence among predictor variables. The research used statistical package for social sciences (SPSS V 21.0) to code, enter and compute the measurements of the multiple regressions.

**Table 4.9: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.8895	0.7912	0.7364	0.7296

R-Squared is a commonly used statistic to evaluate model fit. R-square is 1 minus the ratio of residual variability. The adjusted R<sup>2</sup>, also called the coefficient of multiple determinations, is the percent of the variance in the dependent explained uniquely or jointly by the independent variables. 73.64% of the implementation of procurement procedures could be attributed to the combined effect of the predictor variables. Other factors that did not contribute in the research accounted for 26.36% on the procurement procedures implementation. 0.7912 was the correlation coefficient implying a strong positive linear relationship between variables and of procurement procedures implementation.

**Table 4.10: Summary of One-Way ANOVA results**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.223	5	3.112	3.671	.001
	Residual	92.876	244	0.641		
	Total	115.099	249			

The probability value of 0.001 indicates that the regression relationship was highly significant in predicting how strategic planning, staff competence, top management support and organizational culture influenced level of procurement procedures implementation.

**Table 4.11: Regression coefficients of the relationship between Procurement procedures implementation and the four predictive variables**

	Un standardized coefficient		Standadized coefficient		
	B	Std.error	Beta	t	s.g
1 (Constant)	1.492	0.298	4.218	0.044	
Strategic planning	0.841	0.178	0.326	5.374	0.032
Staff competence	0.702	0.171	0.421	4.963	0.027
Top management support	0.596	0.563	0.123	3.916	0.038
Organization culture	0.703	.0725	0.384	4.115	0.018

As per the SPSS generated table above, the equation ( $Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \epsilon$ ) becomes:

$$Y = 1.492 + 0.841X_1 + 0.702X_2 + 0.596X_3 + 0.703X_4$$

The results in table 4.11, show that strategic planning has the most significance positive effect on the implementation of procurement procedures. From the above regression model, strategic planning, staff competence, top management support, organisational culture would be 1.492. Through the regression model, the variables were optimized to have a feel quantitatively of the impact that they would have on the dependent variable. The findings show that, while other factors are held constant, a unit increase in strategic planning would yield a 0.841 increase in procurement procedures implementation. A unit increase in staff competence would yield a 0.702 increase in procurement procedures implementation. A unit increase in organisational culture would yield a 0.703 increase in procurement procedures implementation. On the other hand, a unit increase in top management support would yield a 0.596 increase in procurement procedures implementation.

## 5. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

### 5.1 Summary of Findings:

The purpose of the study was to establish the determinants of procurement procedures implementation in universities. The study focused on the effect of organizational culture, staff competence, top management support and the role of strategic planning on procurement procedures implementation in public universities in Kiambu County.

A total of 24 questionnaires were distributed to respondents however, only 19 were filled and returned; representing a significant response rate of 79%. Among the respondents, 53% were male while 47% were female. Majority of the respondents (63%) were aged between 25 and 35 years. It also emerged that most of the respondents (52%) had bachelors degree. Sixty three percent of the respondents had a little experience of less than five years.

#### 5.1.1 Strategic Planning:

From the study, it was clear that strategic planning to a very great extent affects the implementation of procurement procedures and that the institutions were found to have strategic plans in place with their mission, vision and values well stipulated and special staff put in place to steer planning and scheduling of the strategic plans. Most staff was also found to be familiar with the content of the strategic plan. Further, it was established that most institutions had plans for technical, financial, managerial and implementation constraints for their strategic plans. The study found out that strategic planning improves efficiency of the procedures, saves time and money at the same time.

#### 5.1.2 Staff Competence:

The study established staff competence to a great extent affects the implementation of procurement procedures and that most of the employees working in the procurement departments in the institutions of higher learning are competent and are well acquainted with the Procurement Act. At the same time new employees were found to be regularly impacted with the necessary skills in their new role which is one way of enabling them to become competent in their work. Most employees were also found to have adequate education and conducted their work professionally. However, most employees were found to have little experience which could be impacting negatively on the quality of their work output. Although appointments were found to be done on merit, a substantial number of respondents were of the contrary opinion to the effect that appointments are not done on merit.

#### 5.1.3 Top Management:

The study established that top management support to a great extent affects the implementation of procurement procedures and that the management of the institutions under study was found to be ready to help their employees when need arises. This kind of support was making the employees feel appreciated and therefore likely to increase their job output or improve the quality of their services. Other positive attributes that were established included efficient communication from the management and involving employees when making significant changes. Further, the study noted that employees were continuously developed through training and senior managers were found to be mentoring their junior employees.

**5.1.4 Organizational Culture:**

The study established that that organizational culture affects implementation of procurement procedures to a very great extent and that the institutions had unique institutional values that make them different from others. Most employees were found to be held in high regard by the management of the institutions and are also motivated to work in their respective institutions of higher learning. The reason for this feeling could be because most institutions were found to be nurturing their staff's desire for growth which is a good motivator to the employees. Nonetheless, although majority of the staff reported not to be suffering from burnout, a substantial number is affected and this could be slowing down their work output.

**5.2 Conclusion:**

The study concludes that the institutions have strategic plans in place with their mission, vision and values well stipulated and special staff put in place to steer planning and scheduling of the strategic plans. Staffs are familiar with the content of the strategic plan and special people have been put in place to steer its implementation.

The staffs working in the procurement departments of the institutions of higher learning are competent enough which facilitated proper implementation of the public procurement procedures. Staff competency comprised of being acquainted with the procurement Act, induction of new employees, acquisition of necessary skills and appointment of staff by merit.

The study also concludes that the top management of the institutions under study was supportive of the employees and strived to make them feel appreciated through efficient communication, training, mentorship and involving them when making major decisions.

The organizational culture of institutions of higher learning is important in promoting implementation of procurement procedures. A culture that is favourable to the welfare of employees played a role in raising their morale thereby encouraging them to implement of procurement procedures.

**5.3 Recommendations:**

The study recommends that Public universities should establish pro-staff programs that can motivate the workers to increase their productivity. Training programs, giving incentives and involving workers in important decisions would go a long way in motivating them and thereby enhance implementation of procurement procedures. The management should also ensure that employees are familiar with the procurement procedures as they transact business. Top management also need to steer head cultural practices in their organizations and frequently monitor the practices so as to effectively manage them so as to boost its implementation of procurement procedures.

**Suggestions for Further Research:**

The study was confined to Kiambu County, which may not be representative enough for purposes of generalization. Hence, the researcher suggests that more universities in other counties be sampled for such a study in order to enable generalization of findings. The study suggests other areas for further research to include: The role of strategic planning in enhancing procurement procedures, The role of organizational culture in the implementation of procurement procedures, challenges affecting implementation of procurement procedures in public sector, A comparative study on the efficiency of procurement agencies between private and public sector.

**REFERENCES**

- [1] Adedamola, A., & Egbuna, K. C. (2013). Staff Perception of Sustainable Procurement: A study of the University of Brighton. *Journal of Educational and Management Studies*, 3(1), 115-122.
- [2] Agaba, E., & Shipman, N. (2007). Public procurement reform in developing countries: The Ugandan experience. *Advancing Public Procurement: Practices, Innovation and Knowledge-Sharing*, 373-391.
- [3] Andrew, M. (2008). Procurement Reforms in Kenya. *Journal of Economics*, 22(1), 23-50.
- [4] .Barrett, P. (2010). Balancing accountability and efficiency in a more competitive public sector environment. *Australian Journal of Public Administration*, 59(3), 58-71.



- [5] Bediako, P.A., & Issah, O. (2016, January). The effects of perceived usefulness and satisfaction on acceptance of procurement procedures, *International Journal of Economics, Commerce and Management*, 4 (1), 1-30.
- [6] Bowersox, D., Cooper, M. B., & Closs, D. J. (2013). *Supply chain logistics management*. New York: McGraw Hill Higher Education.
- [7] Commission for University Education (2016). *Validation of data collected from universities in 2015/2016*. Nairobi: CUE.
- [8] Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed method approaches*. Los Angeles: Sage.
- [9] Cronbach. N. (2011) *Regulating Procurement Practice*, 4th edition. New York: Jaico Publishing House
- [10] Davis, G.F., & Cobb, J.A. (2009, April). Resource dependence theory: Past and future. *Research in the Sociology of Organizations* (4).
- [11] Dorothy, K. (2010). *Procurement Management Strategies*. *Journal of Purchasing*, 16(1), 20-52.
- [12] Ebrahim, S. (2010). Training Interventions: Fulfilling Managerial Ends or Proliferating Invaluable Means for Employees: Some Evidence from Iran. *European Business Review*, 22(2), 257-301.
- [13] Edward, B. (2009). *Public Sector Procurement Methods*. *Journal of Procurement*, 11(1), 65-78
- [14] Gelderman, J. C., Ghijsen, W. P., & Brugman, J. M. (2006). Public procurement and EU tendering directives-explaining non-compliance. *International Journal of Public Sector Management*, 19(7), 702-714.
- [15] Gikonyo, P.K. (2014). Factors Affecting Implementation of Public Procurement Act in SACCO Societies in Kenya. *International Journal of Academic Research in Business and Social Sciences*, 4 (2), 1-21.
- [16] Griffith, M., & Griffith, I. (2002). *Law of Purchasing and Supply*; 3rd ed. Edinburgh: Prentice.
- [17] Hardt, L. (2009, Summer). The history of transaction cost economics and its recent developments. *Erasmus Journal for Philosophy and Economics*, 2 (1), 29-51.
- [18] Hochman, M. (2007). *New Technologies Boost Procurement's Potential*. *Supply Chain* <http://spendmatters.com/uk/the-top-5-challenges-for-the-chief-procurement-officer/>
- [19] Hunja, R. (2011). Obstacles to public procurement reform in developing Countries, *International Journal of Business and Commerce*, 10(2), 167-170..
- [20] Kenya Information Guide (2015). *Kiambu County*. Retrieved from: <http://www.kenya-information-guide.com/kiambu-county.html>.
- [21] Kiage, J.O. (2013). *Factors Affecting Procurement Performance: A Case of Ministry of Energy*.
- [22] Kimotho, F. (2015). E-procurement first step to restore taxpayers' trust. *Business Daily*.
- [23] Kinyanjui, P. (2010). *Procurement Challenges in Kenya*. *Journal of Procurement*, 13(1), 65-85.
- [24] Kombo, D.K., & Tromp, D.L.A. (2006). *Proposal and thesis writing: An introduction*. Nairobi: Paulines Publications Africa.
- [25] Krol, J. (2012). *Procurement transformation*. Retrieved from: <https://www.capgeminiConsulting.com/blog/procurement-transformation>
- [26] Leeders S. (2006). *Purchasing and Supplies Management*. (3rd ed.). Mason, NJ: Pearson Publishers.
- [27] Li, B. (2008, June). The classical model of decision making has been accepted as not providing an accurate account of how people typically make decisions. *International Journal of Business and Management*, 3 (6), 151-154.
- [28] Luhmann R. (2010). *Research Methodology: Methods and Techniques (Second Revised)*. New Delhi: Tata McGraw-Hill Publishing Company.

- [29] Lunenburg, F.C. (2010). The decision making process. National Forum of Educational Administration and Supervision Journal, 27 (4), 1-12.
- [30] Lysons, K., & Farrington B. (2006). Purchasing and Supply Chain Management. 7th Ed. London: Pearson Education Limited
- [31] Madara O. (2010). Impact of Public Procurement Law on Profit- Oriented State- Owned Corporations in Kenya. Towards New Horizons in Public Procurement. Pr Academics Press. Management Review, (6) 372-388.
- [32] Martins, R, Serra, F.R., Leite, A.S., Ferreira, M.P., & Li, D. (2010). Transactions Cost Theory influence in strategy research: A review through a bibliometric study in leading journals. globADVANTAGE Center of Research in International Business & Strategy, Working paper (61).
- [33] McCrudden, C. (2008). Using public procurement to Achieve Social Outcomes. Natural Resources Forum, 28(4), 23
- [34] Mehra, C. (2000). Corruption: Dealing with the devil. Nairobi: Shiv Publications.
- [35] Mitchell, S.W. (2014). An exploratory study of priority based budgeting: Identification of public values and public priorities through citizen engagement in government budgeting decisions. Michigan: Lawrence Technological University.
- [36] Mose, J.M., Njihia, J.M. & Magutu, P.O. (2013, May). The critical success factors and challenges in e-procurement adoption among large scale manufacturing firms in Nairobi, Kenya. European Scientific Journal, 9 (13).
- [37] Mugenda, O.M., & Mugenda, A.G. (2008). Research Methods. 2nd Ed. Nairobi: Africa Center for Technology Studies (ACTS) Press.
- [38] Mugenda, O.M., & Mugenda, A.G. (2003). Research methods: Quantitative and qualitative. Nairobi: Africa Center for Technology Studies (ACTS) Press
- [39] Mutahaba, G. (1989). Reforming public administration for development: Experiences from
- [40] Mwangangi & Owuoth (2015) International Journal of Social Sciences Management and Entrepreneurship 2(1), 171-184.
- [41] Njagi, M. & Obala, R. (2015). Audit reveals 'misuse of public funds' in counties. <http://www.standardmedia.co.ke/article/2000169528/audit-reveals-misuse-of-public-funds-in-counties>.
- [42] Odhiambo, W., & Kamau, P. (2013). Public Procurement: Lessons from Kenya, Tanzania and Uganda. OECD Working Paper NO.208. OECD Development Centre. on <http://www.wto.org>, on 15th Dec. 2009.
- [43] Oh, S., Yang, H. & Kim, S.W. (2014). Managerial capabilities of information technology and the firm performance: Role of e-procurement system type. International Journal of Production Research, 52 (15), 4488-4506.
- [44] Otenyo, E. E. (1998). Ethics and public service in Africa. Nairobi, Kenya: Friends-of-the-Book parastatals in Kenya. Retrieved from: <http://erepository.uonbi.ac.ke/>
- [45] Patrick, K. (2010). Procurement Reforms in Kenya. Working Paper no 1. Nairobi: Government Press. 184
- [46] Procurement Reform Project (2004). African Regional workshop on harmonization, alignment and results, available on <http://www.worldbank.org/> on 14th Dec.2009.
- [47] Public Procurement Oversight Authority (2007). Assessment of the Procurement System in Kenya. Nairobi: PPOA.
- [48] Reed, B.J. (2011). Encyclopedia of Public Administration and Public Policy. 2nd edition. Hampshire: Taylor & Francis.
- [49] Republic of Kenya (2005). The Public Procurement and Disposal Act, (3). Retrieved from [http://www.ppoa.go.ke/Review.7\(3\),162-171](http://www.ppoa.go.ke/Review.7(3),162-171).
- [50] Roodhooft, F., & Abbeele, A. V. D. (2006). Public procurement of consulting services Evidence and comparison with private companies. International Journal of Public Sector Management, 19(5), 490-512.

- [51] Simon, J., & Evenett K. (2005). International Cooperation and the Reform of Public Procurement Policies (On line) Available at [www.worldbank.org](http://www.worldbank.org).
- [52] Smith, T.R. (2011). Agency Theory and Its Consequences A study of the unintended effect of Agency Theory on risk and morality techniques. Nairobi: Africa Centre for Technology Studies (ACTS).
- [53] Thai, K. V. (Ed.). (2008). International handbook of public procurement. CRC Press. Thursday June 11, 2015. Towards transparency. European Procurement & Public Private Partnership Law.
- [54] Tukamuhabwa, B. R. (2012). Antecedents and Consequences of Public Procurement Noncompliance Behavior. Journal of Economics and Behavioral Studies, 19(5), 490-512. University of Nairobi.
- [55] Wanyama, J (2010) .The effectiveness of the Procurement Regulations in Kenya. Retrieved from <http://www.oecd.org>
- [56] 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), 1-35.
- [57] World Bank (2004). Guidelines: Procurement under IBRD Loans and IDA Credits. Washington DC: World Bank [www.ijbnet.com](http://www.ijbnet.com).