AN ASSESSMENT OF FACTORS AFFECTING IMPLEMENTATION OF PROCUREMENT PROCESSES IN TERTIARY PUBLIC LEARNING INSTITUTIONS. (CASE STUDY OF KISII NATIONAL POLYTECHNIC)

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DECLARATION AND RECOMMENDATION

DECLARATION

This research project is my original work and has not been submitted to any other university for award of diploma in procurement and supplies.

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RECOMMENDATION

This research was submitted for examination with approval by my supervisor in University

SIGNATURE: ……………………………… DATE: ……………………………

SCHOOL OF BUSINESS AND ECONOMICS

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DEDICATION

This work is dedicated to my family members, relatives and friends for their moral and financial support to my academic endeavors.
### ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tr>
<td>DEFRA</td>
<td>Department for Environment Food and Rural Affairs</td>
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<td>EOQ</td>
<td>Economic Order Quantity</td>
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<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>ICT</td>
<td>Information Communication Technology</td>
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<td>JIT</td>
<td>Just-in-time</td>
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<td>OECD</td>
<td>Organization of Economic Cooperation Development</td>
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<td>PPDA</td>
<td>Public Procurement and Disposal Act</td>
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<tr>
<td>SP</td>
<td>Sustainable Procurement</td>
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<tr>
<td>UNEP</td>
<td>United Nations Environment Program</td>
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<td>WSSD</td>
<td>World Summit on Sustainable Development</td>
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<tr>
<td>OECD</td>
<td>Organization for Economic Co-operation and Development</td>
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<tr>
<td>ROK</td>
<td>Republic of Kenya</td>
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<tr>
<td>PPDR</td>
<td>Public Procurement and Disposal Regulations</td>
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<td>KISM</td>
<td>Kenya Institute of Supplies Management</td>
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ABSTRACT
In Kenya, the inefficiency and ineptness of overall implementation of procurement process in many tertiary public learning institutions contributes to loss of over Ksh. 50 million annually. In addition, in over 50% of tertiary public learning institutions, the quality and quantity of procured goods and services do not meet the raised specifications during tendering and the actual procurement expenditure is normally higher than the budgeted procurement funds. Procurement expenditure can be minimized through effective implementation of procurement process. However, none of tertiary public learning institution has successfully managed to effectively implement procurement process and practices and this has led to increased procurement expenditure and high institutions operational costs. The general objective of the study was to determine factors affecting effective implementation of procurement process in tertiary public learning institutions in Kenya. This study utilized the descriptive design. The study area was National Polytechnic Kisii County. The population of this study consist of 80 employees working in the procurement department, store keeping, supply operation and transport within National Polytechnic in Kisii County. Stratified random sampling technique were applied. Questionnaires was the main data collection tool which was administered to the individual staff. Descriptive and inferential statistics data analysis results revealed the employed procurement policies, supplier selection, inventory management methods, and the use of ICT based systems that hamper effective implementation of procurement practices in over 80% of tertiary public learning institutions in Kenya. Therefore the institutions layed strategies to ensure that there is perception and actual open and fair tendering and procurement being done. The study recommended; improvement on the level of compliance with procurement regulations, application of inventory management techniques based on economic order quantity, implementation of better supplier selection strategies and finally training of procurement staff and integration of procurement functions with ICT based systems to enhance the perception of open and fair completion within the tendering.
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CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

This section of the study introduced the following sub-sections in the following order, background to the study, statement of the problem, research objectives, research questions, and significance of the study, scope of the study, limitations of the study and operational definition of the terms. This section of the study layed down the foundations of the research problem on factors affecting effective implementation of procurement practices in tertiary public higher learning institutions in Kenya. Procurement is a crucial element in the working functions of any state. It refers to the purchasing of goods and services in the right quality, from the right source and the right price all to meet a specific need. Every government has the obligation to provide essential services to its citizens. In Kenya, procurement consumes 45% of the national budget, excluding local government procurement. The close relationship between procurement and development demonstrates that there was needed for transparency and accountability in the manner in which procurement was conducted. (Masime 2009). The study aimed at determining factors affecting effective implementation of procurement practices in tertiary public learning institutions in Kenya.

Procurement is the process in which public or private organizations buy supplies or services to fulfill various functions such as shelter, transport and need for infrastructures, among many others (Talluri 2008). According to (Chopra 2005), procurement is the process of obtaining goods and services from the preparation and processing through to receipt and approval of the invoice for payment. Procurement commonly involved purchase planning, standards
determination, specifications development, supplier research and selection, value analysis, financing, price negotiation, making the purchase, supply contract administration, inventory control and stores, and disposal and other related functions (Corsten 2009). Public procurement was concern with how public sector organizations spend taxpayers' money on goods and services (Hall 2009). Public procurement is guided by principles of transparency, accountability, and achieving value for money for citizens and taxpayers. Globally, in many developed nations, public sector expenditure is substantial. Government organizations across the world tend to spend between 8 per cent and 25 per cent of GDP on goods and services (OECD 2006). In the UK, public procurement expenditure was approximately £150 billion (DEFRA 2007). Government is often the single biggest customer within a country, and governments can potentially use this purchasing power to influence the behavior of private sector organizations (Charles 2007). In particular, was noted that public procurement can be a lever to deliver broader government objectives, such as stimulating innovation in supply markets, using public money to support environmental or social objectives, and for supporting domestic markets (McCrudden 2008).

1.2 Statement of the Problem

Tertiary public learning institutions experienced major challenges in the execution of procurement practices. In Kenya, the central government spends about Kshs. 234 billion per year on procurement. However on annual bases, the government losses close to Ksh. 121 billion about 17 per cent of the national budget due to inflated procurement quotations (KISM 2010). According to Public Procurement Oversight Authority (PPOA 2009), most of the tendered products/services in many tertiary public learning institutions have a mark-up of 60 per cent on
the market prices. In the year 2010, the Ministry of Education lost 4.2 billion Kenyan shillings, in the year 2011, a total of Kshs. 33,061,925 is said to have been embezzled from “Kazi Kwa Vijana funds” (Daniel 2010).

The inefficiency and ineptness of overall implementation of procurement process in many tertiary learning institutions contributes to loss of over Ksh.50 million annually (Tom 2009). According to Victor (2012), procurement expenditure could be minimized through proper implementation of procurement practices. A relatively well-developed body of research by Daniel (2010), Victor (2012) and Tom (2009) explored implementation of procurement process in public sector organizations in general and left a major knowledge gap on effective implementation of procurement process in tertiary public leaning institutions. It’s hence against this background this study was undertaken to determine factors affecting implementation of procurement practices in tertiary public learning institutions in Kenya. In addition this research will explore on the effect of procurement policies, inventory management, supplier selection and information communication technology in public learning institutions in Kenya.

1.3 Objectives of the Study

The following were the objectives of the study;

1.3.1 General Objective

The general objective of the study was to determine factors affecting effective implementation of procurement process in tertiary public learning institutions in Kisii County.
1.3.2 Specific Objectives

1. To determine the effect of procurement policies on effective implementation of procurement process in tertiary public learning institutions in Kenya.

2. To find out the effect of inventory management on effective implementation of procurement process in tertiary public learning institutions in Kenya.

3. To establish the effect of supplier selection under effective implementation of procurement process in tertiary public learning institutions in Kenya.

4. To assess the effect of information communication technology on effective implementation of procurement process in tertiary public learning institutions in Kenya.

1.4 Research Questions

1. What are the significant effects between procurement policies and effective implementation of procurement practices in tertiary public learning institutions in Kenya?

2. What are the significant effects between inventory management and effective implementation of procurement process in tertiary learning institutions in Kenya?

3. Which ways are effective to select supplier in public learning institution in Kenya?

4. What is the link between information communication technology and effective implementation of procurement process in tertiary public training institutions in Kenya?
1.5 Significance of the Study

Effective implementation of procurement process was play significant role towards enhancing sustainability of institution operations with less negative impact to environmental issues (Paul. 2007). In Kenya, many tertiary public learning institutions have not yet effectively embrace procurement process because they have not put measures in place on how to manage factors affecting effective implementation of procurement process in tertiary public learning institutions.

The study was of great significant to stake holders and board members in all tertiary public learning institutions in Kenya since the study findings will assist in formulation and implementation of guidelines and framework for supporting effective implementation of procurement process.

The study played great significance to all other public learning institutions in Kenya since study recommendations that assist institutions management to overcome the major challenges that hinder effective implementation of procurement process in learning institutions. The study was important to procurement professionals in various industrial sectors since it would add a body of knowledge to theory and practice of effective implementation of procurement process. The study was of great importance to the government since the obtained findings will provide guidelines on how public organizations will effectively implement procurement process hence leading to proper utilization of government financial resources. The findings of this study was expected to be of significance to various scholars, students and researchers who will be involved in procurement research activities since the documented report provide ready reference material
that will equip the learners with more knowledge and skills on issues relating to factors affecting effective implementation of procurement process in public learning institutions in Kenya.

1.6 Scope of the Study

The study was undertaken in a tertiary public learning institution of Kisii National Polytechnic. The study involved all the procurement staff within the institution and the user teams. The study was specifically gathered data on the effect of procurement policies, inventory management, supplier selection, and information communication technology on effective implementation of procurement process. This was undertaken within duration of 12 days.

1.7 Limitations of the Study

The challenges that the researcher encountered include some of the respondents did not fill or complete the questions or some issues being misunderstood, inadequate responses to questionnaires and unexpected occurrences like people going on leave before completing the questionnaires. This was mitigated through constant reminder to the respondents during the period the questionnaires will be administered to them. The organizational confidential policy restricts some of the respondents from answering some of the questionnaires unless the introduction letter that was provided from the university to the organizations management help to avoid suspicion and enabled the institutions to disclose much of the information to be the studied.
1.8 Operational definition of terms

**Procurement:** The process in which public or private organizations buy, supplies or services to fulfill various functions such as shelter, transport and need for infrastructures, among many others.

**Procurement policies:** These are rules and regulations for governing procurement process in an organization.

**Inventory management:** Is the application of data collection, demand and forecasting, lean and operational principles to manage the total amount of inventory within the supply chain at any point in time and manage inventory holding costs.

**Green procurement:** This is defined as taking into account environmental criteria for goods and services to be purchased in order to ensure that the related environmental impacts are minimized.

**Demand management:** This ensures that the resources required to fulfill the objectives of the strategic procurement plan are delivered to the organization efficiently, effectively and equitably without fruitless expenditure.

**Supplier management:** This is a business process that allows a company to adequately select its vendors and negotiate the best prices for goods and services that it purchases. The senior managers also monitor the corporate supply chain to ensure that the vendors familiarize themselves with the company’s operating activities and manufacturing process.
**Disposal management:** Refers to the decommissioning, clearance and removal of unserviceable, redundant and obsolete assets.

**Information communication technology:** Is a technology that involves use of computers, software and internet connections infrastructure for supporting information processing and communication functions.
CHAPTER TWO

2.1 Literature Review

This chapter explored the existing literature on factors affecting effective implementation of procurement process in tertiary public learning institutions. The chapter covers theoretical review, empirical literature, research gaps and conceptual framework.

2.2 Theoretical Review

There are many theories that exist to analyze the creation and application of procurement process. These theories were used to identify important aspects of procurement process, as well as to explain related expectations proposed by these theories.

2.2.1 Agency Theory

Agency theory is concerned with agency relationships. The two parties have an agency relationship when they cooperate and engage in an association wherein one party (the principal) delegates decisions and/or work to another (an agent) to act on its behalf (Eisenhardt 2014; Rungtusanatham et al., 2012). The important assumptions underlying agency theory is that; potential goal conflicts exist between principals and agents; each party acts in its own self-interest; information asymmetry frequently exists between principals and agents; agents are more risk averse than the principal; and efficiency is the effectiveness criterion. Two potential problems stemming from these assumptions may arise in agency relationships: an agency problem and a risk-sharing problem (Xingxing 2013). An agency problem appears when agents' goals differ from the principals' and it is difficult or expensive to verify whether agents have appropriately performed the delegated work (i.e. moral hazard). This problem also arises when it
is difficult or expensive to verify that agents have the expertise to perform the delegated work (i.e. adverse selection) that they claim to have. A risk-sharing problem arises when principals and agents have different attitudes towards risk that cause disagreements about actions to be taken (Xingxing 2013).

The assumptions and prescriptions of agency theory fit naturally with the issues inherent in supply chain quality management. In the process of managing supplier quality, buyers in agency relations will be faced with potential problems. By their nature, buyers expect suppliers to provide good quality and to improve the quality of supplied products and/or services, but suppliers may be reluctant to invest substantially in quality, especially if they perceive that buyers are reaping all the benefits. Agency theory determined ways on how procurement managers will execute procurement process on behalf of tertiary public learning institutions. Existence of poor principle agent relationship leads to low level of top management commitment and this also affects the relationship between institutions and the suppliers. Existence of conflict of interest amongst the agents leads to execution of procurement practices against the procurement the procurement policies and this leads to increased procurement budget and loss of procurement funds. The study will use this theory to determine the effect of procurement policies for effective implementation of procurement process in tertiary public learning institutions in Kenya.

2.2.2 The Knowledge-Based Theory

The knowledge-based theory of the firm considers knowledge as the most strategically significant resource of the firm. Its proponents argue that because knowledge-based resources are usually difficult to imitate and socially complex, heterogeneous knowledge bases and capabilities
among firms are the major determinants of sustained competitive advantage and superior corporate performance (Grant 2013). This knowledge will be embedded and carried through multiple entities including organizational culture and identity, policies, routines, documents, systems, and employees (Zander 2014). The knowledge-based theory will determine the nature organization human resources capabilities which influenced by the nature of training given to the employees. Existence of professional trained staff in procurement field and availability of many staff with high education level plays an important role in strengthening the organization capabilities in terms of trained manpower. Therefore this theory establishes on how an organization trains employees in order to equip them with knowledge that helps them to support implementation of procurement process.

2.2.3 Ethics Based Theory

This theory advocates for the self-regulation of entities such as the public procurement departments or institutions to ensure market efficiency (Mbae, 2014). This theory was basis of the code of conduct among the professionals such as the procurement officials (Mwangi, 2014). The efficient market functioning will negatively impacted by the unethical practice such as corruption. In this context of the study, the theory was be applicable since the integrity of the public procurement process and the adherence to the laws concerned dependent on the procurement officials acting in an ethical way (Njoroge, 2012).

2.3 Empirical Literature

This section will review the existing empirical studies on factors affecting implementation of procurement process. The chapter will relate studies on; effect of procurement policies on effective implementation of procurement process; effect of inventory management on effective
implementation of procurement practices; effect of supplier selection on effective implementation of procurement process; and effect of information communication technology on effective implementation of procurement process.

2.3.1 Procurement Policies

A procurement policy is simply the rules and regulations that are set in place to govern the process of acquiring goods and services needed by an organization to function efficiently (Findlay 2013). The size of the entity is likely to make a difference in the formation of procurement policy, in that a small company may not be able to command the volume purchase discounts that a large corporation can manage with relative ease (Gadde 2010).

Procurement policy benefits the organization by keeping costs in line and clearly defining how purchases will be made (Hall 2010). As the needs of the entity change, there is a good chance that the procurement policy will be adjusted to meet those new circumstances.

Arthur (2009) notes that many procurement managers in Kenyan state corporations lack competitive knowledge and skills on how to formulate and embrace effective procurement policies in many public institutions in Kenya. A study by Jerald (2010) notes that procurement reforms in Kenya have led to enactment of Public Procurement and Disposal Act 2005, the Public Procurement and Disposal Regulations 2006 and The Secondary Schools and Colleges Procurement Manual (2007). The manual provides procurement guidelines on KESSP related expenditure. The manuals make reference to other Ministry of Education publications that set out in a more comprehensive manner the processes to be observed in the procurement of particular items such as instructional materials and school infrastructure. The study reveals that only less
that 20% of public colleges undertake their procurement process in tandem with the Secondary Schools and Colleges Procurement Manual guidelines. Onyinkwa’s (2013) study on factors influencing compliance of procurement regulations in public secondary schools in Nyamache sub-county found that ethics, awareness and training influence the compliances of procurement regulations in public secondary schools. The study recommends that it is important to offer ethics education to school tendering committee members in order to ensure they serve in ultimate objectivity, accountability, and non-discrimination.

The study further notes that many public learning institutions procurement process do not fully comply with the procurement regulations and this leads to misappropriation of institutional funds.

### 2.3.2 Inventory Management

Inventory management is the process of efficiently overseeing the constant flow of units into and out of an existing inventory (Elliot 2013). This process usually involves controlling the transfer of units in order to prevent the inventory from becoming too high, or dwindling to levels that could put the operation of the company into jeopardy. Competent inventory management also seeks to control the costs associated with the inventory, both from the perspective of the total value of the goods included and the tax burden generated by the cumulative value of the inventory (Barcodesinc 2014).

Finally, inventory management has to do with keeping accurate records of finished goods that are ready for shipment. Maintaining figures on the finished goods inventory makes it possible to quickly convey information to sales personnel as to what is available and ready for shipment at
any given time (Cooper 2008). In addition to maintaining control of the volume and movement of various inventories, inventory management also makes it possible to prepare accurate records that are used for accessing any taxes due on each inventory type. Without precise data regarding unit volumes within each phase of the overall operation, the company cannot accurately calculate the tax amounts. This could lead to underpaying the due taxes and possibly incurring stiff penalties in the event of an independent audit (Barcodesinc 2014).

Right inventory management approach for any purchased item must not only address the cash tied up in physical inventory but also the costs of planning, storing, and handling such an item. In fact, within the same firm, the “right” inventory management approach for a particular purchased item may not be the “right” inventory management approach for another purchased item. Moreover, across firms, the “right” inventory management approach for a particular purchased item in one firm may not be the “right” inventory management approach for the same purchased item in another firm (Margetta 2008).

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

### 2.3.3 Supplier Management

Gadde’s (2010) study revealed that many public training institutions in India employed poor supplier appraisal methods and this hindered implementation of effective procurement practices. A study by Mulwa (2009) revealed that the use of poor supplier appraisal methods and application of ineffective supplier selection process discourages implementation of effective procurement practices in many public training institutions in Kenya. Oyugi (2010) notes that many public training institutions lack effective supplier relationship management strategies and do not collaborate with suppliers and this impacts negatively towards implementation of cost-effective procurement practices. The study, therefore, deduced that the key notable factors influencing supplier management to affect implementation of effective procurement practices in tertiary public training institutions include: poor supplier appraisal techniques, poor supplier selection strategies, poor supplier selection process, lack of effective supplier performance rating method, lack of supplier relationship management, lack of supplier development and lack of supplier collaboration.

Supplier management studies have been largely dominated by mathematical models which try to rate and rank suppliers based on a number of pre-defined factors such as cost, quality, service, and delivery (De Boer 2001). However, in an era of new trends in products and services outsourcing, there is an increasing need to employ theories from other relevant disciplines such as economics, strategy, and organizational behavior to supply management and supplier selection/evaluation/development research (McIvor 2009).
2.3.5 Information Communication Technology

According to Bell (2007), information technology is a general term that describes any technology that helps to produce, manipulate, communicate or disseminate information. ICT merges computing with high-speed communication links carrying data, sound and videodisc can also be defined as an automatic acquisition, Storage, manipulation, movement, control, display, switching interchange, transmission or reception of data or information. The two important major components of ICT are computers and telecommunications. A computer is a programmable, multiple machine that accepts data, raw facts and figures and processes or manipulates these into information that is easily understandable which enhances speed processing of information leading to increased organization productivity (Compton 2007).

Golder (2007) asserts that organizations that fail to integrate procurement functions with information communication technology systems like electronic data interchange employs manual procurement procedures that are inefficient and ineffective and leads this to wastage of procurement funds since the procurement processes are characterized by a low degree of transparency.

According to Ken (2007), IT has reached almost every aspect of procurement and may enhance and deepen the effort of procurement reform. Specifically, information technology (IT) promotes economy and efficiency, significant savings of public funds by increasing competition, transparency by making procurement information of all sorts such as bidding opportunities, bidding documents, notices, texts of applicable rules readily available and in diminishing the opportunities for discretion (and hence corruption), and public confidence in the integrity of
government. Chang (2008) affirms that IT plays a great role towards supporting adoption of centralized procurement systems in public sector organizations. Centralized procurement system leads to a central procurement data base that creates a favorable environment for effective automation of procurement processes.

According to Baily (2007), organization with effective IT infrastructure can easily automate its procurement functions by implementing an Enterprise Resource Planning (ERP) system. ERP is a system that integrates all organizational functions into a single system in order to serve the needs of each different department within the enterprise A study by George (2008) found that in Kenya’s many public institutions fail to succeed in embracing effective procurement process due to lack of effective waste recycling technology and effective technology for utilizing renewable energy sources such as wind and solar energy.

2.3.6 Effective Implementation Procurement Process

Effective implementation of procurement process is determined by the level of compliance with procurement regulations, minimization of procurement expenditure, transparency and accountability of procurement funds and quality of procured goods and services (Gadde 2010). Effective implementation of procurement process entails implementation of strategies to be followed when making organization purchasing decisions. This include building supplier relationship, team-based approaches to procurement and proper use of technology or e-procurement (UNEP 2007). Effective implementation of procurement process significantly improved the effectiveness of purchasing decision (Sobezak 2012). One of the most important factor that promote effective implementation of procurement process is improving the relationship between the buyers and suppliers.
A key factor that affects implementation of procurement process was to make the entire organization department responsible to comply with the procurement disposal Act 2005 and policies, minimize the procurement expenditure, to enhance transparency & accountability in selection of suppliers and automation of ICT infrastructure as ways of implementing of procurement process.

The view of this implementation of procurement process as an add-on or an approach that costs more. Truly sustainable solution will often cost less over the whole life of purchase. Some key benefits includes; value for money, protection and enhancement of environment, more efficient use of resources, greater social inclusion, air and ethical trade, support for innovation, better risk management, lower whole-life cost improved supplier relationships, a diverse and flexible supplier chain and competitive edge in many institutions.

2.4 Research Gaps

Despite the importance of public sector procurement, the number of studies that have investigated the role of public authorities in effective supply is still small. Studies by Thomson and Jackson (2009), DEFRA (2009) and Brulhart (2011) draw much emphasis on effective procurement in developed nations but failure to address the factors affecting adoption of effective procurement process in developing nations.

Studies by Patrick (2010) and Edward (2010) attempted to explain the status of effective procurement process in Kenya but do not offer practical solution on how government learning institutions should embrace effective procurement process. A study by Simpson and Power (2013) found that in many African government institutions, many procurement managers are not
trained on implementation of procurement process since most African learning institutions have not embraced effective procurement process in public procurement learning institutions.

These studies were not specifically addressed the key effective procurement process implementation challenges hence developing a major knowledge gap on factors influencing implementation of procurement process in public learning institutions in Kenya. This study aimed to fill the missing gaps by determining the major factors influencing the implementation of procurement process in public learning institutions in Kenya and offering recommendations on implementation of effective procurement process in government learning institutions.

### 2.5 Conceptual Framework

A conceptual framework is a set of broad ideas and principles taken from relevant fields of enquiry and was used to structure a subsequent presentation (Biklen 2009). In conducting the study, a conceptual framework was developed to show the relationship between the independent variables and dependent variables. The constructs and relationships between the research variables are illustrated in the figure below.

![Conceptual Framework Diagram]

- **Effectiveness of procurement implementation approach**
  - Procurement policies
  - Inventory management
  - Supplier selection
  - Information communication technology

- **Procurement process**
  - Compliance with procurement disposal Act 2005
  - Minimization of procurement expenditure
  - Transparency and accountability
  - Automation of ICT infrastructure

- **Government policies**
  - Procurement system
  - Adherence to public procurement law
  - Supply performance
Intervening variables

Fig 2.1: Conceptual Framework

Source: Journal of Purchasing Management
2.5.1 Procurement Policies

Procurement policies are rules and regulations for governing procurement procedures in an organization. A properly designed and implemented procurement policy plays a pivotal role in providing a guiding framework for the implementation of procurement process (Bartik, 2009). The employed procurement policy in government learning institutions doesn’t provide a framework for supporting implementation of procurement process.

2.5.2 Inventory Management

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

2.5.3 Supplier Selection

Supplier selection is a technique process that allows leaning institution to adequately select its vendors and negotiate the best prices for goods and services that it purchases. Senior managers
also monitor the corporate supply chain ensured that vendors familiarize themselves with the company's operating activities and manufacturing processes (Arthur 2009).

2.5.4 Information Communication Technology

Information Communication Technology (ICT) is a technology that involved use of computers, software and internet connections infrastructure for supporting information processing and communication functions (Crompton 2007). The use of information technology in public sector has not been effectively implemented since most of the procurement functions are subjected to manual procedures that are slow, inaccurate and infective. This has negative impact on procurement process since the public sector organizations cannot effectively monitor and coordinate procurement process of all activities subjected to procurement. The use of computerized procurement systems demonstrates effective use of information technology. In cases where the organization subjects all it is procurement functions to manual procedures, the benefits of information technology were not experienced and a high level of inefficiency was experienced during execution of procurement process.
CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Research Design

The research adopted a descriptive research design. According to Mugenda (2009), descriptive research design involves direct exploration analysis and description of a particular phenomenon and it enables the researcher to conduct an in-depth investigation on the study variables. Descriptive research design was appropriate because the study sought to build a profile about the factors affecting implementation of procurement process in Kisii National Polytechnic.

3.2 Study Area

The study was conducted in Kisii National Polytechnic.

3.3 Target Population

Population is the entire set of units for which the study data were used to make inferences (Kothari 2003). Target population defined. The target population will be 80 employees working under procurement department, store keeping, supply operation, transport and the user teams.

3.4 Sample Size and Sampling Procedure

The researcher used complete census and all members were involved in the study. According to Rasco, 1975, a census is appropriate for a small population. Therefore census was used to select all the units for the study. Therefore, the information acquired from the respondents is as below.
<table>
<thead>
<tr>
<th>Groups</th>
<th>Sample size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement officers</td>
<td>14</td>
</tr>
<tr>
<td>Supply Operation</td>
<td>10</td>
</tr>
<tr>
<td>Store keeping</td>
<td>11</td>
</tr>
<tr>
<td>Transport</td>
<td>12</td>
</tr>
<tr>
<td>User Teams</td>
<td>20</td>
</tr>
<tr>
<td>TOTAL</td>
<td>68</td>
</tr>
</tbody>
</table>

Table 3.1: Number of Respondents
3.5 Data Collection Procedure

After receiving the letter of authority, data pertaining to the factors affecting implementation of procurement process in Kisii National Polytechnic was collected by use of a structured questionnaire with closed ended questions to obtain primary data from procurement managers, staffs and employees in 12 days.

3.6 Instrumentation

The study data was obtained from the respondents through questionnaires. Questionnaires were circulated with employees and bath collected. The questionnaires collected on the basis of closed and open ended questions to collect the necessary information. Questionnaires was used to obtain important information about the population.

3.6.1 Validity

The questionnaires allowed the respondents to give their responses in a free environment and help the researcher to gather information that fit the research objectives.

3.6.2 Reliability

Questionnaire was the only way to elicit self-report on the people opinions, attitudes, beliefs and values. The research instruments yield consistent results or data after repeated trials.
3.7 Data Analysis and Presentation

The data were collected, classified, sorted, edited and compiled. Measures of central tendency; mean mode was used to analyze the quantitative data. The data was presented in form of statistical tools like tabulation, percentage, and groups will be used to present the data.
CHAPTER FOUR
DATA ANALYSIS AND INTERPRETATION

4.1 Introduction
The Chapter provides an analysis of the data that was collected from the field in Kisii National Polytechnic to determine factors affecting implementation of procurement processes

4.2 Personal Information

4.2.1 Response Rate
Thirty three respondents participated and response rate was as follows

Table 4.1 Response rate

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responded</td>
<td>30</td>
<td>91%</td>
</tr>
<tr>
<td>Not responded</td>
<td>3</td>
<td>9%</td>
</tr>
<tr>
<td>Total</td>
<td>33</td>
<td>100%</td>
</tr>
</tbody>
</table>

Out of thirty three issued with questionnaires, only thirty (30) respondents representing 91% responded, three (3) procurement staff representing 9% did not respond, they told me that they misplaced the questionnaires. A respondent of 70% and above is very good according to Mugenda and Mugenda (2003) therefore; this percentage was adequate to give reliable results.

4.2.2 Gender
The respondents were asked to indicate their gender to which it turned out that the majority were male at (60%) while the remainder 40% were female. This implies that there is gender disparity at Kisii National Polytechnic should strive to achieve gender parity in management.
Table 4.2 Gender

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>48</td>
<td>60%</td>
</tr>
<tr>
<td>Female</td>
<td>32</td>
<td>40%</td>
</tr>
<tr>
<td>Total</td>
<td>80</td>
<td>100%</td>
</tr>
</tbody>
</table>

4.2.3 Working Period

Table 4.3 working

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 year and below</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>2-4</td>
<td>30</td>
<td>45%</td>
</tr>
<tr>
<td>5 years and Above</td>
<td>50</td>
<td>55%</td>
</tr>
<tr>
<td>Total</td>
<td>80</td>
<td>100%</td>
</tr>
</tbody>
</table>

In terms of the working brackets, the majority (50 personnel) representing 55% said they were aged between 36 and 45 years while another 30 respondents (45%) were aged between 26 and 35 years. Many of them were capable of giving required information on record keeping systems in Kisii National Polytechnic.
4.2.4 Marital Status

Table 4.4 Marital Status

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married</td>
<td>48</td>
<td>60%</td>
</tr>
<tr>
<td>Single</td>
<td>32</td>
<td>40%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>80</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

In terms of their marital status, nearly all the respondents, 48, representing 48% of all the respondents said they were married while the remaining 32 (40%) said that they were single. This implies that the majority of the court clerks at Kisii National Polytechnic were mature enough to give reliable information.

4.2.5 Designation of the Respondents

Table 4.5 Designation of the respondents

<table>
<thead>
<tr>
<th>Designation</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top Management</td>
<td>1</td>
<td>3%</td>
</tr>
<tr>
<td>Middle</td>
<td>21</td>
<td>20%</td>
</tr>
<tr>
<td>Lower</td>
<td>30</td>
<td>47%</td>
</tr>
<tr>
<td>Subordinate</td>
<td>28</td>
<td>30%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>80</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

The study also wanted to know the designation of the respondents. Majority of the respondents (30) representing 47% said that they were in the middle level of management while another 6 of
them said they were in the lower level of management. Two (28) of them said they were subordinates while only 1 of the respondents was at the top level management. This is clear that Kisii National Polytechnic has more middle level employees more than the lower level. It also shows that the top level including the chief magistrates and registrars are few confirming the management structure in the civil service the higher up the ladder the fewer the managers.

4.3 Effective implementation of procurement process

Table 4.6 Rate at which they considered the current implementation of procurement process

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent</td>
<td>4</td>
<td>13.3%</td>
</tr>
<tr>
<td>Good</td>
<td>30</td>
<td>50%</td>
</tr>
<tr>
<td>Don’t know</td>
<td>10</td>
<td>3.3%</td>
</tr>
<tr>
<td>Fair</td>
<td>15</td>
<td>26.7%</td>
</tr>
<tr>
<td>Poor</td>
<td>11</td>
<td>6.6%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>80</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

When asked about the rate at which they considered the current records keeping systems at Kisii Law Courts, majority of the respondents (50%) indicated that it was good while another 8 (26.7%) said that the records keeping was just fair. Four of the respondents rated it excellent while 2 rated it poor. The remainder of the respondents (1) said did not know if there is effective implementation of procurement process in Kisii National Polytechnic
4.4 Procurement Policies

Table 4.7 procurement policies

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree</td>
<td>4</td>
<td>13.3%</td>
</tr>
<tr>
<td>Agree</td>
<td>30</td>
<td>40%</td>
</tr>
<tr>
<td>Don’t know</td>
<td>12</td>
<td>16.7%</td>
</tr>
<tr>
<td>Disagree</td>
<td>10</td>
<td>6.7%</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>25</td>
<td>20%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>80</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Respondents, representing the entire workforce at Kisii Law Courts, were also asked about the effect of Government legislation on records keeping to which the majority (12) representing 40% agreed while another 4 (13.3%) strongly agreed that the legislation affected records keeping system. Five (5) of them said they did not know, 2 (6.7%) disagreed while the remaining 6 (20%) said that they strongly disagreed. They document compliance or non-compliance with laws, rules, and procedures. Governments can no longer justify taking action with little or no reference to past performance or future goals.
4.4.1 Inventory Management

When respondents were asked if they were aware inventory management which involves the record keeping systems within an institution of them (22) representing 73.3% said that they were not aware while the remaining 8 respondents (26.6%) said that they were aware. This is a clear indication that the registry needed to do better in informing its clerks on the policies and legislation that governed record keeping in Kisii National Polytechnic.

4.4.2 Supplier Selection

Table 4.10 supplier selection

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree</td>
<td>20</td>
<td>30%</td>
</tr>
<tr>
<td>Agree</td>
<td>36</td>
<td>53.3%</td>
</tr>
<tr>
<td>Don’t know</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Disagree</td>
<td>9</td>
<td>6.7%</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>15</td>
<td>10%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>80</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

When asked whether the policies of the registry affected the way record systems are managed, 53.3% of the respondents agreed while another 30% strongly 9 agreed but 16.7% represented by
(5) respondents disagreed and strongly disagreed that record keeping systems is affected by the policies of the registry. Van der Waldt et al (2002) and Dearstyne (1985) were of the opinion that supplier selection was conducted with an open tender method.

4.5.1 Information and Communication Technology

Table 4.12 Information and Communication Technology

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree</td>
<td>30</td>
<td>46.7%</td>
</tr>
<tr>
<td>Agree</td>
<td>28</td>
<td>30%</td>
</tr>
<tr>
<td>Don’t know</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Disagree</td>
<td>10</td>
<td>10%</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>12</td>
<td>13.3%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>80</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Fourteen (14) respondents strongly agreed that records management at the registry was affected by the application of Information and Communication Technology while 9 of them representing 30% agreed to it. However, 3 of them disagreed and a further 4 strongly disagreed. This is a clear impression that information communication and technology affected the application of record keeping in Kisii National Polytechnic.
CHAPTER FIVE
CHALLENGES, RECOMMENDATIONS AND CONCLUSION

5.1 Challenges
Despite of various achievements I got from Kisii National polytechnic, lack of enough finances has been great beast. Thrice involved upkeep funds, typing, printing and photocopying this reports in addition to that, power of disruptions during data entry making it difficult to have full data.

5.2 Recommendations
I would recommend the institution of Kisii national polytechnic to make better arrangements with the procurement board to adjust the procurement ethics education to school tendering committee members in order to serve ultimate objectivity, accountability and non-discrimination.

The institution should also embrace inventory management by keeping accurate records of finished goods and information channels.

Under supply management, the institution should enhance good appraisal technique, good supplier relationship and good performance rating method.

Lastly, I recommend the information communication technology should be affirmed because it plays a great role towards supporting adoption of centralized procurement system in public learning institutions.

5.3 Conclusion
The field attachment has been a great success despite of few challenges faced. The Kisii national polytechnic enabled me to conduct and appreciate employed implementation of procurement processes and allowed me to outlook their roles from their employees to fulfill my research to gain advanced procurement within learning institutions in Kenya.
REFERENCE


APPENDICES

APPENDIX I: BUDGET

The following is a budget proposal of the total amount of money to be spent

<table>
<thead>
<tr>
<th>ITEM/ACTIVITY</th>
<th>ESTIMATED COSTS(KSH)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stationery</td>
<td>1,000</td>
</tr>
<tr>
<td>Printing/photocopying</td>
<td>3,500</td>
</tr>
<tr>
<td>Transport</td>
<td>1,000</td>
</tr>
<tr>
<td>Binding</td>
<td>1,500</td>
</tr>
<tr>
<td>Data analysis</td>
<td>4,500</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>5,000</td>
</tr>
<tr>
<td><strong>TOTAL COST</strong></td>
<td><strong>15,500</strong></td>
</tr>
</tbody>
</table>
APPENDIX II: TIME SCHEDULE

The research was took approximately 12 days.

<table>
<thead>
<tr>
<th>Phase</th>
<th>Description</th>
<th>Number of weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1   2   3   4   5   6   7   8</td>
</tr>
<tr>
<td>1</td>
<td>Data collection</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Data analysis</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Result Writing</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Compilation and presentation</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX III: LETTER OF AUTHORITY

KIPRONO COLLINS
P.O BOX 22
SOTIK
20th JULY 2017

THE PRINCIPAL
THE KISII NATIONAL POLYTECHNIC
P.O BOX 222 –40200
KISII

Dear Sir/Madam

RE: REQUEST TO CONDUCT A RESEARCH IN YOUR INSTITUTION

I am a student at Kisii University undertaking Diploma in Procurement and Logistics. I am currently carrying out a research entitled AN ASSESSMENT OF FACTORS AFFECTING IMPLEMENTATION OF PROCUREMENT PROCESS IN PUBLIC LEARNING INSTITUTIONS. I am requesting you to allow me to carry out a study within your institution.

I believe my application will be considered favorably.

Yours faithfully,

Kiprono Collins

CB05/10481/15
APPENDIX IV: QUESTIONNAIRE

This questionnaire was given to respondents only. Information gathered from the form was strictly treated confidential and only meant for the purpose of this study. You are requested to be sincere when giving out the information.

SECTION A: BACKGROUND INFORMATION

1. What is your gender?
   - Male [ ]
   - Female [ ]

2. What is your area of work?
   - Store keeping [ ]
   - Procurement [ ]
   - Supply operation [ ]
   - Transport [ ]

3. For how long have you worked in this Kisii National Polytechnic?
   - Below 1 year [ ]
   - 2 – 4 years [ ]
   - More than 5 years [ ]

SECTION B: IMPLEMENTATION OF PROCUREMENT PROCESS

1. Are there any implementations of procurement process in this institution of Kisii national polytechnic?
   - Yes [ ]
2. To what extent do this implementation of procurement process used in Kisii national polytechnic?

<table>
<thead>
<tr>
<th>Implementation of procurement process</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adoption to Act 2005</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tender reward</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SECTION C: PROCUREMENT POLICIES

1. Does Kisii national polytechnic have policies that govern procurement performance?

   Yes [ ]
   
   No [ ]

2. To what extent do you agree that the institution sticks to these policies when carrying out procurement performance?

<table>
<thead>
<tr>
<th>Procurement policies</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supplier selection</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Award of tender</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SECTION D: INVENTORY MANAGEMENT

1. Do the roles of inventory management enhance performance of procurement in Kisii national polytechnic?
   
   Yes [ ]
   
   No [ ]

2. To what extent do you agree that the roles of inventory management enhance procurement process in Kisii national polytechnic?

<table>
<thead>
<tr>
<th>Roles of inventory management</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Maintenance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SECTION E: SUPPLIER SELECTION

1. Are there any methods applicable in selecting suppliers?
   
   Yes [ ]
   
   No [ ]

2. To what extent the methods of selection of supplier are induced in Kisii national polytechnic?
### Selection of Supplier

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

### Open Tender Method

### Closed Tender Method

---

### SECTION E: INFORMATION TECHNOLOGY

1. Does the institution assess information technology in implementation of procurement process?

   - Yes [ ]
   - No [ ]

2. To what extent do you agree that Kisii national polytechnic adhere to the information communication technology in implementation of procurement process?

<table>
<thead>
<tr>
<th>Information Communication Technology</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased procurement system</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>IT experts</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

44