

**DETERMINANTS OF PUBLIC PROCUREMENT AND PERFORMANCE OF
MEDICAL TRAINING COLLEGES IN KENYA.**

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2020

DECLARATION

Declaration by the Student

This project is my original work and has not been submitted for a degree in any other University or academic institution

Signature.....

Date

Ngari Ng'endo Janet

MBA/14/00108/3/2018

Declaration by the Supervisor

This project has been presented for examination with my approval as the University Supervisor.

Signature.....

Date

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DEDICATION

This project is dedicated to my doting family, for their enduring support and compassion when I was out to write the project. Stephen, Grace and Esther I shall forever be grateful. To my parents: mom and late dad, for their tenacity on me to further my education and their efforts to inculcate values of discipline and hard work that laid a strong footing to my academic journey.

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ABSTRACT

Public procurement uses a significant proportion of tax payer's money hence it is necessary for governments to ensure public procurement process are efficient while observing high standards for quality service delivery and safeguard of public interest. Thus, this study was set out to establish the determinants of public procurement in Tertiary institutions in Kenya with a specialized focus of Kenya Medical Training College. Specific objectives were to: determine procurement planning influence on performance of public procurement; establish influence of information technology on public procurement performance; finding out political influence on public procurement performance and assess influence of staff competence on performance of public procurement. This study adopted a descriptive research design so as to gather information from demographic groups; and to lay emphasis on determining the level of frequency with which variables could be expressed or the extent which variables co-varied. The study's target population was 285 heads of procurement, finance officers and their assistants at KMTC. Size of the sample constituted of 166 respondents who were selected with the help of a stratified random sampling approach. The study used primary sources of data that was collected using semi-structured questionnaires having both open-ended and closed questions. Questionnaires were administered to the respondents using a 'drop and pick' method at an agreed time with the researcher. Data was analyzed using quantitative analysis methods namely, descriptive analysis and inferential analysis. Under descriptive statistics, mean and standard deviation were utilized to summarize the pattern of variables while regression analysis was utilized to test hypothesis and associations between variables. Statistical Package for Social Sciences (SPSS) was utilized for data analysis. Qualitative data was analyzed using content analysis. Data was presented in form of graphs, tables and pie-charts followed by prose interpretation of findings. The study found that information technology, procurement planning and staff competence were significantly linked to performance. However, political influence was insignificantly linked to procurement performance. The coefficient of determination was satisfactory (56.3%) and overall regression model significant since its p-value was below 5% (0.000). Correlation results established that information technology and procurement planning were strongly correlated to procurement performance while staff competence and political influence were moderately and weakly correlated to procurement performance. The study recommends the need to continue investing in technological innovations and integrating procurement systems. These technologies should be integrated with business processes and supply chain channels to lower cost and enhance efficiency. There is need for public organizations to sponsor their staff for development and training programs to improve their skills and boost their efficiency and creativity in their work. Also, public organizations should institute plans to ensure that funds for procurement can be channeled through effective methods that facilitates efficient delivery of goods, services and works.

ABBREVIATIONS AND ACRONYMS

BSC	Balanced Scorecard
CBA	Cost Benefit Analysis
CBD	Central Business District
GDP	Gross domestic product
ICT	Information Communication Technology
IT	Information Technology
KMTC	Kenya Medical Training College
KPI	Key Performance Indicators
OP	Operational Performance
POCT	Purchase Order Cycle Time
PP	Public Procurement
PPP	Public Procurement Performance
PPRA	Public Procurement Regulatory Authority
PV	Public Value
RT	Resource Dependency Theory
SNT	Social Network Theory
TCET	Transaction Cost Economics Theory
UK	United Kingdom
USA	United States of America

OPERATIONAL DEFINITION OF TERMS

Public procurement (PP)	Purchase by government or state-owned enterprises of products, services and works. It is a process through which the government purchases products, services and works so as to perform its functions and maximize on public value/welfare.
Public Procurement Performance (PPP)	Level of efficiency and effectiveness of actions in managing public procurement function
Procurement Planning	A process that used to identify consolidate the requirements as well as determine the time for procurement with the objective of ensuring that the requirements are ready when they are needed. An appropriate procurement plan describes the entire process of identifying and selecting suppliers/consultants.
Information Technology	Utilization of computers to store, repossess and manipulate information. IT is considered as a subset of Information and communications technology (ICT). Use of information technology in procurement entails automating the entire process of procurement from when the organisation makes a purchase to the time the product or service is delivered to the organisation.
Political influence	Activities that are associated to decision making in power relations among people for instance resource distribution or status. External interference from politicians/political class on key procurement decisions in order to serve their interests through violating procurement laws of favoritism
Staff competence	How employees conduct themselves and their well-defined technical skills that greatly impact on organization's performance. Procurement professionals are bestowed with a very critical role and their competence is important towards achieving efficiency and effectiveness in procurement

CHAPTER ONE

INTRODUCTION

1.0 Introduction

This chapter presents study background that covers; global perspective, regional perspective and local perspectives on public procurement. It also covers the concepts of; public procurement and public procurement performance, Profile of Kenya Medical Training College, problem statement, study objectives, research questions, significance, limitations and scope of the study.

1.1 Background of the Study

An effective procurement system ensures minimal leakages from the system as possible (Beh, 2009). The government procurement system is part of this conversion process, from the allocation of funds to implementation of projects. Thus, the procurement system is under scrutiny of different stakeholders (Walker & Phillips, 2009). Some of the concerns that have been raised by the public in the quest to ensure public funds are properly managed and wastage of public funds kept to a minimum include accountability, transparency, corruption, integrity and cronyism. Nonetheless, weaknesses exist in the system that includes failure to buy products in the right quantities and at the right specifications and prices, leading to higher ownership costs, inefficient and ineffective procurement process (Hamza, Gerbi & Ali, 2017). These results to delayed cycle times, opaqueness and ambiguity in the procurement process leading to leakages, corruption and inadequate infrastructure to facilitate procurement systems and processes. Procurement is important to organisations and its strategies have become part of business success. Hence, there is need for organisations to give emphasis on the strategic factors that affect public procurement performance (Flynn, 2018).

The major problem facing public procurement globally is wasteful government spending for paying of public services and goods. In a study conducted by Garson (2014), it was established that huge amounts of money were spent in public procurement hence the need for accountability since its public funds. Also, the State of South Carolina in the U.S abandoned its system of e-procurement on June 2002 and most of the pilot projects were closed down in Massachusetts, Indiana and Michigan because of lack of accountability and transparency of public funds (Shaw, 2010). Most parts of Europe particularly United Kingdom, Ministry of Defense reported cases of inability to achieve target savings from e-procurement services after a duration of three years (Slack & Brandon-Jones, 2018).

The major problem was limited capacity to integrate procurement order data into financial systems of control, this was important towards successful implementation of e-procurement as revealed by Croom and Brandon-Jones (2005). In Denmark, Herinksen and Mahnke (2005) found that structural political problems that were associated to general decentralization hindered central process of procurement through public e-procurement portal (PePP). A report by the United States Congress, the Commission of Government Procurement indicated that the extent of government outlay on procurement was alarming on public goods and services due to inadequate accountability for funds allocated on public projects (Federal Acquisition Institute, 1999).

World Bank has pointed out for major objectives of public procurement of loan funded projects; it stipulates that the loan should be used for buying goods and services that are specifically meant for the project. The need to ensure a fair and just competition among qualified bidders from World Bank eligible economies and maintaining integrity and encouraging development of local contractors and manufacturers through enabling local buyers to develop preferences for local manufacturers (Maurer, 2004). Shaw (2010) indicates that public procurement is area marred by corruption and wastage of public resources for example, U.S government lost huge revenues in the District of Columbia through disposal of used emergency vehicles at lower prices during auctions ran by inexperienced staffs. In duration of 2 and a half years, the District of Columbia sold out 11 fire trucks for \$. 3,125, however the same vehicle (model and make) market prices was \$3,609, this was a sign of entrenched bribery and corruption in governments contracts (Nakamura, 2004).

The key determinants of public procurement discussed in this study include procurement planning, information technology, political influence and staff competence. Procurement planning is a process of identifying and choosing suppliers (Svidronova & Mikus, 2015). It also entails determining the time lead time with the objective of ensuring timely delivery of goods and services. Use of information technology in procurement entails automating the whole process of procurement from when the firm makes an order to the time that the service or product is delivered to the firm. Svidronova and Mikus (2015) indicate that information is effectively managed and utilized by teams to make procurement decisions. Political influence is any form of external pressures from politicians or political leaders to influence procurement decisions in order to favour them or give them favors over bidders.

Staff competence is technical skills and knowledge that enable procurement staff to execute their procurement functions efficiently and make accurate decisions (Sreejesh, Mohapatra & Anusree, 2014). Asante (2017) did a study on factors that affect public procurement performance at Kintampo Municipal Assembly. The study utilized a purely qualitative approach where the sample size included five respondents that were key study informants. Analysis was executed through content analysis and transcription of responses on the interview guide into themes. Findings established that lack of skills, weak institutional structures and political conflicts, failure to implement policies and laws were critical factors that hindered procurement performance in public sector in Ghana. Kabega, Kule and Mbera (2016) assessed effect of procurement practices on project performance of tertiary colleges in Rwanda. The study utilized a descriptive design in a population of 45 senior procurement officers in Bugesera District office. Primary data was collected using questionnaires and analysis was done using descriptive statistics and Spearman's rank correlation. The results revealed that technology, staff competencies and regulatory framework were the main factors that affected project performance. It was further established that there was a significant relationship between procurement planning and project performance of tertiary colleges.

Anane and Kwarteng (2019) delved the factors that affect procurement performance of technical universities in Ghana. An exploratory design was applied with the help of non-probability sampling methods to choose 120 participants. Primary sources of data were gathered using closed questionnaires and analysis was achieved using descriptive and inferential statistics, the findings established that procurement planning, regulatory framework, staff competence and ICT influenced procurement performance. These factors were found to have a significant relationship with procurement performance. Bekele (2015) did a study on the factors that affect procurement performance of public higher education institutions at Jimma University in Ethiopia. A study was done using a purposeful sampling approach to select the study applicants. The size of the sample involved 257 respondents from both administrative and academic staff who worked at management levels. Structured form of questionnaires and interviews were utilized to collect primary data and quantitative type of data analysis was utilized, these included descriptive and inferential statistics. Findings disclosed that procurement planning, process, organizational structure, staff competence and information technology significantly led to performance of procurement.

Wahu, Namusonge, Mungai and Chilion (2017) studied the factors that affect performance of procurement function in public secondary school. A case study form of design was applied in a in 45 schools in Gatundu South District and primary type of data was collected using questionnaires. Analysis was done using descriptive statistics and the results established that legal framework and competitive bidding were the key factors that affected procurement functions of public secondary school. Wanyonyi and Muturi (2015) studied factors that affect performance of procurement function in public technical training institutions in Kisumu County in Kenya. The study utilized a descriptive survey in a sample of 35 technical training institutions and questionnaires were utilized to collect primary data. Analysis was done using quantitative analysis both descriptive and inferential statistics and the results revealed that staff competence, ethics and information technology contributed greatly on performance of procurement function.

Nzau and Njeru (2014) delved the factors that affect performance of procurement of public institutions of higher learning in Nairobi County. A cross-sectional kind of research design was used in a population of 166 procurement staff that worked in procurement departments. These categories of population had been drawn from three of the four main public universities in Nairobi County namely University of Nairobi, Kenyatta and Technical Universities. A stratified sampling method was adopted whereby the target group was employees who worked in procurement departments. Questionnaires were utilized for data collection and analysis was executed using descriptive statistics and regression analysis and the results depicted that procurement plans and top management support made a significant contribution to public procurement performance. Okong'o and Muturi (2017) examined the factors affecting performance of public procurement in public institutions in Kisii County. A descriptive research design was implemented and a target population of 214, who consisted of users of public procurement departments and suppliers in Kisii County. A survey questionnaire was administered to collect primary data from a sample of 54 respondents, secondary sources of data were also used. Analysis was executed using descriptive statistics and regression analysis. Findings depict that many public institutions comprise of procurement plans prepared annually to boost procurement performance. The study has further recommended that to ensure efficiency in public procurement institutions, National Treasury needs to sponsor periodic training courses on public procurement, procurement planning, and compliance with procurement laws, competent staff and adequate allocation of resources.

1.1.1 Public Procurement in Kenya

In an attempt to address the public procurement the government has undertaken various initiatives

First initiatives in public procurement systems are:

a) Pre-independence set up

In` **1959** there was well defined procurement system. The supplies and transport department existed for the entire government under the ministry of works. Treasury provided a vote for each ministry and this vote was used to order goods and supplies by the ministries. In **1960** financial regulations were issued by the treasury for the purposes of providing common user services to the ministries. To date the supplies branch of the ministry of roads still operates under these regulations. Market research, inspection of materials and central tender board were established and were responsible for the procurement and award and they had three sections namely: The local, he overseas, countrywide contracts. . (PPDA) 2005

The chief store keeper was appointed the chairman and members were drawn from various ministries at the level of assistant secretary or higher. The secretariat was the responsibility of the officers in the purchasing division of the ministry of works, the central tender board (CTB) has since undergone many changes over the years in its location, format, structure and its responsibilities. At pre-independence the government organization was small and therefore procurement and supplies was centralized and divided into countrywide contract and overseas. . (PPDA) 2005

b) Post independence set up

The supplies services in Kenya were centralized at the ministry of works. The services covered purchasing and storage was headed by the chief procurement officer and the chief store keeper respectively. The chief store keeper had the responsibility of controlling all the common user items in the government and serving all the government ministries and departments with both the allocated and unallocated stores.

Its important to note that prior to **1974** public procurement was largely done by the crown agents on behalf of the government .This is mainly because the local sources were inadequate. However, respective ministries assumed the role and function of procurement of goods and services. In **1976** the East African community developed the guidelines under the east African supplies manual. This replaced the function of the Crown agents and it was used for all the procurements. With the collapse of the East African community

the Kenya government developed its own guidelines. Procurement supplies guide of 1978 was issued and was used alongside the east African manual.

The first major shift came in **1979** when the treasury through another circular removed the secretariat from the ministry of works to the treasury as well as the chairmanship but the membership remained at the inter-ministerial but the level was raised to undersecretary. . (PPDA) 2005

In **1980** the central tender board was transferred from treasury to the office of the president and placed under the cabinet affairs and the reunion of the central tender board and supplies branch were in the same ministry once again. The role played by the two independent departments was greatly boosted by the fact that they were now both answerable to one accounting officer and more important to one in charge of cabinet affairs. . (PPDA) 2005

In **1989** there was government restructuring. Central tender board and supplies branch were separated with the central tender board going back to treasury and the supplies branch returning to the ministry of works. This was the beginning of the major changes that were to follow. The membership level was elevated to the level of deputy secretary. The chairmanship was drawn from the private sector with the secretary being the finance secretary. . (PPDA) 2005

In **1999** the review of the country's public procurement system was undertaken and established weaknesses.-No uniform procurement system for the public sector as whole. The lack of sanctions or penalties against persons who breach regulations other than the internal disciplinary action. Consequently application of the rules was not strictly adhered to and many of the norms were not followed-Supplies manual didn't cover the procurement of works. -Dispute settlement mechanisms relating to the award procedure were weak and unreliable for ensuring fairness, transparency and accountability. -records of procurement transactions in many cases were found to be inaccurate or incomplete or absent which led to suspicious of dishonesty dealing at the tender board. -the system and other institutional weaknesses that not only undermine its capacity to carry out its mandate effectively but also led to the public perception that the public sector was not getting maximum value for money spent on procurement. . (PPDA) 2005

In **2001** the central tender board was done away with and its roles given to the procuring entity. The exchequer and the public audit Regulations were developed and issued in 2001 which created the public procurement directorate and the public procurement

complaints review and appeal board. This was the far reaching effort by government in an effort to provide a legal framework for the regulation of public procurement. The ministry of finance was charged with the responsibility of issuing guidelines and overseeing procurement processes. However, due to numerous and conflicting circulars from the ministry procurement was decentralized to various ministries. These two institutions created under the 2001 regulation though largely independent in carrying out the activities had been operating as departments in the ministry of finance on which they received for staff, facilities and funding. A task force was formed to undertake the work in consultation with the government, developing partners and the private sector. A bill emanated to the enactment of the public procurement and disposal act 2005. This legal framework provides for an efficient system for the procurement of goods, services, works and the disposal of stores and equipment. To date this is the legal framework that regulates public procurement. This act and regulations became operational on 1st of January 2007. (PPDA) 2005

According to Ameyaw, Mensah and Osei-Tutu (2012) Public Procurement (PP) can be defined as a government function that entails decisions on services which they deliver to local authorities and communities that they serve (Girth, Hefetz, Johnston & Warner, 2012). Public procurement involves government purchase and state-owned enterprises of goods, services and works. As public procurement includes a significant percentage of the tax payer's money, governments are required to conduct public procurement efficiently while maintaining high standards to ensure quality service delivery and protection of public interest. The only way public procurement can be beneficial to all the stakeholders is when it is effective. For instance, the public sector in the UK spends over £150 billion a year on goods and services necessary to deliver public services (Knight, Harland, Telgen, Thai, Callender & McKen, 2012). Hence the need to maintain efficient and effective public procurement systems and processes to minimize waste and improve ensure value for goods and services delivered. By reducing bottlenecks, combating corruption, and building capacity in procurement, this helps governments to maximize the buying power of their budgets and improve quality of service delivery to their citizens. Competitive and transparent public procurement systems are therefore a key element to achieving sustainable development and more prosperous societies (Walker & Phillips, 2009).

1.1.2 Public Procurement Performance

Public procurement performance can be defined as the level of efficiency and effectiveness of actions in managing the public procurement function (Neely, 2005). There are various factors that should be considered when measuring public procurement performance namely personnel, management, procedures, policies, and information system (Patrucco, Luzzini & Ronchi, 2016). Measuring public procurement performance is a vital role of the firm particularly in supply chain in case of an economic decline. Procurement not only comprises of acquisition of goods and services through the purchasing department but it also involves responsibility to explore and formulate strategies that integrate the mission and objectives of the firm. For a performance measurement system to be considered as a useful management process, it should act as a mechanism that allows assessment to be made, through providing useful information and detecting problems, and allow judgement against certain predetermined criteria to be performed. (Walker & Phillips, 2009).

More importantly, the system should be reviewed and improved as an ongoing process (Redges, 2012). Some of the performance measurement systems are utilized as reporting mechanisms while other systems are applied to control the performance of products, employees and other resources in the organisation. Performance measurement systems provide (quality) information to decision makers to assist in determining whether the programs are succeeding or failing.

According to OECD.org, 2019, key among the measurement systems used in measuring public procurement is the MAPS. The Methodology for Assessing Procurement Systems (MAPS) was initially developed in 2003/2004 as a contribution to the collective efforts of many stakeholders to assess and improve public procurement systems by providing a common tool to analyses information on key aspects of any system. MAPS has been widely used to assess the quality and effectiveness of public procurement systems and, based on the identified strengths and weaknesses, to develop strategies and implement reforms. Methods of public procurement systems evaluate how well Public Procurement systems work. It is organized into four pillars namely: Legal, regulatory and policy framework which has the following indicators: principles and applicable obligations, implementing regulations and tools, sustainable development of the country and implementation and international obligations. Institution framework and management capacity: integration of procurement system with public financial management system,

regulatory function, clearly defined mandates, an effective information system, and stable capacity. Procurement operations and market practices: realizing set goals, public procurement market is fully functioning. Accountability, integrity and transparency of the public procurement system, strengthen integrity in public procurement, proper control of audit systems, efficient and effective mechanisms, ethics and anti-corruptions measures (Assetova, Kubeyev & Kizdarbekova, 2018).

Performance can be defined as the firm's ability to maximize on its existing resources such as human capital and knowledge to accomplish its set goals and objectives. There exist three categories of firm performance measurement namely, performance prism, performance measurement matrix as well as the Balanced Score Card (BSC). Neely, Mills and Platts (2001) opine that performance prism emphasized on stakeholder orientation. This system of performance measurement prompts the decision makers to identify all organization needs. The matrix is the second measure of performance advanced by Keegan, Eiler and Jones (2011), with similarities of the prism. Its activities are categorized in form of a matrix. Balanced Score Card (BSC) is the third system of measurement that was postulated by Kaplan and Norton (2009), they indicated that BSC uses four perspectives to assess performance in the organization, these include financial, learning and growth, internal business process and the customer. BSC can be utilized to align business strategy and lower costs this improves internal operations of the organization and cultivates innovation through use of information technology (Kleijnen & Smits, 2003; Bhagwat & Sharma, 2007). When the correct tools are designed and performance is assessed, it is easy to tell whether the firm is making the right progress in realizing set goals and targets or not.

The key performance indicators (KPI) for measuring public procurement performance are many. However, this study will look at the following measures: CBA, OP and PV: CBA is a systematic approach used to compare potential course of actions or evaluate the value against certain costs of a decision or policy. The choice of Cost Benefit Analysis (CBA) as a measure of public procurement performance is because it helps to predict whether the benefits outweigh the costs of a policy in relation to other alternatives. This helps to rank various alternative policies according to their priorities, on the basis of cost-benefit ratio (Boardman, Greenberg, Vining & Weimer, 2017). OP involves measuring the performance of an organization against standard or prescribed indicators of effectiveness, efficiency, and environmental responsibility such as, cycle time, productivity, waste

reduction, and regulatory compliance (Slack & Brandon-Jones, 2018). According to Patrucco et al. (2016) speed as a key component of operational performance seeks to measure how fast the organization can deliver the intended products or services (Arrowsmith & Quinot, 2013).

PV is a means of assessing the achievement of public procurement goals in a balanced way through a greater emphasis on public consultation and the impacts and outcomes of procurement. An analytical framework is proposed to assess the delivery of public procurement policies (Nsiah-Asare & Prempeh, 2016). Value for money is an essential test for procuring entities to justify a procurement outcome. Price alone is not a sound indicator and procuring entities cannot necessarily get the best value for money by accepting the lowest price or bid (Brent, 2007).

1.1.3 Profile of Kenya Medical Training Colleges

Kenya Medical Training College (KMTC) Nairobi City Campus officially started in 1927 with only four students at Kenya Institute of Administration (KIA), Kabete. It's a public middle level medical training institution under Medical Services Ministry. It is located approximately three kilometers towards the Northern side of Nairobi City. In the 90s', it became a semi-independent Government agent by an Act of Parliament, Cap 261, Legal Advertisement No.14, Kenyan Laws.

In 1994, the term Kenya Medical Training College was accepted as the unifying name for the College. The Nairobi based Campus operated under KMTC headquarters up to 2001 when it became independent of its own principal. The institution is standing on a 20-acre piece of land, directly opposite Kenyatta National Hospital, it has more than 41,000 students pursuing medical courses, KMTC contributes significantly to Kenya's health sector and produces over 12,000 graduates annually for both private and public health sectors, this accounts for over 85% of the workforce in the hospital (Kabanya, Karani & Mirie, 2017). This institution is recognized for its highly skilled and competent administrative and teaching staff; the staff are estimated to be more than 2,200. The uniqueness of this college is its national distribution. It has approximately 71 constituent Campuses that are spread through the country as far as Kisumu, Garissa, Lodwar and Loitokitok, the effectiveness of the College in enhancing healthcare so far has been felt in many parts of this country (Nyamai & Mutisya, 2013). It is obvious to find KMTC in

each part of this country deliberated located next to health facilities where students seek out clinical attachment. Currently KMTC has attained rapid growth as one of the biggest medical training institutions in East and Central Africa and beyond offering a wide array of courses, it attracts students from Nigeria, Sudan, Rwanda, Tanzania, Burundi and Uganda. This is attributed to huge support from government, commitment by staff and effective management.

Medium level colleges like KMTC are still reluctant to adopt technology (Asante, 2017). Such situations make it more difficult to award contracts and monitor work progress, instead encourage red-tape and bureaucracy. However, changes in information and communication technology within and between organizations are taking place at a faster pace (Mahmood, 2010). It is therefore important for public institutions like Colleges to keep pace of these changes to remain competitive by investing on information technologies. The rising demand for information dissemination has prompted the need for efficiency in information technology. Many public institutions are investing in information systems such as, electronic data interchange (EDI), enterprise resource planning (ERP), e-procurement and inter-organization systems to boost communication with stakeholders. The use of information systems technology is aimed at enhancing procurement performance (Kabanya et al., 2017).

1.2 Statement of the Problem

Public procurement has undergone tremendous changes reforms 1960 to date, with the enactment of key legislations, regulations and policies. However, a lot of concern has been raised by members of public and development partners on the lack of strategic focus in procurement plans, high level of corruption, conflict of interest, strategic policies and lack of adherence to the currently laid policies (Kokor, 2015; Dza, Fisher & Gapp, 2013). Studies have been conducted on performance of public procurement globally and locally but limited focus has been given on factors affecting public procurement performance in Tertiary institutions. However, there is a general consensus that public procurement performance in most public institutions is poor and inefficient (Hamza, Gerbi & Ali, 2017). Further, it has been established that procurement system is marred by incompetence, inefficiency, negligence and misconduct (Bekele, 2015; Anane & Kwarteng, 2019), violation of procurement procedures, delayed deliveries and

incompetent procurement personnel (Kabega, Kule & Mbera, 2016; Asante, 2017). Thus, there is a need to ensure that systems of public procurement and processes reduce waste and add value to good and services procured. This might be achieved by first ensuring compliance with procurement rules, ensuring transparency and accountability, fighting corruption and regular training of staff. This will aid governments to exploit their budget's buying power and boost quality of public services (Walker & Phillips, 2009).

Many local studies for example, Gesuka and Namusonge (2013), have dwelt on compliance of public procurement regulations in Kenya. Other studies by (Nzau & Njeru, 2014; Wanyonyi & Muturi, 2015; Okong'o & Muturi, 2017; Wahu et al., 2017) are limited in scope to scope hence, the studies are not exhaustive. Also, the combination of factors affecting PPP is different, many studies have largely ignored factors such as political influence and staff competence that the current study is considering.

It is against this backdrop that this study found it necessary to establish the determinants of public procurement in tertiary institutions in Kenya with a specific focus on Kenya Medical Training Colleges. Thus, there is a need to ensure that systems of public procurement and processes reduce waste and add value to good and services procured. This might be achieved by first ensuring compliance with procurement rules, ensuring transparency and accountability, fighting corruption and regular training of staff. This will aid governments to exploit their budget's buying power and boost quality of public services (Walker & Phillips, 2009).

1.3 Objectives of the Study

1.3.1 General Objective

The general objective of this study was to establish the determinants of public procurement and performance of Medical Training Colleges in Kenya.

1.3.2 Specific Objectives

The specific objectives of the study were to:

- i. To determine the influence of procurement planning on public procurement and performance of Medical Training Colleges in Kenya.
- ii. To establish the influence of information technology on public procurement and performance of Medical Training Colleges in Kenya.

- iii. To find out political influence on public procurement and performance of Medical Training Colleges in Kenya.
- iv. To examine the influence of staff competence on public procurement and performance of Medical Training Colleges in Kenya.

1.4 Research Questions

- i. What is the influence of procurement planning on public procurement and performance of Medical Training Colleges in Kenya?
- ii. How does information technology influence public procurement and performance of Medical Training Colleges in Kenya?
- iii. To what extent does political factors public procurement and performance of Medical Training Colleges in Kenya?
- iv. What is the influence of staff competence on public procurement and performance of Medical Training Colleges in Kenya?

1.5 Significance

Scholars and researchers will find this study useful in deepening their understanding on the theories that guided the study, relevance and application. Researchers interested in this field of study utilized the findings as basis for future research. This study also provided the scholars with a background to investigate challenges that face public institutions in implementing public procurement and ways to counter these challenges. The findings obtained from this study added to the scarce evidence available on public procurement in the Kenyan setting.

Other organizations will find this research useful. It informed them of the key determinants of public procurement and how they relate with public procurement performance. The study equipped public institutions with knowledge on public procurement and its applicability in procurement decisions. Procurement practitioners also understood the challenges that hinder public procurement performance and the indicators of procurement performance that they could be applied to accomplish efficiency and value addition.

Findings obtained from this study will be of value to the policy makers in particular Public Procurement Regulatory Authority in setting policies that motivated public institutions to adopt key procurement determinants. This helped public procurement professionals to craft policies that ensured uniform adoption of public procurement practices by public institutions. Procurement professionals and practitioners were able to make timely decisions that enhance efficiency and effectiveness in public procurement. They were able to identify the factors that hindered public procurement performance in Tertiary institutions and ways to counter these challenges and ensure public procurement was efficient and effective in delivery of public services.

1.6 Scope of the Study

The study was carried out to determine the public procurement practices and performance of medical training colleges in Kenya, with specific reference to 71 medical colleges in all counties in Kenya. The study was guided by the following variables; procurement planning, information technology, political leadership and staff competence. The unit of analysis was the 71 colleges in the five counties namely; Nairobi, Kisumu, Kiambu, Mombasa and Kisii. The unit of observation was the procurement officers, finance officers and heads of respective medical colleges who are involved in the running and operations of colleges.

1.7 Chapter Summary

The chapter discussed the following subsections: background to the study; demonstrating how independent variables affect the dependent variable, problem statement, purpose of the study, research questions, importance of the study, scope of the study and definition of terms. Chapter two covered a conceptual and empirical discussion of the literature review in line with the research objective.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

The reviewed literature is guided by the underlying research objective which is establishing the determinants of public procurement in Tertiary institutions in Kenya. The literature review is aimed at enabling the reader to deepen his or her understanding of extant research and debates in this field. The chapter further discusses theories supporting this research, empirical review on the factors affecting public procurement performance, summary and the research gaps, conceptual framework, variables operationalization and the summary of the chapter.

2.1 Theoretical Literature Review

In this section, the study provided a discussion of theories anchoring the study. The literature reviewed the background of the key constructs in the study and supported the investigation into the research questions, as suggested in chapter one. With increasing literature, it emerged that the focus in the concepts of issues, opportunities, challenges and public procurement performance was geared towards making meaning in improving the firm's efficiency and effectiveness (Hearnshaw & Wilson, 2013). The anchor theory was TCET since public procurement revolves around costs incurred by government in provision of goods and services via the market as opposed to government producing the goods itself (Grover & Malhotra, 2003). Before government engages in a transaction, it is necessary to identify the party to transact with, negotiations need to be done in order to draw a contract and ensure that the contract terms are complied with (Ketchen & Hult, 2007). The theory authorities like Coase have claimed that failure to factor in transaction costs makes it impossible to properly understand how the economic system works as well as have a solid basis for establishing economic policies. The main theory of this research is Social Network Theory; this because networks easily share information. The networks are mostly misused in the public sector whereby cartels manipulate tendering processes and award contracts to unqualified suppliers thus hindering competition in public procurement. This has contributed significantly to poor procurement performance (Hearnshaw & Wilson, 2013).

2.1.1 Transaction Cost Economics Theory

The theory of Transaction Cost Economics (TCE) was elaborated by Williamson (1975) based on former concepts developed by Coase (1937). As a branch of the New Institutional Economics, TCE essentially contributes to the question why firms are founded and how they are governed and structured hierarchically. A transaction is defined as the transfer of a pre-product or semi-manufactured product or service from an upstream to a downstream manufacturing stage (David & Han, 2004). Furthermore, transaction costs may also integrate transaction risks that other parties break an engagement agreed upon (Grover & Malhotra, 2003). This study considers transaction costs only as costs of the types of information, communication and coordination. Costs can be measured as employee efforts including travelling costs. For example, when a procurement manager spends one week abroad evaluating the supplier, his costs of labour and travelling expenses will be allocated to the transaction costs of the corresponding buyer-supplier relationship. Transaction costs form part of the total cost of ownership (TCO) of a purchased good.

TCO comprises of the purchase price, logistics and transport costs, transaction costs, costs of capital lockup and depreciations, and costs associated with risk. Risks associated with public procurement are unpredictable and their outcomes are based on probability (Ketokivi & Mahoney, 2016). Predictable performance outcomes are not considered risky. For instance, change of a local supplier in Switzerland to an offshore supplier in China will eventually increase the delivery lead time from one week to an expected value of five weeks. The lead time of five weeks is associated to subsequent capital lockup costs for higher safety stocks and increased value of goods-in-transit. However, in case of damaged shipments, lead time may increase to 15 weeks; this can be considered through quantifying associated costs of risks for unpredicted incident such as costs of information, communication and coordination. Examples of these costs include processes of searching, initiation, negotiation, execution, adaptation and controlling (Rindfleisch & Heide, 1997). TCE can be used to assess the right decisions for example, investment in technology that can build long-term capabilities in the public sector procurement and impact positively on performance. The theory also affirms the essence of making decisions to purchase and adopt an approach that consider several attributes. It is premised on minimizing hazards of opportunism in the cost-efficient way for all the transactions.

Transactions are handled in such a way as to reduce costs involved. This relates to transaction governance; the mode of vertical integration across value-adding stages. Due to challenges in measuring and observing transaction costs, analysts have to rely on estimations of reduced-form relationships between observed traits and organisational form. Secondly, it is not easy to determine the transactional costs of procuring goods and services without additional information since the magnitude of transaction cost differentials and its effect on performance cannot be determined from standard empirical tests of transaction costs hypotheses (Macher & Richman, 2008).

2.1.2 Resource-Dependence Theory

The resource-dependence theory (RDT) focuses on a set of power relationships based on exchange of resources (Pfeffer & Alison, 1987). It recognizes that companies do not possess all the resources they might require in the process of value-creation, hence will often become dependent on each other (Emerson, 1962; Hunt & Morgan, 1996). The key issue then becomes how organisations manage their power-dependence relationships to maintain their functional and operational requirements (Pfeffer & Salancik, 1978). In this regard, RDT assumes that organisations often form coalitions to increase their power and make other organisations dependent on themselves (Heide, 1994). Resource manipulation and control exertion are the strategies offered by RDT to manage uncertainty and dependence in business transactions. In their argument on the issue of resource dependence in procurement, Ketchen and Hult (2007) highlighted the dissimilar nature of dependence in the traditional and best value supply chains. While traditional procurement tends to behave opportunistically in relation to their power-dependence advantage along the chain, best value procurement exploit dependency as a means of fostering trust and commitment to fulfill procurement requirements (Crook & Combs, 2007).

This indicates a dramatic change in the resource-dependence prediction caused by the realities of contemporary business, such as the need for collaboration. The weakness of this theory is that Pfeffer and Salancik (1978) gave a wide ecological theory of how firms depend on the environment however, the empirical application of the theory is too narrow. Top management can counter dependencies by symbolic responses like absorption as an efficient response strategy. Dependence absorption implies that the firms eliminate the source of its dependence by merger, acquisition and co-optation among others. Hence, most of the studies on resource dependence are centered on merger and acquisitions across the sectors.

This theory further assumes that survival of the firm largely depended on how best the firm interacted with other stakeholders in the environment to acquire resources as opposed to managerial talents and knowledge (Pfeffer & Salancik, 2003). The relevance of this theory is because the organisation can easily gather, modify and effectively use resources much faster than its rivals, this is key to the organization's success. To successfully implement public procurement, state organisations should have the right resources for example, competent staff and technology in order to successfully deliver quality services to the public. In line with the tenets of this theory on scarcity of resources found in the environment, it is worth noting that organisations depend on these resources to survive hence their inability to control these resources could result to uncertainty (Ketchen & Hult, 2007). There is need for public institutions to consider four critical decision points in their supply chain namely make-or-buy, sourcing strategies, contracting decisions and supplier strategy.

2.1.3 Social Network Theory

Jacob Moreno is credited to have postulated this theory from his works: sociograms in 1930s which was aimed at exploring interpersonal relationships. This concept was formalized using mathematical methods in 1950s, this approach started being accepted in behavioral sciences in the 80s. Over the last two decades, this theory has gained traction and its relevance can no longer be over emphasized (Borgatti & Foster, 2003), among operations and production management scholars for example Hearnshaw and Wilson (2013). Central to social network perspective is the idea that social networks are “conduits of valuable information” (Gulati, 1995, p. 623), which otherwise would not have been available to an individual (Lin, 1999). A social network is defined as “a finite set or sets of actors and the relation or relations defined on them” (Wasserman & Faust, 1994, p. 20). The actors (nodes) in social network analysis can represent different levels of any kind of social unit such as individuals, firms, organizations (Borgatti & Li, 2009). The main purpose of social network theory is to explain the consequences of network. Two types of consequences are considered. One type of consequence is referred to as “contagion” in which the key issue is to have a deeper understanding of how networks might create or spread homogeneity for example in attitudes or organisational practices. The other type of consequence, and of more relevance to understanding “insidership”, is “evaluative” and is interested in performance outcomes for network members.

The uniqueness of SNT is that it is based on key influence on performance outcomes for network members, rather than on the attributes of the individual network nodes or members. Thus, for example, firm attributes such as absorptive capacity or managerial capability are not the main data for network analyses (Freeman, White & Romney, 1992). Contrary, the premise behind network theory is how actors (firms) having similar traits perform differently due to influence of network characteristics to which they belong or different positions in similar networks. There are two fundamental axioms of SNT. One axiom is that structure, which is the pattern of relationships between the nodes (or members), matters. The second axiom is that the position within the network matters; that is the set of opportunities and constraints faced by a node is partly determined by the node's location in the network. The majority of network theorizing deals with network ties primarily as flows of information and knowledge (Nsiah-Asare, & Prempeh, 2016).

Here network theory asks how the structural configuration of networks and nodal positions within them generate information and knowledge advantages (or disadvantages) for the networks and/or particular nodes (Giuliani, 2013). Additionally, ties which connect the nodes in a network may be “bonds” without knowledge or information necessarily flowing between the nodes (Borgatti & Li, 2009). The relevance of this theory is that the benefits derived from network features are expressed through the concept of social capital. Social capital, in this context, refers to the actual and potential resources that are embedded and available from the network of relationships that are possessed by an individual or social unit (Nahapiet & Ghoshal, 1998). It is assumed that actors that are doing well are those that are well connected (Burt, 2001). The weakness of this theory is that it is not always the case that these networks provide important information; the networks can also be used to spread negative and untrue information about an organisation (Freeman et al., 1992). This may impact negatively on public procurement performance. To gain from social network, it is essential for the organisation to have a deeper understanding of how these networks spread similar negative information by observation of attitudes and practices and how this information affect performance of public procurement. Government involvement in anti-corruption could help to reduce political influence, public actors willing to comply with the set rules and enforcement can help overcome corruption. In cases where corruption is rampant it is unlikely that the relevant government would participate in anti-corruption strategies since the problem is systemic (Patrucco, Luzzini & Ronchi, 2016).

Also, social and economic relations of politicians as well as regulators have the influence to interfere with the tendering process which might hinder a competitive procurement process and deprive the government value for goods and services delivered, resulting to non-performance of public procurement (Redges, 2012).

2.2 Empirical Literature Review

Empirical research is dependent on observed as well as measured phenomena while at the same time deriving knowledge from actual experience as opposed to belief or theory. The current research is based on the issues discussed below:

2.2.1 Procurement Planning and Public Procurement Performance

Researchers: Willy and Njeru (2014) delved influence of procurement portfolio management on procurement performance of Agricultural Development Corporation in Nairobi. A descriptive survey was utilized and primary data was collected using semi-structured questionnaires in a sample of 65 respondents. Analysis of data was done using descriptive statistics and the findings established existence of a strong and significant linkage among procurement planning and procurement performance. The study further concluded that procurement portfolio, effective management of logistics and compliance with procurement plans positively impacted on procurement performance. Ogwang and Waweru (2017), assessed the influence of procurement planning on performance of Kisumu water and Sewerage Company. The underlying objective of the study was establishing the influence of transparency in procurement in, and procurement requirements on KIWASCO performance. A survey study design was employed in a population of 128 respondents that included procurement officers, heads of departments, middle level managers and supervisors. The study sample involved 57 respondents who were selected through a stratified random sampling approach.

Structured questionnaires were utilized to collect primary data and analysis was executed with the help of descriptive and inferential statistics and the findings established that procurement planning was positively associated with organisational performance. This was revealed by procurement facets like transparency and procurement requirements that recorded a positive association with procurement performance. Odero and Ayub (2017) studied the contribution of procurement practices on procurement performance of public sugar manufacturing firm in Western Kenya.

The research objective was establishing the effect of procurement planning and staff competence on procurement performance in Western Kenya's public sugar manufacturing firms. A descriptive survey type of study design was applied and primary data was gathered using questionnaires from employees working for procurement department. Analysis was executed and the findings revealed that procurement planning was insignificantly and positively linked to procurement performance. On the other hand, staff competence was positively and significantly linked to procurement performance. Kipkemoi (2017) did a study on the effect that procurement practices had on organisational performance in the Public Sector in Kenya. The main study objective was determining how organisational performance was affected by procurement practices in the public sector. This research involved a population of staff working for East African Portland Cement. A descriptive form of research design was adopted and a survey of respondents from finance and procurement departments were interviewed. Data was collected with the help of questionnaires and analysis was done using descriptive statistics and the findings established that managing suppliers' relationships played a significant role towards improving organisational performance.

A study by Salim and Kitheka (2019) on procurement planning and its effect on procurement performance of State Corporations in Mombasa County in Kenya. The specific goal of this research included identification of a need, specialization, budget and cost estimates as well as procurement approaches and their effect on procurement performance. The study adopted a descriptive design and the researcher utilized a stratified random sampling technique to choose a sample of employees to represent the whole population. Target population involved 204 employees at the middle level and senior staff chosen from 34 parastatals in Mombasa County. The size of the sample entailed 135 respondents and primary data was collected using questionnaires. Descriptive statistics and a multivariate type of regression analysis were adopted for data analysis. Results revealed that need for identification in procurement impacted on procurement performance of Parastatals. A conclusion was drawn that procurement budget estimates and costs impacted greatly on procurement performance.

2.2.2 Information Technology and Public Procurement Performance

An investigation by Svidronova and Mikus (2015), involved E-procurement as the ICT innovation in the public services management: case of Slovakia. Through a combination of government reforms together with public administration:

New Public Management, a host of innovations are driven by ICT in the public sector. The research focused on various ICT driven innovations from the perspective of electronic procurement process, which comprises of search, negotiation, sourcing, ordering, and receipt as well as post-purchase review. The study found that ICT enabled creation of tools for organizing, transmitting, storing, and acting on information in digital form in new manner. This contributed to a more transparent and competitive environment where the government operated. Mardia and Namusonge (2016) studied the impact of IT practices on firms' performance of public organizations in Kenya, specifically in JKUAT. The objective of this study was to explore the impact of IT practices on firm performance of public organisations in Kenya. A descriptive survey design was used for the study where the target population comprised of 41 managers and procurement officials of all 8 campuses of JKUAT. A structured questionnaire was used as a tool for data collection, which was administered to 36 procurement officers stationed at JKUAT Juja campus. Administration of questionnaires happened through the process of drop-and-pick-later method to allow the participants ample time to respond to the questions. For clarity, face-to-face interviews were carried out with key informants through the use of an interview guide. To analyze quantitative data, inferential statistics and descriptive statistics were used. The study findings revealed that information technology in procurement was significantly and positively associated with improved organizational performance. It was arrived at a conclusion that technology in procurement is a major contributor to firm's performance as it improves service delivery, effectiveness, efficiency, transparency, and reduction in purchase time. These results are consistent to the study hypothesis which project that information technology would have a significant association with PPP.

In the study conducted by Ndiiri (2016), among the Kenyan county governments the researcher evaluated the extent of implementation of e-procurement with an aim of ascertaining whether there are any limitations when it comes to implementing e-procurement among these governance units and figuring out the existing links between the performance of county governments in Kenya and execution of electronic procurement. This study involved all the 47 county governments in Kenya as the target population. Owing to the fact that the population is relatively small, a census was proposed. A questionnaire was employed for data collection with both open and closed-ended questions. Data analysis was done using descriptive statistics. Main tools utilized comprised of standard deviation, frequency distribution tables, and the mean.

Ms Excel and SPSS served as the main software used for processing data. It was revealed that advertising of tenders through the internet has a significant impact on procurement performance among Kenyan county governments. Furthermore, the study concluded that online shortlisting of tenders by county governments in Kenya has a positive impact on procurement. The study equally arrived at a conclusion that tenders in Kenyan county governments are advertised online, competitive bidding and sourcing exists, and counties employees make requisitions online.

2.2.3 Political Factors and Public Procurement Performance

In the study by Tirefa (2019) explored the factors that affected public procurement performance in Addis Ababa. The research employed a descriptive survey and a purposive and random sampling methods in a sample of 177 respondents (for questionnaires) and interviews with 9 interviewees. Primary source of data was collected via questionnaires and interview guides. Analysis of data was achieved with the help of descriptive and inferential statistics. Findings revealed that political influence was positively and significantly linked to performance of public procurement. It was further uncovered that there lacked proper linkage among budget demands, other factors that inhibited performance of procurement included fraud and corruption. Omanji and Moronge (2018) investigated the influence that procurement practices had on performance of the public sector in Narok County. A descriptive survey research design was adopted in sample size of 196 respondents. Stratified sampling procedure was utilized to choose the respondents and structured questionnaires were administered to collect primary data. A multiple linear regression analysis and descriptive statistics were utilized to analyze data and the outcome proved that political influence made a significant contribution towards performance of procurement. Green purchasing policy was also found to impact on County procurement performance. In their Sandada and Kambarami (2016), on the determinants of public procurement policy compliance requirements in Zimbabwe, they applied a mixed strategy research design. The main goal was assessing the influence of identified factors on compliance towards procurement regulations and performance. Data was gathered from 144 study participants in Harare and analysis was executed using regression and correlation analysis. Results established that political inference meaningfully impacted on compliance and overall performance of procurement. Asante (2017) evaluated the factors that affect procurement performance in the public sector in Kintampo Municipal Council.

A purely qualitative method was applied and interviews were done with 5 interviewees; who were the key study informants. Analysis of data was achieved through content analysis. The findings revealed that performance of procurement was still a night by both private and public sectors. It was uncovered that the main challenged that constrained procurement performance was political interference, lack of strong institutions and incapacity to monitor and implement procurement laws particularly in the public sector. Musau (2015) did a research involving environment factors that affect procurement performance in county governments in Uasin Gishu County. The underlying objective was to establish the contribution of politics on procurement performance in Uasin Gishu County and the role of played by social economic environment on procurement performance of Uasin Gishu County. A cross-sectional survey was employed in a sample of 60 respondents. Administration of questionnaires was done to all the respondents and analysis was done using descriptive statistics and correlation analysis. The findings unraveled that political, legal and socio-economic environments impacted on procurement performance. Influence of politics was apparent through authorization of budgets, violation of procurement laws, politically instigated pressure, compromise from different groups and status quo in public procurement system infrastructure.

2.2.4 Staff Competence and Public Procurement Performance

Odero and Ayub (2017) assessed effects of procurement practices on procurement performance of public sugar manufacturing firms in Western Kenya. The study's specific objective was establishing the effect that staff competence had on performance of procurement of state sugar manufacturing firms. A descriptive survey was employed and questionnaires were utilized to collect primary data. Findings revealed that staff competence was significantly and positively linked to procurement performance. Mrope (2017) explored the contribution of professionalism on performance of procurement function in Tanzanian's public sector. The objective of this research was to analyzing the effect of professionalism on performance of procurement function. A mixer of quantitative and qualitative research methods was utilized to collect data. Target population for the study involved 470 public institutions from which 100 entities comprised of the sample size. The study applied a multi-stage stratified random sampling approach to identify potential respondents. Research findings disclosed that there was a significant relationship between professionalism and performance of public procurement.

The findings further revealed that staff competence by procurement officials played a significant role in procurement decisions and processes. Toroitich, Mburugu and Waweru (2017) delved influence of employee competence towards successful implementation of e-procurement system in a few selected County governments. The research objective was assessing the influence of employee competence towards successful implementation of e-procurement by County governments in Kenya. A descriptive form of research design was employed in a target population of 47 County governments. A sample consisting of 5 county governments was utilized and the selection was done with the help of a simple random sampling approach. Primary sources of data were gathered with the help of questionnaires and it was revealed that employee competence contributed positively towards successful implementation of e-procurement at the grass roots.

2.3 Summary of Research Gaps

It was deduced that studies have been globally and locally in relation to the determinants of public procurement in public institutions. Related studies globally have concentrated on factors that affect procurement performance in the Private Sector for example, (Hamza, Gerbi & Ali, 2017; Flynn, 2018), few others like Flynn (2018) looked at how to measure procurement performance single-handedly. In the region, studies in East Africa for example Emaru (2016) depicted that most researches dwelt on challenges facing public procurement such as integrity, inefficiencies, professionalism, ineffective controls among others. Locally, studies (Wanyonyi & Muturi, 2015) restricted themselves to factors that affect procurement functions while disregarding key determinants of public procurement. Other researchers like Kiromo (2015), have investigated factors affecting procurement and supply chain performance in the context of building construction companies in Kenya but the current study focuses on Tertiary Institutions. Nzau and Njeru (2014) explored the factors that affected procurement performance in Public Universities, the study paid huge concentration on top management support and resource allocation which the current study has blatantly ignored. From the empirical review, key issues have emerged. First, studies lack clarity on the key determinants that affect public procurement. Scholars have dwelt on problems facing public procurement. There is need for an exhaustive study to find out key determinants that affect PPP. Also, it is emerging that in spite of huge resources allocated by government in public procurement, most of the resources are lost to corruption, noncompliance with procurement rules and regulations and political interference.

A clear identification of factors that affect PPP will provide a basis to establish effective ways to minimize wastage, enhance efficiency and ensure compliance with procurement laws, this contribute greatly towards improved PPP.

Table 2.1: Summary of Research Gaps

Author(s)	Area of Study	Methodology	Findings	Knowledge Research gaps	Focus of the Study
Bekele (2015)	Factors affecting PPP of higher institutions of education at Jimma University in Ethiopia.	A purposeful sampling approach was employed to select respondents. Size of the sample was 257 respondents. Questionnaires and interviews were employed to gather primary data, analysis was done achieved using quantitative analysis.	It was revealed that procurement planning, employee competence and organisational structure greatly contributed towards PPP	The study ignored political influence and information technology which are key determinants being considered in this study. Secondly, the study limited itself to one university while the current study is focusing on tertiary colleges.	Focus on Political influence and information technology
Okong'o and Muturi (2017)	Factors that affect PPP in public institutions in Kisii County.	A descriptive type of design was implemented in a population of 214 (officers at procurement departments and suppliers). Data was gathered with the help of questionnaires and analysis was achieved using regression.	The output established that procurement plans were widely utilized by public institutions. Procurement plans was significantly linked to PPP while organisational structure was insignificantly linked to PPP.	The research restricted itself to County governments while the current study focuses on tertiary colleges.	Focus on Tertiary colleges to establish procurement plans.
Wahu <i>et al.</i> (2017)	Factors that influence the performance of procurement function in public secondary schools in Gatundu South District.	A case study type of design was applied in a population of 45 schools and primary data was gathered using questionnaires. Analysis was achieved through descriptive statistics.	Results demonstrated that competitive bidding and legal frameworks widely affected PPP in public secondary schools.	The combination of factors utilized in this study is completely different from the current study. For instance, the study dwells on competitive bidding and procurement laws that the	Focus on Competitive Bidding

				current study has ignored.	
Hamza, Gerbi and Ali (2017)	Factors affecting performance of procurement in Awassa Textile Share Company	A descriptive form of research design was applied in a target population of 40 employees. Questionnaires were utilized to collect primary data sources. Analysis methods involved descriptive and inferential statistics.	A conclusion was drawn that procurement procedure, resource allocation and employee competence contributed significantly towards procurement performance.	The study limited itself to the private sector particularly textile company while the current study focuses on the public sector.	Focus on organizational performance
Salim and Kitheka (2019)	Influence of procurement planning on performance of Parastatals in Mombasa County in Kenya.	A descriptive survey design was applied with the help of a stratified sampling technique. A population of 204 staff was utilized and a sample size of 135 respondents. Questionnaires were utilized to collect data and analysis was executed using a multivariant form of regression and descriptive statistics.	Findings revealed that identification need in procurement process contributed towards PP. Both costs and budget estimates played an instrumental role in PP.	The study focused on procurement planning singlehandedly and its effect procurement performance. The current considers determinants of public procurement.	Focus on influence of procurement planning

2.4 Conceptual Framework

The study seeks to investigate the determinants of public procurement in Tertiary institutions in Kenya. The independent study variables include Procurement Planning, Information Technology, Political Influence and Staff Competence while the dependent variable is Public Procurement Performance. The study is seeking to establish existing relationship between the independent and dependent variables.

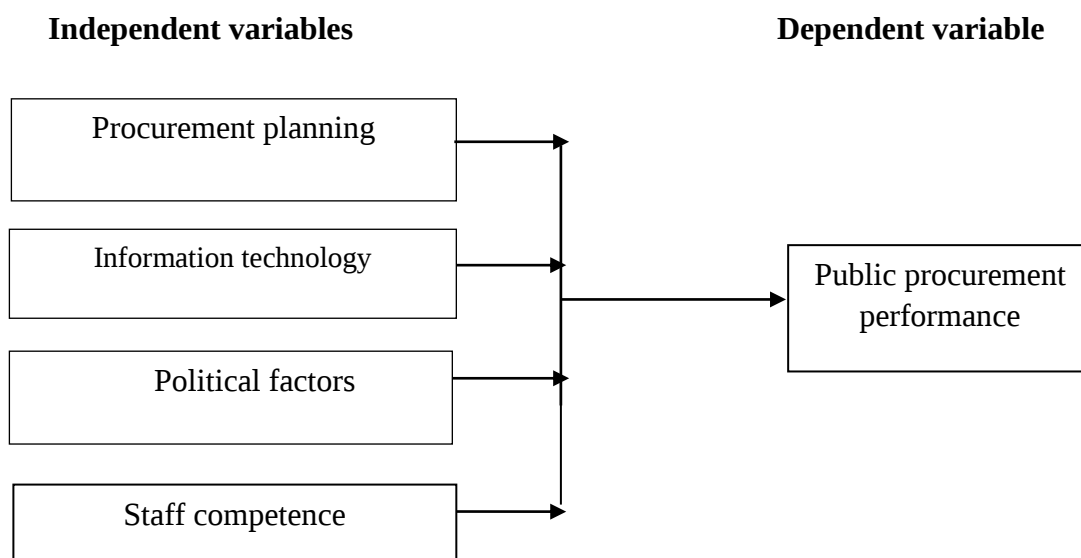


Figure 2.1: Conceptual Framework

Table 2.2: Operationalization of Variables

Objectives of the Variables	Type of Variable	Indicators	Tool of Analysis	Scale of Measurement
Procurement Planning.	Independent variable	- Plans are within budgets - Early requisitions - Timely resource allocation - Easy tracing and tracking of orders	Descriptive and Regression	Likert
Information Technology	Independent variable	- Online tender advertisement - Pre-qualified suppliers' database - Continuous staff training - E- procurement function	Descriptive statistics and Multiple Regression Analysis	Likert
Political Influence	Independent variable	- Pressure on budget authorization - Different interests on tender awards - Pressure to violate procurement laws - Political interference on procurement decisions	Descriptive and Regression	Likert

Staff Competence	Independent variable	• Staff are hired based on skills • Innovative culture • Staff comply with procurement rules and regulation • Training and development programs	Descriptive and Regression	Likert
Public Procurement Performance	Dependent variable	• Timeliness • Price • Quality • Cost • Quantity	Descriptive and Regression	Likert

2.6 Chapter Summary

The chapter presents an introduction to the study investigating the determinants of public procurement in tertiary institutions in Kenya and seeking viable solutions that can help to address this gap. In Chapter two, the study gives a detailed account of theories anchoring this study, summary of research gaps, conceptual framework, variables operationalization and chapter summary.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.0 Introduction

The chapter explains the research methodology that was used in this study, the chapter discussed the methods and approaches used. They included, research philosophy, research design, the population of the study, the sample size, sample design, the data collection, data collection instruments, research procedure and the data analysis process.

3.1 Research Design

A research design is a plan of how a researcher intent to answer their research questions (Saunders, Lewis, & Thornhill, 2016). It acts as a roadmap that describes the data collection and analysis methods that enables the researcher to answer the research questions. The research design gives clarity on the objectives of study, data to be collected, source of data, the data analysis and interpretation of the findings (Sreejesh, Mohapatra, & Anusree, 2014). A good research design is one that provides adequate information, minimal bias, maximum data accuracy and adequate information for analysis of the research problem.

Therefore, the study relied on a descriptive research design. The design was chosen because it is most popularly used in surveys where the researcher is allowed to collect data from a single point in time across the wider region, Kothari (2003). During surveys, a group of study participants are subjected to a set of questions at a point. The basis for selecting this method is because the researcher sought to collect data at a given time once in order to describe the determinants of public procurement at KMTCs.

3.2 Target Population

Population as a whole group of individuals, events or objects that possess similar attributes that fit to a specification (Cooper &Schindler, 2008). The unit of analysis for the study was all KMTCs in Kenya. The Unit of observation procurement officers, finance officers and Heads of KMTCs who are involved in the running and operations of colleges. The choice of these category of participants was because they were directly or indirectly involved in key procurement decisions and operations at KMTCs. There were 71 KMTCs that were licensed to operate within the Count governments in Kenya.

Table 3.1: Target Population

Target Population	Frequency	Percent
CEO	1	00.35%
Procurement officers	71	24.91%
Finance officers	71	24.91%
Heads of Procurement dept.	142	49.82%
Total	285	100%

(KMTC, 2020)

3.3 Sample and Sampling Technique

A sample design as a method used by the researcher to select items in a sample (Kothari, 2004). A sample is defined as a small section of the entire population that is selected in a systematic fashion. The sample was chosen from a population of 213 employees with the help of a stratified random sampling approach. Stratification seeks to minimize standard error by effective control of variation. Sreejesh et al. (2014) indicate that stratified random sampling method is a technique that enables the researcher to easily select respondents from dissimilar positions but the same departments as a representative sample. In this approach the population was divided into various subgroups (strata) and the respondents were chosen from every stratum in a proportional fashion. Yamane formula was used to calculate the sample size as follows:

The formula is $n = N / [1 + N (e)^2]$

Where n = sample size,

N = population size

e = error term (0.05)

Hence, $n = 285 / [1 + 285(.05)^2] = 166.42$

=166

3.3.1 Proportionate Sample size

The study utilized Slovin's formula to determine the sample size as follows:

$nl = N \times NL / N_1$

Where nl= number of units allocated to each strata (respondent)

N=Total sample size

NL= number of staff in each strata

N₁= Total population

Table 3.2: Sample Size

Sample size	Frequency	Proportionate Sampling	Sample Size
CEO	1	166x1/285	00.58
Procurement officers	71	166x71/285	41.35
Finance officers	71	166x71/285	41.35
Heads of Procurement dept.	142	166x142/285	82.71
Total	285		166

(KMTC, 2020)

3.4 Data Collection Instruments

Data collection refers to the process of gathering raw and unprocessed information that can be processed into meaningful information, following the scientific process of data analysis (Saunders, Lewis, & Thornhill, 2016). The choice of instrument to use was determined by: research design, the required information, the characteristics of the population, the time available and available research funding. This study collected primary data, where questionnaires were used to gather the data. Data on the determinants of public procurement was collected through questionnaires that were administered to the heads of procurements or their equivalents at KMTCs. Use of questionnaires is a method of obtaining primary data in the form of a survey (Bryman & Bell, 2011). In this study, questionnaire was used to collect quantitative data. The questionnaire was designed to capture information on demographics of the respondent, profession, experience or duration in employment, public procurement and procurement performance.

The questionnaire used the Likert scale to measure respondents view to a particular question or statement. Likert scale was developed in 1932 and is the most familiar scale response that most people are familiar with today. In this study the scale was coded as follows; 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree and 5 = Strongly Agree. The study sought permission to conduct research from the university and authority to collect data from National Commission for Science, Technology and Innovation (NACOSTI). The researcher developed questionnaires with questions that were simple for the respondents to understand and participate in providing responses.

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3.5 Pilot Study

A pilot study is a preliminary research, usually done prior to the actual research (Hertzog, 2008). Pilot testing is an important step in research process because it reveals vague questions and unclear instructions in the instruments. It also captured important comments and suggestions from the respondents that enabled the researcher to improve on the efficiency of research instrument. It also enabled the researcher to detect weaknesses of the research design and the instruments of research (Cooper & Schindler, 2014). According to Saunders, Lewis, and Thornhill (2016), it is recommended that the questionnaires should be pre-tested on a small number of the respondents who should have the same characteristics as sample for the full research. The respondents who participated in the pilot study should not participate in the full study.

Although not much guidance has been given on the appropriate pilot sample size, Kothari (2004) recommends a pilot sample size of 20% of the full study sample. The pilot sample size was sufficient to accommodate any major variations in the population that were likely to affect responses and recommend a minimum number of 10 respondents. For this study, 30 respondents were chosen to participate in the pilot study for the questionnaire. Questionnaires were administered to 30 respondents after which they were collected and analyzed. Out of the 30 respondents, two pilot tests were conducted, one with 15 procurement officers and the other with 15 finance officers. The clarity of the questionnaire was determined by an analysis of rate at which different questions were answered. Any lack of clarity detected was corrected by reframing the questions to make them clearer.

3.5.1 Validity

There are three ways of validating a questionnaire, namely content, construct, and external validity (Saunders *et al.*, 2016). The questions used in data collection instrument were understood by the participants as intended by the researcher, and the answers given by the respondents were understood by the researcher as intended by the respondents. According to Bryman and Bell (2011), validity is the most important criterion for research and as such the researcher defined the objectives of the study very carefully and used as many questions from previous studies in order to ensure construct validity. It was important for a researcher to confirm the validity of the instrument and of the results as well.

Validity in research involved the process of confirming whether the results of the study were what they appeared to be. The data collection instruments were shared with the supervisor for review before they were used for data collection to confirm their validity prior to undertaking pilot testing.

3.5.2 Reliability

According to Mugenda and Mugenda (2003), reliability refers to a measure of the degree to which a research instrument yields consistent results or data after repeated trials. Reliability refers to the degree to which data collection methods yielded consistent findings; or that similar observations would be made or conclusions reached by other researchers, or there was transparency in how sense was made from raw materials (Markman, Balkin & Baron, 2002). The reliability of the questionnaire was established using Cronbach's Alpha Reliability Coefficient; of above 0.7 confirms reliability.

3.6 Data Collection Procedure

Primary data was utilized. The questionnaires were administered using a drop and pick later method at an agree time with the researcher. Questionnaires consisted of open and closed-ended questions. Five-point Likert Scale was used to measure the level at which the respondents agreed on various statements. This kind of scale was applicable to closed-ended questions only. Follow-up was made using phone calls to remind and push the respondents to fill and complete the questionnaires administered to them. A cover letter was obtained from Management University of Africa as proof and permission to collect data for academic purposes only. Another letter of authority to collect data was obtained from National Commission for Science, Technology and Innovation.

3.7 Data Analysis and Presentation

The data collected was compiled, edited and coded into various categories using numerical values. This took place after assessing the consistency of data and reliability. Statistical Package for Social Sciences (SPSS) version 24 was used to facilitate data analysis. Analysis was done using quantitative data analysis that included descriptive statistics: frequencies, percentages, mean and standard deviation using frequency tables to give meaningful description of how the scores were distributed. The study made inferences from the findings to address the research questions. Inferential statistics such as correlation and regression were utilized to establish existing relationships between variables. Multiple regression model was used to show the relationship between the study variables.

The models will be of the form:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where:

Y = Public Procurement Performance

(β_i , $i = 1, 2, 3, 4$) = coefficients for the independent variables

X_1 = Procurement Planning

X_2 = Information technology

X_3 = Political Influence

X_4 = Staff Competence

ε = Error Term

3.8 Ethical Considerations

3.8.1 Informed Consent

Informed consent means that the party involved had capacity to give legal consent; and as such the person was able to exercise free power of choice without being coerced, duress or intervention. The person needed to have adequate knowledge and understanding of the subject matter to allow him or her make the right decision. Prior accepting this decision, the participant was made aware of the nature, purpose and duration of the study including the approach that was applied to conduct the study; inconveniences and risks expected as well as any health effects that they could possibly get exposed to. The researcher obtained consent through interacting with the respondents so as to win their confidence, support and permission to carry out investigation. This study did not pose any physical, psychological or cognitive harm to the respondents.

3.8.2 Voluntary Participation

This means that the study participants gave assurance that the study was unequivocally voluntary and that the respondent were free to stop participating anytime at will. Refusing to take part or a decision to withdraw from the study by the participant had no consequences like penalty or even loss of benefits that the participants were entitled to. However, it is important to make it clear that the participant was important, and his or her contribution was highly valued.

Also, the participants needed to be informed that if they failed to follow the procedures the study might have been compromised, and opportunity, money and time was lost.

3.8.3 Confidentiality

Confidentiality means that the study participants were identified but their identity was not disclosed to anybody outside the study. Confidentiality was successfully achieved through effective security and management of data; the respondents' personal information was integrated to their data with the help of an identification number to enable easy storage of personal information separately from the database. Basically, only the researcher was allowed to know the identity of the respondents, measures were taken in ensuring that their identity was not disclosed to a third party. Moreover, information gathered from the respondents was kept confidential since it was for academic use only. The investigator briefed the respondents on the importance of this study and the intended purpose of the questionnaire which was to gather data on the factors affecting performance of public procurement in Tertiary Institutions in Kenya.

3.8.4 Privacy

Privacy involves safeguarding the study participants' right to their privacy. This included respecting their independence, right to self-determination and their general welfare. Privacy is part of acceptable social norms and personal expectations of one's information that should be known by third parties and that which was not supposed to be known. Privacy was achieved by assuring the respondents that information provided and their identity would be kept a secret as well as motivating them to take part in the study. A cover letter was got from the MUA University as proof of permission and authority to collect data for research purposes. Also, a letter of authority to collect data was requested from National Commission for Science, Technology and Innovation (NACOSTI) since the study touches on the public sector.

3.8.5 Anonymity

Anonymity is regarded as a condition whereby the identity of the respondents is kept to the researcher. This implies that no personal information is collected in a study that is anonymous. This kind of information entailed names, e-mail address, phone contacts, government-issued identity numbers among others. This was an indication that a study conducted one-on-one or through telephone conversation could not be deemed as anonymous. Thus, this rule did not apply to qualitative type of research that consisted of interviews.

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSION

4.0 Introduction

This chapter provides discussions on major study findings in line with the objectives of the study. The study utilized a quantitative form of data analysis that comprised of descriptive statistics that was utilized to analyze quantitative data. Frequency distribution tables were also utilized to summarize and present data.

4.1 Presentation of Research Findings

4.1.1 Response Rate

Out of 166 questionnaires that were distributed, 150 were successfully filled and given back to the researcher; this signified a response rate of 90.36%, was considered a sufficient representation of the whole population. This view is supported by Sekaran (2008), who argued that a response rate of 50% and above was an adequate representation of a sample from a whole population. Mugenda and Mugenda (2012) opined that a response rate exceeding 70% was excellent for a study. Thus, a response rate of 90% in this case was considered to be satisfactory. Explaining the objective of the study to the respondents and follow-up calls greatly contributed to the response rate.

Table 4.1: Response Rate

Variable	Frequency	Percentage
Returned	150	90.36%
Not returned	16	9.64%
Total	166	100

Figure 4.1: Response Rate

Table 4.1 above shows the response rate. The study attained a strong response rate of 90.36% and only 9.64% of the respondents failed to return the questionnaires.

4.1.2 Demographic Information

The participants were requested to indicate their position in the organisation. The output is tabulated below as follows:

Table 4.2: Position in the Organisation

Variable	Frequency	Percentage
CEO	1	0.60
Senior procurement	34	22.667
Finance officer	55	36.667
Assistant procurement	60	40
Others	-	-
Total	150	100.0

Figure 4.2: Respondent's Position in the Organisation**4.1.3 Length of Service in the Organisation**

The participants were requested to indicate the duration that they had served in the organisation. The output is presented below:

Table 4.3: Respondent's length of Service in the Organisation

Variable	Frequency	Percentage
Below 3 years	10	6.67
3-6 years	70	46.67
7-10 years	45	30
Over 10 years	25	16.67
Total	150	100

Figure 4.3: Respondent's Length of Service**4.1.4 Respondent's Gender**

The participants were requested to indicate the respondent's gender. The results are provided as follows:

Table 4.4: Respondent's Gender

Variable	Frequency	Percentage
Male	84	56
Female	66	44
Total	150	100

Figure 4.4: Respondent's Gender

4.1.5 Highest Educational Level

The participants were asked to indicate their level of education. The output is provided as follows:

Table 4.5: Highest Educational Level

Variable	Frequency	Percentage
Diploma	40	26.67
Undergraduate	70	46.67
Postgraduate	35	23.33
Others	5	03.33
Total	150	100

Figure 4.5: Highest Level of Education

The results depict that 46.67% of the respondents had first degree, 26.67% had diplomas, and 23.33% had a master's degree while only 3.33% had Phd degrees. This implies that a majority of the participants had at least the first degree thus had a better understanding of factors that affected public procurement performance.

4.1.6 Duration of Operation of the Organisation

The participants were requested to indicate the duration that the organisation had been in operation. The results are tabulated below:

Table 4.6: Duration of Operation

Variable	Frequency	Percentage
Less than 3 years	00	00
3-6 years	00	00
7-10 years	40	26.67
Over 10 years	110	73.33
Total	150	100

Figure 4.6: Duration of Operation

The results show that 73.33% of the respondents indicated that KMTCs had been in operation for a duration of more than 10 years only, 26.67% respondents indicated between 7-10 years. This was an indication that majority of KMTCs had been operation for over ten years.

4.2 Factors Affecting Public Procurement Performance

4.2.1: Procurement Planning

The study sought to determine the extent of agreement with the following statements concerning procurement planning and performance of KMTCs. The output is tabulated as follows:-

Table 4.7: Procurement Planning

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Standard deviation
The organisation ensures that its plans are within the budget	12.79%	17.57%	11.07%	34.42%	24.15%	3.76	0.19
The organisation ensures there is a need before an item is procured	15.34%	22.45%	12.30%	32.35%	17.56%	3.45	0.20
The organisation does early requisitions	18.34%	23.82%	14.56%	28.74%	14.54%	3.15	0.21
The organisation has reduced its dependency on suppliers	17.78%	22.40%	12.56%	31.50%	15.76%	3.27	0.20
There is timely allocation of resources	21.56%	22.84%	13.72%	26.89%	14.99%	3.10	0.22
The organisation is able to make timely decisions	15.32%	20.31%	13.43%	33.27%	17.67%	3.56	0.20
There is compliance with procurement rules	20.89%	25.10%	16.45%	24.89%	12.67%	2.98	0.44
It is easy to trace and track orders	15.11%	19.60%	14.01%	32.36%	18.92%	3.55	0.19
Average score						3.35	0.23

From Table 4.7, the participants were requested to provide their opinion on the influence of procurement planning on procurement performance. Feedback from the respondents was guided by Likert scale which comprised of 5 options. The feedback was as follows: -

In the first statement, the respondents were asked whether the organization's plans were within the budget, 34.42% of the participants agreed while 17.57% disagreed. The statement recorded a mean of 3.76 within a standard deviation of 0.19. In the second statement, the respondents were requested if the organisation ensured there was a need before purchasing items, 32.35% of the participants agreed while 22.45% disagreed and

15.34% strongly disagreed. This statement had a mean of 3.45 and standard deviation of 0.20. The third statement, the respondents were requested whether their organisation did prior requisitions, 28.74% participants agreed while 23.82% disagreed and 18.34% disagreed strongly. This statement attained a mean of 3.15 with a standard deviation of 0.21. The fourth statement, the participants were requested whether the organisation had minimized its reliance on suppliers, 31.50% participants agreed while 22.40% disagreed and another 17.78% strongly disagreed. This statement recorded a mean of 3.27 and standard deviation of 0.20. The fifth statement was aimed at determining whether there was timely resources allocation, 25.89% participants agreed while 22.84% disagreed and another 21.56% strongly disagreed. This statement recorded a mean of 3.10 and standard deviation of 0.22. The sixth statement was aimed at establishing whether the organisation made timely decisions, 33.27% participants agreed while 20.31% disagreed, another 15.32% disagreed strongly.

This statement scored a mean of 3.56 and a standard deviation of 0.20. In the seventh statement, the participants were asked whether the organisation complied with the rules of procurement, 24.89% participants agreed whereas 25.10% disagreed and another 20.89% disagreed strongly. This statement had a mean of 2.98 with a standard deviation of 0.44. The last statement the study sought to determine whether it was easy for the organisation to trace and track orders, 32.99% participants concurred while 19.60% disagreed and another 15.11% disagreed strongly. The statement attained a mean of 3.5 with a standard deviation of 0.19. In line with these findings is the observation by Salim and Kitheka (2019) who established that early requisitions, timely allocation of resources, compliance with procurement rules and minimized dependency on suppliers as key pillars of procurement planning.

4.2.2 Information Technology

The study sought to determine the extent of agreement with the following statements on information technology and performance of KMTCS. The output is provided as follows: -

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Standard deviation
Tenders are advertised online	16.11%	18.67%	16.73%	29.34%	19.15%	3.65	0.14

The organisation maintains a database of pre-qualified suppliers	15.21%	20.12%	11.23%	33.23%	20.21%	3.72	0.19
The organisation sponsors employees for a continuous training to keep them updated on procurement innovations	17.35%	16.01%	17.23%	32.33%	17.08%	3.61	0.11
The process of procurement is automated in the organisational functions	18.25%	15.47%	8.74%	34.63%	22.91%	4.10	0.01
Use of information technology has completely reduced paper work	19.14%	16.71%	10.13%	33.90%	20.12%	3.78	0.17
Integrity and transparency have improved tendering process	17.14%	18.12%	18.11%	28.02%	18.61%	3.65	0.25
Standardization processes and processes have improved	14.94%	19.27%	12.56%	32.97%	20.26%	3.72	0.19
Average score						3.75	0.15

Table 4.8: Information Technology

Table 4.7, the study participants were asked to offer their opinion on the influence of information technology on procurement performance. Analysis was done using five points of Likert Scale as follows:

The first statement sought to establish whether the organisation advertised its tenders online, 29.34% of the participants agreed while 18.67% disagreed and another 16.11% strongly disagreed. The statement recorded a mean of 3.65 and a standard deviation of 0.21. The second statement sought to find out whether the organisation maintained a database of prequalified suppliers, 33.23% of the participants agreed while 20.12% disagreed and another 15.21% of the participants strongly disagreed. The statement had a mean of 3.72 with a standard deviation of 0.11. The third statement sought to establish whether employees were sponsored by their organisation for a continuous training, 32.33% of the participants agreed while 16.01% disagreed and another 17.35% of the participants strongly disagreed. The statement had a mean of 3.61 and standard deviation of 0.11. The fourth statement sought to establish whether the organisation had automated its procurement processes into its functions, 34.63% of the participants agreed while 15.47% disagreed and 18.25% strongly disagreed. The results found a mean of 4.10 and standard deviation of 0.01. The fifth statement sought to determine whether use of IT had reduced paper work, 33.90% of the participants agreed while 16.71% disagreed and 19.14% of the participants strongly disagreed. This finding recorded a mean of 3.78 and a

standard deviation of 0.17. The sixth statement sought to determine if transparency and integrity enhanced the process of tendering, 28.02% of the participants agreed while 18.12% disagreed while 17.14% of the respondents strongly disagreed. This result recorded a mean of 3.65 with a standard deviation of 0.25. The seventh statement sought to determine whether the process of standardization had improved with the use of integrated procurement, 32.97% of the participants agreed while 19.27% disagreed and 14.94% strongly disagreed. This finding attained a mean of 3.72 and a standard deviation of 0.19. The findings are consistent with the observations of Svidronova and Mikus (2015), who found out that use of technology in public procurement led to integration of procurement systems, less use of paper, standardization and improved transparency and accountability.

4.2.3 Political Interference

The study sought to establish the level of agreement with the following statement concerning political interference and procurement of KMTC. The results are provided below: -

Table 4.9: Political Interference

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Standard deviation
There is undue influence on budget authorization	24.32%	30.31%	19.13%	14.57%	11.67%	1.92	0.12
Award of tenders have interest from different groups	23.47%	29.41%	18.18%	15.47%	13.47%	2.15	0.15
The organisation faces pressure on implementation of procurement laws	15.94%	16.89%	19.76%	25.47%	21.94%	2.55	0.22
Procurement officers face pressure from politicians to make decisions that favour them	22.47%	32.88%	19.76%	15.95%	8.94%	1.91	0.01
Awards for tenders are always competitive	15.35%	20.88%	25.76%	22.89%	15.12%	2.45	0.18
The organisation does debriefing	14.82%	19.32%	15.17%	30.49%	20.20%	3.45	0.02
Average						2.41	0.12

In Table 4.9, the respondents were asked to offer their opinion on the influence of politics on procurement performance. Responses from respondents was guided by Likert scale that consisted of 5 alternatives. The results are as follows: In the first statement, the respondents were asked to indicate where there was undue influence on authorization of budgets, 30.31% of the participants disagreed while 14.57% agreed and another 11.67% of the participants strongly agreed. This finding recorded a mean of 1.92 and standard deviation of 0.12. In the second statement, the participants were asked whether tender award had interests from different groups, 29.41% of the participants disagreed while 15.47% agreed and another 13.47% of the participants strongly agreed.

The finding attained a mean of 2.15 and standard deviation of 0.15. In the third statement, the respondents were asked whether the organisation was under any pressure to adopt procurement laws, 25.47% of the participants agreed while 16.89% disagreed and 15.94% strongly disagreed. The finding attained a mean of 2.55 and standard deviation of 0.22. In the fourth statement, the participants were asked whether the organisation experienced any pressure from politicians to favour them in tender award, 32.88% of the participants disagreed while 15.95% agreed and another 8.94% of the participants strongly agreed. This finding attained a mean of 1.91 and standard deviation of 0.01. In the fifth statement, the participants were asked whether the process of awarding tenders in their organisation

was competitive, 22.89% of the participants agreed while 20.88% disagreed and 15.35% of the respondents strongly disagreed. This finding recorded a mean of 2.45 and standard deviation of 0.18. In the last statement, the participants were requested whether their organisation did debriefing, 30.49% of the participants agreed while 19.32% disagreed and 14.82% of the participants strongly disagreed. This finding had a mean of 3.45 and standard deviation of 0.02. The findings are in line with the recommendations of OECD (2013), who insists on the need to avoid political interference and advances in public procurement. The need for autonomy and priority on public interest at all the levels of the policy process, and specifically by promoting open government and transparency, including actively ensuring competitiveness, no influence on budget authorization. In line with these findings is Tirefa (2019) who insisted on the need for competitiveness in the procurement process, importance of debriefing and independence in budget authorization.

4.2.4: Staff Competence

The participants were asked to give their views regarding the influence of staff competence on procurement performance. The response issued were guided by Likert Scale that consisted of 5 alternatives. The feedback was as follows: -

Table 4.10: Staff Competence

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Standard deviation
The organisation hires staff based on their skills	17.45%	23.75%	15.17%	28.17%	15.46%	3.33	0.24
New recruits go through a rigorous induction program	17.34%	20.21%	17.35%	26.65%	18.45%	2.55	0.20
Staff are knowledgeable of procurement rules	18.85%	17.45%	15.82%	28.46%	19.42%	3.45	0.27
The organisation sponsors its employees for training programs	18.85%	24.51%	14.01%	29.21%	13.42%	3.10	0.29
The staff have problem solving skills	17.74%	19.25%	15.35%	27.95%	19.71%	2.76	0.28
The staff comply with the code of conduct	18.94%	16.65%	15.94%	29.35%	19.12%	3.58	0.27
The organisation hires experienced staff	19.91%	18.50%	14.72%	26.76%	20.11%	2.92	0.26
Average						3.10	0.26

In Table 4.10, the respondents were asked to give their views on the influence of staff competence on procurement performance. Responses were given via Likert scale that comprised of 5 options. The results are as follows:

The first statement sought to determine whether the organisation hired employees in accordance to their skills, 28.17% of the participants agreed while 23.75% disagreed and 17.45% strongly disagreed. This finding recorded a mean of 3.33 and standard deviation of 0.26. The second statement sought to establish whether new employees went an intense induction program, 26.65% of the participants agreed while 20.21% disagreed and 17.34% of the participants strongly disagreed. This finding attained a mean of 2.55 and standard deviation of 0.20. The third statement sought to determine if the staff were conversant with procurement rules, 28.46% of the participants agreed while 17.45% disagreed and 18.85% strongly disagreed. This statement had a mean of 3.45 and standard deviation of 0.27. The fourth statement sought to find out if the staff were sponsored for training programs, 29.21% of the participants agreed while 24.51% disagreed and 18.85% strongly disagreed. This finding attained a mean of 3.10 and standard deviation of 0.29. The fifth statement sought to determine whether employees had skills to solve problems, 27.95% of the participants agreed while 19.25% disagreed and 17.74% strongly disagreed.

This finding attained a mean of 2.76 and standard deviation of 0.28. The sixth statement sought to determine whether employees observed the code of conduct in their work, 29.35% of the participants agreed while 16.65% disagreed and 18.94% strongly disagreed. This statement recorded a mean of 3.58 and standard deviation of 0.27. The seventh statement sought to establish if the organisation hired competent employees, 26.76% of the participants agreed while 18.50% disagreed and 19.91% strongly disagreed. This finding earned a mean of 2.92 and standard deviation of 0.26. The findings are consistent to the views of Toroitich et al. (2017) who pointed that skills, training, problem solving skills and ethics were key traits of competent staff. In with this is a study by Odero and Ayub (2017), who found that experience and skills were key components of competent staff.

4.2.5 Procurement Performance

The study participants were requested to indicate the level at which the organisation had improved on performance.

Table 4.11: Procurement Performance

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Standard deviation
Efficiency of public procurement cycle	14.98%	16.77%	10.56%	38.27%	19.42%	3.65	0.23
Timely delivery of products and services	18.34%	23.82%	14.56%	28.74%	14.54%	3.15	0.21
Reduced delays in processing supplier payment	15.36%	21.45%	12.29%	32.35%	18.55%	3.45	1.01
Efficiency in procurement operations	16.11%	19.60%	15.01%	31.36%	17.92%	3.45	0.24
Openness and transparency in public procurement cycle	15.25%	20.98%	25.66%	22.99%	15.12%	2.46	0.19
Improved professionalism by the procurement workforce	16.90%	18.89%	18.76%	24.57%	20.88%	2.56	0.21
The organisation gets value adding products and services	14.72%	19.45%	15.15%	30.50%	20.18%	3.55	0.09
Average						3.18	0.31

The first statement sought to establish whether the organisation maintain an efficient procurement cycle, 38.27% of the participants agreed while 16.77% disagreed and 14.98% strongly disagreed. This result established that a mean of 3.65 and standard deviation of 0.23. The second statement sought to determine whether the organisation received its goods and services on time, 28.74% of the participants agreed while 23.82% disagreed and another 18.34% strongly disagreed. The finding attained a mean of 3.15 and standard deviation of 0.21. In the third statement, the study sought to establish whether the organisation minimized its delays in processing its payments to suppliers, 32.35% of the participants agreed while 21.45% disagreed and another 15.36% of the participants strongly disagreed. The results showed a mean of 3.45 and standard deviation 1.01. The fourth statement sought to establish whether the organisation was efficient in its procurement operations, 31.36% of the participants agreed while 19.60% disagreed and 16.11% strongly disagreed. The findings revealed a mean of 3.45 and standard deviation of 0.24. The fifth statement sought to determine whether the organisation was open and transparent in public procurement cycle, 22.99% of the participants agreed while 20.98% disagreed and 15.25% strongly disagreed.

The finding attained a mean of 2.46 and standard deviation of 0.19. The sixth statement sought to establish whether there was improved professionalism by the procurement workforce, 24.57% of the participants agreed while 18.89% disagreed and 16.90% strongly disagreed. This result recorded a mean of 2.56 and standard deviation of 0.21. In the seventh statement, the participants were requested whether the organisation got products and services of value, 30.50% of the participant agreed while 19.45% disagreed and 14.72% disagreed strongly. The findings attained a mean of 3.55 and standard deviation of 0.09. The findings are in line with the observations of Patrucco et al. (2016) who indicated that efficiency, on-time delivery and transparency as key indicators of procurement performance.

4.3 Correlation Analysis

Pearson correlation coefficient measures linear dependence between independent and dependent variables. The researcher did a correlation analysis on the link between the determinants of public procurement and procurement performance of KMTCs. The results are shown in Table 4.11:

Table 4.12: Correlation Analysis

		Procurement performance	Procurement Planning	Information Technology	Political Influence	Staff Competence
Procurement performance	Pearson Correlation	1				
	Sig. (2 tailed)	0.000				
Procurement planning	Pearson Correlation	0.682**	1			
	Sig. (2 tailed)	0.000	0.000			
Information technology	Pearson Correlation	0.752**	0.614**	1		
	Sig. (2 tailed)	0.029	0.000			
Political Influence	Pearson Correlation	-0.091	0.056	0.049	1	
	Sig. (2 tailed)	0.394	0.497	0.501		
Staff Competence	Pearson Correlation	0.557**	0.089	0.162	0.094	1
	Sig. (2 tailed)	0.012	0.492	0.283	0.465	0.255

Correlation analysis between procurement planning and procurement performance recorded a positive correlation coefficient of 0.682 and a p-value of 0.000. These imply that the output is significant since its p-value is below 5%, (0.000). Information technology and procurement performance attained the highest correlation of 0.752 and a p-value of 0.029 which is significant at $\alpha = 5\%$. Political influence and procurement performance attained the lowest correlation of -0.091 and a p-value of 0.394, this is an indication that the output is insignificant since its p-value is above 5% (0.394). Staff competence and procurement performance also attained a positive correlation of 0.557 and a p-value of 0.012. These imply that information technology had the greatest influence on procurement performance followed by procurement planning and then staff competence while political influence had the least influence on procurement performance of KMTCs.

4.4 Regression Analysis

A model of regression was utilized to test the link between determinants of public procurement and procurement performance of KMTCs. The output is as follows:

Table 4.13: Model Summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.781 ^a	.563	.398	1.342

The findings point out that the coefficient of determination is 0.563, implying that independent variables explained 56.3% of the variation in procurement performance at KMTCs. Adjusted R^2 is 0.398 which means that the variation explained by the factors which have an effect on procurement performance is 39.8%.

Table 4.14: Analysis of Variance

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.056	4	0.264	1.275	.000 ^b
	Residual	30.049	145	0.207		
	Total	35.105	149			

The overall model of regression utilized in the study is significant as its p-value is less than 5% (0.00).

Table 4.15: Coefficients

Model	Coefficients ^a			t	Sig.
	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta		
(Constant)	1.201	.765		1.461	.092
Planning	-.291	.166	-.292	2.372	.000
1 Information technology	.381	.217	.314	3.353	.000
Political influence	.031	.146	.091	0.109	.160
Staff competence	.277	.193	.159	2.204	.049

The resultant equation is as follows:

$$\text{Procurement performance} = 1.201 - 0.291X_1 + 0.381X_2 + 0.031X_3 + 0.277X_4 + \epsilon$$

Information technology, staff competence and political were positively linked to procurement performance as follows (0.381, 0.277 & 0.031m respectively), these implied that a unit increase any of the variables resulted to a corresponding increase in procurement performance. On the other hand, procurement was inversely linked to procurement performance (-0.291). Information technology, planning and staff competence were significantly linked to procurement performance as their values of probability were lower than 5% (0.000, 0.000 & 0.049, respectively). Though, political influence was insignificantly associated to procurement performance as its value of probability was higher than 5% (0.160).

4.5 Limitations of the Study

This topic was considered a sensitive subject by the respondents citing politics and procurement as areas where many respondents were reluctant to give information. The respondents further claimed that some questions asked elicited delicate information where personal views could be criticized. This might could lead to victimization by local authorities and probably affect their relationships at the work place or expose them to risks of loss of jobs or opportunities. So as to deal with this limitation, the researcher assured the study participants of confidentiality of the information obtained and non-disclosure of their identities.

Fear that the information provided could be divulged to a third party led to poor cooperation among the respondents. A few of them completely declined to participate in filling of questionnaires even when the researcher assured them of confidentiality. A few others complained of having very busy schedules that denied them time to fill the questionnaires. Others requested for motivation in form lunch or money in order to fill the questionnaire. However, the researcher explained to them about the importance of this study and promised to share the findings with them upon completion of the study.

4.6 Chapter Summary

A total of 155 questionnaires were distributed by the researcher and a total of 166 questionnaires were filled, completed and analysed. The chapter have given detailed discussion of the study findings. This is important in addressing the research questions. The analysis consists of the demographic findings for this study. The study established that information technology, procurement planning and staff competence significantly contributed to procurement performance. It was further established that information technology, political influence and staff competence were strongly correlated towards procurement performance.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter gives a summary of research findings in line with the objective of the study which was establishing the determinants of public procurement in Tertiary Institutions in Kenya. The chapter further presents a detailed discussion of findings, conclusion and recommendations.

5.2 Summary of Findings

The researcher made a distribution of 166 questionnaires out of which 150 were duly filled and returned. This represented an excellent response of 90.36% which was regarded as a satisfactory representation of an entire population. The findings revealed that many respondents were qualified and well experienced on matters of public procurement hence they were in better position to provide accurate and reliable information.

5.2.1 Procurement Planning

The findings found a mean of 3.35, which implies that the respondents were in consensus that the organisation ensured that its plans were within the budget, there was need before procuring of goods and services, abated supplier dependency and timely decisions and resource allocation including compliance to procurement regulations. Correlation coefficient was $R=0.682$ which meant that planning significantly contributed towards procurement performance. Findings further established that planning was significant associated to procurement performance as evidenced by its $p\text{-value}=0.000$. This clearly indicates that an organisation that aspires to realize performance in its procurement must do proper planning by ensuring that the set-out plans do not exceed the budget coupled with accurate decisions and ample distribution of resources. In a study done by Ogwang and Waweru (2017), on procurement planning and performance the findings disclosed that planning was essential for public procurement. The organisation is able to easily access product and services from suppliers. Procurement plan documents the necessary information of purchases from suppliers which are required in a department. The management consider procurement planning as a key function that sets the ground for effective execution of procurement activities.

The major role of procurement planning is to address the following question: what the organisation intends to procure, when to procure, from whom to procurement, when resources will be available, the approaches to be adopted, the timeliness of procurement and the players involved in procurement. Procurement planning enables the organisation to have an efficient process of acquiring goods within a reasonable timeframe (Patrucco et al., 2016).

5.2.2 Information Technology

The results established a 3.75 mean which implies that the participants strongly agreed that the organisation; utilized integrated systems, sponsored its staff on continuous training, observed transparency and accountability, process standardization and shared communication in their procurement systems. Correlation coefficient was found to be 0.752 which is an indication that use of advanced technologies was strongly correlated to procurement performance. Results also showed that information technology was significantly linked to procurement performance as its p-value was less than 5% (0.000). This imply that there is need for the organisation to invest in modern technologies in its supply chain networks to enhance efficiency in its operations, lower costs, improve communication and enable collaboration between procurement partners and stakeholders.

A study by Mardia and Namusonge (2016) on the impact of information technology on public procurement performance, the study found that firms that use technology to automate their supply chain processes for improved productivity, visibility and cost efficiency. Use of information technology enables organizations to improve on their efficiency in business dealings. Technology is one of the metrics that is applied by benchmarking firms to assess maturity of procuring firms. So, it is necessary to get the right information technology and earn the benefits. Use of information technology reduced information asymmetry and enhances collaboration between internal departments while ensuring maximum value to the firm. Svidronova and Mikus (2015) opine that use of information technologies minimize chances of error and mistakes. It makes it easier to track old contracts and orders while ensuring contract compliance thus lowering inaccuracies of data.

5.2.3 Political Influence

The findings display a mean of 2.41 is a sign that the participants failed to agree on the following matters; there was undue influence on budget authorization, procurement officers experienced external pressures to favour some bidders, the procurement process was competitive, the organisation practiced debriefing. Results from correlation analysis established that there existed a weak correlation between political influence and procurement performance ($R=0.394$). Findings further revealed that political influence was insignificantly associated to procurement performance (0.160). This is an indication that to achieve procurement performance, the organisation should observe autonomy in budget authorization, ignore pressure from any groups for tender award, ensure tender awards are competitive.

In line with this finding is a study by Tirefa (2019) on the factors affecting performance of public procurement, the findings established that political interference, interest from dissimilar groups, lack of independence on budget approval and lack of competition in tender awards created a huge barrier in achieving procurement performance. This finding is consistent to the observations of Sandada and Kambarami (2016) who found that politics, influence on budget approval and interest from different groups as a major barrier towards achieving procurement performance.

5.2.4 Staff Competence

The results depict a mean of 3.10 which imply that the participants agreed that the organisation hired employees in accordance to their skills and knowledge. The staff; were sponsored into a comprehensive induction and continuous training programs, had skills to solve problems, experienced and complied with the code of conduct. Correlation results showed a moderately strong correlation between staff competence and procurement performance (0.557) and regression analysis revealed that there was a significant connection between staff competence and procurement performance (0.049). This is a sign that the organisation needed: efficient, skillful, strategic, creative and innovation staffs to achieve procurement performance.

The findings are congruent to a study by Odera and Ayub (2017), who studied the influence of staff competence on procurement performance and concluded that there was need for staff to have skills and knowledge to execute their tasks efficiently, the way they behave also determines how well they get things done.

Their adequacy of knowledge informs their judgement on different situations. In view of this, Mrope (2017) who found a positive association between staff competence and procurement performance. He argued that absence of knowledge in procurement may result to serious breach of code of conduct. Many organizations lack competence staff with the right skills to handle procurement functions efficiently.

5.2.5 Procurement Performance

From the research findings, the respondents indicated that the organisation was efficient in its procurement cycle; this significantly minimized lead time. Goods and services were delivered on time through effective coordination of supply chain partners. By embracing dynamic procurement practices, the organisation was able to minimize delays in processing payments for suppliers; the organisation made sure that there was an adequate budget to cater for projects implementation with the required time, cost and quality. The supply chain process was more open and transparent and the operations were more efficient and effective and the organisation was able to get more value for its products and services. This finding is consistent to Patrucco et al. (2016) who indicated that efficiency and effectiveness were key pillars of procurement performance. Redges (2012) noted that performance was a critical driver of competitiveness of quality of services. Procurement performance helps the organisation to minimize cost, increase profitability, improve quality earn competitive advantage. 5.4 Conclusion

The study draws a conclusion that information technology, procurement planning and staff competence play a critical role in enhancing procurement performance. The findings established that the organisation utilized information technology, procurement planning and staff competence to a moderate extent. It was further established that the organisation automated their procurement functions and processes leading to increased visibility, cost efficiency and improved productivity. Some notable information technology practices used by the organisation included online advertisement of tenders, shared communication framework, supplier database, standard processes and procedures. Procurement planning practices used included early requisitions, timely allocation of resources, the budget is within the plan, easy tracking and tracing of orders. Some of the notable staff competence practices were continuous training program, knowledge of procurement rules and performance contracting.

Political practices were not embraced in the organisation. However, there was huge efforts by the organisation to prevent external pressures on budget authorization and ensuring that awards for procurement tenders were competitive. Regression analysis established that information technology, staff competence and procurement planning were significantly linked to procurement performance. Political influence was insignificantly linked to procurement performance. These findings are similar to correlation analysis which established existence of a correlation between information technology, planning and staff competence. However, no correlation was found between political influence and procurement performance. Automation of procurement functions enhanced visibility, cost efficiency and overall productivity. It also enabled the organisation to boost its efficiency in business transaction as well as collaboration among internal departments to maximize organisation value. Through planning, the organisation was able to plan within its budgets, track and trace its order and ensure timely delivery of goods and services. There was minimized reliance on suppliers, timely decisions and resource allocation. The staff made accurate decisions and had strong problem-solving skills. They were efficient in their work and this saved the organisation huge operational cost.

5.3 Conclusion

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5.4 Recommendations

Based on the research findings, the study makes the following recommendation to improve on procurement performance. The need to craft procurement plans on time with all the necessary information by end users. Procurement plans should be drafted on time with the necessary information by the end users. Organizations should minimize unplanned requisitions by strengthening and ensuring successful implementation of organisational plans to realize organisational goals and objectives. The organisation should align procurement plans with strategic plans.

Procurement plans are purposely designed to channel funds for procurement through ensuring that the right procurement method is adopted and the kind of contract selected is appropriate for procurement of works, services and goods. There is need to assess procurement procedures within the administrative system so as to identify points of service delivery with the aim of re-engineering the process of procurement.

Contract management procedures should be improved to boost procurement performance by minimizing delays in finance processes and delivery of goods and services through improving procedures of contract management. The organisation should continue investing in modern technologies in its business processes aligned to procurement. A regular update of ERP systems by ensuring that it is well aligned to all the operations of the organisation in a manner that is beneficial to the stakeholders. With an integrated

system of procurement, it is easier for the organisation to easily communicate with the department, procurement unit and suppliers in processing procurement information for making decisions, this in turn improves accuracy and transaction time. Training awareness on key procurement aspects is key in ensuring staff are up to date with knowledge on procurement processes and its functions. The process of procurement ought to be administered by competent and experienced procurement professionals. The organisation should prioritize its staff competence to achieve excellence in service delivery as a means of achieving procurement performance.

5.5 Suggestion for further studies

The current study sought to investigate the determinants of public procurement and performance of medical training colleges in Kenya. Areas for further studies can be done on the effect of public procurement on the performance of other public related entities. This would be of great relevance for comparison purposes. Such a study can help to identify whether there are other public procurements that influence performance. This would help to compare the performance of public versus private institutions. This would assist in making comparisons on the performance in public procurement. The variables used in the current project were not exhaustive thus the study recommends that other variable can be used to address the gaps.

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APPENDICES

Appendix I: Research Questionnaire

The purpose of this questionnaire is to collect data for studying DETERMINANTS OF PUBLIC PROCUREMENT IN TERTIALLY INSTITUTIONS IN KENYA. A CASE OF KENYA MEDICAL TRAINING COLLEGE. The questionnaire will take approximately 25 minutes to fill. Your responses to the questions will be treated as confidential. The data will only be used in the aggregate format to further distant it from any particular person or organization. Kindly do not write your name or that of your company in the survey. There is an optional space at the end to enable you give any comments or suggestions at the end of the questionnaire. Thank you

General Instructions:

Please Tick (✓) your preferred selection where choices are provided and where your opinion is required, please state your views as precisely and honestly as you can.

Q1. Please indicate your position in this organization?

1. ☐ Senior Procurement officer
2. ☐ Assistant Procurement officer
3. ☐ Other (Specify) _____.

Q2. Please indicate how long you have worked for this organization?

1. ☐ Below 3 years
2. ☐ 3 – 6 Years
3. ☐ 7 – 10 years
4. ☐ Over 10 years

Q3. Please select your Gender.

1. ☐ Male
2. ☐ Female
3. ☐ Intersex

Q4. Please indicate your highest education level.

1. Diploma ☐
2. Undergraduate ☐
3. Postgraduate ☐
4. Other (Specify) _____.

Q5. Please indicate for how long has your organization been in operation?

1. Less than 3 years ☐
2. 3 – 6 Years ☐
3. 7 – 10 years ☐
4. Over 10 years ☐

PART B: PROCUREMENT PLANNING

Q5. To what extent do you agree with the following statements on the procurement planning within your organisation. Where: 1=Strongly Disagree (SD), 2=Disagree (D), 3=Neutral (N) 4=Agree, 5=Strongly Agree (SA)

Procurement Planning	SD	D	N	A	SA
i). The organisation ensures that its plans are within the budget	1	2	3	4	5
ii). The organisation ensures there is a need before an item is procured	1	2	3	4	5
iii). The organisation does early requisitions	1	2	3	4	5
iv). The organisation has reduced its dependency on suppliers	1	2	3	4	5
v). There is timely allocation of resources	1	2	3	4	5
vi). The organisation is able to make timely decisions	1	2	3	4	5
vii). There is compliance with procurement rules	1	2	3	4	5
Viii). It is easy to trace and track orders					

Q6. How do you think procurement planning enables the organisation to boost its efficiency in procurement?

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Q7. To what extent do you agree with the following statements in respect to your organization's use of information technology in procurement. Where: 1=Strongly Disagree (SD), 2=Disagree (D), 3=Neutral (N) 4=Agree, 5=Strongly Agree (SA)

Information Technology	SD	D	N	A	SA
i). Tenders are advertised online	1	2	3	4	5
ii). The organisation maintains a database for pre-qualified suppliers	1	2	3	4	5
iii). The organisation sponsors its staff for a continuous training to keep them updated on innovations in procurement	1	2	3	4	5
iv). The organisation has an integrated communication system that enables suppliers to give feedback	1	2	3	4	5
v). The process of procurement is automated into the functions of the organization	1	2	3	4	5
vi). Use of information technology has completely reduced paper work	1	2	3	4	5
vii). Integrity and transparency have improved the process of tendering	1	2	3	4	5
viii). Standardization processes and procedures have improved	1	2	3	4	5

Q8. How does your organization ensure that information technology is well aligned into the procurement processes and procedures?

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Q 9. To what extent do you agree with the following statements how political influence affect procurement in your organisation. Where: 1=Strongly Disagree (SD), 2=Disagree (D), 3=Neutral (N) 4=Agree, 5=Strongly Agree (SA)

Political Influence	SD	D	N	A	SA
i). There is undue influence on budget authorization	1	2	3	4	5
ii). Award of tenders have interests from different groups	1	2	3	4	5
iii). The organisation experiences pressure on implementation of procurement laws	1	2	3	4	5
iv). Procurement officers face pressure from politicians to make decisions that favour them	1	2	3	4	5
v). Awards for procurement tenders are always competitive	1	2	3	4	5
vi). The organisation does debriefing	1	2	3	4	5

Q10.What is your organization's response to political influence in the procurement processes and procedures?

.....

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Q11.To what extent do you agree with the following statements regarding your organization's staff competence. Where: 1=Strongly Disagree (SD), 2=Disagree (D), 3=Neutral (N) 4=Agree, 5=Strongly Agree (SA)

Staff Competence	SD	D	N	A	SA
i). The organisation hires staff based on their skills	1	2	3	4	5
ii). New recruits undergo through a rigorous induction program	1	2	3	4	5
iii). Staff are knowledgeable about procurement rules and regulations	1	2	3	4	5
iv). The organisation sponsors its staff on training and development programs	1	2	3	4	5
v). The staff possess problem solving skills and capabilities	1	2	3	4	5
vi). Staff comply with the code of conduct	1	2	3	4	5
vii). The organisations hires staff who are adequately experienced in their work	1	2	3	4	5

Q12. PART C: PUBLIC PROCUREMENT PERFORMANCE

To what extent do you agree with the following statements regarding your organization's performance of public procurement. Where: 1=Strongly Disagree (SD), 2=Disagree (D), 3=Neutral (N) 4=Agree, 5=Strongly Agree (SA)

Public Procurement Performance	SD	D	N	A	SA
i). Efficiency of public procurement cycle	1	2	3	4	5
ii). Timely delivery of products and services	1	2	3	4	5
iii). Reduced delays in processing supplier payments	1	2	3	4	5
iv). Openness and transparency of the public procurement cycle	1	2	3	4	5
v). Efficiency in procurement operations in the procurement departments	1	2	3	4	5
vi). Improved professionalism by the public procurement workforce	1	2	3	4	5
vii). The organisation gets quality products and services	1	2	3	4	5
viii). The organisation gets products and services at competitive prices					

Thank you for your responses

FULL CONFIDENTIALITY IS GUARANTEED

If you would like to receive a copy of a summary of this research findings, please contact

Janet Ngari via janetngari@gmail.com or call +254 726 521 361

Appendix II: Proposed Work Plan for Masters Proposal and Project

Month/Activity	J	F	M	A	M	J	J	A	S	O	N	D
Year	2020											
Concept Paper												
Chapter one												
Chapter two												
Chapter three												
Proposal Presentation												
Finalization of project and Graduation												

Appendix III: Research Budget Estimates

Activity	Description	Unit cost	Number of units	Amount Kshs.
Proposal & final Project	Typing, photocopying, printing and binding			30,000
Pilot survey	Food transport and photocopy			4000
Analysis of data using SPSS	data package	8,000	1	8000
Internet services	2000 minutes@ 2 shillings	2	4000	4000
Transport	For Four Assistants	2000	4	8000
Miscellaneous				7700
Total				61,700