

**DETERMINANTS OF EFFECTIVE PROCUREMENT CONTRACT
ADMINISTRATION IN SELECTED PUBLIC UNIVERSITIES IN KENYA**

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DEDICATION

I dedicate this work to my wife Joyce Ngetich, my sons Franklin Kipruto and Brian Kipruto, my daughter Sharon Cherotich, and my friend Samson Chira.

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ABSTRACT

Procurement represents one of the most critical functions in public institutions that ensure efficiency in utilization of public resources as well as efficiency in service delivery. The procurement process involves going into contract with the supplier and subsequently fulfillment of the contract. The administration of procurement contracts is the sole responsibility of the procurement department. However in the recent past, Public institutions in Kenya have lost billions of tax payer's money through annulled contracts, uncompleted projects, unsupplied goods and services not provided, collusion in the tender evaluation and award, inadequate training of the procurement staff especially on the technical fields, corruptions and extended contract periods. The mismanagement of procurement contracts continues to be reported despite the enactment of the Public Procurement laws and oversight bodies in place in Public Universities in Kenya. These points out to weaknesses at the contract administration stage therefore prompting this study to assess the determinants of effective procurement contract administration in Public Universities. The objective of the study was to examine the determinants of effective procurement contracts administration in Public Universities in Kenya. The study specifically focused on the staff competencies, use of information communication technology, professionalism and accountability. The theories which were relevant to this study were Resource Dependency Theory and Dynamic Capabilities Theory. The study was conducted among some selected Public Universities in Kenya. The study adopted the descriptive survey research design where the procurement staff of public universities was used to provide information on the influence of staff related factors and efficiency of contract administration. The study target population comprised of 141 procurement staff who included senior procurement officers, procurement officers, procurement assistants and clerical officers. A sample of 59 was selected using stratified random sampling technique to provide information. Questionnaires were then be used to obtain data from the respondents. Data analysis was performed using both descriptive and inferential statistics. Descriptive statistics included frequency counts, percentages, mean and standard deviation which was used to summarize the findings. Multiple regression analysis was then used to determine the relationship between variables. The study concluded that staff competencies, use of information communication technology, professionalism and accountability have a statistically significant influence on contract administration in public universities in Kenya. Additionally, the study concluded that a unit increase in the staff competencies, use of information communication technology, professionalism and accountability, on their own, results in an increase in procurement contract administration.

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LIST OF ABBREVIATIONS

CIPS – Chartered Institute of Procurement and Supply

CMS - Contract Management Style

CUE - Commission for University Education

E.A – East Africa

JKUAT - Jomo Kenyatta University of Agriculture and Technology

KISM – Kenya Institute of Supplies Management

LIA - Letter of Interim Authority

NACOSTI – The National Commission of Science, Technology and Innovation

OECD - Organization for Economic Co-operation and Development

OGC - Office of Government Commerce

PPDA – Public Procurement and Disposal Act

PPRA – Public Procurement Regulatory Authority

RDT - Resource Dependency Theory

RoK – Republic of Kenya

SPSS - Statistical Package for Social Sciences

DEFINITION OF TERMS

Accountability-This refers to the act of being responsible over various resources that have been allocated (Wee 2002).

Contract Administration – is a process which involves the activities of a buyer during a contract period to ensure that all parties to the contract fulfill their contractual obligation (Bailey, 2008)

Ethical Code of Conduct – refers to the moral principles or values that guide staff in the procurement function in all aspects of their work. Ethical behaviour encompasses the concepts of honesty, integrity, probity, diligence, fairness, trust and respect (Wee 2002).

Information Communication Technology: The convergence of audio-visual and telephone networks with computer networks through a single cabling or link system (Arrowsmith, 2004).

Procurement Contract - is a written or oral legally-binding agreement between a procuring entity and supplier to supply goods or services outlined in the agreement (Arrowsmith, 2004).

Staff Professionalism – Refers to the conduct, aims, expectations, or qualities of staff when executing their mandates (Raymond, 2008).

Staff Competencies – Staff ability to perform their functions or mandates effectively Sultana (2012).

Staff skills – Refers to the ability and capacity acquired through deliberate, systematic, and sustained effort to smoothly and adaptively carry out complex activities or job functions involving ideas, things, and/or people in procurement (Armstrong, 2009).

Staff training - Refers to the deliberate efforts by universities to impart new skills to staff on better and more profitable ways of performing the procurement functions (Armstrong, 2009).

CHAPTER ONE

INTRODUCTION

This chapter presents a discussion on the introduction to the study which included background information of the study, problem statement, research objectives, and hypotheses, significance of the study as well as the scope of the study.

1.1 Background of the Study

A contract is a written or oral legally-binding agreement between the parties identified in the agreement to fulfill the terms and conditions outlined in the agreement. A prerequisite requirement for the enforcement of a contract, amongst other things, is the condition that the parties to the contract accept the terms of the claimed contract. Historically, this was most commonly achieved through signature or performance, but in many jurisdictions – especially with the advance of electronic commerce - the forms of acceptance have expanded to include various forms of electronic signature. Contracts can be of many types, e.g. sales contracts (including leases), purchasing contracts, partnership agreements, trade agreements, and intellectual property agreements (Arrowsmith, 2004).

Contract management involves the activities of a buyer during a contract period to ensure that all parties to the contract fulfill their contractual obligation (Bailey, 2008). Contract life cycle management is the process of systematically and efficiently managing the contract creation, execution and analysis of maximizing operational and financial performance and minimizing risks (Else, 2007). A procurement contract is the agreement between a company (the buyer) and a supplier who is intending to sell products and/or services within agreed terms and conditions. The company (buyer) in return is obligated to acknowledge the goods / or service and pay for liability created (Atkinson (2003).

The Office of Government Commerce (OGC, 2002) defines contract management as the process that enables both parties to a contract to meet their obligations in order to deliver the objectives required from the contract. It also involves building a good working relationship between customer and provider. It continues throughout the life of a contract and involves managing proactively to anticipate future needs as well as reacting to situations that arise. The central aim of contract management is to obtain

the services as agreed in the contract and achieve value for money. This means optimizing the efficiency, effectiveness and economy of the service or relationship described by the contract, balancing costs against risks and actively managing the customer–provider relationship. Contract management may also involve aiming for continuous improvement in performance over the life of the contract.

The OGC (2002) identifies that for a good contract management an organization must ensure good preparation, the right contract and single business focus where each party needs to understand the objectives and business of the other. Contract administration to ensure that the customer gets what is agreed, to the level of quality required. Further, relationship management to ensure mutual trust and understanding, openness, and excellent communications are critical. Continuous improvements in price, quality or service should be sought and, where possible, built into the contract terms. There must be people with the right interpersonal and management skills to manage these relationships on a peer-to-peer basis and at multiple levels in the organization. Clear roles and responsibilities should be defined, and continuity of key staff should be ensured as far as possible. Those involved in managing the contract must understand the business fully and know the contract documentation inside out. Management of contracts usually requires some flexibility on both sides and a willingness to adapt the terms of the contract. Contracts should be capable of change. Good contract management is not reactive, but aims to anticipate and respond to business needs of the future.

Public procurement plays a significant role in implementing public projects, supply of goods and delivery of services therefore management of public procurement contracts remains key. Various issues have been identified to affect the efficiency of public procurement contracts. For instance, Raymond (2008) states that professionalism in public procurement relates not only to the levels of education and qualifications of the workforce but also to the professional approach in the conduct of business activities. If the workforce is not adequately educated in procurement matters, serious consequences; including, breaches of codes of conduct occur.

Raymond (2008) also linked lack of a high degree of professionalism in public procurement to corruption, which ultimately obstructs compliance. According to Hui

et al., (2011) procurement officers must be trained and aware about all regulations in relation to procurement and related procedures in order to be efficient. Rossi, (2010) asserts that ethical code is not only a deterrent of incorrect behaviour but also an enabler for all members of the organization to safeguard the ethical legacy of the firm.

In Uganda, the PPDA Audit Report (2008) revealed that lack of professionalism was the largest contributor of poor performance amongst public procurement officers. This position is further confirmed by Basheka and Mugabira (2008) who state that the level of professionalism in public procurement in Uganda was low or non – existent. Consequently, De Boer and Telgen (1998) also attributed non-compliance in public procurement to lack of purchasing professionalism in the public sector. They argue that another cause of non – compliance was the lack of proper staff training. The PPOA Audit Report (2008) in Kenya revealed that inadequate training was high amongst public officers.

University education in Kenya began in 1963 with just 571 students enrolled in Nairobi University College (Weidman, 1995). Since then, the system has undergone some commendable expansion, and by 1998 there were a total of six Public Universities and 18 Private Universities with varying degrees of recognition in the country. Since 1998 the expansion of University education in the country has been rapid and a spontaneous in response to the increasing demand for higher education necessitated by the increasing flow of students from schools. By the year 2014 there were 22 Public Universities, 14 Chartered Private Universities and 12 Universities with Letter of Interim Authority (LIA) (Commission for University Education (CUE), 2014). These Universities were established through institutional Acts of Parliament under the Universities Act, 2012 which provides for the development of University education, the establishment, accreditation and governance of Universities.

The rapid uncontrolled expansion of Public Universities in Kenya has led to various challenges. According to Sifuna (2013), unlike in other contexts, such as the corporate sector, governance in higher education has been quite diffuse and entails shared responsibilities among a variety of stakeholders. Sifuna further asserts that biggest challenge in governance within the University sector relates to issues of power and responsibilities as dealt with by councils, the University leadership, senior

administrators, academics, staff, students, policy makers and other external stakeholders.

Audit reports for the financial year 2013/2014 by the Office of the Auditor General in 12 out of the 22 Public Universities revealed challenges in the procurement management in the Universities. The audit reports show serious mistakes in procurement laws and procedures. Some of the procurement challenges identified in Technical University of Mombasa, Technical University of Kenya and in the Multimedia University, audit report revealed gross violation of procurement rules and regulations where goods were procured from suppliers who were not prequalified, payment for goods not received, and procurement of consultancy services not in line with the procurement rules and consequently value for money was compromised (RoK, 2015a). A similar situation was also observed in Chuka University (RoK, 2015b). In Meru University no bids were invited for the professional services (RoK, 2015c).

1.2 Statement of the Problem

Public procurement represents one of the most critical functions that ensure efficiency in delivery of services in the public sector. However, in the recent past, public institutions in Kenya have lost billions of tax payer's money through annulled contracts, uncompleted projects, unsupplied goods and services not provided, collusion in the tender evaluation and award, inadequate training of the procurement staff especially on the technical fields, corruptions and extended contract periods in the past years without major improvement (Transparency international, 2009). According to the PPOA (2010) the inefficiency of overall administration and management of procurement function in many public institutions contributes to loss of over Ksh 50 million annually.

The mismanagement of procurement contracts continues to occur despite the enactment of the Public Procurement Assets and Disposal Act PPADA (2015) and the Regulations 2006 as well as creation of Public Procurement Regulatory Authority (PPRA) meant to promote effectiveness in public procurement and contract management. Public Universities in Kenya being public entities have been adversely cited in the mismanagement of procurement contracts.

Studies on efficiency of public procurement contract management and the contributing factors in Kenya remains blurred. Maria (2013) pointed out that even the most carefully designed contracting process supported by sophisticated information technology will not succeed without capable contract management professionals. This raises questions on the level of understanding on effective public procurement contract management in Kenya and the enormity of loss of public funds if the situation remains unaddressed. This study therefore sought to assess the determinants of effective procurement contracts administration by focusing on few selected public university in Kenya.

1.3 Research Objectives

1.3.1 General Objective of the Study

The general objective of this research study was to examine the determinants of effective procurement contracts administration in selected Public Universities in Kenya.

1.3.2 Specific Objectives

The specific objectives of the study were:

- (i) To determine the influence of staff competencies on procurement contract administration in Public Universities in Kenya
- (ii) To examine how the use of information communication technology affects procurement contract administration in Public Universities in Kenya.
- (iii) To assess the influence of staff professionalism on procurement contract administration in Public Universities in Kenya.
- (iv) To examine influence of accountability on procurement contract administration in Public Universities in Kenya.

1.4 Research hypotheses

The study was guided by the following hypotheses:

- (i) **H₀₁**: Staff competencies do not have a statistically significant influence on procurement contract administration in Public Universities in Kenya.
- (ii) **H₀₂**: Use of information communication technology has no statistically significant influence on procurement contract administration in Public Universities in Kenya.

(iii) **H₀₃**: Staff professionalism has no statistically significant influence on procurement contract administration in Public Universities in Kenya.

(iv) **H₀₄**: Accountability has no statistically significant influence on procurement contract administration in Public Universities in Kenya.

1.5 Significance of the Study

Procurement is a key component in every institution as it determines the efficiency of utilization of resources committed through procurement contracts. The findings of this study therefore are of significance to the Public Procurement Regulatory Authority in Kenya as well as the National Treasury in understanding the factors contributing to efficiency utilization of public resources in procurement contracts in Public Universities in Kenya. The study assists in identifying the procurement contract management practices and the efficiency in Public Universities in Kenya. This comes at a time when the Ministry of Education in Kenya is actively engaged in activities geared towards enhancing efficiency and quality of university education in the country. The findings are therefore important to the Ministry of Education and the Commission for University Education in Kenya in determining the status of procurement contract management in Public Universities.

The findings are of significance to the selected Public Universities in Kenya where respondents were sampled from by providing information on how procurement contracts are managed and the extent to which factors influencing contracts management challenge the effective implementation of procurement contracts. The senior procurement staff and administrators also gain insights on improving the performance of contracts administration. The findings of the study also assist public universities in improving their procurement functions which would ultimately result in efficient service delivery to the students and customers of the universities.

1.6 Scope of the Study

The study was done covering some selected Public Universities in Kenya including Egerton University, Laikipia University, Kenyatta University, and the University of Nairobi. The researcher sought information from procurement staff by way of questionnaires. The focus was only on factors which have the potential to influence the efficiency of procurement contract management in the Public Universities namely:

staff competencies, use of ICT, professionalism and accountability. The study was conducted in the period of April 2017 – September 2017.

1.7 Limitations of the Study

The administrators of the public universities were sceptical about the intended use of the data collected in their institutions. The researcher availed formal written authority from Jomo Kenyatta University of Agriculture and Technology (JKUAT) as well as the National Council of Science, Technology and Innovation (NACOSTI) as authorities for data collection. These letters indicated that the purpose of the study was strictly academic. Potential respondents were apprehensive to provide information given the sensitive nature of the study. This was addressed through an introduction letter which indicated that information collected was confidential and their identities anonymous.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter involves the analysis of theoretical information of past studies that has been done before. Theoretical information helped the researcher to understand the gaps in the previous research works that the current research should fulfill. This section also looks at critical review, research gaps and summary.

2.2 Theoretical Literature Review

Theoretical review examines relevant theories to this study.

2.2.1 Dependency Theory of Resource the Firm

The Resource Dependency Theory (RDT) was originally developed by Pfeffer and Salancik (1978) based on the idea that resources are key to organizational success and that access and control over resources is a basis of power. Resources are often controlled by organizations not in the control of the organization needing them, meaning that strategies must be carefully considered in order to maintain open access to resources.

The theory draws from social exchange theory to examine how buyer–supplier relationships operate and evolve over time, using concepts such as expectations, co-operation, trust, commitment, communication and conflict behavior. Actors are assumed to be self-interested rather than opportunistic, and to recognize that serving their self-interest requires them to interact with others in a network context. One of the key insights offered is that a single buyer supplier relationship can be characterized by both competitive and co-operative behavior, either simultaneously on different levels within each organization or at different times in the relationship. Firms are seen as organic and adaptive rather than mechanistic and rational (Davis & Cobb, 2009).

With reference to staffing and procurement in Public Universities, it is evident that the procurement department is heavily dependent on the strength of its own resource persons in administration of its functions. More importantly is the skills level of the staff which is a key resource in the procurement. Based on this theory, the buyer – supplier relationship which is managed through procurement contracts would be key

in ensuring efficiency in the organization. It is therefore key for a procuring entity to effectively manage its human resources effectively and to ensure that they have the ability to manage procurement contracts effectively.

2.2.2 Dynamic Capabilities Theory

The dynamic capabilities refer to the firm's ability to build, incorporate, and reconfigure internal and external competencies to address rapidly changing environments (Seleim, 2007). Dynamic capability enables business enterprises enhance their points of differentiation by identifying organizational or individual capabilities thus allowing the business enterprise to build and maintain value (Sifuna, 2013). Capabilities are the firm's capacity to deploy resources that have been properly integrated to achieve a desired goal. There are two components which form the basis of dynamic capability which are the ability of the firm to uniquely deliver value and the flexibility and adaptive nature of the firm to change depending on the circumstances (Seleim, 2007). In this context, the dynamic capabilities are the antecedent strategic and organizational routines that enable a shake-up of the resource base where resources are acquired or shed, integrated, and combined to generate new value creating strategies. The dynamic capability approach seeks to understand how firms develop, refresh and renew important capabilities.

2.3 Empirical Literature Review

According to Makabira & Waiganjo (2014), the ability to realize procurement goals is influenced by internal force and external force. Interactions between various elements, professionalism, staffing levels and budget resources, procurement organizational structure whether centralized or decentralized, procurement regulations, rules, and guidance, and internal control policies, all need attention and influence the performance of the procurement function.

2.3.1 Staff Competencies on Effective Contract Administration

According to Berger & Humphrey (2007) Procurement functional unit suffers from different challenges drawn from internal and external factors in organization. Attracting and retaining talent in the procurement space is among the top concerns for companies already dealing with today's complex pricing pressures. With so much at stake it obviously makes sense to fill key procurement roles with seasoned employees

that have a keen understanding of how the procurement process works in today's environment of increasing complexity across the supply chain.

Sultana (2012) has realized that, in order to sustain economic growth and effective performance, it is important to optimize the contribution of employees to the aims and goals of the organizations. Technological developments and organizational change have gradually led some employers to the realization that success relies on the skills and abilities of their employees, and this means considerable and continuous investment in training and development.

Appiah, (2010) also observes that the current educational systems, do not necessarily impart specific knowledge for specific job positions in organizations. As a result of this the labour force comprises of few people with the right skills, knowledge and competencies needed for positions in the job market. There is therefore the need for extensive external training for human resources to be able to improve and also contribute to the productivity of organizations.

Kiage (2013) conducted a study in Kenya to assess the factors Affecting Procurement Performance: A Case of Ministry of Energy. One of the key issues focused in the study was staff competencies which included staff skills and experience. The study found out that only 34% of the staff were in agreement that the procurement staff had the necessary skills and experience to carry out procurements effectively and that the staff competencies influence procurement performance to a large extent. Besides, the procurement staff competencies not only affected performance of procurement department but also the whole ministry.

The study also found that competent staff are effective, efficient and provide solutions to the procurement problems while incompetent staff would be ineffective and inefficient thus contributing to poor performance for the ministry. Finally it was found out that effective and efficient procurement process in the ministry could only be achieved through proper planning by competent staff else there would be flaws in the process. Competent staff would ensure that items services are procured as and when the need is expected.

A study conducted by Barsemoi, Mwangagi & Asienyo (2014) to assess the factors influencing procurement performance in private sector in Kenya focused on the procurement practices in Henkel Chemicals (E.A). The study established a strong positive correlation of 70% between staff competence and procurement performance indicating that staff competences positively affect procurement performance of Henkel Chemicals. This implies that when staff competence improves in a procurement function, it automatically improves procurement performance measured through the company's service delivery. This study however did not explicitly focus on the staff skills in contract administration in procurement although it is an integral part of procurement.

According to Ndumbi and Okello (2014), training has been invaluable in increasing productivity of organizations. They further state that training does not only enhance employees resourcefully, but also provide them with an opportunity to virtually learn their jobs and perform more competently. The improvement is not only on employees' productivity but also on the entire organizations' productivity. Training as a process is one of the most pervasive methods to enhance the productivity of individuals and communicating organizational goals to personnel.

Seleim (2007) explains that in today's competitive training has become a key element for improved organizational performance through the increasing level of individual competences. This means that training will help employees to master knowledge, skills, behaviors, sense of self-worth and confidence upon which they are able to perform efficiently to improve on the performance of the organization. According to Raymond (2008), training in public procurement relates not only to the levels of education and qualifications of the workforce but also to the professional approach in the conduct of business activities (Hui, Othman, & Normah, 2011).

In a study conducted by Makabira & Waiganjo (2014), to assess the Role of Procurement Practices on the Performance of Corporate Organizations in Kenya focuses on the case study of the Kenya National Police Service in Makueni County they found out that most of the procurement personnel in the organization had attended training in procurement practices.

Hui et al. (2011) analyzed the procurement issues in Malaysia and established that procurement officers were to blame for malpractice and non-compliance to the procurement policies and procedures. The study further established that procurement officers must be trained and aware about all regulations in relation to procurement and related procedures.

A study conducted by Eyaa and Oluka, (2011) in Uganda revealed that lack of familiarity with procurement rules resulted into poor compliance levels among the procurement staff. They also found out that in the Ugandan context, familiarity with procurement regulations significantly predicted compliance with procurement regulations. This shows that the level of training on the existing and emerging procurement laws and policies was key in ensuring efficiency in procurement processes, key among them being the procurement contracts administration.

A study conducted by Ndumbi and Okello (2014) to assess the effect of staff training on level of Compliance to public procurement system in Parastatals in Kenya. The study was conducted at Kengen Company to provide an understanding on the situation in the energy sector in Kenya. The findings revealed that most of the personnel who were employed in the procurement department were not properly trained and therefore lacked skills required to run the compliance processes. The poor training was attributed to the fact that most public sector organizations did internal transfers and recruitment to staff their departments.

The study found that as a result of the internal transfers and recruitment, staff in the procurement department were not exposed to much training in procurement. Majority of the respondents also indicated staff training actually influenced it to a great extent the procurement performance since moderate a positive relationship existed between the variables. This however did not look at the contract administration aspects although it's part of procurement outcome. The current study focuses on procurement performance from the perspective of contract administration which is an integral part of procurement.

The PPOA Audit Report (2008) revealed that inadequate training was high amongst public procurement officers in Kenya and this can still be attributed to the fact that the profession is still young in Kenya. A study by Atkinson (2003) notes that compliance

arises from dynamic and continuous training. A report by the PPOA (2013) and the Kenya Institute of Supplies Management (KISM, 2014) stated that the procurement staffs in many procuring entities suffer from a general lack of information about the legal frame- work, principles, procedures and processes of procurement. Other studies have also noted that deficient awareness of the procurement procedure by all the internal stake holders may affect compliance.

2.3.2 ICT on Effective Contract Administration

Berger & Humphrey (2007) reckoned that personnel in procurement are, in a sense, information processors. They receive, analyze, make decisions and distribute information in order to manage the flow of goods and services in the SC. ICT is an enabler for information sharing which organizations in the procurement system can use for eliminating bloated inventory levels caused by cumulative effect of poor information cascading up through a SC. Maria (2013) averred that information integration is also a key component in many automatic replenishment programs (ARP). Initiatives such as Vendor Managed Inventory (VMI) and collaborative planning, forecasting and replenishment (CPFR) are based on an increased level of automation in both the flow of physical materials, goods and associated information between companies to improve the efficiency in the entire system. It shortens information processing time and tremendously improves procurement performance.

Process integration can enhance procurement performance. ICT provides new ways to store, process, distribute and exchange key information with customers and suppliers in the entire procurement system. (Elsay, 2007) emphasized that information is the glue that holds organizations together and can be used to integrate procurement process activities both within a process and across multiple processes. Information on demand, forecasting and replenishment is recognized as a central component in integration of planning and control. Internal integration focuses on cross-functional processes. Externally, focus is on relationships with outside customers and suppliers. A relationship can have various intensity levels ranging from lowest open-market negotiations, cooperation and coordination to the highest collaboration level.

Collaboration in procurement is based on a high degree of trust, commitment and information-sharing. It requires linking performance systems with decision making,

information sharing and incentive alignment in the SC. Hotterbeekx (2013) reckoned that enterprise resource planning (ERP) systems are essential for supporting internal information sharing. Externally, inter-organizational information systems (IOIS) constituting automated information systems shared by various firms can be used to support information-sharing with customers and suppliers.

ICT contributes to improved communications patterns, increased demand for coordination of joint activities and new organizational structures through its ability to store, transmit and process information, and speed up inter-organizational activities. Organizations have huge amounts of raw procurement data but are poor at converting same into market knowledge. They should strive to find trends, patterns and connections in data in order to inform and improve competitive procurement performance.

Seleim (2007) opined that procurement systems have long been supported by ICT. With the implementation of ERP systems in the 1990s, EDI connections with suppliers were established through automation of delivery schedules by linking user materials management system with supplier systems. ICT enables organizations to decentralize operational procurement processes and centralize strategic ones due to higher transparency. Prior to e-procurement, strategic procurement often dealt with routine tasks such as individual transactions. Strategic aspects were frequently neglected, with the buyer having little influence over the choice of suppliers and purchased products. Internet technologies facilitate faster and more efficient operational procurement processes enabling managers to concentrate on strategic tasks.

Armstrong (2005) asserted that studies have examined business-to-business (B2B) transactions on different operational performance dimensions such as inventory cost, cycle time, and manufacturer flexibility. Rapid growth of importance of ICT application is a testimony to its impact on improving procurement performance. This is achieved through Internet, Intranet and Extranet. However, organizations must make a trade-off between efficiency and responsiveness.

Maria (2013) argued that ICT provides the means for collecting relevant demand data, developing a common database and providing a means for transmitting order information. It allows organizations to change the way they source supplies for smooth operations. Chopra, Meindl, and Dhamram (2007) asserted that ICT provides a collaboration platform by allowing customers and suppliers to work together on product design using specialist ICT design tools. Value chain integration may be made possible if separate activities can be knitted together by faster and more reliable information flows.

Integration allows Customers to change their specification and delivery schedules themselves which then automatically reconfigures requirements back in the procurement system. ICT can allow managers and external stakeholders to bypass traditional gatekeepers who gained power from their control of information. ICT-based systems can also create direct communication between the top and bottom of an organization through use of in-house websites. This helps organizations reduce transaction and production costs and achieve operational efficiency.

Chimwani, Iravo, & Tirimba (2014) conducted a study to assess factors influencing procurement performance in the Kenyan public Sector focusing on a case study of the State Law Office. One of the key variables was on information communications. The study found out that, procurement systems were still largely manual, neither streamlined nor automated. This resulted in efficiency and losses. The study however revealed that the use of ICT enabled systems integration, promotes transparency, accountability, reliability and enhancement of relationship management. Staff members are yet to benefit from attendant ICT use and adoption. The study however looked at procurement in general while the current study focuses on procurement contract management. Besides, since the study was done the government has made much emphasis towards the integration of ICT in procurement which the current study seeks to investigate.

Weeks and Namusonge, (2016) conducted a study to assess the influence of information technology practices in procurement on organization performance in Public Institutions in Kenya by concentrating on the case of Jomo Kenyatta University of Agriculture and Technology. The descriptive survey design and targeted

41 procurement officers and managers of all 8 campuses of Jomo Kenyatta University of Agriculture and Technology. The findings study used a revealed that information technology in procurement is a significant contributor to organizational performance in improving service delivery, efficiency, effectiveness, continuous Quality improvement, reduction in purchase price and transparency. The study however was not able to determine the extent to which information communication technology was adopted in procurement but what technology could do.

2.3.3 Staff Professionalism on Effective Contract Administration

According to Raymond (2008), professionalism in public procurement relates not only to the levels of education and qualifications of the workforce but also to the professional approach in the conduct of business activities. If the workforce is not adequately educated in procurement matters, serious consequences; including, breaches of codes of conduct occur. According to Atkinson (2003) cited in Raymond(2008), there are approximately 500,000 professional purchasing people in the United States and only 10 per cent of these have been members of a professional body and the rest are not even aware that there are ethical and legal standards involved in procurement.

Raymond (2008) also linked lack of a high degree of professionalism in public procurement to corruption, which ultimately impedes compliance. The procurement officers must be trained and aware about all regulations in relation to procurement and related procedures (Hui et al 2011). Rossi, (2010) asserts that ethical code is not only a deterrent of incorrect behavior but also an enabler for all members of the organization to safeguard the ethical legacy of the firm.

In Uganda, the PPDA Audit Report (2008) revealed that lack of professionalism was high amongst public procurement officers. This position was further confirmed by Basheka and Mugabira (2008) who state that the level of professionalism in public procurement in Uganda was low or non – existent. Similarly, adherence to the procurement laws was low. De Boer and Telgen, (1998) also attributed non-compliance in public procurement to lack of purchasing professionalism in the public sector.

According to Berger & Humphrey (2007), a procurement function that is carried out professionally is the heart of delivery of any service on value for money principle. In the study, it was noted that most of personnel carrying out procurement functions in the local authorities in Kenya have not been sensitized on procurement regulations. Raymond (2008) also linked lack of a high degree of professionalism in public procurement to corruption, which ultimately impedes compliance.

A study conducted by Gesuka & Namusonge (2013) to assess the factors affecting compliance of public procurement regulations in Kenya focused on the case study of Butere District. The study considered five components of professionalism: knowledge of procurement officers, certified professional training, recognition of procurement as a profession, association to a profession body and finally better pay and other remunerations. The findings revealed that lack of professional knowledge of the procurement regulations, ethics and risks to its integrity, accountability, confidentiality and transparency and poor remunerations the resulting effect is non-compliance of public procurement regulations.

2.3.4 Accountability and Effective Contract Administration

According to Armstrong (2005) accountability is a standard of public life, where holders of public office are accountable for their decisions and actions to the public and must submit themselves to whatever scrutiny is appropriate to their offices. Accountability constitutes a central pillar of any public procurement system. Without transparent and accountable systems enabling governments and citizens to engage in a mutually responsive way, the vast resources channeled through public procurement systems run the danger of increased corruption and misuse of funds. Even in a system with low levels of corruption, public and civic oversight can help identify inefficiencies, thereby increasing procurement efficiency and effectiveness for the benefit of improved service delivery and ultimately citizens.

Karanja and Mugo (2010), conducted a study to assess the internal factors affecting procurement process of supplies in the public sector. The study surveyed government ministries in Kenya. The findings revealed that, ethical behavior supports openness and accountability in a procurement process and gives suppliers confidence to participate in the Government marketplace. Ethical behavior was also found to reduce

the cost of managing risks associated with fraud, theft, corruption, and other improper behavior; and enhance confidence in public administration. This study however did not consider the contract management in procurement.

According to Transparency International (2006), corruption is the misuse of entrusted power for private gain. Raymond (2008) stated that procurement related corruption tends to be a serious problem in developing countries rather than in developed countries. Developing countries such as Bangladesh, India, Sri Lanka, Nigeria, Kenya and Venezuela were identified as having high levels of corruption. As stated by Hui et al; (2011), public procurement corruption could threaten legitimacy and as such, the policies and procedures should be created to curb any possible corruption activities and enhance transparency, accountability and integrity.

According to the Walk Free Foundation (2013) ethical procurement which is also referred to as responsible procurement refers to procurement processes which; respect fundamental international standards against criminal conduct like bribery, corruption and fraud and human rights abuse and respond immediately to such matters where they are identified. This would result in progressive improvements to the lives of people who contribute to supply chains and are impacted by supply chain decisions. Due to the business risk of unethical procurement practices, many organizations already have Codes of Conduct that set out minimum standards and parameters for procurement other than simply cost.

Wanyonyi and Muturi (2015) conducted a study which sought to assess the factors affecting performance of procurement function among public technical training institutions in Kisumu County. The study narrowed on four factors namely: information technology, competency of staff and ethical issues. The ethical dimension was analyzed using four indicators: honesty, integrity, fairness and trust. The findings revealed that of the three factors under investigation, ethics had the largest effect on procurement performance. Most of the respondents observed that it negatively affected the performance of procurement functions in the two institutions. Among the major contributing factors for work ethics was fairness in procurement procedures, professionalism and accountability, awarding of tenders to most qualified and eligible bidders and ensuring members of the procurement committees are not in any way

involved in supplying goods and services in the two institutions. This study was conducted in tertiary colleges while the current one focuses on public universities. Besides, other than the ethics, professionalism staff skills and training was taken into consideration to determine their effect on procurement contract management.

2.3.5 Effective Contract Administration

Contract management includes negotiating the terms and conditions in contracts and ensuring compliance with the terms and conditions. It includes documenting and agreeing on any changes that may arise during its implementation or execution. It can be summarized as the process of systematically and efficiently managing contract creation, execution, and analysis for the purpose of maximizing financial and operational performance and minimizing risk (Bhardwaj, 2011). According to Hotterbeekx (2013) contract management can be defined as the processes undertaken to maintain the integrity of the contract, and ensure that the roles and responsibilities contractually demarcated are fully understood and carried out to the contracted standard. Another definition of contract management is the process that ensures that all parties to a contract fully meet their obligations, in order to satisfy the operational objectives of the contract and the strategic business goals of the customer (Hotterbeekx, 2013).

According to Bhardwaj (2011), contract management process enables both parties to a contract to meet their obligations in order to deliver the objectives required from the contract. It is also involves building a good working relationship between company and contractor. It continues throughout the life of a contract and involves managing proactively to anticipate future needs as well as reacting to situations that rises.

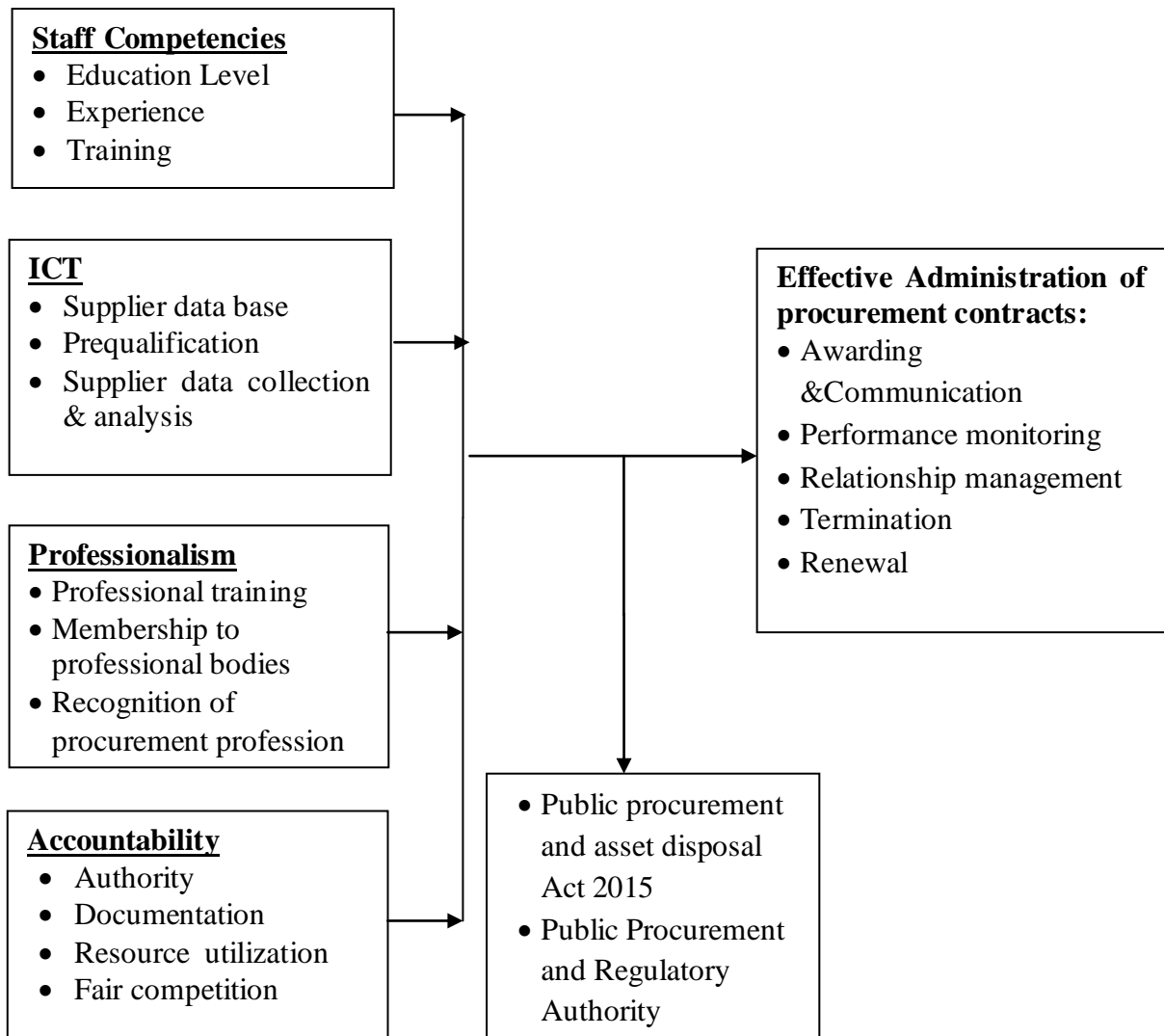
In a study conducted in the ministry of Energy in Kenya, Kiage (2013) revealed an overwhelming support where, 71% of the respondents indicated that contract management influenced procurement performance to a great extent. The study evaluated contract management in the context of planning, organizing, control and directing payments. Besides, timeliness, work plans and contract periods were key contractual issues that ensured that most projects would have no cost overruns.

Oluka and Basheka (2012) observed that contract management requires qualified workforce, clear processes, relationships, resources, leadership and policies all of which have direct impact on resulting contractors' performance outcomes. Costa et al., (2009) argue that contract management in Engineering Procurement Construction projects, involves the main six categories; finance management, HSE management, quality management, schedule management, human resources management, and Procurement management.

According to CIPS (2012) the key elements of contract management include: contract communication; contract administration; managing performance; relationship management; and contract renewal or termination. Hence effective contract management refers excellence in the following six areas; contract management team roles and responsibility, risk management, specification preparation, contractor selection, key performance indicators set up, and relationship management.

2.4 Conceptual Framework

The study was guided by the conceptual framework that in Figure 2.1 to determine factors that influence contract administration in selected public universities. The model shows hypothesized causal relationship between the independent variables of the study and the dependent variables.



Independent Variables Intervening Variables Dependent Variables

Figure 2.1: Conceptual Framework

Source; Author (2017)

According to the conceptual model in Figure 2.1 above, the four variables to be evaluated are: staff competencies, use of ICT, professionalism and the accountability. In evaluating the staff competencies, the study sought to analyze the, education level, experience, and knowledge and leadership skills of the procurement team especially those involved in the administration of procurement contracts. Besides, the training and capacity development opportunities were considered.

ICT was analyzed by considering the level and the extent to which the technology is adopted in the various stages of procurement contract. These include the prequalification and maintenance of supplier databases, supplier rating and evaluation, collection, storage and analysis of supplier information in monitoring the implementation progress of procurement contracts.

The study analyzed professionalism in the procurement function by analyzing the considerations to professional training and development of staff. Further, the staff membership to procurement professional bodies was analyzed as well as the level to which the university recognizes the procurement profession. Finally in assessing accountability among staff, the study sought opinion on the extent to which authority is exercised, documentation, resource utilization and fair competition in tendering processes.

The legal and regulatory framework in Kenya is a key determinant on how an organization conducts its procurement function. The public procurement is governed by the Public procurement and asset disposal Act of 2015 while its implementation is overseen by the public procurement oversight authority. These form key intervening variables of the study. The dependent variable (effective contract administration) in public universities was assessed based on how the institutions perform on key contractual stages in procurement. These will include the contract awarding and communication, monitoring the contractor performance in line with the contract, managing relationships with contractor, termination and renewal of contracts.

2.5 Summary of Literature Reviewed

The study has reviewed literature in two broad categories of theoretical and empirical literature. The resource dependency theory explains the importance of staff as a key resource in a procurement contract. The overall performance of the procurement would be highly dependent on the staffing. The dynamic capability approach seeks to understand how firms develop, refresh and renew important capabilities in order to deliver value depending on the circumstances.

The section on empirical literature review focused on the variables and concepts under investigation and the previous studies done as well as the gaps. The most

outstanding outcome of the review is that a number of the have been done in relation to the relationship between staffing and procurement performance. However, there is little focus on public universities in Kenya. Secondly, public procurement is evolving at a very significant rate. Most of the previous studies however focus on procurement from the perspective of the initial concept of institutional buying. However with the current issues there is need to focus on the evolving issues like the procurement contract management.

2.6 Research Gaps

Various studies have been conducted in relation to factors affecting procurement contract administration in public sector although with limited scope. A study conducted by Barsemoi, Mwangagi & Asienyo (2014) for instance focused to assess the factors influencing procurement performance in private sector. The focus was on Henkel Chemicals and was assumed to represent other private sector institutions regardless of the sector and the dynamics in which they operated. Henkel Chemicals is a manufacturing company while there are other industries that procure heavily but not necessarily in manufacturing. Besides, the outcome of the study could be due to the influence of internal operations and structures. The current study therefore focuses on public universities but with caution to ensure that data is collected from more than one institution to enhance the reliability.

While assessing the role of procurement on performance of corporate organizations, Makabira and Waiganjo (2014), focused on the Kenya National Police Service in Makueni County where they found out that most of the procurement personnel in the organization had attended training in procurement practices. However, the study did not focus on analyzing the nature of training and the training practices and how these trainings translated to improvement in procurement performance. Ndumbi and Okello (2014) however opened up in a study in Kengen which revealed that staff were not properly trained and therefore lacked skills required to run the compliance processes. This however did not look at the contract administration aspects although it's part of procurement outcome. The current study focuses on procurement performance from the perspective of contract administration which is an integral part of procurement.

Information communication technology has been found to have a significant impact in procurement since majority of the activities involve information processing. Studies on the use of ICT in procurement in public institutions by Chimwani, Iravo, & Tirimba (2014) focused on the State Law Office and Weeks and Namusonge, (2016) focused on Jomo Kenyatta University of Agriculture and Technology. The two studies were in agreement that ICT was key in enhancing efficiency in public procurement, however, they did not quantify the extent to which this was practiced in the institutions studied.

On professionalism and integrity, Wanyonyi and Muturi (2015) study on the factors affecting performance of procurement function among public technical training institutions in Kisumu County focused on three technical institutions by analyzing honesty, integrity, fairness and trust. The findings revealed that among other factors, ethics had the greatest contribution on procurement performance. However, the study was not able to separate the professionalism and the ethics components in procurement since all of them were evaluated using the same indicators. Secondly, this study was conducted in tertiary colleges while the current one focuses on public universities.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This section presents the methodology and procedures that was followed in conducting the study. It contains the design for the study, study population, sampling frame, study sample and sampling techniques, data collection instruments, procedures, pilot testing and data analysis procedures.

3.2 Research Design

The study adopted a descriptive survey design. A survey allows a researcher to obtain information that describes existing phenomena by asking individuals about their opinions, perception, attitude and behavior or values (Creswell, 2013). Descriptive survey design is the most frequently used descriptive design which collects information about people's attitudes, opinions, habits or any other variable or social issues from a cross section of similar set up (Orodho, et al., 2003). Descriptive research allows a researcher to describe a certain phenomenon the way it is without manipulating the variables. This study involves gathering opinions from University Procurement staff on the determinant on effective contract administration. Further, an analysis of the factors to determine how they influence contract administration was. Thus descriptive survey research design was appropriate in facilitating the study.

3.3 Population of study

The study was conducted in some selected Public University in Kenya. These include: Egerton University, Laikipia University, Kenyatta University, and the University of Nairobi. The selected universities were identified to represent other public universities because their procurement procedures, regulations, systems and challenges are the same. The study target population was comprised of all the staff in procurement department directly involved in procurement since the structure in the procurement department is the same. These include Senior Procurement officers, Procurement officers, Procurement assistants, and clerical officers. This category of staff is chosen because of the nature of their duties in managing day to day procurement matters of the University. They are responsible for implementing University policies on procurement and interact with the systems on daily basis. The distribution of target population across the selected Public Universities is shown on Table 3.1.

Table 3.1: Target Population

University	Procurement Staff
Egerton University	28
Laikipia University	32
Kenyatta University	32
University of Nairobi	49
Total	141

Source: Author (2017)

3.4 Sample Frame

The sampling frame was drawn from the payroll register of the University's procurement departments in each of the four institutions selected for the study. The distribution of staff in each category is shown on Table 3.1.

3.5 Sample Size

Creswell (2013) define a study sample as the subjects from which study information was obtained. They further state that there is no widely recommended formula for determining the size of sample of a study. In this study, the appropriate sample size was determined using the formula by Nassiuma (2002). This formula is convenient for large sample sizes.

The formula states that:

$$n = (Nc_v^2) / (c_v^2 + (N-1)e^2)$$

Where:

n= Sample size

N= Population

C_v= Coefficient of variation (take 0.5)

e= Tolerance at desired level of confidence, take 0.05 at 95% confidence level

Upon substitution, the sample size would be as follows:

$$n = (141*0.5^2) / (0.5^2 + (141-1)*0.05^2)$$

$$n = 59$$

The distribution of sample size is shown on Table 3.2.

Table 3.2; Distribution of Sample Size

University	Target Population	Sample Size
Egerton University	28	12
Laikipia University	32	13
Kenyatta University	32	13
University of Nairobi	49	21
Total	141	59

Source: Author (2017)

3.5.1 Sampling Procedure

The sample size for the study was 59 procurement staff from Public Universities. Stratified proportionate random sampling technique was used in selection of individual respondents where the number of staff in each University was determined in relation to the size of population. In each University, the staffs were selected using simple random sampling.

3.6 Research Instruments

The study depends on primary data to be obtained from staff of procurement departments. This was occasioned using self-administered questionnaires. The questionnaires were designed to seek information in determinant of procurement contract administration which included staff competency, application of information Communication Technology, professionalism and Accountability. Further, respondents were required to assess the performance in procurement contract administration. Questionnaires are preferred in this study because they allow investigation with an ease of accumulation of data in a highly economical way (Graveter & Forzano, 2003). The questionnaires were designed using both open ended and closed ended questions. Respondents' opinions were quantified by rating them on a five point Likert scale.

3.7 Data Collection Procedure

In collecting data, the researcher first obtained an introductory letter from the Jomo Kenyatta University of Agriculture and Technology. The researcher then informed and sought permission from the University senior procurement officers. The researcher then sought the assistance of data collection clerks paid a field pre-visit to

the Universities to familiarize with their mode of operation. Sampling was then done and questionnaires administered to the selected respondents at the Universities using the drop and pick method.

3.8 Pilot Testing

To ensure validity in the study, the researcher designed the research instruments based on objectives and also sought expert judgment from research supervisors at all times. Before conducting the actual study, the questionnaires were tested through a pilot study among seven staff selected in the procurement department of Jomo Kenyatta University of Agriculture and Technology. The rule of the thumb suggests that 5% to 10% of the target sample should constitute the pilot test (Cooper & Schilder, 2011; Creswell, 2013; Gall and Borg, 2007). The pilot questionnaires were then analyzed for reliability using Cronbach reliability coefficient. The Cronbach alpha coefficient of effective contract administration, staff competencies, use of ICT, Professionalism of procurement staff, and accountability were 0.8534, 0.7456, 0.7986, 0.8002, and 0.7527 respectively. These Cronbach alpha coefficients were greater than 0.7 thus the data collection instrument was considered reliable (Creswell, 2013).

3.9 Data Processing and Analysis

The collected data was processed and analyzed using Statistical Package for Social Sciences (SPSS) version 21. Data was then analyzed using descriptive statistics such as frequency counts, percentages, mean, and standard deviation. Multiple regression analysis and t-test statistics were used to determine the relationship between predictor variables (determinants) and the dependent variables (contract administration). The regression data analysis was based on the regression model below:

$$Y = \alpha_0 + \beta_i X_i + \beta_{ii} X_{ii} + \beta_{iii} X_{iii} + \beta_{iv} X_{iv} + \varepsilon$$

Where: Y = Effective contract administration

$\beta_i, \beta_{ii}, \beta_{iii}, \beta_{iv}$ = Coefficients of the independent variables

X_i = Staff competencies, X_{ii} = Use of ICT, X_{iii} = Professionalism of procurement staff,

X_{iv} = Accountability

α_0 = Constant

ε = Error Term

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION, INTERPRETATION AND DISCUSSION

4.1 Introduction

The study was interested in examining the determinants of effective procurement contract administration in some selected public universities in Kenya. This chapter covers the analysis of data which was collected, its presentation, interpretation and discussion.

4.2 Response Rate of Respondents

The study's respondents were from procurement staff from selected Public Universities in Kenya including: Egerton University, Laikipia University, Kenyatta University, and the University of Nairobi. The sample size was 59 staff in procurement departments including senior procurement officers, Procurement officers, Procurement assistant and clericals. This sample size was determined using the Naissuma formula (Nassiuma, 2002).

Therefore, the researcher issued 59 questionnaires to the respondents. Out of these questionnaires, 56 questionnaires were returned, as 2 questionnaires had not been filled. This was despite the respondents and the researcher having prior agreement on when the questionnaires were going to be picked. Further, 3 questionnaires were rejected due to some questions having missing answers which made the questionnaires incomplete. This therefore meant that the complete questionnaires were 51 questionnaires which formed the basis of the data analysis in this study. In this context, the response rate for this study was 86.4% which was deemed sufficient for data analysis. According to Mugenda and Mugenda (2002), a minimum response rate of 80.0% is recommended for data analysis.

4.3 General Information

The study was interested in determining the general information of the respondents in terms of age of the respondents, gender of the respondents, current designation of the respondents, and numbers of years the respondents have worked in a given institution.

4.3.1 Age of the Respondents

The study grouped the ages of the respondents as 20 – 30 years, 31 – 40 years, 41 – 50 years, 51 – 60 years, and above 60 years. In this context, the respondents were asked to indicate the age group where their respective ages fell under. The results are presented in Table 4.1.

Table 4.1; Age of Respondents

Age	Frequency	Percentage
20 – 30 years	3	5.9%
31 – 40 years	14	27.5%
41 – 50 years	23	45.1%
51 – 60 years	9	17.6%
Above 60 years	2	3.9%
Total	51	100.0%

Most of the respondents (45.1%) were aged 41 – 50 years followed by those aged 31 – 40 years who were 27.5% of the respondents. The respondents aged 51 – 60 years were 17.6%, those aged 20 – 30 years were 5.9%, while those aged above 60 years were 3.9%. The higher numbers of respondents aged 31-50 years can be attributed to a high retention rate of staff in the public universities as well this age bracket being comprised of people who make up the bigger percentage of the workforce in Kenya. The few number of respondents above 60 years could be attributed to retirement of staff, while the few number of respondents aged 20 – 30 years could be due to most people in this age bracket still undergoing their tertiary education.

4.3.2 Gender of respondents

The respondents were asked to indicate their gender between the male and female gender. The results are as shown in Table 4.2.

Table 4.2; Gender of respondents

Gender	Frequency	Percentage
Male	27	52.9%
Female	24	47.1%
Total	51	100.0%

The majority of respondents were male, that is, 52.9% of the respondents. The female respondents were 47.1% of the respondents. There wasn't a big difference in the gender of respondents which could be attributed to the inclusivity of either gender in various positions within the public universities.

4.3.3 Designation of the Respondents

The respondents were asked to indicate their current designation among senior procurement officer, procurement officer, procurement assistant, and clerk, as shown in Table 4.3.

Table 4.3; Designation of the Respondents

Designation	Frequency	Percentage
Senior Procurement Officer	4	7.8%
Procurement Officer	11	21.6%
Procurement Assistant	17	33.3%
Clerk	19	37.3%
Total	51	100.0%

The respondents whose current designation was that of a clerk were the majority, that is, 37.3% of the respondents. The respondents whose current designation was procurement officer followed at 33.3% of the respondents. The senior procurement officers were formed the least number of respondents (7.8%), while the procurement officers were 21.6% of the respondents. The few number of senior procurement officers could be attributed to few number of individuals who hold the position in each university. The higher number of clerks can be attributed to the higher number of staff who hold these positions in the public universities as the nature of work of a clerk requires a high number of staff.

4.3.4 Number of Years Respondents have Worked in the Institution

The number of years the respondents have worked in their current institution were also used to collect the general information of the respondents. The results are presented in Table 4.4

Table 4.4; Number of Years Respondents have Worked in the Institution

Years Worked	Frequency	Percentage
Below 5 years	5	9.8%
6 - 10 years	6	11.8%
11 - 15 years	9	17.6%
16 - 20 years	17	33.3%
Above 20 years	14	27.5%
Total	51	100.0%

In this context, the respondents were asked to state the number of years they have worked in the current institution, which were then grouped during data editing into below 5 years, 6 -10 years, 11 - 15 years, 16 - 20 years, and above 20 years. A third of the respondents (33.3%) had worked in their current institution for 16 - 20 years while 27.5% of the respondents had worked for above 20 years. The respondents who had worked in their current institution for Below 5 years, 6 - 10 years, and 11 - 15 years were 9.8%, 11.8%, and 17.6% of the respondents, respectively. The higher number of respondent who have worked in their current institution for 16 years and above could be attributed to good working conditions and remuneration of staff in the public universities which ensures low staff turnover

4.4 Staff Competencies

The competencies of the respondents were determined by finding out their highest level of education, number of years they have worked in procurement related function in their career, and how they rate themselves in the level of knowledge in procurement related activities.

4.4.1 Highest Level of education of Respondents

The respondents were asked to indicate their highest level of education among KCSE certificate, diploma, degree, and post graduate. The results are as shown in Table 4.5.

Table 4.5; Highest Level of Education of Respondents

Education Level	Frequency	Percentage
KCSE certificate	0	2.0%
Diploma	16	31.4%
Degree	27	52.9%
Post Graduate	7	13.7%
Total	51	100.0%

Slightly above half of the respondents (52.9%) were graduates with a degree as their highest level of education. The respondents with diploma and post graduate as their highest levels of education were 31.4% and 13.7% respectively. Only 2.0% of the respondents had KCSE Certificate as their highest level of education. The negligible number of respondents with a KCSE certificate as their highest level of education could be attributed to the respondents who were employed for over 20 years as the minimum education requirements included KCSE certificates. On the other hand, the higher number of respondents who have their highest education level at graduate level could be attributed to respondents' upgrade of skills in the universities as they work in learning institutions.

4.4.2 Years the Respondents have Worked in a Procurement Related Function

The respondents indicated the number of years they have worked in procurement related function in their career. The results are as in Table 4.6.

Table 4.6; Years the Respondents have Worked in a Procurement Related Function

Education Level	Frequency	Percentage
1 – 3 years	8	15.7%
4 -6 years	12	23.5%
7 – 9 years	9	17.6%
10 Years and Above	22	43.2%
Total	51	100.0%

The least number of respondents have worked in a procurement related function in their career for 1 – 3 years, that is, 15.7% of the respondents. On the other hand, most of the respondents (43.2%) have worked in a procurement related function in their career for 10 years and above. The respondents who have worked in procurement

related function in their career for 4 -6 years and 7 – 9 years were 23.5% and 17.6% of the respondents respectively. The higher numbers of respondents have worked in procurement related function in their career for 10 years and above could be attributed to the respondents who have been employed at the universities for 10 years and above.

4.4.3 Rating on Level of Knowledge in Procurement Related Activities

The respondents were asked to rate themselves in the level of knowledge in procurement related activities, that is rate their level of knowledge in procurement related activities. The results are presented in Table 4.7.

Table 4.7; Rating on Level of Knowledge in Procurement Related Activities

Rating	Frequency	Percentage
Very Good	26	51.0%
Good	11	21.6%
Fair	14	27.4%
Poor	0	0.0%
Very Poor	0	0.0%
Total	51	100.0%

Slightly above half of the respondents rate their level of knowledge in procurement related activities as very good. The respondents who rate their level of knowledge in procurement related activities as good and fair were 21.6% and 27.4% respectively. There was no respondent (0.0%) who rated their level of knowledge in procurement related activities as poor or very poor. The rating by the respondents of their level of knowledge in procurement related activities as at a minimum fair could be attributed to training in procurement as well as experience acquired during their day to day activities.

4.4.4 Staff Competencies

The study sought to determine the perception of the respondents regarding staff competencies in the procurement department in their respective organizations. This was determined using various descriptive statistics including the frequency

distributions, means and standard deviations of various statements. The results are presented in Table 4.8.

The frequency distributions were a result of various perceptions of the respondents on the different statements in regards to competencies of staff in the procurement department in their respective organizations. These were scored as 5=strongly agree, 4= Agree, 3 = neither agree nor disagree, 2 =disagree, and 1 =strongly disagree. When asked whether the university has recruited staff with education qualification in procurement, slightly above half of the respondents (51.0%) tended to agree that staff with education qualification in procurement have been recruited by the university. This was supported by 11.8% of the respondents who strongly agreed with the statement.

Table 4.8; Descriptive Statistics for Staff Competencies

	5	4	3	2	1	Mean	Std. Dev
The university has recruited staff with education qualification in procurement	6 11.8%	26 51.0%	14 27.5%	3 5.9%	2 3.9%	3.61	0.91
The university considers the level of experience of staff during recruitment in procurement	4 7.8%	26 51.0%	16 31.4%	4 7.8%	1 2.0%	3.55	0.83
Knowledge on procurement practices is critical for a staff to be recruited in the procurement department	6 11.8%	21 41.2%	22 43.1%	1 2.0%	1 2.0%	3.59	0.80
Only staff with procurement education background are transferred to the procuring department	17 33.3%	25 49.0%	4 7.8%	4 7.8%	1 2.0%	4.03	0.96
The education qualifications of staff in procurement is well diversified	11 21.6%	30 58.8%	9 17.6%	1 2.0%	0 0.0%	4.00	0.69
The leadership skills of procurement staff are highly taken into consideration	10 19.6%	27 52.9%	10 19.6%	3 5.9%	1 2.0%	3.82	0.89
The procurement department allows their staff time to pursue higher education qualifications	12 23.5%	24 47.1%	13 25.5%	1 2.0%	1 2.0%	3.88	0.86
New staff in the procurement department are taken through intensive induction training	5 9.8%	14 27.5%	20 39.2%	9 17.6%	3 5.9%	3.18	1.03
The procurement department organizes for regular in house training	14 27.5%	32 62.7%	3 5.9%	1 2.0%	1 2.0%	4.12	0.77
Staff in procurement department are sponsored for trainings outside the university	9 17.6%	35 68.6%	6 11.8	1 2.0%	0 0.0%	4.02	0.62
Staff in procurement department often attend to seminars addressing current issues in procurement	9 17.6%	24 47.1%	14 27.5%	3 5.9%	1 2.0%	3.73	0.90

However, 27.5% of the respondents neither agreed nor disagreed with the statement, while 5.9% and 3.9% of the respondents disagreed and strongly disagreed, respectively, that staff with education qualification in procurement have been

recruited by the university. Slightly above half of the respondents tended to agree that the university considers the level of experience of staff during recruitment in procurement (51.0%), and that the leadership skills of procurement staff are highly taken into consideration (58.8%). On the other hand, none of the respondents (0.0%) was in strong disagreement that the education qualifications of staff in procurement is well diversified, while 2.0% of the respondents strongly disagreed that the university considers the level of experience of staff during recruitment in procurement.

Most of the respondents 43.1% tended to be neutral (neither agreed nor disagreed) when asked whether knowledge on procurement practices is critical for a staff to be recruited in the procurement department. However, 41.2% of the respondents tended to agree that knowledge on procurement practices is critical for a staff to be recruited in the procurement department. Almost half of the respondents (49.0%) tended to agree that only staff with procurement education background are transferred to the procuring department. Additionally, 33.3% of the respondents were in strong agreement that only staff with procurement education background are transferred to the procuring department.

The leadership skills of procurement staff are highly taken into consideration as perceived by a cumulative 72.5% of the respondents (52.9%=agree and 19.6%=strongly agree). On the other hand, 5.9% and 2.0% of the respondents disagreed and strongly disagreed that the leadership skills of procurement staff are highly taken into consideration, respectively. Almost half of the respondents (47.1%) tended to agree that the procurement department allows their staff time to pursue higher education qualifications, while 23.5 % tended to strongly agree with the same statement. However, 25.5% of the respondents neither agreed nor disagreed when asked whether the procurement department allows their staff time to pursue higher education qualifications.

Most of the respondents tended to be neutral when asked whether new staff in the procurement department are taken through intensive induction training 39.2%. There were 27.5% of the respondents who tended to agree as well as 9.8% of the respondents who tended to strongly agree that new staff in the procurement department are taken through intensive induction training. More than half of the

respondents (62.7%) tended to agree that the procurement department organizes for regular in house training supported by 27.5% of the respondents who tended to strongly agree on the same.

On the other hand, 2.0% (each) of the respondents tended to disagree and strongly disagree that the procurement department organizes for regular in house training. Most of the respondents (68.6%) tended to agree that staff in procurement department are sponsored for trainings outside the university. On the other hand, none of the respondents strongly disagreed, though 2.0% tended to disagree that staff in procurement department are sponsored for trainings outside the university.

Almost half of the respondents (47.1%) tended to agree that staff in procurement department often attend to seminars addressing current issues in procurement. There were 27.5% of the respondents who neither agreed nor disagreed when asked whether staff in procurement department often attend to seminars addressing current issues in procurement. On the other hand, 5.9%, and 2.0% of the respondents tended to disagree and strongly disagree that staff in procurement department often attend to seminars addressing current issues in procurement, respectively.

The average the perception of the respondents regarding staff competencies in the procurement department in their respective organization was examined. In this context, the mean scores for the different statements of the staff competencies matrix were generated. The distribution of the responses around the mean was also examined with the standard deviations showing the level of consensus on a given statement.

The mean scores were interpreted as strong tendency to agree for mean scores of between 4.5 and 5, tendency to agree on average for mean scores between 3.5 and 4.49, tendency to be neutral on average for mean scores between 2.5 and 3.49, tendency to disagree on average for mean scores between 1.5 and 2.49, and strong tendency to disagree for mean scores between 1.00 and 1.49. The standard deviations were interpreted as no consensus for standard deviations of 1 and above, moderate consensus for standard deviations between 0.50 and 0.99, and high consensus for standard deviations between 0 and 0.49.

The mean scores and standard deviations were 3.61 and 0.91 for the university has recruited staff with education qualification in procurement, 3.55 and 0.83 for the university considers the level of experience of staff during recruitment in procurement, 3.59 and 0.80 for knowledge on procurement practices is critical for a staff to be recruited in the procurement department, and 4.03 and 0.96 for only staff with procurement education background are transferred to the procuring department, respectively. Additionally, the mean scores and standard deviations were 4.00 and 0.69 for the education qualifications of staff in procurement is well diversified, 3.82 and 0.89 for the leadership skills of procurement staff are highly taken into consideration, 3.88 and 0.86 for the procurement department allows their staff time to pursue higher education qualifications, 3.18 and 1.03 for new staff in the procurement department are taken through intensive induction training, 4.12 and 0.77 for the procurement department organizes for regular in house training, 4.02 and 0.62 for staff in procurement department are sponsored for trainings outside the university, and 3.37 and 0.90 for staff in procurement department often attend to seminars addressing current issues in procurement, respectively.

All the mean scores for the different statements of the staff competencies matrix were between 3.5 and 4.49 which implies that the respondents on average tended to agree with each of the statements. The standard deviations for the different statements of the staff competencies matrix except the standard deviation for one statement were between 0.50 and 0.99 which means that responses were moderately distributed around the mean implying there was moderate consensus on the various statements.

The standard deviation for new staff in the procurement department are taken through intensive induction training was 1.03 which was above one implying there was no consensus amongst respondents on this statement. Therefore, there was no consensus and respondents on average tended to agree that new staff in the procurement department are taken through intensive induction training. There was moderate consensus amongst respondents and on average respondents tended to agree (mean=3.61; std. dev=0.91) that the university has recruited staff with education qualification in procurement.

There was moderate consensus amongst respondents and on average respondents tended to agree (mean=3.55; std. dev=0.83) that the university considers the level of

experience of staff during recruitment in procurement. These findings contradicted those by Kiage (2013) in a study to assess the factors Affecting Procurement Performance: A Case of Ministry of Energy in Kenya. The study found that only 34% of the staff were in agreement that the procurement staff had the necessary skills and experience to carry out procurements effectively and that the staff competencies influence procurement performance to a large extent.

The respondents had moderate consensus and on average tended to agree (mean=3.59; std. dev=0.80) that knowledge on procurement practices is critical for a staff to be recruited in the procurement department. This was consistent with findings of a study conducted by Makabira & Waiganjo (2014), to assess the Role of Procurement Practices on the Performance of Corporate Organizations in Kenya that most of the procurement personnel in the organization had attended training in procurement practices. Hui et al. (2011) analyzed the procurement issues in Malaysia and established that procurement officers were to blame for malpractice and non-compliance to the procurement policies and procedures. The study further established that procurement officers must be trained and aware about all regulations in relation to procurement and related procedures.

A study conducted by Eyaa and Oluka, (2011) in Uganda also revealed that lack of familiarity with procurement rules resulted into poor compliance levels among the procurement staff. They also found out that in the Ugandan context, familiarity with procurement regulations significantly predicted compliance with procurement regulations. This shows that the level of training on the existing and emerging procurement laws and policies was key in ensuring efficiency in procurement processes, key among them being the procurement contracts administration.

The respondents had moderate consensus and on average tended to agree (mean=4.03; std. dev=0.96) that only staff with procurement education background are transferred to the procuring department. A study conducted by Ndumbi and Okello (2014) to assess the effect of staff training on level of Compliance to public procurement system in Parastatals in Kenya contradicted these findings. The study revealed that most of the personnel who were employed in the procurement department were not properly trained and therefore lacked skills required to run the compliance processes.

The poor training was attributed to the fact that most public sector organizations did internal transfers and recruitment to staff their departments. As a result most of the staff in the procurement department was not exposed to much training in procurement.

There was moderate consensus amongst respondents and on average they tended to agree (mean=4.00; std. dev=0.69) that the education qualifications of staff in procurement is well diversified. There was moderate consensus amongst respondents and on average they tended to agree that the leadership skills of procurement staff are highly taken into consideration (mean=3.82; std. dev=0.89), and the procurement department allows their staff time to pursue higher education qualifications (mean=3.88; std. dev=0.86).

The respondents had moderate consensus amongst themselves and on average tended to agree that the procurement department organizes for regular in house training (mean=4.12; std. dev=0.77), that staff in procurement department are sponsored for trainings outside the university (mean=4.02; std. dev=0.62), and that staff in procurement department often attend to seminars addressing current issues in procurement (mean=3.73; std. dev=0.90). This was consistent with Sultana (2012) who realized that, in order to sustain economic growth and effective performance, it is important to optimize the contribution of employees to the aims and goals of the organizations. Technological developments and organizational change have gradually led some employers to the realization that success relies on the skills and abilities of their employees, and this means considerable and continuous investment in training and development.

Appiah, (2010) also observes that the current educational systems, do not necessarily impart specific knowledge for specific job positions in organizations. As a result of this the labour force comprises of few people with the right skills, knowledge and competencies needed for positions in the job market. There is therefore the need for extensive external training for human resources to be able to improve and also contribute to the productivity of organizations.

According to Ndumbi and Okello (2014), training has been invaluable in increasing productivity of organizations. They further state that training does not only enhance employees resourcefully, but also provide them with an opportunity to virtually learn their jobs and perform more competently. The improvement is not only on employees' productivity but also on the entire organizations' productivity. Training as a process is one of the most pervasive methods to enhance the productivity of individuals and communicating organizational goals to personnel.

Seleim (2007) explains that in today's competitive training has become a key element for improved organizational performance through the increasing level of individual competences. This means that training will help employees to master knowledge, skills, behaviors, sense of self-worth and confidence upon which they are able to perform efficiently to improve on the performance of the organization. According to Raymond (2008), training in public procurement relates not only to the levels of education and qualifications of the workforce but also to the professional approach in the conduct of business activities (Hui, Othman, & Normah, 2011).

However, PPOA Audit Report (2008) revealed that inadequate training was high amongst public procurement officers in Kenya and this can still be attributed to the fact that the profession is still young in Kenya. A report by the PPOA (2013) and the Kenya Institute of Supplies Management (KISM, 2014) stated that the procurement staffs in many procuring entities suffer from a general lack of information about the legal frame- work, principles, procedures and processes of procurement.

4.5 Use of ICT

The study sought to determine the perception of the respondents regarding the use of ICT in the procurement department in their respective organizations. This was determined using various descriptive statistics including the frequency distributions, means and standard deviations of various statements and results presented in Table 4.9.

Table 4.9; Descriptive Statistics for Use of ICT

	5	4	3	2	1	Mean	Std. Dev
The university has embraced use of information communication technology in procurement	16 31.4%	31 60.8%	4 7.8%	0 0.0%	0 0.0%	4.24	0.59
We maintain a database of suppliers through our ICT system	13 25.5%	26 51.0%	7 13.7%	3 5.9%	2 3.9%	3.88	0.99
We perform online procurement	0 0.0%	0 0.0%	0 0.0%	18 35.3%	33 64.7%	1.35	0.48
We have been using the government prescribed IFMIS in our procurement functions	0 0.0%	5 9.8%	10 19.6%	15 29.4%	21 41.2%	1.98	1.01
The procurement department has enough ICT equipment for performing its functions	0 0.0%	8 15.7%	16 31.4%	18 35.3%	9 17.6%	2.45	0.97
We do appraisal of our suppliers online	14 27.5%	25 49.0%	6 11.8%	5 9.8%	1 2.0%	3.90	0.98
Our inventory management records are computerized	20 39.2%	19 37.3%	12 23.5%	0 0.0%	0 0.0%	4.16	0.78
We collect information and monitor supply contracts using computers	20 56.9%	19 29.4%	12 13.7%	0 0.0%	0 0.0%	4.43	0.73

The frequency distributions were a result of various perceptions of the respondents on the different statements in regards to the use of ICT in the procurement department in their respective organizations. These were scored as 5=strongly agree, 4= agree, 3 = neither agree nor disagree, 2 =disagree, and 1 =strongly disagree.

More than half of the respondents (60.8%) tended to agree that the university has embraced use of information communication technology in procurement. Additionally, 31.4% of the respondents tended to strongly agreed that the university has embraced use of information communication technology in procurement. On the other hand, none of the respondents (0.0%) chose “disagree” or “strongly disagree” when asked whether the university has embraced use of information communication technology in procurement.

When asked whether a database of suppliers is maintained through their ICT system, slightly more than half of the respondents (51.0%) tended to agree that it was maintained. Additionally, 25.5% of the respondents tended to strongly agree that a database of suppliers is maintained through their ICT system. While no respondents (0.0%) tended to strongly agree, agree or be neutral when asked whether they perform online procurement, 35.4% of the respondents tended to disagree and 64.7% of the respondents tended to strongly disagree that they perform online procurement.

Most of the respondents (41.2%) tended to strongly disagree that they have been using the government prescribed IFMIS in their procurement functions supported by 29.4% of the respondents who tended to disagree with the statement. There was also no respondent (0.0%) who chose “strongly agree” and only 9.8% of the respondents chose “agree”. A majority of respondents (35.3%) tended to disagree that the procurement department has enough ICT equipment for performing its functions 35.3%. There were 31.4% of respondents who neither agreed nor disagreed that the procurement department has enough ICT equipment for performing its functions.

Almost half of the respondents (49.0%) tended to agree that they do appraisal of their suppliers online while 27.5% of the respondents tended to strongly agree with the statement. Most of the respondents tended to strongly agree (39.2%), 37.3% of the respondents tended to agree, and 23.5% tended to disagree that their inventory management records are computerized. No respondents used the “disagree” or “strongly disagree” responses in regards to the whether their inventory management records are computerized. More than half of the respondents were in strong agreement that they collect information and monitor supply contracts using computers. Additionally, 29.4% of the respondents tended to agree, and 13.7% were neutral (neither agree nor disagree) that they collect information and monitor supply contracts using computers. There were no respondents (0.0%) who tended to either disagree or strongly disagree that they collect information and monitor supply contracts using computers.

The study examined the average the perception of the respondents on the use of ICT in the procurement department in their respective organizations. In this context, the mean scores for the different statements of the use of ICT matrix were generated. The

distribution of the responses around the mean was also examined with the standard deviations showing the level of consensus on a given statement.

The mean scores were interpreted as strong tendency to agree for mean scores of between 4.5 and 5, tendency to agree on average for mean scores between 3.5 and 4.49, tendency to be neutral on average for mean scores between 2.5 and 3.49, tendency to disagree on average for mean scores between 1.5 and 2.49, and strong tendency to disagree for mean scores between 1.00 and 1.49. The standard deviations were interpreted as no consensus for standard deviations of 1 and above, moderate consensus for standard deviations between 0.50 and 0.99, and high consensus for standard deviations between 0 and 0.49.

The mean scores and standard deviations were 4.24 and 0.59 for the university has embraced use of information communication technology in procurement, 3.8 and 0.99 for we maintain a database of suppliers through our ICT system, and 1.35 and 0.48 for we perform online procurement, 1.98 and 1.01 for we have been using the government prescribed IFMIS in our procurement functions, respectively. Additionally, the mean scores and standard deviations were 2.45 and 0.97 for the procurement department has enough ICT equipment for performing its functions, 3.90 and 0.98 for we do appraisal of our suppliers online, 4.16 and 0.78 for our inventory management records are computerized, and 4.43 and 0.73 for we collect information and monitor supply contracts using computers, respectively. using computers (mean=4.43; std. dev=0.73).

The respondents on average tended to disagree that they perform online procurement, they have been using the government prescribed IFMIS in our procurement functions, and the procurement department has enough ICT equipment for performing its functions. On the other hand, the respondents on average tended to agree that the university has embraced use of information communication technology in procurement, they maintain a database of suppliers through our ICT system, they do appraisal of their suppliers online, their inventory management records are computerized, and they collect information and monitor supply contracts using computers. This is because the mean scores for these metrics were between 3.5 and 4.49.

In the context of consensus, there was moderate consensus (standard deviations between 0.5 and 0.99) amongst respondents that the university has embraced use of information communication technology in procurement, they maintain a database of suppliers through their ICT system, the procurement department has enough ICT equipment for performing its functions, and they do appraisal of our suppliers online. Additionally, there was moderate consensus amongst respondents that, their inventory management records are computerized, and they collect information and monitor supply contracts using computers. On the other hand, responses were closely distributed around the mean which implied that there was high consensus (standard deviation between 0 and 0.5) amongst respondents that they perform online procurement. There was no consensus amongst respondents (standard deviation above 1) that they have been using the government prescribed IFMIS in their procurement functions, since the responses were widely distributed around the mean.

Therefore, there was moderate consensus and on average respondents tended to agree that the university has embraced use of information communication technology in procurement (mean=4.24; std. dev=0.59). Armstrong (2005) asserted that studies have examined business-to-business (B2B) transactions on different operational performance dimensions such as inventory cost, cycle time, and manufacturer flexibility. Rapid growth of importance of ICT application is a testimony to its impact on improving procurement performance. This is achieved through Internet, Intranet and Extranet.

There was moderate consensus and on average respondents tended to agree that they maintain a database of suppliers through their ICT system (mean=3.88; std. dev=0.99). This was consistent with the opinion by Seleim (2007) that procurement systems have long been supported by ICT. With the implementation of ERP systems in the 1990s, EDI connections with suppliers were established through automation of delivery schedules by linking user materials management system with supplier systems. Additionally, Hotterbeekx (2013) reckoned that enterprise resource planning (ERP) systems are essential for supporting internal information sharing. Externally, inter-organizational information systems (IOIS) constituting automated information

systems shared by various firms can be used to support information-sharing with customers and suppliers.

There was high consensus amongst respondents and on average they tended to disagree that they perform online procurement (mean=1.35; std. dev=0.48). On the other hand, there was no consensus amongst respondents and respondents on average tended to disagree that they have been using the government prescribed IFMIS in their procurement functions (mean=1.98; std. dev=1.01). There was moderate consensus amongst respondents and on average respondents tended to disagree that the procurement department has enough ICT equipments for performing its functions (mean=2.45; std. dev=0.97).

On the other hand, there was moderate consensus and respondents on average tended to agree that they do appraisal of their suppliers online (mean=3.90; std. dev=0.98). This collaborated findings by Chopra, Meindl, and Dhamram (2007) who asserted that ICT provides a collaboration platform by allowing customers and suppliers to work together on product design using specialist ICT design tools. They also found that value chain integration may be made possible if separate activities can be knitted together by faster and more reliable information flows. Integration allows customers to change their specification and delivery schedules themselves which then automatically reconfigures requirements back in the procurement system.

There was moderate consensus amongst respondents and on average respondents tended to agree that their inventory management records are computerized (mean=4.16; std. dev=0.78). This was in agreement with Berger & Humphrey (2007), who reckoned that personnel in procurement are, in a sense, information processors. They receive, analyze, make decisions and distribute information in order to manage the flow of goods and services in the SC. ICT is an enabler for information sharing which organizations in the procurement system can use for eliminating bloated inventory levels caused by cumulative effect of poor information cascading up through a SC.

Maria (2013) averred that information integration is also a key component in many automatic replenishment programs (ARP). Initiatives such as Vendor Managed Inventory (VMI) and collaborative planning, forecasting and replenishment (CPFR)

are based on an increased level of automation in both the flow of physical materials, goods and associated information between companies to improve the efficiency in the entire system. It shortens information processing time and tremendously improves procurement performance.

There was moderate consensus amongst respondents and on average respondents tended to agree that they collect information and monitor supply contracts (mean=4.43; std. dev=0.73). This was consistent with Maria (2013) who argued that ICT provides the means for collecting relevant demand data, developing a common database and providing a means for transmitting order information. It allows organizations to change the way they source supplies for smooth operations. Process integration can enhance procurement performance. ICT provides new ways to store, process, distribute and exchange key information with customers and suppliers in the entire procurement system. (Elsay, 2007) emphasized that information is the glue that holds organizations together and can be used to integrate procurement process activities both within a process and across multiple processes.

4.6 Professionalism in the Procurement Function

4.6.1 Membership of Respondents in a Professional Body

The respondents were asked if they were a member of any professional body. The results are in Table 4.10.

Table 4.10; Membership of Respondents in a Professional Body

Membership	Frequency	Percentage
Yes	44	86.3%
No	7	13.7%
Total	51	100.0%

A majority of respondents (86.3%) indicated that they have membership in a professional body. Only 13.7% of the respondents indicated that they have no membership in a professional body. The large number of respondents who are members of a professional body could be attributed to the benefits that members get from the professional bodies including training through seminars. This aids members in career progression and advancing skills by keeping up to date with current issues of procurement.

4.6.2 Highest Professional Qualifications of Respondents

The respondents were asked to indicate the qualification that best represents or is equivalent to their highest professional qualifications. The results are shown in Table 4.11.

Table 4.11; Highest Professional Qualifications of Respondents

Membership	Frequency	Percentage
Certificate in Procurement and Supply Operations	13	25.5%
Advanced Certificate in Procurement and Supply Operations	5	9.8%
Diploma in Procurement and Supply	22	43.1%
Advanced Diploma in Procurement and Supply	8	15.7%
Professional Diploma in Procurement and Supply	3	5.9%
Total	51	100.0%

Most of the respondents (43.1%) have a diploma in Procurement and Supply as their highest professional qualification, followed by 25.5% of the respondents who have an advanced certificate in Procurement and Supply Operations as their highest professional qualification. The respondents with an advanced diploma in Procurement and Supply as their highest professional qualification were 15.7%, while 5.9% of the respondents have a professional diploma in Procurement and Supply as their highest professional qualification. The higher numbers of respondents with a diploma in Procurement and Supply as their highest professional qualification could be attributed to respondents who acquired this diploma as their tertiary education course.

The study used the frequency distributions, means and standard deviations of various statements to examine the professionalism in the procurement function in their respective organizations. The results are presented in Table 4.12. The frequency distributions were a result of various perceptions of the respondents on the different statements in regards to the professionalism in the procurement function in their respective organizations. These were scored as 5=strongly agree, 4= agree, 3 = neither agree nor disagree, 2 =disagree, and 1 =strongly disagree.

Table 4.12; Descriptive statistics for Professional Qualifications

	5	4	3	2	1	Mean	Std.Dev
The university puts it as a requirement for every staff to be a member of a professional body	25 49.0%	15 29.4%	9 17.6%	2 3.9%	0 0.0%	4.24	0.89
Professional training is mandatory for all procurement staff in our university	20 39.2%	15 29.4%	13 25.5%	3 5.9%	0 0.0%	4.02	0.95
The university recognizes the procurement profession as an important function in the organization	11 21.6%	25 49.0%	9 17.6%	6 11.8%	0 0.0%	3.80	0.92
The staff of procurement department are remunerated fairly well	15 29.4%	21 41.2%	15 29.4%	0 0.0%	0 0.0%	4.00	0.77

Almost half of the respondents (49.0%) tended to strongly agree that the university puts it as a requirement for every staff to be a member of a professional body. Additionally, 29.4% of the respondents tended to agree that the university puts it as a requirement for every staff to be a member of a professional body. The respondents who strongly affirmed that professional training is mandatory for all procurement staff in their university, that is, 39.2% of the respondents. Additionally, 29.4% of the respondents affirmed that professional training is mandatory for all procurement staff in their university. There were 25.5% of the respondents neither agreed nor disagreed whether professional training is mandatory for all procurement staff in their university.

Most of the respondents (49.0%) tended to agree that the university recognizes the procurement profession as an important function in the organization. The respondents who were in strong agreement that the university recognizes the procurement

profession as an important function in the organization were 21.6% of the respondents. On the other hand, 11.8% of the respondents tended to disagree that the university recognizes the procurement profession as an important function in the organization, while 17.6% of the respondents were neutral. A majority of respondents (41.2%="agree") were of the perception that the staff of procurement department are remunerated fairly well. Further, 29.4% of the respondents strongly affirmed ("strongly agree") that the staff of procurement department are remunerated fairly well. On the other hand, 29.4% of the respondents tended to neither agree nor disagree with the statement that the staff of procurement department are remunerated fairly well.

There was no respondent (0.0%) who strongly opposed any statement of the professionalism of the procurement function matrix since none chose "strongly disagree". Additionally, there was no respondent (0.0%) who chose "disagree" in response to whether the staff of procurement department are remunerated fairly well.

The study examined the average the perception of the respondents regarding professionalism in the procurement function in their respective organizations. In this context, the mean scores for the different statements of the professionalism in the procurement function matrix were generated. The distribution of the responses around the mean was also examined with the standard deviations showing the level of consensus on a given statement.

The mean scores were interpreted as strong tendency to agree for mean scores of between 4.5 and 5, tendency to agree on average for mean scores between 3.5 and 4.49, tendency to be neutral on average for mean scores between 2.5 and 3.49, tendency to disagree on average for mean scores between 1.5 and 2.49, and strong tendency to disagree for mean scores between 1.00 and 1.49. The standard deviations were interpreted as no consensus for standard deviations of 1 and above, moderate consensus for standard deviations between 0.50 and 0.99, and high consensus for standard deviations between 0 and 0.49.

The mean scores were 4.24 for the university puts it as a requirement for every staff to be a member of a professional body, 4.02 for professional training is mandatory for all procurement staff in their university, 3.80 for the university recognizes the

procurement profession as an important function in the organization, and 4.00 for the staff of procurement department are remunerated fairly well. The standard deviations were 0.89 for the university puts it as a requirement for every staff to be a member of a professional body, 0.95 for professional training is mandatory for all procurement staff in their university, 0.92 for the university recognizes the procurement profession as an important function in the organization, and 0.77 for the staff of procurement department are remunerated fairly well.

All the mean scores of the professionalism in the procurement function matrix were between 3.5 and 4.49 which implied that respondents on average tended to agree with each statement of this matrix. Additionally, the standard deviations for all the statements of the professionalism in the procurement function matrix were between 0.5 and 0.99. This meant that responses for each of these statements were moderately distributed around the mean implying there was moderate consensus amongst respondents on each of the statements of the professionalism in the procurement function matrix.

Therefore, there was moderate consensus amongst respondents and respondents on average tended to agree that the university puts it as a requirement for every staff to be a member of a professional body (mean=4.24; std. dev=0.89). This was contrary to Raymond (2008) who cited that there are approximately 500,000 professional purchasing people in the United States and only 10 per cent of these have been members of a professional body and the rest are not even aware that there are ethical and legal standards involved in procurement. De Boer and Telgen, (1998) also attributed non-compliance in public procurement to lack of purchasing professionalism in the public sector.

There was moderate consensus amongst respondents and respondents on average tended to agree that professional training is mandatory for all procurement staff in their university (mean=4.02; std. dev=0.95). This contradicted findings by Berger & Humphrey (2007) that most of personnel carrying out procurement functions in the local authorities in Kenya have not been sensitized on procurement regulations. Raymond (2008) also linked lack of a high degree of professionalism in public procurement to corruption, which ultimately impedes compliance. In Uganda, the

PPDA Audit Report (2008) revealed that lack of professionalism was high amongst public procurement officers. This position was further confirmed by Basheka and Mugabira (2008) who stated that the level of professionalism in public procurement in Uganda was low or non – existent. Similarly, adherence to the procurement laws was low. The procurement officers must be trained and aware about all regulations in relation to procurement and related procedures (Hui et al 2011).

Additionally, there was moderate consensus amongst respondents and respondents on average tended to agree that the university recognizes the procurement profession as an important function in the organization (mean=3.80; std. dev=0.92), and the staff of procurement department are remunerated fairly well (mean=4.00; std. dev=0.77). This was inconsistent with findings of a study conducted by Gesuka & Namusonge (2013) to assess the factors affecting compliance of public procurement regulations in Butere District, Kenya. The findings revealed that lack of professional knowledge of the procurement regulations, ethics and risks to its integrity, accountability, confidentiality and transparency and poor remunerations resulted in non-compliance of public procurement regulations.

4.7 Accountability

The study examined accountability in procurement in the universities by getting the level of agreement of the respondents with various statements of the accountability function. These were presented as frequency distributions, means and standard deviations, as shown in Table 4.13.

The frequency distributions were a result of various perceptions of the respondents on the different statements in regards to accountability in procurement in their respective organizations. These were scored as 5=strongly agree, 4= agree, 3 = neither agree nor disagree, 2 =disagree, and 1 =strongly disagree.

Table 4.13; Descriptive Statistics for Accountability

	5	4	3	2	1	Mean	Std. Dev
The staff of procurement department are required to practice the highest level of honesty in executing their jobs	12 23.5%	27 52.9%	8 15.7%	4 7.8%	0 0.0%	3.92	0.84
Procurement staff are expected to work with independence in executing their jobs	8 15.7%	20 39.2%	10 19.6%	13 25.5%	0 0.0%	3.45	1.05
Integrity is a key value for staff in the procurement department	17 33.3%	21 1.2%	8 15.7%	5 9.8%	0 0.0%	3.98	0.95
The staff of procurement department are highly committed to their work	9 17.6%	19 37.3%	11 21.6%	12 23.5%	0 0.0%	3.49	1.05
Documentation is highly emphasized in every procurement transaction	23 45.1%	18 35.3%	8 15.7%	2 3.9%	0 0.0%	4.22	0.86
Procurement contract matters are treated with high level of confidentiality	13 25.5%	31 60.8%	5 9.8%	2 3.9%	0 0.0%	4.08	0.72
Value for money is ensured in every procurement contract	11 21.6%	25 49.0%	9 17.6%	6 11.8%	0 0.0%	3.81	0.92
Corruption in procurement is highly condemned and punished	15 29.4%	23 45.1%	13 25.5%	0 0.0%	0 0.0%	4.04	0.75
The university policy advocates for fair competition in every procurement contract	23 45.1%	23 45.1%	1 2.0%	3 5.9%	1 2.0%	4.25	0.91

Slightly more than half of the respondents (52.9%) tended to agree that the staff of procurement department are required to practice the highest level of honesty in executing their jobs. This was also the case for procurement contract matters are treated with high level of confidentiality, since more than half of the respondents (60.8%) tended to agree with the statement. Most of the respondents (39.2%) tended to agree that procurement staff are expected to work with independence in executing their jobs. On the other hand, 25.5% of the respondents tended to disagree that procurement staff are expected to work with independence in executing their jobs.

Most of the respondents (41.2%) tended to agree that integrity is a key value for staff in the procurement department, which was supported by 33.3% of the respondents who tended to strongly agree on the same. In the context of the staff of procurement department being highly committed to their work, most of the respondents (37.3%) tended to agree whereas 23.5% of the respondents tended to disagree that they are highly committed to their work.

Almost half of the respondents (45.1%) were inclined to strongly agree that documentation is highly emphasized in every procurement transaction, supported by 35.3% of the respondents who were inclined to agree with the same statement. On the other hand, 3.9% of the respondents were inclined to disagree that documentation is highly emphasized in every procurement transaction, and 15.7% of the respondents were neutral on the same. About half of the respondents (49.0%) were in agreement that value for money is ensured in every procurement contract, while 21.6% of the respondents strongly agreed to the same. However, 11.8% of the respondents were in disagreement that value for money is ensured in every procurement contract.

Most of the respondents (45.1%) affirmed that corruption in procurement is highly condemned and punished in the universities. Additionally, 29.4% of the respondents strongly affirmed that corruption in procurement is highly condemned and punished. On the other hand, no respondent (0.0%) chose “disagree” or “strongly disagree” in answer to whether corruption in procurement is highly condemned and punished in the universities.

However, 25.5% of the respondents neither agreed nor disagreed when asked whether corruption in procurement is highly condemned and punished in the universities. The respondents who chose “strongly agree” and “agree” were 45.1% each in respect to whether the university policy advocates for fair competition in every procurement contract. All statements of the accountability matrix did not get “strongly disagree” responses except the university policy advocates for fair competition in every procurement contract, which had 2.0% of the respondents answer using “strongly disagree”.

The study examined the average the perception of the respondents regarding accountability in the procurement department in their respective organizations. In this

context, the mean scores for the different statements of the accountability matrix were generated. The distribution of the responses around the mean was also examined with the standard deviations showing the level of consensus on a given statement.

The mean scores were interpreted as strong tendency to agree for mean scores of between 4.5 and 5, tendency to agree on average for mean scores between 3.5 and 4.49, tendency to be neutral on average for mean scores between 2.5 and 3.49, tendency to disagree on average for mean scores between 1.5 and 2.49, and strong tendency to disagree for mean scores between 1.00 and 1.49. The standard deviations were interpreted as no consensus for standard deviations of 1 and above, moderate consensus for standard deviations between 0.50 and 0.99, and high consensus for standard deviations between 0 and 0.49.

The mean scores and standard deviations were 3.92 and 0.84 for the staff of procurement department are required to practice the highest level of honesty in executing their jobs, 3.45 and 1.05 for procurement staff are expected to work with independence in executing their jobs, 3.98 and 0.95 for integrity is a key value for staff in the procurement department, and 3.49 and 1.05 for the staff of procurement department are highly commitment to their work, respectively. Additionally, mean scores and standard deviations were 4.22 and 0.86 for documentation is highly emphasized in every procurement transaction, 4.08 and 0.72 for procurement contract matters are treated with high level of confidentiality, 3.81 and 0.92 for value for money is ensured in every procurement contract, 4.07 and 0.75 for corruption in procurement is highly condemned and punished, 4.25 and 0.91 for the university policy advocates for fair competition in every procurement contract, respectively.

On average, the respondents tended to neither agree nor disagree in regards to whether procurement staff are expected to work with independence in executing their jobs, and whether the staff of procurement department are highly commitment to their work. This was due to the mean scores of these two statements being between 2.5 and 3.49. On the other hand, the respondents tended to agree with all the other statements of the accountability matrix due to mean scores between 3.5 and 4.49.

In the context of distribution of responses around the mean, responses were widely distributed around the mean for procurement staff are expected to work with independence in executing their jobs, and the staff of procurement department are highly commitment to their work. This implies that there was no consensus (standard deviations above 1) amongst respondents on both statements. On the other hand, responses for all other statements of the accountability matrix were moderately distributed around the mean which implied moderate consensus (standard deviations between 0.5 and 0.99) amongst respondents on each of the statements.

There was no consensus amongst respondents and on average respondents tended to be neutral on whether procurement staff are expected to work with independence in executing their jobs (mean=3.45; std. dev.=1.05), and whether the staff of procurement department are highly commitment to their work (mean=3.49; std. dev.=1.05). There was moderate consensus amongst respondents and respondents on average tended to agree that documentation is highly emphasized in every procurement transaction (mean=4.22; std. dev.=0.86). Additionally, there was moderate consensus amongst respondents and respondents on average tended to agree that the procurement contract matters are treated with high level of confidentiality (mean=4.08; std. dev.=0.72), value for money is ensured in every procurement contract (mean=3.81; std. dev.=0.92).

There was moderate consensus amongst respondents and respondents on average tended to agree that the staff of procurement department are required to practice the highest level of honesty in executing their jobs (mean=3.92; std. dev.=0.84) and integrity is a key value for staff in the procurement department (mean=3.98; std. dev.=0.95). Karanja and Mugo (2010), conducted a study to assess the internal factors affecting procurement process of supplies in the public sector. The study surveyed government ministries in Kenya. The findings revealed that, ethical behavior supports openness and accountability in a procurement process and gives suppliers confidence to participate in the Government marketplace. Ethical behavior was also found to reduce the cost of managing risks associated with fraud, theft, corruption, and other improper behavior; and enhance confidence in public administration.

Additionally, there was moderate consensus amongst respondents and respondents on average tended to agree that the university policy advocates for fair competition in every procurement contract (mean=4.25; std. dev.=0.91). This was consistent with Wanyonyi and Muturi (2015) in a study that sought to assess the factors affecting performance of procurement function among public technical training institutions in Kisumu County. The study found that among the major contributing factors for work ethics include awarding of tenders to most qualified and eligible bidders and ensuring members of the procurement committees are not in any way involved in supplying goods and services in the two institutions.

There was moderate consensus amongst respondents and respondents on average tended to agree that corruption in procurement is highly condemned and punished (mean=4.04; std. dev.=0.75). Raymond (2008) stated that procurement related corruption tends to be a serious problem in developing countries rather than in developed countries. Developing countries such as Bangladesh, India, Sri Lanka, Nigeria, Kenya and Venezuela were identified as having high levels of corruption. As stated by Hui et al; (2011), public procurement corruption could threaten legitimacy and as such, the policies and procedures should be created to curb any possible corruption activities and enhance transparency, accountability and integrity.

4.8 Procurement Contract Management

The study examined the procurement contract management of the universities. In this context, the respondents were asked to rate the procurement department on efficiency in performance various functions. These functions included administering procurement contracts, communicating contractual obligations, performance monitoring in procurement contracts, managing relationships with contractors/suppliers, termination of contracts, and contract renewal. The results of this examination are presented in Table 4.14.

Table 4.14; Descriptive Statistics for Procurement Contract Management

	5	4	3	2	1	Mean	Std. Dev
Administering procurement contracts	12 23.5%	25 49.0%	8 15.7%	4 7.8%	2 3.9%	3.80	1.02
Communicating contractual obligations	4 7.8%	30 58.8%	11 21.6%	6 11.8%	0 0.0%	3.63	0.80
Performance monitoring in procurement contracts	11 21.6%	22 43.1%	9 17.6%	7 13.7%	2 3.9%	3.65	1.09
Managing relationships with contractors/suppliers	12 23.5%	24 47.1%	5 9.8%	8 15.7%	2 3.9	3.71	1.12
Termination of contracts	8 15.7%	35 68.6%	1 2.0%	4 7.8%	3 5.9%	3.80	1.00
Contract renewal	4 7.8%	36 70.6%	6 11.8%	4 7.8%	1 2.0%	3.75	0.80

The frequency distributions were based on responses scored as 5=Very good, 4=Good, 3 = Fair, 2 = Poor, and 1 = Very Poor. Almost half of the respondents (49.0%) tended to agree that the procurement department in the university is efficient in administering procurement contracts. Additionally, 23.5% of the respondents tended to strongly agree that the procurement department in the university is efficient in administering procurement contracts. On the other hand, 7.8% and 3.9% of the respondents tended to disagree and strongly disagree that the procurement department in the university is efficient in administering procurement contracts, respectively.

More than half of the respondents (58.8%) tended to agree that the procurement department in the university is efficient in communicating contractual obligations. On the other hand, 21.6% of the respondents were neutral (neither agreed nor disagreed) that the procurement department in the university is efficient in communicating contractual obligations. No respondent (0.0%) strongly disagreed that the procurement department in the university is efficient in communicating contractual obligations, though there were 11.8% of the respondents who disagreed. The respondents who affirmed that the procurement department in the university is efficient in performance monitoring in procurement contracts were 43.1%, while those who strongly affirmed the same were 21.6% of the respondents.

The procurement department in the university is efficient in managing relationships with contractors/suppliers as affirmed by about half of the respondents (47.1%), and

strongly affirmed by 23.5% of the respondents. Above half of the respondents (68.6%) tended to agree that the procurement department in the university is efficient in termination of contract the other hand, 7.8% and 5.9% of the respondents chose “disagree” and strongly disagree” that the procurement department in the university is efficient in termination of contract. Almost three quarters of the respondents (70.6%) tended to agree that the procurement department in the university is efficient in contract renewal. There were 11.8% of the respondents were neutral on whether the procurement department in the university is efficient in contract renewal, while 7.8% disagreed, 2.0% strongly disagreed.

The study examined the average rating of the efficiency in performance of procurement department on various functions in their respective organizations. In this context, the mean scores for the ratings of efficiency in the functions of the procurement contract management matrix were generated. The distribution of the responses around the mean was also examined with the standard deviations showing the level of consensus on a given statement.

The mean scores were interpreted as very good rating, on average, for mean scores of between 4.5 and 5, a good rating on average for mean scores between 3.5 and 4.49, fair rating on average for mean scores between 2.5 and 3.49, poor rating on average for mean scores between 1.5 and 2.49, and very poor rating on average for mean scores between 1.00 and 1.49. The standard deviations were interpreted as no consensus for standard deviations of 1 and above, moderate consensus for standard deviations between 0.50 and 0.99, and high consensus for standard deviations between 0 and 0.49.

The mean scores were 3.80 for administering procurement contracts, 3.63 for communicating contractual obligations, 3.65 for performance monitoring in procurement contracts, 3.71 for managing relationships with contractors/suppliers, 3.80 for termination of contracts, and 3.75 for contract renewal. All the mean scores of the procurement contract management matrix were between 3.5 and 4.49 which implied that on average the efficiency in performance of procurement department on each function scored a good rating.

The standard deviations were 1.02 for administering procurement contracts, 0.80 for communicating contractual obligations, 1.09 for performance monitoring in procurement contracts, 1.12 for managing relationships with contractors/suppliers, 1.00 for termination of contracts, and 0.80 for contract renewal. The responses for communicating contractual obligations, and contract renewal were moderately distributed around the mean which implied moderate consensus (standard deviations between 0.5 and 0.99) amongst respondents on each of the functions.

On the other hand, the responses for administering procurement contracts, performance monitoring in procurement contracts, managing relationships with contractors/ suppliers, and termination of contracts were widely distributed around the mean. This implies that there was no consensus (standard deviations above one) amongst respondents on administering procurement contracts, performance monitoring in procurement contracts, managing relationships with contractors/suppliers, and termination of contracts.

Therefore, there was moderate consensus amongst respondents and respondents on average gave a good rating on the efficiency in communicating contractual obligations (mean=3.63; std. dev=0.80), and contract renewal (mean=3.75; std. dev=0.80) by procurement department. On the other hand, there was no consensus amongst respondents and on average respondents gave a good rating on the efficiency of the procurement department in performance monitoring in procurement contracts (mean=3.65; std. dev=1.09), and termination of contracts (mean=3.80; std. dev=1.00).

There was no consensus amongst respondents and on average respondents gave a good rating on the efficiency of the procurement department in administering procurement contracts (mean=3.80; std. dev=1.02). This contradicted a study conducted in the ministry of Energy in Kenya, Kiage (2013) which revealed an overwhelming support that contract management influenced procurement performance to a great extent.

Additionally, there was no consensus amongst respondents and on average respondents gave a good rating on the efficiency of the procurement department in managing relationships with contractors/suppliers (mean=3.71; std. dev=1.12).

According to Bhardwaj (2011), contract management process enables both parties to a contract to meet their obligations in order to deliver the objectives required from the contract. It is also involves building a good working relationship between company and contractor. It continues throughout the life of a contract and involves managing proactively to anticipate future needs as well as reacting to situations that rises.

4.9 Inferential Statistics

The simple linear regressions and multiple linear regression were used to explain the relationship between the dependent variable (procurement contract administration) and independent variables (staff competencies, staff professionalism, ICT, and accountability). The hypotheses were also tested using the p-value of the multiple linear regression.

4.9.1 Simple Linear Regression for Staff Competencies

The study sought to know the relationship between the staff competencies (independent variable) and procurement contract administration (dependent variable). In this context, procurement contract administration was regressed against staff competencies and the correlation results presented in Table 4.15.

Table 4.15; Model Summary for Staff Competencies

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.371 ^a	.138	.120	.98161

a. Dependent Variable: Procurement Contract Administration

b. Predictors: (Constant), Staff Competencies

There was positive correlation between the procurement contract administration and staff competencies as the correlation coefficient, expressed as R, was 0.371. The coefficient of determination gave the amount of explained variance in the dependent variable (expressed as R²) as a result of the independent variable. The coefficient of determination gave a value of 0.138 which implies that 13.8% of the variance in procurement contract administration was as a result of the staff competencies in Public Universities in Kenya. This value shows that there is a very small variance in the dependent variable which is explained by the staff competencies. This implies that

staff competencies have to be accompanied by other factors which are not in this model for them to have higher variability in the dependent variable.

The ANOVA was used to determine whether the simple linear regression with procurement contract administration as the dependent variable and the staff competencies in Public Universities in Kenya as the independent variable was reliable. In this context, the p-value was used to determine this with the minimum requirement for reliability of the model being a p-value less than 0.05 ($p < 0.05$). The results are presented in Table 4.16.

Table 4.16; ANOVA^a for Staff Competencies

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.530	1	7.530	7.815	.007 ^b
	Residual	47.215	49	.964		
	Total	54.745	50			

a. Dependent Variable: Procurement Contract Management

b. Predictors: (Constant), Staff Competencies

This simple linear regression with procurement contract administration (dependent variable) and staff competencies (independent variable) gave a p-value of 0.007. This p-value was less than 0.05 ($p < 0.05$) thus the model was deemed reliable.

The simple linear regression analysis also helped to understand how much change would occur in procurement contract administration when there was change in staff competencies. The regression coefficient (β) was used to determine the expected increase (or decrease) in procurement contract administration when there is a unit increase in staff competencies, as in Table 4.17.

Table 4.17; Coefficients^a for Staff Competencies

Model	Unstandardized		Standardized	t	Sig.	
	Coefficients		Coefficients			
	B	Std. Error	Beta			
1	(Constant)	1.579	.697		2.264	.028
	Staff Competencies	.453	.162	.371	2.796	.007

a. Dependent Variable: Procurement Contract Management

The regression coefficient was 0.453 and resulted in the following regression model;

$$\text{Procurement Contract Administration} = 1.579 + 0.453 (\text{Staff Competencies})$$

This therefore implies that for every unit increase in staff competencies on its own, the performance procurement contract administration in Public Universities in Kenya increases by 0.453 ($\beta=0.453$). This implies that staff competencies have a positive influence on procurement contract administration.

4.9.2 Simple Linear Regression for Use of ICT

The study sought to know the relationship between the use of ICT (independent variable) and procurement contract administration (dependent variable). In this context, procurement contract administration was regressed against use of ICT and the correlation results presented in Table 4.18.

Table 4.18; Model Summary for Use of ICT

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.822 ^a	.675	.669	.54603

a. Predictors: (Constant), Use of ICT

There was positive correlation between the procurement contract administration and the use of ICT as the correlation coefficient was 0.822. The coefficient of determination gave a value of 0.675 which implies that 67.5% of the variance in procurement contract administration was as a result of the use of ICT in Public Universities in Kenya.

The ANOVA was used to determine whether the simple linear regression with procurement contract administration as the dependent variable and the use of ICT in

Public Universities in Kenya as the independent variable was reliable. In this context, the p-value was used to determine this with the minimum requirement for reliability of the model being a p-value less than 0.05 ($p < 0.05$). The results are presented in Table 4.19.

Table 4.19; ANOVA^a for Use of ICT

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	30.371	1	30.371	101.865	.000 ^b
	Residual	14.609	49	.298		
	Total	44.980	50			

a. Dependent Variable: Procurement Contract Management

b. Predictors: (Constant), Use of ICT

This simple linear regression with procurement contract administration (dependent variable) and use of ICT (independent variable) gave a p-value of 0.000. This p-value was less than 0.05 ($p < 0.05$) thus the model was deemed reliable.

The simple linear regression analysis also helped to understand how much change would occur in procurement contract administration when there was change in use of ICT. The regression coefficient (β) was used to determine the expected increase (or decrease) in procurement contract administration when there is a unit increase in use of ICT, as in Table 4.20.

Table 4.20; Coefficients^a for Use of ICT

Model		Unstandardized		Standardized	t	Sig.
		Coefficients		Coefficients		
		B	Std. Error	Beta		
1	(Constant)	.363	.367		.989	.327
	Use of ICT	.923	.091	.822	10.093	.000

a. Dependent Variable: Procurement Contract Management

The regression coefficient was 0.923 and resulted in the following regression model;

$$\text{Procurement Contract Administration} = 0.363 + 0.923 (\text{Use of ICT})$$

This therefore implies that for every unit increase in use of ICT on its own, the performance procurement contract administration in Public Universities in Kenya increases by 0.923 ($\beta=0.923$). This implies that use of ICT has a positive influence on procurement contract administration.

4.9.3 Simple Linear Regression for Staff Professionalism

The study sought to know the relationship between the staff professionalism (independent variable) and procurement contract administration (dependent variable). In this context, procurement contract administration was regressed against staff professionalism and the correlation results presented in Table 4.21.

Table 4.21; Model Summary for Staff Professionalism

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.418 ^a	.175	.158	.84252

- a. Dependent Variable: Procurement Contract Management
- b. Predictors: (Constant), Staff Professionalism

There was positive correlation between the procurement contract administration and the staff professionalism as the correlation coefficient was 0.418. The coefficient of determination gave a value of 0.175 which implies that 17.5% of the variance in procurement contract administration was as a result of staff professionalism in Public Universities in Kenya.

The ANOVA was used to determine whether the simple linear regression with procurement contract administration as the dependent variable and staff professionalism in Public Universities in Kenya as the independent variable was reliable. In this context, the p-value was used to determine this with the minimum requirement for reliability of the model being a p-value less than 0.05 ($p<0.05$). The results are presented in Table 4.22.

Table 4.22; ANOVA^a for Staff Professionalism

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.375	1	7.375	10.390	.002 ^b
	Residual	34.782	49	.710		
	Total	42.157	50			

a. Dependent Variable: Procurement Contract Management

b. Predictors: (Constant), Staff Professionalism

This simple linear regression with procurement contract administration (dependent variable) and staff professionalism (independent variable) gave a p-value of 0.002. This p-value was less than 0.05 ($p < 0.05$) thus the model was deemed reliable.

The simple linear regression analysis also helped to understand how much change would occur in procurement contract administration when there was change in staff professionalism. The regression coefficient (β) was used to determine the expected increase (or decrease) in procurement contract administration when there is a unit increase in staff professionalism, as in Table 4.23.

Table 4.23; Coefficients^a for Staff Professionalism

Model		Unstandardized		Standardized	t	Sig.
		Coefficients		Coefficients		
		B	Std. Error	Beta		
1	(Constant)	1.970	.522		3.776	.000
	Staff Professionalism	.461	.143	.418	3.223	.002

a. Dependent Variable: Procurement Contract Management

The regression coefficient was 0.461 and resulted in the following regression model;

$$\text{Procurement Contract Administration} = 1.970 + 0.461 (\text{Staff Professionalism})$$

This therefore implies that for every unit increase in staff professionalism on its own, the performance procurement contract administration in Public Universities in Kenya increases by 0.461 ($\beta = 0.461$). This implies that staff professionalism has a positive influence on procurement contract administration.

4.9.4 Simple Linear Regression for Accountability

The study sought to know the relationship between accountability (independent variable) and procurement contract administration (dependent variable). In this context, procurement contract administration was regressed against accountability and the correlation results presented in Table 4.24.

Table 4.24; Model Summary for Accountability

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.614 ^a	.378	.365	.76375

a. Predictors: (Constant), Accountability

There was positive correlation between the procurement contract administration and the accountability as the correlation coefficient was 0.614. The coefficient of determination gave a value of 0.378 which implies that 37.8% of the variance in procurement contract administration was as a result of accountability in Public Universities in Kenya.

The ANOVA was used to determine whether the simple linear regression with procurement contract administration as the dependent variable and accountability in Public Universities in Kenya as the independent variable was reliable. In this context, the p-value was used to determine this with the minimum requirement for reliability of the model being a p-value less than 0.05 ($p < 0.05$). The results are presented in Table 4.25.

Table 4.25; ANOVA^a for Accountability

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	17.339	1	17.339	29.724	.000 ^b
1	Residual	28.583	49	.583		
	Total	45.922	50			

a. Dependent Variable: Procurement Contract Management

b. Predictors: (Constant), Accountability

This simple linear regression with procurement contract administration (dependent variable) and accountability (independent variable) gave a p-value of 0.000. This p-value was less than 0.05 ($p < 0.05$) thus the model was deemed reliable.

The simple linear regression analysis also helped to understand how much change would occur in procurement contract administration when there was change in

accountability. The regression coefficient (β) was used to determine the expected increase (or decrease) in procurement contract administration when there is a unit increase in accountability, as in Table 4.26.

Table 4.26; Coefficients^a for Accountability

Model	Unstandardized		Standardized	t	Sig.
	Coefficients		Coefficients		
	B	Std. Error	Beta		
1 (Constant)	1.737	.436		3.986	.000
Accountability	.593	.109	.614	5.452	.000

a. Dependent Variable: Procurement Contract Management

The regression coefficient was 0.593 and resulted in the following regression model;

$$\text{Procurement Contract Administration} = 1.737 + 0.593 (\text{Accountability})$$

This therefore implies that for every unit increase in accountability on its own, the performance procurement contract administration in Public Universities in Kenya increases by 0.593 ($\beta=0.593$). This implies that accountability has a positive influence on procurement contract administration.

4.9.5 Multiple Linear Regression

The multiple linear regression was used to explain the relationship between procurement contract administration (dependent variable) and staff competencies, staff professionalism, ICT, and accountability (independent variables). The results are presented in Table 4.15.

Table 4.27; Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.848 ^a	.720	.695	.46622

a. Predictors: (Constant), Accountability, ICT, Staff Competencies, Staff Professionalism

There was positive correlation between the procurement contract administration and staff competencies, staff professionalism, ICT, and accountability, as the correlation coefficient, expressed as R, was 0.848. The coefficient of determination gave the amount of explained variance in the dependent variable (expressed as R²) as a result of the independent variables. The coefficient of determination gave a value of 0.720 which implies that 72.0% of the variance in procurement contract administration was as a result of the staff competencies, professional qualifications, ICT, and accountability in Public Universities in Kenya.

The ANOVA was used to determine whether the multiple linear regression with procurement contract administration as the dependent variable and the staff competencies, staff professionalism, ICT, and accountability in Public Universities in Kenya as the independent variables was reliable. In this context, the p-value was used to determine this with the minimum requirement for reliability of the model being a p-value less than 0.05 (p<0.05). The results are presented in Table 4.16.

Table 4.28; ANOVA ^a

	Model	Sum of Squares	df	Mean Square	F	Sig.
	Regression	25.688	4	6.422	29.545	.000 ^b
1	Residual	9.999	46	.217		
	Total	35.686	50			

a. Dependent Variable: Procurement Contract

b. Predictors: (Constant), Accountability, ICT, Staff Competencies, Staff Professionalism

This multiple linear regression with procurement contract administration (dependent variable) and staff competencies, staff professionalism, ICT, and accountability (independent variables) gave a p-value of 0.000. This p-value was less than 0.05 (p<0.05) thus the model was deemed reliable.

4.9.6 Hypothesis testing

The hypothesis of this study were tested using the p-value of the respective independent variables from the multiple linear regression with procurement contract administration as the dependent variable and staff competencies, staff

professionalism, ICT, and accountability as the independent variables. The minimum threshold for the null hypothesis to be rejected was a p-value less than 0.05 ($p < 0.05$) as the hypothesis was being tested at a level of significance of 0.05. The p-value results are shown in Table 4.17.

Table 4.29; Coefficients^a

Model	Unstandardized		Standardized	t	Sig.
	Coefficients		Coefficients		
	B	Std. Error	Beta		
(Constant)	.699	.424		1.647	.106
Staff Competencies	.166	.155	.206	2.071	.029
Use of ICT	.704	.073	.791	9.654	.000
Staff Professionalism	.180	.086	.182	2.091	.042
Accountability	.266	.153	.330	2.044	.008

a. Dependent Variable: Procurement Contract

The p-value was 0.029 for staff competencies, 0.000 for use of ICT, 0.042 for staff professionalism, and 0.008 for accountability. The p-values for all the independent variables in this regression model were less than 0.05 which implied that each null hypothesis (H_{01} , H_{02} , H_{03} , and H_{04}) was rejected. The null hypotheses which were rejected were as follows;

H_{01} : Staff competencies do not have a statistically significant influence on procurement contract administration in Public Universities in Kenya.

H_{02} : Use of information communication technology has no statistically significant influence on effective contract administration in Public Universities in Kenya.

H_{03} : Staff professionalism has no statistically significant influence on effective contract administration in Public Universities in Kenya.

H_{04} : Accountability has no statistically significant influence on effective contract administration in Public Universities in Kenya.

The rejection of the null hypotheses implies that staff competencies, use of ICT, staff professionalism and accountability each has a statistically significant influence on procurement contract administration in Public Universities in Kenya.

The multiple linear regression analysis also helped to understand how much the dependent variable would change when there was change in the independent variables. The regression coefficient was used to determine the expected increase (or decrease) when there is a unit increase in an independent variable (staff competencies, staff professionalism, use of ICT, and accountability).

$$\text{Procurement Contract Administration} = 0.699 + 0.166 (\text{Staff Competencies}) + 0.704 (\text{Use of ICT}) + 0.180 (\text{Staff Professionalism}) + 0.266 (\text{Accountability})$$

This therefore implies that for every unit increase in staff competencies, the performance procurement contract administration in Public Universities in Kenya increases by 0.166 (B= 0.166), when other factors are held constant. Additionally, for every unit increase in staff professionalism, the performance procurement contract administration in Public Universities in Kenya increases by 0.180 (B= 0.180), when other factors are held constant. Similarly, for every unit increase in use of ICT, the performance procurement contract administration in Public Universities in Kenya increases by 0.704 (B= 0.704), when other factors are held constant, and for every unit increase in staff competencies, the performance procurement contract administration in Public Universities in Kenya increases by 0.266 (B= 0.266), when other factors are held constant.

In order of influence of the independent variables on the dependent variable, use of ICT had greater influence on the procurement contract administration in Public Universities in Kenya. This was followed by accountability, staff professionalism, and finally the staff competencies of the procurement department.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION, RECOMMENDATIONS AND SUGGESTIONS

5.1 Introduction

The study examined the determinants of effective procurement contract administration in some selected public universities in Kenya. This chapter summarizes the findings from this study, contains the conclusion from the study and gives recommendations as well as suggestions for further studies.

5.2 Summary of Findings

The summary of findings for this study is as follows;

5.2.1 Staff Competencies

The study examined the average the perception of the respondents regarding staff competencies in the procurement department in their respective organization. In this context, the mean scores for the different statements of the staff competencies matrix were generated. The distribution of the responses around the mean was also examined with the standard deviations showing the level of consensus on a given statement.

All the mean scores for the different statements of the staff competencies matrix were between 3.5 and 4.49 implying that the respondents on average tended to agree with each of the statements. The standard deviations for the different statements of the staff competencies matrix except the standard deviation for one statement were between 0.50 and 0.99 which means that responses were moderately distributed around the mean implying there was moderate consensus on the various statements. The standard deviation for new staff in the procurement department are taken through intensive induction training was above one implying there was no consensus amongst respondents on this statement.

Therefore, there was no consensus and respondents on average tended to agree that new staff in the procurement department are taken through intensive induction training. There was moderate consensus amongst respondents and on average respondents tended to agree that the university has recruited staff with education qualification in procurement, the university considers the level of experience of staff

during recruitment in procurement, and knowledge on procurement practices is critical for a staff to be recruited in the procurement department.

Additionally, the respondents had moderate consensus and on average tended to agree that only staff with procurement education background are transferred to the procuring department, the education qualifications of staff in procurement is well diversified, the leadership skills of procurement staff are highly taken into consideration, and the procurement department allows their staff time to pursue higher education qualifications. Similarly, the respondents had moderate consensus amongst themselves and on average tended to agree that the procurement department organizes for regular in house training, staff in procurement department are sponsored for trainings outside the university, and staff in procurement department often attend to seminars addressing current issues in procurement.

5.2.2 Use of ICT

The study examined the average the perception of the respondents on the use of ICT in the procurement department in their respective organizations. In this context, the mean scores for the different statements of the use of ICT matrix were generated. The distribution of the responses around the mean was also examined with the standard deviations showing the level of consensus on a given statement.

The respondents on average tended to disagree that they perform online procurement, they have been using the government prescribed IFMIS in our procurement functions, and the procurement department has enough ICT equipment for performing its functions. This is because the mean scores for these statements were between 1.5 and 2.49. On the other hand, the respondents on average tended to agree that the university has embraced use of information communication technology in procurement, they maintain a database of suppliers through our ICT system, they do appraisal of their suppliers online, their inventory management records are computerized, and they collect information and monitor supply contracts using computers. This is because the mean scores for these metrics were between 3.5 and 4.49.

In the context of consensus, there was moderate consensus (standard deviations between 0.5 and 0.99) amongst respondents that the university has embraced use of information communication technology in procurement, they maintain a database of suppliers through their ICT system, the procurement department has enough ICT equipment for performing its functions, and they do appraisal of our suppliers online. Additionally, there was moderate consensus amongst respondents that, their inventory management records are computerized, and they collect information and monitor supply contracts using computers. On the other hand, responses were closely distributed around the mean which implied that there was high consensus (standard deviation between 0 and 0.5) amongst respondents that they perform online procurement. There was no consensus amongst respondents (standard deviation above 1) that they have been using the government prescribed IFMIS in their procurement functions, since the responses were widely distributed around the mean.

5.2.3 Staff Professionalism

The study used the frequency distributions, means and standard deviations of various statements to examine the professionalism in the procurement function in their respective organizations. All the mean scores of the professionalism in the procurement function matrix were between 3.5 and 4.49 which implied that respondents on average tended to agree with each statement of this matrix. Additionally, the standard deviations for all the statements of the professionalism in the procurement function matrix were between 0.5 and 0.99. This meant that responses for each of these statements were moderately distributed around the mean implying there was moderate consensus amongst respondents on each of the statements of the professionalism in the procurement function matrix.

Therefore, there was moderate consensus amongst respondents and respondents on average tended to agree that the university puts it as a requirement for every staff to be a member of a professional body, and professional training is mandatory for all procurement staff in their University. Additionally, there was moderate consensus amongst respondents and respondents on average tended to agree that the university recognizes the procurement profession as an important function in the organization, and the staff of procurement department are remunerated fairly well.

5.2.4 Accountability

The study examined accountability in procurement in the universities by getting the level of agreement of the respondents with various statements of the accountability function. On average, the respondents tended to neither agree nor disagree in regards to whether procurement staff are expected to work with independence in executing their jobs, and whether the staff of procurement department are highly commitment to their work (mean scores between 2.5 and 3.49). On the other hand, the respondents tended to agree with all the other statements of the accountability matrix (mean scores between 3.5 and 4.49).

In the context of distribution of responses around the mean, responses were widely distributed around the mean for procurement staff are expected to work with independence in executing their jobs, and the staff of procurement department are highly commitment to their work. This implies that there was no consensus (standard deviations above 1) amongst respondents on both statements. On the other hand, responses for all other statements of the accountability matrix were moderately distributed around the mean which implied moderate consensus (standard deviations between 0.5 and 0.99) amongst respondents on each of the statements.

There was no consensus amongst respondents and on average respondents tended to be neutral on whether procurement staff are expected to work with independence in executing their jobs, and whether the staff of procurement department are highly commitment to their work. On the other hand, there was moderate consensus amongst respondents and respondents on average tended to agree that the staff of procurement department are required to practice the highest level of honesty in executing their jobs, integrity is a key value for staff in the procurement department, and documentation is highly emphasized in every procurement transaction. Additionally, there was moderate consensus amongst respondents and respondents on average tended to agree that the procurement contract matters are treated with high level of confidentiality, value for money is ensured in every procurement contract, corruption in procurement is highly condemned and punished, and the university policy advocates for fair competition in every procurement contract.

5.2.5 Procurement Contract Management

The study examined the procurement contract management of the universities. In this context, the respondents were asked to rate the procurement department on efficiency in performance various functions. These functions included administering procurement contracts, communicating contractual obligations, performance monitoring in procurement contracts, managing relationships with contractors/suppliers, termination of contracts, and contract renewal.

All the mean scores of the procurement contract management matrix were between 3.5 and 4.49 which implied that on average the efficiency in performance of procurement department on each function scored a good rating. The responses for communicating contractual obligations, and contract renewal were moderately distributed around the mean which implied moderate consensus (standard deviations between 0.5 and 0.99) amongst respondents on each of the functions. On the other hand, the responses for administering procurement contracts, performance monitoring in procurement contracts, managing relationships with contractors/suppliers, and termination of contracts were widely distributed around the mean. This implies that there was no consensus (standard deviations above one) amongst respondents on administering procurement contracts, performance monitoring in procurement contracts, managing relationships with contractors/suppliers, and termination of contracts.

5.3 Conclusion

In the examination of the influence of staff competencies, the study concluded that the staff competencies have a significant influence on procurement contract administration in Public Universities in Kenya. The study also concluded that a unit increase in staff competencies on their own results in an increase in procurement contract administration.

In the examination of the effect of use of information communication technology, the study concluded that the use of information communication technology have a significant influence on procurement contract administration in Public Universities in Kenya. The study also concluded that a unit increase in the use of information

communication technology on its own results in an increase in procurement contract administration.

In the assessment of the influence of staff professionalism, the study concluded that the use of information communication technology has a significant influence on procurement contract administration in Public Universities in Kenya. The study also concluded that a unit increase in the staff professionalism on its own results in an increase in procurement contract administration.

Finally, in the examination of the influence of accountability, the study concluded that accountability has a significant influence on procurement contract administration in Public Universities in Kenya. A unit increase in accountability on its own results in an increase in procurement contract administration.

5.4 Recommendations

In the context of staff competencies, the study recommends that emphasis be placed on only transferring staff with procurement education background to the procuring department. This will ensure that the employees in the procurement department can competently perform their duties within the department.

In the context of use of information and communication technology, the study recommends that more emphasis be put on collection of information and monitoring supply contracts using computers for ease of access to information and for transparency purposes.

Within the context of professionalism, the research recommends that the public universities in Kenya put a requirement for every staff to be a member of a professional body. This will serve to enhance the skills of the staff as well as keep them up to date with emerging trends in procurement which improves the procurement contract administration in the universities.

Finally, in the context of accountability, the research recommends the implementation of the university policy which advocates for fair competition in every procurement

contract. This will guarantee that only qualified suppliers who are able to deliver quality goods and services to these institutions are selected.

5.5 Suggestions for Further Studies

The highlighted various aspects to be studied further due to their high standard deviations. The study suggests an examination of the independence of procurement staff in procurement contract administration in public universities in Kenya. Additionally, further studies should be carried out to determine the effect of IFMIS in procurement contract administration in public universities in Kenya. Finally, the study suggests for further studies an examination of determinants of effective procurement contract administration in selected private universities in Kenya.

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APPENDICES

APPENDIX 1: RESEARCH QUESTIONNAIRE

Dear Respondent,

Greetings, my name is Stephen Kibet, a Master of Science in Procurement and Contract Management student at Jomo Kenyatta University of Agriculture and Technology. I would like to ask for your help in my research project. The purpose of this study is academic and all information received shall be treated with absolute confidentiality. Kindly fill out this questionnaire to help me analyze: **DETERMINANTS OF EFFECTIVE PROCUREMENT CONTRACT ADMINISTRATION IN SELECTED PUBLIC UNIVERSITIES IN KENYA**

I appreciate your help in this study.

The study will use acronyms which are as follows:

Key {5=strongly agree, 4= Agree, 3 = neither agree nor disagree, 2 =disagree, 1 =strongly disagree}

Please respond as honestly as possible to all items in the questionnaire.

Section A: General information

1. Indicate your Age bracket

20 – 30 years [] 31 – 40 years [] 41 – 50 years []

51 – 60 years [] Above 60 years []

2. What is your gender Male [] Female []

3. Which of these best describes your current designation?

Senior Procurement officer [] Procurement Officer []

Procurement Assistant [] Clerk []

4. How long have you worked in the current institution? (State years)

Section B: Staff Competencies

5. What is your highest level of education?

KCSE [] Certificate [] Diploma [] Degree []

Post Graduate [] others qualifications (specify)

6. How long have you worked in procurement related function in your career?

1 – 3 years [] 4 -6 years [] 7 – 9 years [] 10 Years and Above []

7. How do you rate yourself in the level of knowledge in procurement related activities?

Very Good [] Good [] Fair [] Poor [] Very Poor []

Indicate your level of agreement with the following statements regarding staff competencies the procurement department in your organization.

	5	4	3	2	1
8. The university has recruited staff with education qualification in procurement					
9. The university considers the level of experience of staff during recruitment in procurement					
10. Knowledge on procurement practices is critical for a staff to be recruited in the procurement department					
11. Only staff with procurement education background are transferred to the procuring department					
12. The education qualifications of staff in procurement is well diversified					
13. The leadership skills of procurement staff are highly taken into consideration					
14. The procurement department allows their staff time to pursue higher education qualifications					
15. New staff in the procurement department are taken through intensive induction training					
16. The procurement department organizes for regular in house training					
17. Staff in procurement department are sponsored for trainings outside the university					
18. Staff in procurement department often attend to seminars addressing current issues in procurement					

Key {5=strongly agree, 4= Agree, 3 = neither agree nor disagree, 2 =disagree, 1 =strongly disagree}

Section C: Use of ICT

In your own opinion what is your level of agreement with the following statements regarding the use of ICT in the procurement department in your university?

	5	4	3	2	1
19. The university has embraced use of information communication technology in procurement					
20. We maintain a database of suppliers through our ICT system					
21. We perform online procurement					
22. We have been using the government prescribed IFMIS in our procurement functions					
23. The procurement department has enough ICT equipment for performing its functions					
24. we do appraisal of our suppliers online					
25. Our inventory management records are computerized					
26. We collect information and monitor supply contracts using computers					

Key {5=strongly agree, 4= Agree, 3 = neither agree nor disagree, 2 =disagree, 1 =strongly disagree}

Section D: Professional Qualifications

27. Are you a member of any professional body?

Yes [] No []

28. If Yes, state the body _____

29. Which of these represents or is equivalent to your highest professional qualifications?

Certificate in Procurement and Supply Operations []

Advanced Certificate in Procurement and Supply Operations []

Diploma in Procurement and Supply []

Advanced Diploma in Procurement and Supply []

Professional Diploma in Procurement and Supply []

In reference to the procurement department in your University indicate your level of agreement with the following statements regarding professionalism in the procurement function?

	5	4	3	2	1
30. The university puts it as a requirement for every staff to be a member of a professional bodies					
31. Professional training is mandatory for all procurement staff un our university					
32. The university recognizes the procurement profession as an important function in the organization					
33. The staff of procurement department are remunerated fairly well					

Key {5=strongly agree, 4= Agree, 3 = neither agree nor disagree, 2 =disagree, 1 =strongly disagree}

Section E: Accountability

In reference to accountability in procurement in your University indicate your level of agreement with the following statements

	5	4	3	2	1
34. The staff of procurement department are required to practice the highest level of honesty in executing their jobs					
35. Procurement staff are expected to work with independence in executing their jobs					
36. Integrity is a key value for staff in the procurement department					
37. The staff of procurement department are highly commitment to their work					
38. Documentation is highly emphasized in every procurement transaction					
39. Procurement contract matters are treated with high level of confidentiality					
40. Value for money is ensured in every procurement contract					
41. Corruption in procurement is highly condemned and punished					
42. The university policy advocates for fair competition in every procurement contract					

Key {5=strongly agree, 4= Agree, 3 = neither agree nor disagree, 2 =disagree, 1 =strongly disagree }

Section F: Procurement Contract Management

How would you rate the procurement department on efficiency in performance of the following functions?

Key {5=Very good, 4= Good, 3 = Fair, 2 = Poor, 1 = Very Poor}

	5	4	3	2	1
43. Administering procurement contracts					
44. Communicating contractual obligations					
45. Performance monitoring in procurement contracts					
46. Managing relationships with contractors/suppliers					
47. Termination of contracts					
48. Contract renewal					

Thank You