DETERMINANTS OF EFFECTIVE PROCUREMENT CONTRACT ADMINISTRATION IN PUBLIC SECONDARY SCHOOLS IN MOGOTIO SUB-COUNTY, KENYA

EPHANTUS KIPKEMOI MARIGAT

A RESEARCH PROJECT SUBMITTED TO THE SCHOOL OF ENTREPRENEURSHIP, PROCUREMENT AND CONTRACT MANAGEMENT IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF SCIENCE IN PROCUREMENT AND CONTRACT MANAGEMENT OF JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY

MAY, 2018

DECLARATION

This project is my original work and has not been presented for a degree in any other University

Ephantus Kipkemoi Marigat ……………………….………………………

HD311-C007-2026/2015   Signature   Date

This project has been submitted for examination with my approval as University supervisor

Mr. James Gacuiri   ……………………………   …………………….

Lecturer, JKUAT   Signature   Date

DEDICATION

I dedicate this paper to my dear wife Agneta and my daughter Ashley who have been so supportive of me and a source of encouragement.

ACKNOWLEDGEMENTS

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

ABBREVIATIONS AND ACRONYMS

BOM   Board of Management

CDF   Constituency Development Fund

CM   Contract Management

ICT   Information Communication Technology

IT   Information technology

KLB   Kenya Literature Bureau

KPI   Key Performance Indicators

NGCDF   National Government ConstituencyDevelopment Fund

NGCDFB   National Government ConstituencyDevelopment Fund Board

PP   Public Procurement

RBV   Resource Based View

TAM   Technology Acceptance Model

DEFINITION OF TERMS

Budgetary Allocations	Amount of funding designated to each expenditure line. It designates the maximum amount of funding an organization is willing to spend on a given item or program, and it is a limit that is not to be exceeded by the employee authorized to charge expenses to a particular budget line (Lysons& Farrington, 2006).
Procurement Contract Administration	The management of contracts made with customers, vendors, partners, or employees (Nguyen, 2013). Contract administration includes activities of a buyer during a contract period to ensure that all parties to the contract fulfill their contractual obligation (Bailey, 2008).
Staff Competency	A cluster of related abilities, commitments, knowledge, and skills that enable a person (or an organization) to act efficiently in a job or situation (Telewa, 2014).
Technology Adoption	A term generally used to mean a choice to get and utilise a new innovation, (Williamson, 2002).

ABSTRACT

Kenya public institutions lose hundreds of millions of tax payer's money through cancelled contracts, unfinished projects, poor service or product delivery, corruptions and extended contract periods each year. The study aimed at achieving the following objectives: To assess the influence of staff competency on effective procurement contract administration in public secondary schools in MogotioSub-County, Kenya; To evaluate the effect of technology adoption on effective procurement contract administration in public secondary schools in MogotioSub-County, Kenya, and; To examine whether budgetary allocations affect effective procurement contract administration in public secondary schools in MogotioSub-County, Kenya. The study used three theories including the agency theory, Technology Acceptance Model (TAM) and the resource based view. The study adopted a descriptive research design using quantitative approaches. The target population of the study was all principals and their deputies of public secondary schools in MogotioSub-Countywho total (52) individuals. Since the population was small a census design was used. Closed ended questionnaires constructed based on a five-point Likert scale were used as data collection instruments. A positive and strong correlation (R= 0.790) was found to exist between the variables. The variables of this study only accounted for 62.5% of the variability in effective procurement contract administration in public secondary schools in MogotioSub-County, Kenya. The hypothesis was tested at a level of significance of 0.05 which led to the rejection of the hypotheses that stated there is no significant relationship between staff competency and effective procurement contract administration in public secondary schools in MogotioSub-County, Kenya (H_{01}) andthere is no significant relationship between and effective procurement contract administration in public secondary schools in MogotioSub-County, Kenya (H_{03}). This was due to p-values of less than 0.05 corresponding to the staff competency and budgetary allocations from the analysis of variance (ANOVA). On the other hand, the hypothesis that stated there is no significant relationship between technology adoption and effective procurement contract administration in public secondary schools in MogotioSub-County, Kenya (H_{02}) was accepted as the p-value of the ANOVA for technology adoption was more than 0.05. The study found that staff competency and budgetary allocation have a statistically significant influence on the effective procurement contract administration in public secondary schools in MogotioSub-County, Kenya. Additionally, the study found that technology adoption has no statistically significant influence on the effective procurement contract administration in public secondary schools in MogotioSub-County, Kenya.The findings of this study are of significance to: management/Board of Management of public secondary schools; management/Board of Management of other schools, both public and private; National Government CDF board, and; researchers and scholars.

CHAPTER ONE
INTRODUCTION
1.1   Background of the Study

A contract is a written or oral legally-binding agreement between 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 agreementsAlatrista and Arrowsmith (2004).

Contract management may be defined as the process that ensures both parties to a contract fully meet their respective obligations as efficiently and effectively as possible, in order to deliver the business and operational objectives required from the contract and in particular to provide value for money, (Nguyen, 2013). As a result developing and managing contracts is a skill required by public sector entities in the management of the majority, if not all, programmes. However, contract management is not an end in itself and it is important that all contracting decisions and actions focus on the outcomes that entities are seeking to achieve. In the public sector there is huge variety of contracts, with different types of contracts needing different types of contract management. On the other hand agency contract management is the process of managing all stages in the lifecycle of enterprise-wide contracts with the goal of minimizing costs and risks, maximizing revenues, streamlining operations, and improving compliance with policies, procedures, regulations, and negotiated terms and conditions (Nguyen, 2013).

Contract management (CM) are 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 (Elsey, 2007). A sales contract is a

contract between a company (the seller) and a customer that where the company agrees to sell products and/or services. The customer in return is obligated to pay for the product/services bought. A purchasing contract is a contract between a company (the buyer) and a supplier who is promising 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.

Contract management has been perceived in different approaches (Christopher and Stuart, 2006). Some of these approaches include the following; "Contract management" is synonyms to "Contract implementation"; means is the process that enables both parties to a contract to meet their obligations in order to deliver the objectives required by the contract. It also involves building a good working relationship between client and contractor. It continues throughout the life of a contract and involves managing proactively to anticipate future needs as well as reacting to situations and/or risks that may arouse in the course of executing the contract. Contract management may also involve aiming for continuous improvement in performance over the lifecycle of the contract.

Contract management involves balancing costs against risks because works contract are frequently complex, may involve multiple actors, may last a long time and may consume many resources (South Ribble Borough Council, 2007). It is therefore vital that they are properly managed. If a bidder realizes that the contracting authority is not monitoring progress, it may get careless and delivery will be less than acceptable, or it may create and demand variations not provided for in the contract. It is believed that contract management processes start from the initial stages or procedures during procurement processes.

It is in the very nature of some widely used standard contracts, particularly for works, that they should have clear and comprehensive provisions allowing the contracting authority to change the nature, quantity, quality and completion of the subject of the contract (Peter, 2004). From a contract management point of view it is advantageous to be able to address changing circumstances in a transparent, timely, efficiently, effectively and professionally manner coping the way the challenges of contract management are arise during contract execution.

1.1.1 Global Perspective of Procurement Contract Administration

Different studies on contract management have been done the world over. In his study on design of a supplier performance measurement and evaluation system in Netherlands, Beijer (2012) found a positive correlation between design and supplier performance. A study done in England by Breedon (2013) insist on the need for proper key performance indicators and having a staffed and competent contract management team in relation to procurement contract management.

In India, Kumar and Markeset (2007) on a study on development of performance-based service strategies for the Indian oil and gas industry found that a direct relationship between strategies and contract performance. In Hong Kong, where corruption has been effectively controlled, large-scale projects have been managed effectively. In a review of the project, a mission of Transparency International found that the vast project had been implemented largely within budget and with minimal corruption. Among the factors in the success of the project were: strict anti-corruption laws and strong enforcement; and clear rules for procurement of services and suppliers; monitoring of contract performance; enforcement of accountability; and dispute resolution.

1.1.2 Regional Perspective of Procurement Contract Administration

In the African context, in his a study in Tanzania, Mlinga, (2008) found out that ineffectiveness in procurement contract management is due to lack of competent personnel armed with skills and experience to manage contracts. He recommended that there was need to have a contract manager with enough skills and experience in the field that they are supervising. Another study by Marco (2013) revealed that, contract management stage was deemed to be as the separate process to procurement, procurement functions are headed by the non-procurement professional which implied that, most of the decision reached at may not comply with the requirement of procurement laws in awarding contract to bidders. Also the initial preparation of tendering documents and contract documents was not effectively undertaken by the organization hence unnecessary and/or avoidable changes during contract implementation which in most cases leads to cost overrun, delays in project implementation.

A study by Oluka and Basheka (2012) in Uganda identified major determinants of procurement contract management as: Lack of political will to monitor contracts; lack of capacity in contract management and monitoring of various stakeholders, and; lack of integrity in the contract management process. These findings offer a useful foundation for policy and practical improvement in this important area.

1.1.3 Local Perspective of Procurement Contract Administration

In a study in Kenya, Waigwa and Njeru (2016) found that procurement policy framework guidelines are important for the success of the contracts in public agencies, however it had lowest effect compare to the other two factors. The study also established that enhanced service markets using tools such as ICT enhance efficient contract management among the public agencies. The study further established that training and motivation correlated significantly with the success of contract management meaning that employees need to have the skills and knowledge needed to make the contract management effective. The study concluded that effective management of contracts of whatever size and for whatever purpose is an essential requirement all public sector agencies and for this to happen then the agencies must ensure an effective policy framework. A study by Kibogo and Mwangangi (2014) found that information technology, management styles and employee competence influenced contract management in public procurement.

1.1.4 Concept of Effective Procurement Contract Administration

Contract administration includes 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 (Elsey, 2007). A sales contract is a contract between a company and a customer where the company agrees to sell products and/or services. The customer in return is obligated to pay for the product/services bought. A purchasing contract is a contract between a buying company and a supplier who is promises to sell products and/or services within agreed terms and conditions. The buying company in return is obligated to acknowledge the goods/or service and pay for liability created (Willmott, 2009).

1.2   Statement of the Problem

The Kenya public institutions lose hundreds of millions of tax payer's money through cancelled contracts, unfinished projects, poor service or product delivery, corruption and extended contract periods each year. The government of Kenya spends between 10%−30% of GDP on procurement alone. Out of that, 5% goes to waste due to lack of proper management of the contracts (Auditor general, 2015). Public secondary schools are not exception to this. Many public secondary schools in MogotioSub-Countyenter into contracts for projects which take longer than planned leading to unplanned financial implications and in some cases abandonment of the projects. At the same time, there are a few schools where most contracts are entered into and completed within time and budget. A question arises as to what is it that happens with some contracts that see completion within set budget and time frame and others finished outside the constraints. Very few studies on effective procurement contract administration have been done in Kenya; even fewer studies have been done in public secondary schools especially in MogotioSub-County. This study, therefore, seeks to assess the determinants of effective procurement contract administration in public secondary schools in MogotioSub-County.

1.3   Research Objectives

The study is guided broadly by two objectives, general and specific objectives.

1.3.1   General Objective

The general objective of the study is to assess the determinants of effective procurement contract administration in public secondary schools in MogotioSub-County, Kenya.

1.3.2   Specific Objectives

The study aims at achieving the following objectives:

i.   To assess the influence of staff competency on effective procurement contract administration in public secondary schools in MogotioSub-County, Kenya

ii.   To evaluate the effect of technology adoption on effective procurement contract administration in public secondary schools in MogotioSub-County, Kenya

iii.   To examine whether budgetary allocations affect effective procurement contract administration in public secondary schools in MogotioSub-County, Kenya

1.4   Research Hypotheses

The research study tested the following research hypotheses:

i. H_{01}: There is no significant relationship between staff competency and effective procurement contract administration in public secondary schools in MogotioSub-County, Kenya.

ii. H_{02}: There is no significant relationship between technology adoption and effective procurement contract administration in public secondary schools in MogotioSub-County, Kenya.

iii. H_{03}: There is no significant relationship between budgetary allocations and effective procurement contract administration in public secondary schools in MogotioSub-County, Kenya.

1.5   Significance of the Study

The findings of this study are of significance to: management/Board of Management of public secondary schools; management/Board of Management of other schools, both public and private; National Government CDF board, and; researchers and scholars.

The Board of Management (BOM)/management of public secondary schools may gain an understanding of how to manage contracts involving their schools. This may help them understand ways of ensuring that school contracts are executed in full, on time and within the set budget.The management and BOM of other public secondary schools may also find the findings of this study of importance by learning issues in contract administration. They can then drop bad practices and adopt best practices.

The NGCDF board may get an understanding of how the funds they give to public secondary schools are used and their effect. The board may then come up with policies to ensure that the funds are used in the best interest of the schools and the public at large. This is because the funds are normally from the exchequer.

Researchers and scholars may benefit from the findings of this study. This is because the findings of the study add to the body of knowledge concerning public secondary schools and contract administration.

1.6 Scope of the Study

The study was carried out in MogotioSub-Countyin Baringo County. It specifically focused on public secondary schools. The study looked at three variables, namely: staff competency; technology adoption, and; budgetary allocation. The target population of the study wasprincipals and deputy principalsof public secondary schools. The budget of the study was Kshs 140,975. The study was conducted between September 2017 and January 2018.

1.7 Limitations of the Study

The study was limited to public secondary schools in MogotioSub-Countythus findings may not be completely generalizable to the secondary schools in the entire country. Additionally, this research was limited by the measures used, to assess the determinants of effective procurement contract administration in public secondary schools in MogotioSub-County, that is, the staff competency, technology adoption, and budgetary allocations.

<div align="center">

CHAPTER TWO

LITERATURE REVIEW

</div>

2.1 Introduction

This chapter reviews theoretical review, empirical review, critique of existing literature, conceptual framework, summary of reviewed literature and research gaps.

2.2 Theoretical Review

This section discusses theories relevant to the study.

2.2.1 Agency Theory

The agency theory was put forward by Meckling in 1976. It is concerned with agency relationships between two parties, one known as the principal and the other one the agent. The two parties (principal and agent) have an agency relationship when they cooperate and engage in an association wherein one party, the principal, delegates work and decision making authority to another, the agent, to act on their behalf (Eisenhardt, 2014). The crucial assumptions on the agency theory is that; there are potential goal conflicts between principal and the agent; all parties act in their own self-interest; There exists frequent information asymmetry between the principal and the agent; agents tend to be more risk averse compared to the principal; and efficiency is the effectiveness criterion.

There are two potential problems that stem from the mentioned assumptions in agency relationships: a risk-sharing problem and an agency problem. A risk-sharing problem arises when principals and agents have different attitudes towards risk that cause disagreements about actions to be taken. An agency problem emerges when agents' goals are different from the principals' and it is hard or expensive to verify whether agents have carried out the delegated work appropriately. This problem may also emerge when it is hard or expensive to verify that agents can carry out the delegated work with the required expertise that they claim to have.

The assumptions and prescriptions underlying the agency theory match naturally with the issues inherent in supply chain quality management. In the process of managing supplier quality, buyers in agency relations face potential problems. By their nature, buyers would expect suppliers to provide expected quality and to better the quality of

<div align="center">

8

</div>

services and products supplied. On the contrary, suppliers may be reluctant to invest majorly in quality, especially if they think that buyers could be reaping all the benefits. The difference between buyers and suppliers will lead to the two parties concentrating only on their self-interestsXingxing (2012).

Agency theory determines how procurement managers execute procurement practices on behalf of tertiary public training institutions (Eisenhardt, 2014). Existence of poor principle agent relationship leads to low level of top management commitment and this also affects the relationship between institutions and the suppliers. Existence of conflict of interest amongst the agents leads to execution of procurement practices against the procurement the procurement policies and this leads to increased procurement budget and loss of procurement funds. The study thus used this model to determine the effect of procurement policies for effective implementation of procurement practices in tertiary public training institutions in Kenya.

The underlying principle of the principal-agency theory is that there should be a clear understanding of the needs of the principal and ability of the agent to meet these needs competently. Principal must closely monitor agents' performance; create reward structures that reinforce desired performance. Indeed, when procurement contract is well defined and planned, the principal and agents find it easy to meet needs of each other in an efficient way resulting into timely execution of the contract (Oluka&Basheka, 2012).

The principal-agent theory can proudly be applied to this study with a case company as a principal and contractors or service providers or suppliers as agents. The theory becomes significant to the study as it highlights the need for robust contract requirements and specifications as well as the objectively process of monitoring contractors' performance. When contract requirements, CM team roles and responsibilities and KPIs are well defined, the principal and agents will find it easy to meet needs of each other in an efficient way resulting into timely execution of the contract in predetermined performance level.

This theory relates to the study in various ways. First, the management of the school act as agents of the owners and financiers of public secondary schools. Employees, on their part, act as agents of the management. It is therefore, important that the schools employ qualified and competent employees.

2.2.2 Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM), developed by Davis in 1986, is theory on information systems that explains how users come to accept and use technology. Adoption of any innovation or especially information technology based needs investment in computer based tools to support decision making, planning communication. However, these systems may be risky. It is therefore very critical that the systems are specified on organizational preference and logic. It is also important to comprehend that people may resist technological changes. There must be an endeavour to comprehend reasons why people resist changes and the possible ways resolving issues. A friendly organizational culture must be inculcated; the change must be adopted incrementally accompanied by communication. Everybody involved must have an understanding of their roles and empowered to play the respective roles (Kamel, 2014).

This theory is based on two assumptions; perceived usefulness of the system such us; improved performance, enhanced productivity, effectiveness and efficiency in operations etc. and the perceived ease of use of the new systems such as ease to learn, ease to use, ease to control and ease to remember. This theory brings an understanding that acceptance and use of new technology is a function of the users" feelings about the system and its perceived benefits (Shirzad& Bell, 2012). On the basis of this theory, when the county government develops an IT based system that will help improvement of service delivery, they need to incorporate in the system features that will be appealing to the users. The system should also be easy to use and devoid of complicated terminologies that will confuse the user. This theory relates to the study because for technology to be useful in an organization it must be perceived as useful and accepted by the organization. This links with the second objective which is on technology adoption.

2.2.3   Resource-Based Approach Theory

The resource-based view (RBV) emphasizes the firm's resources as the fundamental determinants of competitive advantage through procurement planning and performance. It adopts two assumptions in analyzing sources of competitive advantage (Peteraf& Barney, 2007). First, this model assumes that firms within an industry may be unique with respect to the bundle of resources that they control. Second, it assumes that resource heterogeneity may persist over time because the resources used to implement firms' strategies are not perfectly mobile across firms. Resource uniqueness is considered a necessary condition for a resource bundle to contribute to a competitive advantage. The argument goes "If all firms in a market have the same stock of resources, no strategy is available to one firm that would not also be available to all other firms in the market. Procurement Performance is attributed to resources having intrinsically different levels of efficiency in the sense that they enable the firms to deliver greater to their customers for a given cost.

This theory can be related to procurement contract management. This because in order to make procurement contract management effective, it is crucial to have budgetary allocations release at the right time and in right amount. Furthermore, an entity can use legal provisions on contracts to achieve its objectives on contract management. The legal provisions can be a source of competitiveness for a procurement entity. This theory links with the third objective which is on budgetary allocations.

2.3   Empirical Review

This section looks at similar studies done by other researchers in the area of contract management. This section discusses the variables used in the study. The variables include human resource competency, information technology, ethics and organizational leadership style.

2.3.1   Staff Competency and Effective procurement Contract Administration

Competency refers to the specified skills, knowledge, attitudes and behavior necessary to achieve a task, activity or career (Mungai, 2014). The reflexive competence explains the ability to integrate actions with an understanding of action while applied competence shows a demonstrated ability to perform a set of tasks with

understanding and reflexivity (Kulundu, 2014). Staff competency affects the performance of the public procurement (Mbae, 2014). The human capital competence can be assessed through the level of education, education specialization, procurement knowledge, professional experience and the technical skills (Mauki, 2014). The efficiency of the staff on the public performance is enhanced by the superior and specialized level of education qualification. In this context, Muange (2013) argues that the possibility of the increase in motivation and subsequent performance lies with having staff with superior level of education which is an aspect of staff competency.

In Malaysia, Ismail and Abidin (2010) did an article on 'Impact of workers' competence on their performance in the Malaysian private service sector.' The article analysed the impact of workers' competence towards their performance in the private service sector. The analysis was based on a sample of 1136 workers who were either executive, manager or professional from three service sub-sectors, namely, education, health and information and communication technology (ICT) in Selangor, Federal Territory of Kuala Lumpur, Penang and Johor collected in 2007/2008. In the analysis, Workers' Performance Index (WPI) and Workers' Competence Index (WCI) were developed and subsequently used to analyse factors determining workers' performance in the selected service sector. The results showed that workers' competence had significant influence towards workers' performance. Besides that, human capital and workers' characteristics also determined workers' performance in the service.

A paper on 'The relationship between competency and performance' was done by Kolibačova (2014). The aim of the paper was to describe the relationship between the competencies of employees and their performance in one particular company. Semi-structured interviews and analysis of internal documents of the company took place between 2010 and 2011 and led to the characterisation of the competency and performance evaluation system. The evaluation of competency and performance of 110 employees made by 22 evaluators is an input to quantitative research. Calculations included data on the evaluation of all employees who met the following conditions: the employment lasted throughout the test period from 2007 to 2009; employee's performance was evaluated regularly in the given period, and; employees'

competencies were assessed in 2007. Null hypothesis, which was not accepted, stated that there was no relationship between competency and employees' performance.

The results of the research suggested that when the competency rate of one employee was a unit higher than the competency rate of another employee, it could be assumed that their performance rate was 7 to 12.5% higher. Recommendations for improving of the evaluation system of the company, which could be used in any company where employees' performance and competencies were evaluated, were formulated in the discussion. The study contributed to the management literature by enriched sources of information about the relationship between employees' competency and employee's performance. From the practical point of view, the result supported investing of time and money in staff development, aimed at enhancing their competencies in order to achieve higher performance of individuals, hence the whole company, (Kolibačova, 2014).

2.3.2 Technology Adoption and Effective procurement Contract Administration

Information Technology (IT) is a general term that is used to describe any technology that helps to produce, manipulate process, store, communicate, and/or disseminate information Williamson (2002). Technology adoption involves use of computers, software and internet connections infrastructure for supporting information processing and communication functions (Crompton 2007).

A study on 'Supply chain technology adoption and large manufacturing firms performance in Nairobi' was done by Jela (2013). The purpose of the study was to establish the drivers of supply chain technology adoption, the level of supply chain adoption and the relationship between extent of supply chain technology adoption and performance of manufacturing organizations. The study adopted an exploratory research design. The target population comprised of all 656 manufacturing firms operating in Nairobi as listed in the KAM directory of manufacturers and exporters 2013. Stratified sampling was applied to pick 66 respondents. A structured questionnaire was used to collect data. The quantitative data was analyzed using descriptive statistics. The study used simple linear regression to analyze the

relationship between extent of supply chain technology adoption and performance of manufacturing organizations.

From the findings, the study concluded that supply chain technology as a tool did not only improve the effectiveness and efficiencies of the operations but also acted as a competitive weapon to the organization strategy. The study further concluded that supply chain technology adoption improved communication and productivity between the organization and suppliers and led to the reduction in costs it also increased efficiency across the extended supply chain and enhanced network relationships. The study recommended that to enhance supply chain effectiveness, the management should organize for staff training both internal and external through seminars and workshop which would go a long way in enhancing ownership of the process by employees. Organizations should enhance these practices as maintenance has to provide the required reliability, availability, efficiency and capability of production system in accordance to the need of these characteristics, (Jela, 2013).

In Kenya, Mwai (2013) did a research study 'Information and communication technology and service delivery in Kenya Power.' The study was aimed at investigating the impact of ICT adoption on service delivery at Kenya Power and Lighting Company. The objectives of the study were to ascertain the level of computerization of business operation at KPLC, to establish factors that hinder full realization of value of ICT investment and to determine impact of ICT systems on services delivery at KPLC. The research design adopted in this study was descriptive survey. A population of 5400 staff was targeted on which a sample size of 400 was derived. Systematic sampling was applied to choose every 20th item hence forming a sample size in each stratum. Questionnaire was the primary data collection instrument for this study. The instrument was pre-tested to establish the reliability and validity of the data collection instrument. This was done by providing the instruments to ten respondents in each category as pilot test. Data analysis was done by use of SPSS for quantitative data while thematic analysis was used for the qualitative data. Frequency distribution tables and charts were used to present the results. The finding of the study concluded that the investment in ICT has a significant positive influence on the service delivery.

Focusing on Kenya, Wanjiru and Abdalla (2014) did a study on 'Effects of Information Communication Technology Adoption on Procurement Process in Kenya's Oil Industry: A Survey of Total Kenya Limited Mombasa County'. The purpose of the study was to map the effects of ICT adoption in procurement processes using Total Kenya limited case. This was guided by four specific objectives: To identify ICT applications adopted in the organizations procurement processes, to establish the firms supply chain propensity to partner with suppliers in ICT adoption. To identify the influence of individual factors in adopting ICT and to determine the challenges experienced in ICT adoption in procurement processes. The population of study comprised of 300 employees of Total Kenya Limited.

The study used stratified sampling technique; the strata were derived from the various employment levels, that is, top, middle and low level management. The study used a proportion of 15% from each stratum to select 45 respondents. The study relied on primary as well as secondary data. Primary data was collected through questionnaires structured to meet the objectives of the study. The questions were both open ended and closed ended. Secondary data was collected from relevant literature review, business magazines, journals, internet and other relevant materials. Responses in the questionnaires were tabulated, coded and processed by use of SPSS (20.0) to analyze the data descriptive statistics such as mean and standard deviation was used. Tables, pie charts, and graphs were also used to present responses and facilitate comparison.

From the study, it was revealed that the impact of ICT adoption on procurement processes mainly refers to time reductions and quality improvements, rather than cost reductions as reported by many authors. The old view that ICT applications are associated with cost reductions is contested in this research. The researchers also found that company is likely to realize improvements in cycle time reductions and process quality.

In terms of ICT adaptability, this study found that the company had not adopted more complicated e-business applications. From the study it was also clear that the adoption of ICT applications was not exclusively a matter of resources on the contrary, operational compatibility and the level of supply chain collaboration were two of the factors that played a determinant role in increased ICT adoption and impact assessment. The research was limited to a multinational company and thus the

researcher recommended for further study in the topic of ICT adoption among the SMEs sector and an analysis of the challenges experienced, (Wanjiru&Abdalla, 2014).

2.3.3 Budgetary Allocations and Effective procurement Contract Administration

A Budgetary allocation is the amount of funding designated to each expenditure line. It designates the maximum amount of funding an organization is willing to spend on a given item or program, and it is a limit that is not to be exceeded by the employee authorized to charge expenses to a particular budget line. A study on the effect of budgets on financial performance of manufacturing companies in Nairobi County was done by Onduso (2013). The aim of the study was to determine the effects of budgets on financial performance of manufacturing companies in Nairobi County. The study used cross-sectional research method targeting 18 manufacturing firms listed in the Nairobi Securities Exchange by employing a census survey to cover all manufacturing firms within Nairobi County. The researcher used both primary and secondary data. A statistical package for social sciences was used as an analysing tool and also regression model was used to determine the association between dependent and independent variables.

The study findings revealed that there was a strong positive effect of budgets on financial performance on manufacturing companies as measured by return on assets. The study recommended that effective budget implementation be facilitated through capacity building, robust systems and processes prioritization, and close monitoring for evaluation. Stakeholders should get involved in budget execution to enhancing the overall budget implementation. Further, financial management systems be supported in order to ensure prudent management of funds and adequate sensitization of both the employees and the public on best financial management practices to enhance the oversight role. In addition, manufacturing companies need to establish a strong link between the planning process and the budget process, (Onduso, 2013).

Still based in Kenya, Kimani (2014) did a study titled 'The effect of budgetary control on effectiveness of Non-Governmental Organisations in Kenya.' The study examined the budgetary control in Non-Governmental Organizations and its effects on their

performance. The research target population consisted of 7,127 Non-Governmental Organizations. Thirty Non-Governmental Organizations were selected using convenience judgmental sampling technique, both local and international organizations with headquarters in Nairobi. A descriptive survey was used in the data collection. The statistical package for social sciences version 17.0 was used to analyze the data using descriptive statistics, including means and standard deviation. The relationship between budgetary controls and performance of the NGOs was analyzed using correlation and regression analysis.

The research findings established that there was a weak positive effect of budgetary control on performance of Non-Governmental Organizations in Kenya measured by R square at 14.3%. The research recommended that employees needed to be sensitized on budgetary controls and the effect on performance of the organization. It also recommended that other factors that influence performance apart from budgetary controls be investigated by organizations. It also suggested that further research be done on the same area but a larger sample be used, (Kimani, 2014).

Focussing on commercial banks, Ifrah, Kerosi and Ondabu (2015) did an analysis of the effectiveness of budgetary control techniques on organizational performance at Dara-Salaam bank headquarters in Hargeisa Somaliland. The analysis examined how budgetary control could impact on the performance of Dara-salaam Bank. The objectives were to find out how responsibility accounting influences organizational performance, to determine whether variance cost analysis affects organizational performance and to establish how zero based budgeting affects organizational performance. The study utilized descriptive and retrospective research designs. Primary data was collected by use of questioners, while secondary data was collected from published materials. The researcher carried out a census study of the 70 staff of Dara-salaam Bank in Hargeisa Somaliland. Data entered into excel was presented by the use of frequency tables. Data was analyzed by SPSS was presented in form of frequency, tables and charts.

Findings on effectiveness of budgetary control techniques showed that responsibility accounting, variance analysis and zero based budgeting enhanced budget control and improved efficiency and productively. Further it was established that variance cost

analysis alone may not affect performance of an organization but it could influence decision making which could in turn affect organizational performance. The study recommended that organizational staff be trained on the existing budgetary control techniques to enhance business decision making and improve efficiency and productivity. The study recommended further research on budget planning and organizational performance and also the relationship between budget implementation and organizational performance, (Ifrah et al., 2015).

In Kenya, Koech (2015) a study titled 'The effect of budgetary controls on financial performance of manufacturing companies in Kenya.' The main objective of the study was to assess the effects of budgetary control on the financial performance of selected manufacturing companies in Kenya. A descriptive research design was used in this study. Stratified sampling technique was used. The respondents were head of the finance department or an equivalent. The sample size was 50 respondents. Both primary and secondary data were used. Descriptive analysis was used to mainly summarize the data collected. The results showed that there was a significant relationship between financial performance in manufacturing companies and the three variables (planning, monitoring and control and participative budgeting).

2.4   Critique of the Existing Literature Relevant to the Study

In Kenya, Kibogo and Mwangangi (2014) did a study on 'Factors affecting contract management in public procurement sector in Kenya: a case of Kenya Literature Bureau (KLB)'. The purpose of the study was to establish factors affecting contract management in public procurement sector. The specific objectives of the study were; to establish the effect of technology, management styles, relationship management, and employee competence on contract management in the public procurement sector in Kenya.

A study by Kibogo and Mwangangi (2014) found that information technology, management styles and employee competence influenced contract management in public procurement.The study adopted a descriptive research design which sought to establish factors associated with certain occurrences, outcomes, conditions or types of behaviour. It also enabled the researcher to answer the questions of how, who, where, why, what and which. The target population was 220 and stratified random technique

was used to arrive at a sample size of 130. Questionnaires were used to collect Data which was analysed both quantitatively and qualitatively. The research findings showed that information technology, management styles and employee competence influenced contract management in public procurement.The study was done in Kenya Literature Bureau (KLB) which is a public institution. It did not look at public secondary schools. It used information technology, management styles and employee competence as independent variables. The study did not look at budgetary allocations and legal framework as variables.

A study on the 'Effectiveness in contract management in Tanzania a case study of Tanroads' was done by Marco (2013). The study was conducted at Tanzania National Roads Agency on the effectiveness of contract management. The general objective of the study was to identify the factors leading to poor contract management in public procurement works towards value for money in Tanzania. Specific objectives included: to determine the factors affecting management of contracts in public procurement for works, to study the governing contract management practice in public procurement works, to explore the understanding of the Tanzania procurement laws in implementation of contract management to achieve value for money for social, economic and political development, to show the importance of legal professionals towards effective contract management in public procurement for works.

This study by Marco (2013)involved the sample of 45 employees of TANROADS involving respondents from Engineering department, Legal department, Procurement Management Unit and Tender Board. Qualitative approach was used during the study and in some cases quantitative approach was used by computation of frequency and percentages and the use of tabulations. A case study design was used during the study and TANROADS was used as a case study. The research methods and instrumentation that were used to collect data included the use of questionnaire, interview, documentary review and observations. The data analysis procedure that was used in this study was through content analysis and calculation of frequencies and percentages, (Marco, 2013).

The main findings of the research revealed that, contract management stage was deemed to be as the separate process to procurement whereby procurement specialists at TANROADS do not take part to monitor contract implementation, procurement functions are headed by the non-procurement professional which implied that, most of the decision reached at TANROADS may not comply with the requirement of procurement laws in awarding contract to bidders. Also the initial preparation of tendering documents and contract documents was not effectively undertaken by the organization hence unnecessary and/or avoidable changes during contract implementation which in most cases leads to cost overrun, delays in project implementation.

Also the use of consultants by TANROADS to some of contradicting functions and lack of effective use of monitoring tools by TANROADS to monitor works by both contractors and consultants may lead to poor quality roads hence wear and tear of roads which may necessitate repairs in a short time. It is recommended that, future research should be conducted covering sample from District Councils, Municipal Councils and roads in rural areas which are not under the supervision of TANROADS, (Marco, 2013).

The study on Tanroads by Marco (2013) was conducted in Tanzania whereas this study was conducted in Kenya. It did not look at any of the variables looked at in this study. The variables include staff competence, technology adoption, budgetary allocations and legal framework. Furthermore, the study was not done in the education sector. On the contrary, this study considered public secondary schools in MogotioSub-County.

In their study on factors influencing management of procurement contracts in public security agencies: a case of Kenya Police Service, Waigwa and Njeru (2016) used the following specific objectives: to assess the influence of policy framework guidance on contract management in the Public Security Agencies; to examine the effects of the service markets on contract management in Public Security Agencies, and to establish the influence of training and motivation of procurement personnel on contract management in the Public Security Agencies. The study adopted a case study research design. The population of the study was employees working with the procurement

department of the Kenya Police Service who were sixty seven in number. Census method was used as the sampling method where all the supply chain management officers were considered. Questionnaire and interview schedule were used to collect data.

The findings of Waigwa and Njeru (2016) study indicated that procurement policy framework guidelines were important for the success of the contracts in public agencies, however it had lowest effect compare to the other two factors. The study also established that enhanced service markets using tools such as ICT enhance efficient contract management among the public agencies. The study further established that training and motivation correlated significantly with the success of contract management meaning that employees needed to have the skills and knowledge needed to make the contract management effective. The three factors had positive and statistically significant effect as explained by the correlation and regression results.

This study by Waigwa and Njeru (2016) concludes that effective management of contracts of whatever size and for whatever purpose is an essential requirement all public sector agencies and for this to happen then the agencies must ensure an effective policy framework, a good service market with improved ICT facilities and effective training and motivation of the staff. The study recommended enhancing of the public procurement policy framework, improving on service markets and enhancing training and motivation of the staff to enhance effective contract management in the public agencies, (Waigwa&Njeru, 2016). The study was done in a public agency, different from this study which considered secondary schools. Furthermore, the variables looked at in this study were not looked at in the study.

2.5   Conceptual Framework

Conceptual framework is an analytical tool with several variations and context that shows the relationship between the independent and dependent variables. The study usedthree independent variables. They include: staffcompetency, technology adoption and budgetary allocations. All these independent variables were analysed with an intention of assessing how they affect effective procurement contract administration

in secondary schools in MogotioSub-Countyin Baringo County. This is presented in Figure 2.1

Staff Competency
- Professional experience
- Technical skills
- Level of Education

Technology Adoption
- Computerization
- Software
- Internet connections

Budgetary Allocations
- Timeliness
- Amount
- Commitment

Effective Procurement Contract Administration
- Time lines
- Cost
- Quality
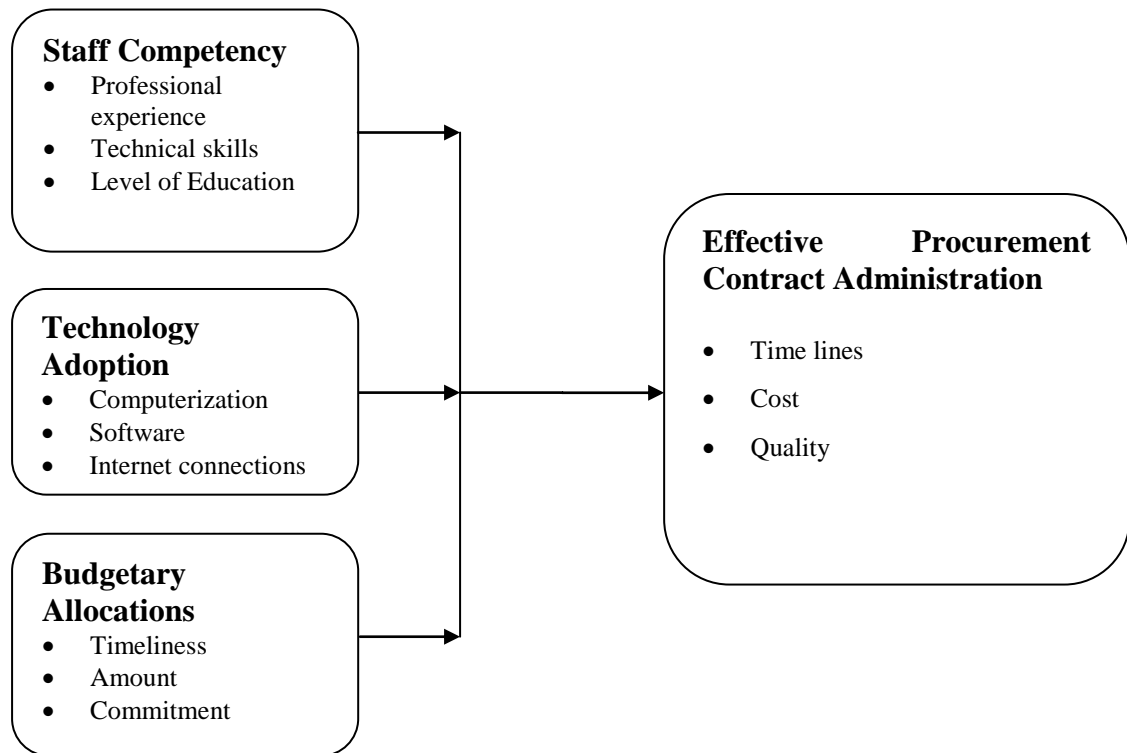
Independent variables   **Dependent variable**
Figure 2.1: Conceptual Framework

2.6   Summary of Reviewed Literature

The study reviewed different literature related to the study. The theories reviewed included the agency theory, Technology Acceptance Model (TAM) and Resource based view. The literature reviewed also includes different research studies, related to contract administration, done by different researchers and scholars. The studies include those done both within and outside Kenya. The agency theory, which is basically about two parties (principal and agent), connects with the first objective which is on staff competency. TAM, which is about adoption and perceived usefulness of technology relates to the second objective which is on technology adoption. The RBV, which is about uniqueness of resource in possession of an organization, connects with the third which is on budgetary allocation.

2.7   Research Gaps

The study reviewed different studies done by other scholars. Kibogo and Mwangangi (2014) did a study on 'Factors affecting contract management in public procurement sector in Kenya: a case of Kenya Literature Bureau (KLB)'.   The specific objectives of the study were; to establish the effect of technology, management styles, relationship management, and employee competence on contract management in the public procurement sector in Kenya. It did not look at public secondary schools. It used information technology, management styles and employee competence as independent variables. The study did not look at budgetary allocations as variables.

A study on the 'Effectiveness in contract management in Tanzania a case study of Tanroads' was done by Marco (2013). Specific objectives of the study included: to determine the factors affecting management of contracts in public procurement for works, to study the governing contract management practice in public procurement works, to explore the understanding of the Tanzania procurement laws in implementation of contract management to achieve value for money for social, economic and political development, to show the importance of legal professionals towards effective contract management in public procurement for works. The study was conducted in Tanzania whereas this study was conducted in Kenya. It did not look at any of the variables looked at in this study. The variables include staff competency, technology adoption and budgetary allocations. Furthermore, the study was not done in the education sector. On the contrary, this study considered public secondary schools in MogotioSub-County.

In their study on factors influencing management of procurement contracts in public security agencies: a case of Kenya Police Service, Waigwa and Njeru (2016) used the following specific objectives: to assess the influence of policy framework guidance on contract management in the Public Security Agencies; to examine the effects of the service markets on contract management in Public Security Agencies, and to establish the influence of training and motivation of procurement personnel on contract management in the Public Security Agencies. The study was done in a public security agency, different from this study which considered secondary schools. Furthermore, the variables looked at in this study were not looked at in the study.

CHAPTER THREE
RESEARCH METHODOLOGY

3.1   Introduction

This chapter discusses the research methodology to be used by the study. Specifically it discusses the following: research design; target population; sampling frame; sample size and sampling technique; data collection instruments; data collection procedures; pilot test; data collection procedures, and; data processing and analysis.

3.2   Research Design

Decisionsregarding what, where, when how much, by what means concerning an inquiry or a research study constitutes a research design,Salaria (2012). Since the researcher's interest is to find the relationship between independent variables and dependent variables without manipulating them, the study adopted a descriptive type of research design. Kothari (2004) opine that descriptive research seeks to establish the status of affairs without manipulating study variables.

3.3   Target Population

Populationrefers to an entire group of individuals, events or objects having a common observable characteristicMugenda and Mugenda, (2004). In other words, population is the aggregate of all that conforms to a given specification. The target population of the study was made up of the principals and deputy principals of public secondary schools within MogotioSub-County, Baringocounty. The Sub-Countyhas 26 public secondary schools. Picking the principals and their deputies from each secondary school, the target population came to 52. This presented on Table 3.1.

Table 3.1: Target Population

Position	Target Population
Principal	26
Deputy Principal	26
Total	**52**

Source: Education Office, (2017)

Since the target population wass fairly small, a census approach was used.

3.4   Data Collection Instruments

Data collection tools, according to Zikmund (2003), are the instruments used to collect information in research or the methods employed to collect research data.

According to (Mugenda&Mugenda, 2003), the choice of the methods to use is influenced by the nature of the problem and by the availability of time and money. The study used a questionnaire to collect primary data from the respondents. Kothari (2004) posit that primary data is the data collected a fresh and for the first time and thus happen to be original in character. Salaria (2012) defines a questionnaire as a data collection tool, designed by the researcher and whose main purpose is to communicate to the respondents what is intended and to elicit desired response in terms of empirical data from the respondents in order to achieve research.

3.5   Data Collection Procedures

The researcher used a drop and pick later method to collect data. Questionnaires were given to the respondents and collected back after allowing them enough time to fill them. The researcher used contact persons to boost response rate. The researcher was also available for any clarifications that respondents needed.

3.6   Pilot Test

Pilot test was used to test the reliability and the validity of instruments to be used by the study. A pilot test was done in 10 public secondary schools in RongaiSub-Countyin the County of Nakuru, Kenya. The figure was around 20% of the target population.

3.6.1   Validity of the Data Collection Instruments

Validity is used to check whether the questionnaires measure what they are supposed to measure. Validity is the strength of our conclusion, inferences or propositions(Kothari, 2004). The researcher enhanced the validity of the instrument by discussing it with the supervisor who is an expert in research.

3.6.2   Reliability of the Data Collection Instruments

In examination reliability, Mugenda and Mugenda (2003) examined reliability as a measure of the degree to which a research instrument yields consistent results after repeated trials. In order to confirm validity of the instrument a pilot test was done. A Cronbach coefficient alpha was used to test the reliability of items in the questionnaires. Items that hadCronbach alpha coefficient of 0.7 and above were

considered to be reliable. Those that had lower alpha coefficient were redone until such a time that they had a score equal to or higher than 0.7.

3.7   Data Processing and Analysis

Once the questionnaires have been administered, the mass of raw data collected must be systematically organized in a manner that facilitates analysis. If empirical or quantitative analysis is anticipated, the responses in the questionnaire should have been assigned numerical values (Mugenda&Mugenda, 2003). After data has been collected, the researcher conducted data cleaning, and then the data was coded and entered in the computer for analysis using the Statistical Package for Social Sciences (SPSS). Data was then analyzed using descriptive statistics such as frequency counts, percentages, means and standard deviation.

Inferential statistics, that is correlation and regression analysis was analysed using SPSS. For regression analysis, the study hypothesized the following regression model:

$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$ ………………………..Equation 3.1

Where;

$\quad$ Y represented Effective Procurement Contract Administration

$\quad$ β_0 represented a constant and represents the value of Y when X_1, X_2, and $X_3=0$

$\quad$ β_1, β_2, β_3 represented the regression coefficients which measures the average change in the value of the dependent variable

$\quad$ $X_1 =$ Staff Competency

$\quad$ $X_2 =$ Technology Adoption

$\quad$ $X_3=$ Budgetary Allocations

$\quad$ $\varepsilon=$ Error Term

CHAPTER FOUR
RESEARCH FINDINGS AND ANALYSIS

4.1   Introduction

This chapter examines the findings of the study and the data analysis related to them. The study sought to assess the determinants of effective procurement contract administration in public secondary schools in MogotioSub-County, Kenya.This chapter presents the results of the study by using frequency distributions, means, standard deviations, and regression analysis.

4.2   Response Rate

The study sought to collect information from 52 respondents (sample members) thus 52 questionnaires were distributed to the potential respondents. Out of these questionnaires, 48 were returned, which were examined to check whether they had complete and consistent information. This process led to the rejection of 3 questionnaires, which left the study with 45 completely filled questionnaires. The data analysis and results thereof are based on the 45 questionnaires. The response rate thus was 86.5% which was deemed sufficient for data analysis as it was above the minimum recommended (80.0%) by Mugenda&Mugenda, (2003).

4.3   General Information of Respondents

The respondents indicated their age during the time of study, gender, length of time they have been involved in contract administration, and education level. All these were used to derive the respondents general information.

4.3.1   Age of Respondents

The respondents were asked to indicate their age at the time the study was conducted and results were as shown in Table 4.1.

Table 4.1: Distribution by Age of Respondents

	Frequency	Percentage
21– 30 yrs	0	0.0%
31 – 40 yrs	8	17.8%
41 – 50 yrs	21	46.7%
Over 50 yrs	16	35.5%
Total	**45**	**100.0%**

Almost half of the respondents (46.7%) were of ages 41 to 50 years. Respondents who were over 50 years of age were 35.5% while those who were of ages 31 to 40 years were 17.8%. None of the respondents (0.0%) was 21 to 30 years of age. The higher numbers of respondents with 41 years and above could be attributed to the experience required for a teacher to be be promoted to a deputy headteacher or a principal. This means that a teacher has to teach for some years before they are promoted to a deputy headteacherand even gain more experience to be promoted to a principal. The few respondents of age 31 to 40 years could be the deputy principals who have recently been promoted.

4.3.2 Gender of Respondents

The gender of the respondents was also used to get their general information. Table 4.2 presents results of the examination of gender of respondents.

Table 4.2: Distribution by Gender of Respondents

	Frequency	Percentage
Male	29	64.4%
Female	16	35.6%
Total	**45**	**100.0%**

Above three fifths of the respondents (64.4%) were male while the female respondents were 35.6% of the respondents. The teaching profession is generally male dominated in the leadership positions especially in boyssecondary schools and mixed schools which could attribute the higher number of male respondents.Additionally, the gender roles for women like caring for their families leave them with less time for administrative duties thus discouraging them from taking up leadership positions.

4.3.3 Time Respondents Have Been Involved in Contract Administration

The length of time respondents have been involved in contract administration was also examined, as shown in Table 4.3.

Table 4.3: Distribution by Time Respondents Have Been Involved in Contract Administration

	Frequency	Percentage
Less than 3 yrs	4	8.9%
4-6 yrs	9	20.0%
7-9 yrs	12	26.7%
More than 9yrs	20	44.4%
Total	**45**	**100.0%**

Most of the respondents (44.4%) indicated that they have been involved in contract administration for more than 9 years. These were followed by the respondents who have been involved in contract administration for 7 to 9 years (26.7%) and for 4 to 6 years (20.0%). The least number of respondents (8.9%) indicated that they had been involved in contract administration for less than 3 years. The higher number of respondents who have been involved in contract administration for 7 years and above could be attributed to principals since they have been involved in it since they were deputy principals.

4.3.4 Education Level of Respondents

The respondents were asked to indicate their highest level of education level among diploma, bachelor degree, master's degree and PhD with results in Table 4.4.

Table 4.4: Distribution by Education Level of Respondents

	Frequency	Percentage
Diploma	0	0.0%
Bachelor degree	30	66.7%
Master's degree	14	31.1%
PhD	1	2.2%
Total	**45**	**100.0%**

Most of the respondents (66.7%) indicated that they had a bachelor degreeas their highest level of education. Respondents with a master's degree as their highest level of education were 31.1%, while 2.2% of the respondents had a PhDas their highest level of education. However, none of the respondents (0.0%) had a diploma as their highest level of education.The higher number of respondents with bachelor degree level of education could be attributed to a most universities offering programmes during holidays which made it easier for respondents to pursue bachelor degrees. This was because promotion was based on higher qualification of teachers until recently where there was a shift in policy in public employment that led to the employer giving promotions based on performance.

4.4 Staff Competency and Contract Administration

4.4.1 Frequency Distributions for Staff Competency

The study sought to assess the influence of staff competency on effective procurement contract administration in public secondary schools in MogotioSub-County, Kenya. The results of this examination are shown in Table 4.5.

Table 4.5: Frequency Distributions forStaff Competency

Staff Competency	SA	A	U	D	SD
Staff who are knowledgeable help improve contract administration	31.1%	51.1%	17.8%	0.0%	0.0%
Professionally experienced staff are empowered and motivated to carry out their duties well thus improving contract administration	55.6%	26.7%	15.6%	2.2%	0.0%
Staff with technical skills do things right the first time thus improving contract administration	24.4%	44.4%	20.0%	11.1%	0.0%
Staff with technical skills do things effectively and efficiently, hence improving contract administration	26.7%	42.2%	31.1%	0.0%	0.0%
Staff with right education perform their tasks efficiently, thus improving contract administration	44.4%	37.8%	17.8%	0.0%	0.0%
Superior level of education improves staff motivation and by extension contract administration	22.2%	60.0%	6.7%	11.1%	0.0%

About half of the respondents (51.1%) were inclined to agree that staff who are knowledgeable help improve contractadministrationin their school. Further, 31.1% of the respondents were inclined to strongly agree on the same. Most of the respondents tended to agree (42.2%) thatstaff with technical skills do things effectively and efficiently, hence improving contract administration in their school. Respondents who strongly agreed that staff with technical skills do things effectively and efficiently, hence improving contract administration in their school.were 26.7%. However, there were 31.1% of respondents who tended to be uncertain on whether staff with technical skills do things effectively and efficiently, hence improving contract administration in in their school.

Most of the respondents tended to strongly agree that staff with the right education perform their tasks efficiently, thus improving contract administrationin their school which was supported further by 37.8% of the respondents who chose the "agree" option. On the other hand, none of the respondents was inclined to either disagree (0.0%) or strongly disagree (0.0%) thatstaff who are knowledgeable help improve contract administration, staff with technical skills do things effectively and efficiently, and staff with right education perform their tasks efficiently, thus improving contract administrationin their school.

Above half of the respondents (55.6%) were of a strong perception that professionally experienced staff are empowered and motivated to carry out their duties well thus improving contract administration in their school. Further, 26.7% affirmed that professionally experienced staff are empowered and motivated to carry out their duties well thus improving contract administration in their school. On the other hand, only a negligible 2.2% of respondents tended to perceive that professionally experienced staff are notempowered and motivated to carry out their duties in their school.

A cumulative majority of respondents 68.8% affirmed that staff with technical skills do things right the first time thus improving contract administration in their school (24.4=strongly agree; 44.4%=agree). However, there were 20.0% of the respondents who tended to be uncertain whether staff with technical skills do things right the first time thus improving contract administration in their school, and 11.1% who tended to disagree with the statement. Thee fifths of the respondents (60.0%) were inclined to agree that superior level of education improves staff motivation and by extension contract administration in their school.. An additional 22.2% of the respondents tended to striongly agree that superior level of education improves staff motivation and by extension contract administration in their school. There were no respondents who had strong perceptions that opposed that the staff competency aspects examined in the study influence contract administration in their school (0.0%=strongly disagree).

4.4.2   Means and Standard Deviations for Staff Competency

The means and standard deviations of the staff competence levels and their influence on contract administration were examined and their results presented in Table 4.6 below. The purpose of calculation of the mean was to find the average opinion of the respondents in respect to the stated staff competency aspects in a likert scale. The standard deviation was calculated to determine the average variance of the responses from the mean and hence determine the consensus levels amongst the respondents in respect to a given metric in a likert scale.

31

Table 4.6: Means and Standard Deviations for Staff Competency

	N	Min.	Max.	Mean	Std. Dev.
Staff who are knowledgeable help improve contract administration	45	3.00	5.00	4.13	0.69
Professionally experienced staff are empowered and motivated to carry out their duties well thus improving contract administration	45	2.00	5.00	4.36	0.83
Staff with technical skills do things right the first time thus improving contract administration	45	2.00	5.00	3.82	0.94
Staff with technical skills do things effectively and efficiently, hence improving contract administration	45	3.00	5.00	3.96	0.77
Staff with right education perform their tasks efficiently, thus improving contract administration	45	3.00	5.00	4.27	0.75
Superior level of education improves staff motivation and by extension contract administration	45	2.00	5.00	3.93	0.86
Valid N (listwise)	**45**				

The means of the six components of the staff competencies were calculated through use of SPSS software. In this context, staff being knowledgeable to help improve contract administration had a mean of 4.13; professionally experienced staff being empowered and motivated to carry out their duties well thus improving contract administration had a mean of 4.36. On the other hand, the role of staff with technical skills doing things right the first time, and doing things effectively and efficiently had means of 3.82 and 3.96 respectively. The staff being knowledgeable, professionally experienced and having the right technical skills imparting on the performance of the contract administration is in tandem with other studies on competency and performance. These results are in tandem with Mundai (2014) study that found that reflexive competence explains the ability to integrate actions with an understanding of action while applied competence shows a demonstrated ability to perform a set of tasks with understanding and reflexivity (Kulundu, 2014).

Finally, Staff with right education performing their tasks efficiently to improve contract administration had a mean of 4.27 while superior educational levels leading to staff motivation had a mean of 3.93. The role of education playing a critical role in the performance of contract administration is tandem with Mauki (2014) findings. Mauki (2014) indicated that human capital competence can be assessed through the level of education, education specialization, procurement knowledge, professional experience and the technical skills. The efficiency of the staff on the public

performance is enhanced by the superior and specialized level of education qualification.

In a five point likert scale (1=Strongly Disagree and 5= Strongly Agree), Keller, (2014)argues that means that fall between 3.5 to 4.49 should be interpreted as the respondents on average tended to agree that the stated likert scale metric positively influenced the dependent variable. In this context, all the metrics for the staff competencies fell between 3.5 and 4.49 therefore leading to a conclusion that on average the respondents agreed that the staff competencies improved contract administration.

The standard deviation of the six components of staff competencies were calculated through use of SPSS software. The results revealed staff being knowledgeable to help improve contract administration had a standard deviation of 0.69; professionally experienced staff being empowered and motivated to carry out their duties well thus improving contract administration had a standard deviation of 0.83. On the other hand, the role of staff with technical skills doing things right the first time, and doing things effectively and efficiently had standard deviations of 0.94 and 0.77 respectively.

Finally, Staff with right education performing their tasks efficiently to improve contract administration had a standard deviation of 0.757 while superior educational levels leading to staff motivation had a standard deviation of 0.86. In a five point likert scale (1=Strongly Disagree and 5= Strongly Agree), Keller, (2014) argues that standard deviations that fall between 0.5 and 1 indicate an average variation of responses relative to the mean hence leading to a conclusion of moderate consensus with the given metric. All the metrics for the staff competences fell between this range with the least standard deviation being 0.69 and the highest being 0.94. A conclusion was therefore reached that there was a moderate consensus amongst the respondents in respect to the influence of the staff competences aspects on contract administration aspects.

4.5   Technology Adoption and Contract Administration

4.5.1   Frequency Distributions for Technology Adoption

The study evaluated the effect of technology adoption on effective procurement contract administration in public secondary schools in MogotioSub-County, Kenya using six metrics. These included computerization of contract administration activities increase effectivenesshence improving contract administration, computerization of contract administration activities increases the speed of doing things, and procurement software help improve contract administration by reducing costs. Additionally perceptions of respondents were sought on whether procurement software increases productivityhence improving contract administration, internet connections help communicate and collaborate more effectively with contractors at a cost effective manner, and internet connection helps improve communication and collaboration with contractors thus saving time. Results of are presented in Table 4.7.

Table 4.7: Frequency Distributions for Technology Adoption

Technology Adoption	SA	A	U	D	SD
Computerization of contract administration activities increase effectiveness hence improving contract administration	55.6%	28.9%	15.6%	0.0%	0.0%
Computerization of contract administration activities increases the speed of doing things	22.2%	48.9%	17.8%	11.1%	0.0%
Procurement software help improve contract administration by reducing costs	28.9%	44.4%	26.7%	0.0%	0.0%
Procurement software increases productivity hence improving contract administration	26.7%	31.1%	33.3%	8.9%	0.0%
Internet connections help communicate and collaborate more effectively with contractors at a cost effective manner	48.9%	33.3%	17.8%	0.0%	0.0%
Internet connection helps improve communication and collaboration with contractors thus saving time	15.6%	51.1%	22.2%	11.1%	0.0%

Most of the respondents were inclined to strongly agree that computerization of contract management activities increase effectivenesshence improving contract administration in their school (55.6%)and that internet connections help communicate and collaborate more effectively with contractors at a cost effective manner (48.9%). Other respondents affirmed that computerization of contract administration activities increase effectiveness hence improving contract administration in their school

34

(28.9%) and that internet connections help communicate and collaborate more effectively with contractors at a cost effective manner (33.3%). However, 15.6% and 17.8% of the respondents were not certain whether computerization of contract administration activities increase effectiveness hence improving contract administration in their school and whether internet connections help communicate and collaborate more effectively with contractors at a cost effective manner respectively.

Most of the respondents were inclined to agree that computerization of contract administration activities increases the speed of doing things (48.9%) and procurement software help improve contract administration by reducing costs (44.4%) in their school. Additionally, 22.8% and 28.9% of the respondents were inclined to strongly agree that computerization of contract administration activities increases the speed of doing things and procurement software help improve contract administration by reducing costs in their school.

A higher number of respondents tended to be uncertain (33.3%) whether procurement software increases productivity hence improving contract administration in their school compared to those who were inclined to strongly agree (26.7%) and agree (31.1%)that procurement software increases productivity hence improving contract administration in their school. Procurement software was perceived not to increase productivity hence improving contract administration by 8.9% of respondents (disagree).

On the other hand, about half of the respondents tended to agree that internet connection helps improve communication and collaboration with contractors thus saving time. Further, 15.6% of the respondents strongly perceived this to be the case. However, there were 11.1% of respondents whose perception was contrary since they tended to disagree with the statement that internet connection helps improve communication and collaboration with contractors thus saving time. None of the respondents (0.0%) chose "strongly disagree" in response to the various statements examined in respect to the effect of technology adoption on effective procurement contract administration in public secondary schools in MogotioSub-County, Kenya.

4.5.2   Means and Standard Deviations for Technology Adoption

The means and standard deviations of the technology adoption and its influence on contract administration was examined and the results presented in Table 4.8 below. The purpose of calculation of the mean was to find the average opinion of the respondents in respect to the stated technology adoption aspects in a likert scale. The standard deviation was calculated to determine the average variance of the responses from the mean and hence determine the consensus levels amongst the respondents in respect to a given technology adoption metric in a likert scale. The technology adoption variable had six components whose means were calculated through use of SPSS and their results presented in Table 4.8.

The use of computerization of contract administration activities to increase effectiveness and speed of doing things had means of 4.40 and 3.82 respectively. This was expected to lead to an improvement in contract administration aspects.The use of procurement software in cost reduction and increase in productivity aspects hence resulting in improvement of contract administration aspects had means of 4.02 and 3.76 respectively. These results are in agreement with Jela (2013) results. Jela (2013) study on Supply chain technology adoption and large manufacturing firms performance in Nairobi found that supply chain technology as a tool did not only improve the effectiveness and efficiencies of the operations but also acted as a competitive weapon to the organization strategy.

Table 4.8: Means and Standard Deviations for Technology Adoption

	N	Min.	Max.	Mean	Std. Dev.
Computerization of contract administration activities increase effectiveness, hence improving contract administration	45	3.00	5.00	4.40	0.75
Computerization of contract administration activities increases the speed of doing things	45	2.00	5.00	3.82	0.91
Procurement software help improve contract administration by reducing costs	45	3.00	5.00	4.02	0.75
Procurement software increases productivity, hence improving contract administration	45	2.00	5.00	3.76	0.96
Internet connections help communicate and collaborate more effectively with contractors at a cost effective manner	45	3.00	5.00	4.31	0.76
Internet connection helps improve communication and collaboration with contractors, thus saving time	45	2.00	5.00	3.71	0.87
Valid N (listwise)	**45**				

The study further concluded that supply chain technology adoption improved communication and productivity between the organization and suppliers and led to the reduction in costs it also increased efficiency across the extended supply chain and enhanced network relationships. The study recommended that to enhance supply chain effectiveness, the management should organize for staff training both internal and external through seminars and workshop which would go a long way in enhancing ownership of the process by employees. Organizations should enhance these practices as maintenance has to provide the required reliability, availability, efficiency and capability of production system in accordance to the need of these characteristics.

Finally, the use of internet connections for communication with contractors in order to enhance cost effectiveness and saving of time had means of 4.31 and 3.71 respectively. The role of use of technology to minimize on the cost implication and time expenditure was in tandem with Wanjiru and Abdalla (2014) study on 'Effects of Information Communication Technology Adoption on Procurement Process in Kenya's Oil Industry: A Survey of Total Kenya Limited Mombasa County'. From the study, it was revealed that the impact of ICT adoption on procurement processes mainly refers to time reductions and quality improvements, rather than cost reductions as reported by many authors. The old view that ICT applications are associated with cost reductions is contested in this research. The researchers also found that company is likely to realize improvements in cycle time reductions and process quality.

In a five point likert scale (1=Strongly Disagree and 5= Strongly Agree), Keller, (2014) argues that means that fall between 3.5 to 4.49 should be interpreted as the respondents on average tended to agree that the stated likert scale metric positively influenced the dependent variable. In this context, all the metrics for technology adoption fell between 3.5 and 4.49 therefore leading to a conclusion that on average the respondents agreed that technology adoption improved contract administration.

The standard deviations of technology adoption were calculated using SPSS software and their results presented in Table 4.8. The use of computerization of contract administration activities to increase effectiveness and speed of doing things had standard deviations of 0.75 and 0.91 respectively. The use of procurement software in

cost reduction and increase in productivity aspects hence resulting in improvement of contract administration aspects had standard deviations of 0.75 and 0.96 respectively. Finally, the use of internet connections for communication with contractors in order to enhance cost effectiveness and saving of time had standard deviations of 0.76 and 0.87 respectively. In a five point likert scale (1=Strongly Disagree and 5= Strongly Agree), Keller, (2014)argues that standard deviations that fall between 0.5 and 1 indicate an average variation of responses relative to the mean hence leading to a conclusion of moderate consensus with the given metric. All the metrics for technology adoption fell between this range with the least standard deviation being 0.75 and the highest being 0.96. A conclusion was therefore reached that there was a moderate consensus amongst the respondents in respect to the influence of the technology aspects on contract administration aspects.

4.6   Budgetary Allocations and Contract Administration

4.6.1   Frequency Distributions for Budgetary Allocations

In a bid to examine whether budgetary allocations affect effective procurement contract administration in public secondary schools in MogotioSub-County, Kenya, the study sought perceptions of respondents on various statements. These included it becomes much easier to save money when you know exactly how much you have available each period, assures efficient allocation of funds in a specific period since it is based on needs and benefits and so avoids unnecessary expenses, improves the services as well utilizes cost-effective methods, budgetary allocations leads to prioritization of activities to be undertaken, budgeting imposes a restraining influence during allocation of funds, more time committed to budget preparation leads to better contract administration. Table 4.9 shows the results of this examination.

Most of the respondents tended to agree that it becomes much easier to save money when you know exactly how much you have available each period (42.2%), budgeting imposes a restraining influence during allocation of funds (40.0%), and more time committed to budget preparation leads to better contract administration (46.7%) in their school. Additionally, some respondents were inclined to strongly agree that it becomes much easier to save money when you know exactly how much you have available each period (28.9%), budgeting imposes a restraining influence during

38

allocation of funds (26.7%), and more time committed to budget preparation leads to better contract administration (26.7%) in their school.

Table 4.9: Frequency Distributions for Budgetary Allocations

Budgetary Allocations	SA	A	U	D	SD
It becomes much easier to save money when you know exactly how much you have available each period	28.9%	42.2%	28.9%	0.0%	0.0%
Assures efficient allocation of funds in a specific period since it is based on needs and benefits and so avoids unnecessary expenses	55.6%	35.6%	8.9%	0.0%	0.0%
Improves the services as well utilizes cost-effective methods	28.9%	53.3%	11.1%	6.7%	0.0%
Budgetary allocations leads to prioritization of activities to be undertaken	62.2%	24.4%	13.3%	0.0%	0.0%
Budgeting imposes a restraining influence during allocation of funds	26.7%	40.0%	17.8%	15.6%	0.0%
More time committed to budget preparation leads to better contract administration	26.7%	46.7%	26.7%	0.0%	0.0%

On the other hand none of the rerspondents tended to disagree (0.0%) or strongly disagree (0.0%) that it becomes much easier to save money when you know exactly how much you have available each period and more time committed to budget preparation leads to better contract administration in their school. However, 15.6% of respondents were of the perception that budgeting does not impose a restraining influence during allocation of funds in their school.

Above half of the respondents (55.6%) were inclined to strongly agree that budget allocation assures efficient allocation of funds in a specific period since it is based on needs and benefits and so avoids unnecessary expenses. Similarly, 62.2% of the respondents were inclined to strongly agree thatbudgetary allocation leads to prioritization of activities to be undertaken in their school. Further, 35.6% and 24.4% of the respondents tended to agree that that budget allocation assures efficient allocation of funds in a specific period since it is based on needs and benefits and so avoids unnecessary expenses andallocation leads to prioritization of activities to be undertaken in their school respectively.There were few respondents who tended not to be sure whether budget allocation assures efficient allocation of funds in a specific period since it is based on needs and benefits and so avoids unnecessary expenses

(8.9%) and allocation leads to prioritization of activities to be undertaken in their school (13.3%).

About half of the respondents (53.3%) tended to agree that budget allocation improves the services as well utilizes cost-effective methods. Additionally, 28.9% strongly perceived the same. On the other hand, 6.7% of the respondents felt that budget allocation does not improve the services as well as utilizes cost-effective method in their school. However, none of the respondents (0.0%) tended to strongly disagree with the statements used to examine budget allocation in regards to its effect on the effective procurement contract administration in public secondary schools in MogotioSub-County, Kenya.

4.6.2 Means and Standard Deviations for Budgetary Allocations

The means and standard deviations of the budget allocation and its influence on contract administrationwas examined and the results presented in Table 4.10 below. The purpose of calculation of the mean was to find the average opinion of the respondents in respect to the stated budget allocation aspects in a likert scale. The standard deviation was calculated to determine the average variance of the responses from the mean and hence determine the consensus levels amongst the respondents in respect to a given budget allocation metric in a likert scale.

Table 4.10: Means and Standard Deviations for Budgetary Allocations

	N	Min.	Max.	Mean	Std. Dev.
It becomes much easier to save money when you know exactly how much you have available each period.	45	3.00	5.00	4.00	0.77
Assures efficient allocation of funds in a specific period since it is based on needs and benefits and so avoids unnecessary expenses.	45	3.00	5.00	4.47	0.66
Improves the services as well utilizes cost-effective methods.	45	2.00	5.00	4.04	0.82
Budgetary allocations leads to prioritization of activities to be undertaken	45	3.00	5.00	4.49	0.73
Budgeting imposes a restraining influence during allocation of funds.	45	2.00	5.00	3.78	0.98
More time committed to budget preparation leads to better contract administration	45	3.00	5.00	4.00	0.74
Valid N (listwise)	**45**				

The means of the six components of budget allocation metrics were calculated through use of SPSS software and results presented in Table 4.10. The study results revealed that budgeting allocation assisting to save money due to knowledgeable on the funds availability for each period had a mean of 4.00. The budgeting assisting in efficient allocation of funds in a specific period had a mean of 4.47 while budgeting improving the services had a mean of 4.04. The budgeting assisting in efficient allocation of funds and in saving money is consistent to findings by Onduso (2013) study. The study found that the budgeting aspects helps in enhancing the financial prudence of the institution.

Finally, the budgetary allocation leading to prioritization of activities to be undertaken, imposing a restraining influence during allocation of funds, and more time committed to budget preparation leads to better contract administration had means of 4.49, 3.78, and 4.00 respectively. In a five point likert scale (1=Strongly Disagree and 5= Strongly Agree), Keller, (2014)argues that means that fall between 3.5 to 4.49 should be interpreted as the respondents on average tended to agree that the stated likert scale metric positively influenced the dependent variable. In this context, all the metrics for budgetary allocations fell between 3.5 and 4.49 therefore leading to a conclusion that on average the respondents agreed that budgetary allocations improved contract administration.

The standard deviations of budgetary allocations on were calculated using SPSS software and their results presented in Table 4.10. The study results revealed that budgeting allocation assisting to save money due to knowledgeable on the funds availability for each period had a standard deviation of 0.77. The budgeting assisting in efficient allocation of funds in a specific period had a mean of 0.66 while budgeting improving the services had a mean of 0.82. Finally, the budgetary allocation leading to prioritization of activities to be undertaken, imposing a restraining influence during allocation of funds, and more time committed to budget preparation leads to better contract administration had a standard deviation of 0.73, 0.98, and 0.74 respectively.

In a five point likert scale (1=Strongly Disagree and 5= Strongly Agree), Keller, (2014) argues that standard deviations that fall between 0.5 and 1 indicate an average variation of responses relative to the mean hence leading to a conclusion of moderate

consensus with the given metric. All the metrics for budget allocation fell between this range with the least standard deviation being 0.66 and the highest being 0.98. A conclusion was therefore reached that there was a moderate consensus amongst the respondents in respect to the influence of the budgetary allocation on contract administration aspects.

4.7   Effective Procurement Contract Administration

4.7.1   Effective Procurement Contract Administration

The study sought to determine through perceptions of respondents whether on various aspects of effective procurement contract administrationin public secondary schools in MogotioSub-County, Kenyahave been achieved due to staff competency, technology adoption and budgetary allocations. In this context, the study examined whether the correct quantity of items have been received, the goods, works or services meet the technical standards defined in the contract, any variations to the contract are well documented and accounted for, the goods, works or services have been delivered or completed on time, appropriate actions have been taken for any variations in service delivery, and all required manuals or documentation have been received, as shown in Table 4.11.

Table 4.11: Frequency Distributions for Effective Procurement Contract Administration

Effective Procurement Contract Administration	SA	A	U	D	SD
The correct quantity of items have been received	51.1%	35.6%	13.3%	0.0%	0.0%
The goods, works or services meet the technical standards defined in the contract	53.3%	28.9%	15.6%	2.2%	0.0%
Any variations to the contract are well documented and accounted for	22.2%	46.7%	15.6%	15.6%	0.0%
The goods, works or services have been delivered or completed on time,	26.7%	51.1%	22.2%	0.0%	0.0%
Appropriate actions have been taken for any variations in service delivery	44.4%	42.2%	13.3%	0.0%	0.0%
All required manuals or documentation have been received.	31.1%	44.4%	17.8%	6.7%	0.0%

Slightly more than half of the respondents tended to strongly perceive that the correct quantity of items have been received (51.1%) and the goods, works or services meet the technical standards defined in the contract (53.3%). Additionally, 35.6% and 28.9%of the respondents were inclined to agree that the correct quantity of items have

been received and the goods, works or services meet the technical standards defined in the contract respectively. However, there were some respondents who were not sure whether the correct quantity of items have been received (13.3%) and the goods, works or services meet the technical standards defined in the contract (15.6%).

Most of the respondnets were inclined to agree that any variations to the contract are well documented and accounted for (46.7%) and all required manuals or documentation have been received (44.4%). On the other hand, 15.6% of the respondents were of the perception that any variations to the contract are not well documented and accounted for (15.6%=disagree) and all required manuals or documentation have not been received (6.7%=disagree) in their school.

A cumulative majority of respondnets perceived that goods, works or services have been delivered or completed on time (77.8%), and appropriate actions have been taken for any variations in service delivery (86.6%) in their school. There were 22.2% and 13.3% of respondents however who tended to be uncertain whether goods, works or services have been delivered or completed on time and appropriate actions have been taken for any variations in service delivery in their school respectively. No respondent (0.0%) chose "strongly disagree" in response to the statements that were used to examine the budgetary allocations the effectiveness of procurement contract administration in public secondary schools in MogotioSub-County, Kenya.

4.7.2 Means and Standard Deviations for Effective Procurement Contract Administration

The means and standard deviations of contract administration aspects were examined and the results presented in Table 4.12 below. The purpose of calculation of the mean was to find the average opinion of the respondents in respect to the stated contract administration aspects in a likert scale. The standard deviation was calculated to determine the average variance of the responses from the mean and hence determine the consensus levels amongst the respondents in respect to a given contract administration aspects in a likert scale.

Table 4.12: Means and Standard Deviations for Effective Procurement Contract Administration

	N	Min.	Max.	Mean	Std. Dev.
The correct quantity of items have been received	45	3.00	5.00	4.38	0.72
The goods, works or services meet the technical standards defined in the contract	45	2.00	5.00	4.33	0.83
Any variations to the contract are well documented and accounted for	45	2.00	5.00	3.76	0.98
The goods, works or services have been delivered or completed on time,	45	3.00	5.00	4.04	0.71
Appropriate actions have been taken for any variations in service delivery	45	3.00	5.00	4.31	0.70
All required manuals or documentation have been received.	45	2.00	5.00	4.00	0.88
Valid N (listwise)	**45**				

Table 4.12 above revealed that the means for the correct quantity of items being received; Goods, works or services meeting technical standards defined in the contract, and any variations to the contract being well documented and accounted for were 4.38, 4.33 and 3.76 respectively. On the other hand, the means for timely delivery of goods, appropriate actions being undertaken for any variations in service delivery and all required documents being received were 4.04, 4.31 and 4.00 respectively. In a five point likert scale (1=Strongly Disagree and 5= Strongly Agree), Keller, (2014)argues that means that fall between 3.5 to 4.49 should be interpreted as the respondents on average tended to agree on the stated likert scale metric. In this context, all the metrics for contract administration fell between 3.5 and 4.49 therefore leading to a conclusion that on average the respondents agreed on the stated contract administration metrics.

In the context of the standard deviations, the study revealed that the standard deviations for for the correct quantity of items being received; Goods, works or services meeting technical standards defined in the contract, and any variations to the contract being well documented and accounted for were 0.72, 0.83 and 0.98 respectively. On the other hand, the standard deviations for timely delivery of goods, appropriate actions being undertaken for any variations in service delivery and all required documents being received were 0.71, 0.70 and 0.88 respectively.

In a five point likert scale (1=Strongly Disagree and 5= Strongly Agree),Keller, (2014)argues that standard deviations that fall between 0.5 and 1 indicate an average variation of responses relative to the mean hence leading to a conclusion of moderate consensus with the given metric. All the metrics for contract administration fell between this range with the least standard deviation being 0.70 and the highest being 0.98. A conclusion was therefore reached that there was a moderate consensus amongst the respondents in respect to the contract administration aspects.

4.8 Multiple Linear Regression

The regression analysis was undertaken with a view of examining the predictive value of the three independent variables (Budgetary Allocation, Technology Adoption, Staff Competency) on the dependent variable (procurement contract administration). The linear regression correlation R of 0.790 as shown in Table 4.13 indicated that there was a strong and positive correlation between the three independent variables and the dependent variable to the tune of 0.790. The R square that is the coefficient of determination of 0.625 indicated that the three independent variables accounted for 62.5% of the variation in the dependent variable. This indicated that 37.5% of the variation in the independent variable was attributed to other factors not in this model.

Table 4.13: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.790[a]	.625	.597	.22472

a. Predictors: (Constant), Budgetary Allocation, Technology Adoption, Staff Competency

The ANOVA was calculated with a view of determining on whether the regression model was good fit for data at 0.05 significance level. Since the p value of the ANOVA was at 0.000, as in Table 4.14 which was below 0.05 level of significance, a conclusion was made that the regression model was good fit for data and thus the regression analysis was undertaken

Table 4.14: ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.446	3	1.149	22.744	.000^b
	Residual	2.070	41	.050		
	Total	5.516	44			

a. Dependent Variable: Procurement contract administration

b.Predictors: (Constant), Budgetary Allocation, Technology Adoption, Staff Competency

Table 4.15 below presents the regression coefficients for the independent variables to be used in the substitution in the regression model. The results revealed that the regression coefficient for staff competency, technology adoption and budgetary allocation was 0.207, 0.013, and 0.591 respectively.

This led to the substitution to the regression model as follows;

$Y= 0.815 + 0.207 (X_1) + 0.013 (X_2) + 0.591 (X_3)$ where y is procurement contract administration, X_1 is Staff competency, X_2 is Technology Adoption, and X_3 is Budgetary Allocation.

Table 4.15: Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.815	.425		1.916	.062
Staff Competency	.207	.086	.260	2.420	.020
Technology Adoption	.013	.135	.014	.096	.924
Budgetary Allocation	.591	.140	.627	4.230	.000

a. Dependent Variable: Procurement contract administration

The regression coefficients of the independent variables revealed that a unit increase in any of the independent variable would lead to an increase in procurement contract administration with the other independent variables kept constant due to the regression coefficients being positive. In this context, the regression coefficient of staff competency was 0.207 implying that a unit increase in staff competency would lead to a 0.207 increase in procurement contract administration with the other independent variables kept constant. On the other hand, a unit increase in technological adoption would lead to a 0.013 increase in procurement contract administration with the other independent variables kept constant. Similarly, a unit

increase in budgetary allocation will lead to a 0.591 increase in procurement contract administration with the other independent variables kept constant.

The t statistics and the p values indicated in Table 4.15 above were used in the hypothesis testing aspects of the study.

H_{01}: There is no significant relationship between staff competency and effective procurement contract administration in public secondary schools in MogotioSub-County, Kenya.

The results in Table 4.15 revealed that the computed t statistic was 2.420 and a p value of 0.020 which was below the 0.05 level of significance leading to a conclusion to reject null hypothesis (H_{01}).

H_{02}: There is no significant relationship between technology adoption and effective procurement contract administration in public secondary schoolsin MogotioSub-County, Kenya.

The results in Table 4.15 revealed that the computed t statistic was 0.096 and a p value of 0.924 which exceeded the 0.05 level of significance leading to a conclusion to accept null hypothesis (H_{02}).

H_{03}: There is no significant relationship between budgetary allocations and effective procurement contract administration in public secondary schoolsin MogotioSub-County, Kenya.

The results in Table 4.15 revealed that the computed t statistic was 4.230 and a p value of 0.000 which didn't exceed 0.05 level of significance leading to a conclusion to reject null hypothesis (H_{03}).

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMEDATIONS

5.1 Introduction

The study sought to assess the determinants of effective procurement contract administration in public secondary schools in MogotioSub-County, Kenya. Three specific onjectives guided this study including examining the influence of staff competency,technology adoption, and budgetary allocations on effective procurement contract administration in public secondary schools inMogotioSub-County, Kenya.This chapter gives a summary of the findings as per the objectives.

5.2   Summary of Findings

The summary of findings for the study is as below;

5.2.1   Staff Competency

The means of the six components of the staff competencies were calculated through use of SPSS software. These included staff being knowledgeable to help improve contract administration, professionally experienced staff being empowered and motivated to carry out their duties well thus improving contract administration, the role of staff with technical skills doing things right the first time, and doing things effectively and efficiently. Also included were staff with right education performing their tasks efficiently to improve contract administration and while superior educational levels leading to staff motivation. All the metrics for the staff competencies fell between 3.5 and 4.49 therefore leading to a conclusion that on average the respondents agreed that the staff competencies improved contract administration.

The standard deviation of the six components of staff competencies fell between 0.5 and 1 (least standard deviation being 0.69 and the highest being 0.94) indicating an average variation of responses relative to the mean hence leading to a conclusion of moderate consensus with the given metric. A conclusion was therefore reached that there was a moderate consensus amongst the respondents in respect to the influence of the staff competences aspects on contract administration aspects. Regression analysis shows that this variable contributed 0.207 to effective procurement contract administration. This means that the procurement contract administration is improved

by a magnitude of 0.207 when there is a unit improvement staff competencies with other factors held constant.

5.2.2 Technology Adoption

The use of computerization of contract administration activities to increase effectiveness, speed of doing things, use of procurement software in cost reduction and increase in productivity aspects hence resulting in improvement of contract administration aspects had means between 3.5 to 4.49. Additionally,mean scores for the use of internet connections for communication with contractors in order to enhance cost effectiveness and saving of time were also in this range.Therefore,a conclusion was reached that on average the respondents agreed that technology adoption improved contract administration.

All the standard deviations for metrics for technology adoption fell between 0.5 and 1 with the least standard deviation being 0.75 and the highest being 0.96. A conclusion was therefore reached that there was a moderate consensus amongst the respondents in respect to the influence of the technology aspects on contract administration aspects. In reference to the regression analysis, the study found that a unit increase in technological adoption would lead to a 0.013 improvement in procurement contract administration with the other independent variables kept constant.

5.2.3 Budgetary Allocations

The means of the six components of budget allocation metrics including budgeting allocation assisting to save money due to knowledgeable on the funds availability for each period, the budgeting assisting in efficient allocation of funds in a specific period, budgeting improving the services, and the budgetary allocation leading to prioritization of activities to be undertaken, imposing a restraining influence during allocation of funds, and more time committed to budget preparation leads to better contract administration were calculated through use of SPSS software. The results revealed that all the mean scores for metrics for budgetary allocations fell between 3.5 and 4.49 therefore leading to a conclusion that on average the respondents agreed that budgetary allocations improved contract administration.

The standard deviations of budgetary allocations fell between 0.5 and 1 indicating an average variation of responses relative to the mean hence moderate consensus amongst the respondents in respect to the influence of the budgetary allocation on contract administration aspects (least standard deviation being 0.66 and the highest being 0.98). From regression analysis, the study found that a unit increase in budgetary allocation would lead to a 0.591 improvement in procurement contract administration with the other independent variables kept constant.

5.2.4 Effective Procurement Contract Administration

The means for the correct quantity of items being received; Goods, works or services meeting technical standards defined in the contract, and any variations to the contract being well documented and accounted, timely delivery of goods, appropriate actions being undertaken for any variations in service delivery and all required documents being received fell between 3.5 to 4.49. This led to the conclusion that on average the respondents agreed on the stated contract administration metrics.

In the context of the standard deviations, the study revealed that the standard deviations for all the metricsfell between 0.5 and 1 indicating an average variation of responses relative to the mean (least standard deviation being 0.70 and the highest being 0.98). A conclusion was therefore reached that there was a moderate consensus amongst the respondents in respect to the contract administration aspects.

From the findings, the regression model was retained given that the variables had a positive and strong correlation R= 0.790, two of the hypotheses (H_{01} and H_{03}) were rejected, and H_{02} was accepted. Additionally, the study found that all variables influenced the effective procurement contract administrationin public secondary schools in MogotioSub-County, Kenyawith an indication thatthey accounted for 62.5% ($R^2 = 0.625$) of the variation in the dependent variable.

5.3 Conclusions

The study concluded that the staff competency and budgetary allocation havea statistically significant influence on the effective procurement contract administrationin public secondary schools in MogotioSub-County, Kenya. The budgetary allocation had the greatest influence on ($\beta = 0.591$) the effective

50

procurement contract administrationin public secondary schools in MogotioSub-County, Kenya. On the other hand, the study concluded that technology adoption has no statistically significant influence on the effective procurement contract administrationin public secondary schools in MogotioSub-County, Kenya.

The study further concludes that for there to be effective procurement contract administrationin public secondary schools in MogotioSub-County, Kenya, other factors not addressed in this study have to be included to make an impact. This is because the variables of this study only accounted for62.5% of the variability in effective procurement contract administrationin public secondary schools in MogotioSub-County, Kenya.

5.4   Recommendations

The study makes the following recommendations. In respect to the staff competency elements, the study recommends that staff knowledge levels impact on contract administration aspects, and the technical skills of staff enhance efficiency and effectiveness in contract administration.

In respect to technology adoption, the study recommended that computerization of contract administration activities lead to increased effectiveness, procurement software help improve contract administration aspects through reduction of costs, and internet connections assist in communication and collaboration with contractors.

The recommedations in relation to the technology adoption is the use of computerization of contract administration, use of procurement software, and use of internet connections for the communication and collaboration with the contractors.
The recommedations in relations to budgetary allocation included the school management knowing the funds available for each period to enhance savings, and need to undertake budgetary allocation leading to prioritazation of activities being undertaken.

REFERENCES

Alatrista, J. and Arrowsmith, J. (2004).Managing employee commitment in the not-for-profit sector.*Personnel Review*, 33(5), 536-548.

Awino Z. B and Marendi-Getuno P. N., (2014).Public procurement legal framework implementation challenges and organizational performance.*DBA Africa Management Review*, 4(2), 103-117.

Beijer, T.A (2012).*Design of a supplier performance measurement & evaluation system for DSM's petrochemical & energy group*, Graduate project, University of Twente.

Breedon, T. (2013).*Contract management review, findings and recommendation report, Ministry of Justice.*Available at [https://www.gov.uk/government/uploads/system/uploads/attachment_data/file /267693/contract-management-review.pdf] accessed on 17/11/2017.

Bryman, A. & Cramer (1997). *Quantitative data analysis with SPSS for windows*. London: Rutledge.

Christopher M. and Stuart G. G (2006).WTO Government Procurement Rules and the Local Dynamics ofProcurement Policies-A Malaysian Case Study.*European Journal of International Law*, 17(1), 151-185.

CIPS. (2005). *Position of Practice Guide* (2nd Ed.). (C. I. Supplies, Ed.) New York, USA: Prentice Hall.

Crompton, A. (2007). *Purchasing and Supplies Management* (13th Ed.). New York: McGraw-Hill.

Eisenhardt, K.M. (2014), Agency theory: an assessment and review*,* Academy of Management.

Elsey. (2007). CIPS contract Management guide.

Gunningham, N., &Kagan, R. A. (2005).Regulation and business behavior.*Law & Policy,* (27), 213-18.

Hui, W. S., Othman, R. O., Normah, O., Rahman, R. A., &Haron, N. H. (2016). Procurement issues in Malaysia. *International Journal of Public Sector Management,* 24(6), 567-593.

Hui, W. S., Othman, R. O., Normah, O., Rahman, R. A., &Haron, N. H. (2011). Procurement issues in Malaysia. *International Journal of Public Sector Management*, 24(6), 567-593.

Ifrah A. M., Kerosi E., and Ondabu I. T (2015). Analysis of the effectiveness of budgetary control techniques on organizational performance at Dara-Salaam bank headquarters in Hargeisa Somaliland. *International Journal of Business Management and Economic Research(IJBMER)*, 6(6),2015,327-340.

Ismail R and Abidin S. Z., (2010).Impact of workers' competence on their performance in the Malaysian private service sector.*Business and Economic Horizons,* 2(2): 25-36.

Jela E. O (2013). Supply chain technology adoption and large manufacturing firms performance in Nairobi, Unpublished MBA project, University of Nairobi, Kenya.

Kagendo N. M (2012). *Effects of public procurement and disposal act on procurement in parastatals in Kenya*. Unpublished MBA Project, University of Nairobi, Kenya

Kamel, S. (2014). ICT4D – Case of the Information Society in Africa. a proposed article submitted for review for possible publication. *Encyclopedia of Information Science and Technology.*

Keller, G. (2014). *Statistics for Management and Economics (9th ed.).* Cengage Learning.

Kibogo, A. D. &Mwangangi, M. (2014). Factors Affecting Contract Management in Public Procurement Sector in Kenya: A Case of Kenya Literature Bureau**.** *European Journal of Business Management, 1* (11), 377-384.

Kimani R. N (2014). The effect of budgetary control on effectiveness of Non-Governmental Organisations in Kenya.Unpublished MSC in Finance project, University of Nairobi, Kenya.

Koech G. M (2015). The effect of budgetary controls on financial performance of manufacturing companies in Kenya.Unpublished MBA project, University of Nairobi, Kenya.

Kolibačova Gabriela. (2014). The Relationship Between Competency and Performance. *ActaUniversitatisAgriculturaeetSilviculturaeMendelianaeBrunensis,* 62(6): 1315–1327.

Kothari, C. (2004). *Research Methodology.*New Delhi, India: John Wiley & Sons.

Kulundu, L. (2014). Challenges of Procurement Strategy Implementation among Road Agencies in Kenya.*International Journal of Business, Humanities and Technology*, 1(2), 12–21.

Kumar, R. &Markeset, T. (2007).Development of performance-based service strategies for the oil and gas industry, a case study.*Journal of Business & Industrial Marketing*, 22(4), 272-280.

Lysons, K., & Farrington, B. (2006).Purchasing and Supply Chain Management (6th Ed.). London: *Prentice - Hall.*

Marco S (2013). *Effectiveness in contract management in Tanzania a case study of Tanroads*.Unpublished Msc. PCM Dissertation of Mzumbe University, Tanzania.

Mauki, R. (2014). The Regions Perspective of the Factors Infleuncing the Implementation of Public Procurement and Disposal ACT in the Kenyan Judiciary. *Journal of Management Research,* 2(3), 19–24.

Mbae, L. (2014). Public Procurement Law and Procurement Performance of County Government in Kenya; Case of Machakos County Government.*International Journal of Research in Management , Economics and Commerce,* 2(2), 14–19.

Mlinga R.S. (2008) Procurement Contract Management in Public Sector-Tanzania Experience, *TPJ,* 1(9).

Muange, E. (2013). Procurement Legislation and Performance of Sub-CountyFund Committees in Kenya.*International Journal of Science and Research,* 2(3), 19–22.

Mugenda, O., &Mugenda, A. (2003).*Research methods.*Nairobi: Acts Press.

Mungai, N. (2014). Factors Influencing Implementation of Public Procurement and Disposal Act, 2005 in Public Day Secondary Schools in Mukurwe-ini Sub County, Nyeri County, Kenya.*International Journal of Science and Research,* 2(3), 12–19.

Mwai P. M (2013).Information and communication technology and service delivery in Kenya Power.Unpublished MBA project, University of Nairobi, Kenya.

Nguyen, P. (2013). *Contract lifecycle management on the sell-side, a case study in upstream oil and gas industry*, Thesis, Lahit University of Applied Sciences.

Njoroge, N. (2013). Pharmacy services in post devolution kenya. *Journal of Modern African Studies,* 2(3), 29–36.

Odhiambo, W., &Kamau, P. (2003), Public Procurement: Lessons from Kenya, Tanzania and Uganda, OECD Development Centre Working Paper No. 208.

Oluka, P.N. &Basheka, B.C. (2012).*Determinants and constraints to effective procurement contract management in Uganda, a practitioner's perspective*. Available at [http://www.ippa.org/IPPC5/Proceedings/Part4/PAPER4-1.pdf] accessed on 18/09/2017.

Onduso E. O (2013). The effect of budgets on financial performance of manufacturing companies in Nairobi County.Unpublished MSC in Finance project, University of Nairobi, Kenya.
Osei-Tutu, E., Mensa, S., &Ameyaw, C. (2014).*The level of non-compliance with the Public Procurement Act* (663)**,** Nigeria.

Peter Trepte, (2004) *"Regulating Procurement"* Oxford University Press.

Peteraf, M. & Barney, J. (2007). Unraveling The Resource-Based Tangle", *Managerial and Decision Economics*. 24, 309-323.

Rungtusanatham, M., Rabinovich, E., Ashenbaum, B., Wallin, C. (2012). Vendor managed inventory. *Supply chain Management*. 16(9), 144-174.

Salaria, N. (2012). Meaning of The Term – Descriptive Survey Research Method. *International Journal of Transformation in Business Management*, 1 (6).

Shirzad, S. & Bell, D. (2012).A Systematic Literature Review of Flexible E-Procurement Market place.*Journal of Theoretical and Applied Electronic Commerce Research 8*(2), 49-70.

South Ribble Borough Council, (2007) *Value for Money Strategy*.

Telewa, S. (2014).Sustainable Procurement Practices in the Public Water Sector Institutions in Kenya.*Journal of Management and Business Studies,* 2(3), 19–25.

Thai, K. V. (2014). *International Handbook of Public Procurement CRC.Pross,* Taylor and Francis Group.

Waigwa, M. W. &Njeru, A. (2016). Factors influencing management of procurement contracts in public security agencies: A case of Kenya Police Service. *International Academic Journal of Procurement and Supply Chain Management, 2* (2), 20-40.

Wanjiru D. K and Abdalla A. 1., (2014). Effects of Information Communication Technology Adoption on Procurement Process in Kenya's Oil Industry: A Survey of Total Kenya Limited Mombasa County. *International Journal of Management and Commerce Innovations,* 2(2): 89-116.

Williamson O.E. (2002). The lens of contract: Private ordering. *American Economic Review* 92(2): 438-443.

Wilmshurst, T., & Frost, G. (2000). Corporate environmental reporting: a test of legitimacy theory. *Accounting, Auditing, & Accountability Journal,* 13(1), 10-26.

Xingxing, Z. (2012). An agency theory perspective on supply chain quality management.*Journal of Supply Chain Management.*31(9), 111-116

Zikmund, W. (2003).*Business Research Methods*. Texas, USA: Harcourt College Publisher.

Zubcic, J., & Sims, R. (2016).Examining the link between enforcement activity and corporate compliance by Australian companies and the implications for regulators.*International Journal of Law and Management*, 53(4), 299-308

APPENDICES

Appendix I: Letter of Introduction

Dear Respondent,

I am EphantusKipkemoiMarigat, a student of Jomo Kenya University of Agriculture and Technology pursuing a Master's of Science degree in Procurement and Contract Management and undertaking this research project on "**Determinants of Effective Procurement Contract Administration in Public secondary schools in MogotioSub-County, Kenya**''. You have been selected as one of the respondents for the research study. Your help is therefore sought in the filling of this questionnaire.

All information given will be treated with utmost confidentiality and will be used for academic purposes only. Any help is fully appreciated. Thank you in advance.

Yours faithfully

Ephantus Kipkemoi Marigat

Appendix II: Research Questionnaire

DETERMINANTS OF EFFECTIVE PROCUREMENT CONTRACT ADMINISTRATION IN PUBLIC SECONDARY SCHOOLS IN MOGOTIO SUB-COUNTY, KENYA

Instructions: Please complete the following questionnaire appropriately.

Confidentiality: The responses you provide will be strictly confidential. No reference will be made to any individual(s) in the report of the study.

Please tick or answer appropriately for each of the Question provided.

PART A: General information

1. What is your current age? (Indicate your age bracket)

    21– 30 yrs [   ]   31 – 40 yrs [   ]   41 – 50 yrs [   ]   Over 50 yrs [   ]

2. What is your gender?

    Male   [   ]   Female   [   ]

3. For how long have been involved in the school's procurement contract administration?

    Less than 3 yrs [   ]   4-6 yrs [   ]   7-9 yrs [   ]   more than 9yrs [   ]

4. What is your level of education?

    Diploma [ ]   Bachelor degree[ ]

    Master's degree [ ]   PHD [ ]

PART B: Staff Competency

What is your opinion on staff competency? (Use the Scale: SA 5 – Strongly Agree, A 4– Agree, U 3– Undecided, D 2 – Disagree, SD 1– Strongly Disagree)

	Staff Competency	SA	A	U	D	SD
1.	Staff who are knowledgeable help improve procurement contract administration					
2.	Professionally experienced staff are empowered and motivated to carry out their duties well thus improving procurement contract administration					
3.	Staff with technical skills do things right the first time thus improving procurement contract administration					
4.	Staff with technical skills do things effectively and efficiently, hence improving procurement contract administration					
5.	Staff with right education perform their tasks efficiently, thus improving procurement contract administration					
6.	Superior level of education improves staff motivation and by extension procurement contract administration					

PART C:Technology Adoption

What is your opinion on technology adoption? (Use the Scale: SA 5– Strongly Agree, A 4– Agree, U 3– Undecided, D 2– Disagree, SD 1– Strongly Disagree)

	Technology Adoption	SA	A	U	D	SD
1.	Computerization of procurement contract administrationactivities increase effectiveness, hence improving procurement contract administration					
2.	Computerization of procurement contract administrationactivities increases the speed of doing things					
3.	Procurement software help improve procurement contract administrationby reducing costs					
4.	Procurement software increases productivity, hence improving procurement contract administration					
5.	Internet connections help communicate and collaborate more effectively with contractors at a cost effective manner					
6.	Internet connection helps improve communication and collaboration with contractors, thus saving time					

PART D: Budgetary Allocations

What is your opinion on budgetary allocations? (Use the Scale: SA 5– Strongly Agree, A 4– Agree, U 3– Undecided, D 2– Disagree, SD 1– Strongly Disagree)

	Budgetary Allocations	SA	A	U	D	SD
1.	It becomes much easier to save money when you know exactly how much you have available each period.					
2.	Assures efficient allocation of funds in a specific period since it is based on needs and benefits and so avoids unnecessary expenses.					
3.	Improves the services as well utilizes cost-effective methods.					
4.	Budgetary allocations leads to prioritization of activities to be undertaken					
5.	Budgeting imposes a restraining influence during allocation of funds.					
6.	More time committed to budget preparation leads to better procurement contract administration					

PART F: Effective Procurement contract administration

What is your opinion on organizational procurement contract administration? (Use the Scale: SA 5– Strongly Agree, A 4– Agree, U 3– Undecided, D 2– Disagree, SD 1– Strongly Disagree)

	Effective Procurement contract administration	SA	A	U	D	SD
1.	The correct quantity of items have been received					
2.	The goods, works or services meet the technical standards defined in the contract					
3.	Any variations to the contract are well documented and accounted for					
4.	The goods, works or services have been delivered or completed on time,					
5.	Appropriate actions have been taken for any variations in service delivery					
6.	All required manuals or documentation have been received.					

Appendix III: Sampling Frame List of Public secondary schoolsin MogotioSub-County

School	Target Population
Principal and Deputy PrincipalMolosirwe	2
Principal and Deputy PrincipalMugurin	2
Principal and Deputy PrincipalKoibarak	2
Principal and Deputy PrincipalMaji Moto	2
Principal and Deputy PrincipalNgubereti	2
Principal and Deputy PrincipalMogotio Girls	2
Principal and Deputy PrincipalKiptoim	2
Principal and Deputy PrincipalKiram	2
Principal and Deputy PrincipalKipsogon	2
Principal and Deputy PrincipalSagasagik	2
Principal and Deputy PrincipalLombogishu	2
Principal and Deputy PrincipalR.C.Olmarai	2
Head teacher and Deputy Kimose	2
Principal and Deputy PrincipalRadad	2
Principal and Deputy PrincipalKaplelwo	2
Principal and Deputy PrincipalRosoga	2
Principal and Deputy PrincipalOterit	2
Principal and Deputy PrincipalEmining Boys	2
Principal and Deputy PrincipalSore	2
Principal and Deputy PrincipalSirwa	2
Principal and Deputy PrincipalCheberen	2
Principal and Deputy PrincipalKimngorom Girls	2
Principal and Deputy PrincipalOlkokwe	2
Principal and Deputy PrincipalSinende	2
Principal and Deputy PrincipalOldebes	2
Principal and Deputy PrincipalKisanana	2
Total	**52**

Appendix IV: NACOSTI Permit

THIS IS TO CERTIFY THAT:
MR. EPHANTUS KIPKEMOI MARIGAT
of JOMO KENYATTA UNIVERSITY OF
AGRICULTURE AND TECHNOLOGY,
0-30400 KABARNET,has been permitted
to conduct research in *Baringo   County*

on the topic: *DETERMINANTS OF
EEFECTIVE PROCUREMENT CONTRACT
ADMINISTRATION IN PUBLIC SCHOOLS
IN MOGOTIO CONSTITUENCY, KENYA*

for the period ending:
18th December,2018

....
**Applicant's
Signature**

Permit No : NACOSTI/P/17/57676/20645
Date Of Issue : 18th December,2017
Fee Recieved :Ksh 1000

..............*J.P. Kaletwa*...............
**Director General
National Commission for Science,
Technology & Innovation**

CONDITIONS

1. The License is valid for the proposed research, research site specified period.
2. Both the Licence and any rights thereunder are non-transferable.
3. Upon request of the Commission, the Licensee shall submit a progress report.
4. The Licensee shall report to the County Director of Education and County Governor in the area of research before commencement of the research.
5. Excavation, filming and collection of specimens are subject to further permissions from relevant Government agencies.
6. This Licence does not give authority to transfer research materials.
7. The Licensee shall submit two (2) hard copies and upload a soft copy of their final report.
8. The Commission reserves the right to modify the conditions of this Licence including its cancellation without prior notice.

REPUBLIC OF KENYA

NACOSTI

**National Commission for Science,
Technology and Innovation**

**RESEARCH CLEARANCE
PERMIT**

Serial No.A 16969

CONDITIONS: see back page

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone: 020 400 7000,
0713 788787,0735404245
Fax: +254-20-318245,318249
Email: dg@nacosti.go.ke
Website: www.nacosti.go.ke
When replying please quote

NACOSTI, Upper Kabete
Off Waiyaki Way
P.O. Box 30623-00100
NAIROBI-KENYA

Ref: No. **NACOSTI/P/17/57676/20645**

Date: **18th December, 2017**

Ephantus Kipkemoi Marigat
Jomo Kenyatta University of
Agriculture and Technology
P.O. Box 62000-00200
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on *"Determinants of effective procurement contract administration in public schools in Mogotio Constituency, Kenya,"* I am pleased to inform you that you have been authorized to undertake research in **Baringo County** for the period ending **18th December, 2018.**

You are advised to report to **the County Commissioner and the County Director of Education, Baringo County** before embarking on the research project.

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit **a copy** of the final research report to the Commission within **one year** of completion. The soft copy of the same should be submitted through the Online Research Information System.

GP Kalerwa
GODFREY P. KALERWA MSc., MBA, MKIM
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner
Baringo County.

The County Director of Education
Baringo County.

National Commission for Science, Technology and Innovation isISO9001:2008 Certified