



**ADDIS ABABA UNIVERSITY COLLEGE OF BUSINESS AND ECONOMICS**

**DEPARTMENT OF MANAGEMENT**

FACTORS AFFECTING EFFECTIVENESS OF CENTRALIZED  
PROCUREMENT CONTRACT MANAGEMENT IN THE CASE OF PUBLIC  
PROCUREMENT AND PROPERTY DISPOSAL SERVICE

**By**

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### **CANDIDATE’S DECLARATION**

I, Natnaiel Asfaw declare that this paper is a result of my independent research work on the topic entitled “**FACTORS AFFECTING EFFECTIVENESS OF CENTRALIZED PROCUREMENT CONTRACT MANAGEMENT IN THE CASE OF PUBLIC PROCUREMENT AND PROPERTY DISPOSAL SERVICE**” in partial fulfillment of the requirements for the Degree of Masters of Art in Business Administration at Addis Ababa University. This work has not been submitted for a degree to any other university. All the references are also duly acknowledged.

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**Date June, 2020**

## CONFIRMATION

This is to certify that **Natnaiel Asfaw** has carried out this research work on the topic entitled “**FACTORS AFFECTING EFFECTIVENESS OF CENTRALIZED PROCUREMENT CONTRACT MANAGEMENT IN THE CASE OF PUBLIC PROCUREMENT AND PROPERTY DISPOSAL SERVICE**” under my supervision. This work is original in nature and has not been presented for a degree in any University and it can be submitted for the partial fulfillment of the requirements for the award of the degree of Masters of Art in Business Administration.

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## ACRONYMS

FA	Framework Agreement
IT	Information technology
MOFED	Minister of Finance and Economic Development
PPPAA	Public Procurement and Property Administration Agency
PPPDS	Public Procurement and Property Disposal Service
PEC	Procurement endorsing committee
SPSS	Statistical Package for Social Science

## ABSTRACT

*The concept that covers “contract management” is the whole procurement cycle including planning, formation, execution, administration and close out of a contract and goes beyond the day to day “administrative” activities in the procurement cycle. The purpose of contract management is to ensure that all parties to the contract fully meet their respective obligations as efficiently and effectively as possible, delivering the business and operational outputs required from the contract and providing value for money. This study aimed to assessing factors affecting effectiveness of centralized procurement contract management in the case of public procurement and property disposal service. Due to several reasons the system of the contractual management of PPPDS seems inefficient. Among those reasons the procuring entities did not sent timely their procurement plan, lack of the disclosure of the procuring entities actual budget, high termination of employer, lack of technical evaluator and lack of adequate capacity building strategy are the major one. Judgmental sampling is used in this study to obtain the sample. It involves the selection of individuals who were the most appropriate for the study. In studying the questionnaire was administered to all the three departments which are Procurement directorate, Contract management directorate and Market price study and data directorate employees who make the sampling 100 percent of the population. The data analysis was conducted through descriptive, correlation and multiple regression statistical technique using SPSS version 20. Data which is collected through Questionnaire was analyzed by thematic analyses. The study concluded that all the staff competency, Technology Adoption, Evaluation process and Legal framework have statistically significant influence on the effectiveness of centralized procurement contract management in PPPDS. The study found that the variables considered; staff competency, Technology Adoption, Evaluation process and Legal framework 75.7% variability in contract management effectiveness; implying that the 24.3% could be due to other factors beyond the scope of this study. Based on the findings, the study observed that there was a contract termination, delay, shortage of effective and efficient management of performance, delivery and payment while procurement contracts are not well administered. So that PPPDS should have prepared strategies for to overcome the above problems.*

**Key Words: Contract management, Centralized procurement, Staff competency, Technology Adoption, Evaluation process, Legal framework**

# CHAPTER ONE

## INTRODUCTION

The introduction chapter deals with background of the study, background of the organization, statement of the problem, the research objective and questions, the significance of the study, scope and limitations of the study, organization of the paper, definition of terms.

### **1.1 Background of the study**

Contract is defined as a legally binding agreement between two or more parties whereby one or more of them undertakes to do (or refrains from doing) some act in return for the other party promising to do, or actually doing (or refraining from doing) some act. It is an agreement, enforceable at law, entered into freely between a willing procuring entity and a willing supplier.

Contract management is the process of managing contract creation, execution and analysis to maximize operational and financial performance at an organization, all while reducing financial risk. (Elsay,2007).

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. Contracts can be of many types, e.g. sales contracts (including leases), purchasing contracts, partnership agreements, trade agreements and intellectual property agreements (Alatrasta and Arrowsmith, 2004).

Contract is made between the procuring entity and the supplier when a legal document stating the terms and conditions of the contract along with the rights and duties of the parties is signed between the two, except in the procurement made through the request for quotation procurement method where the letter of acceptance by the public body constitutes a contract.

Contract management is the activities of a buyer during a contract period to ensure that all parties to the contract fulfill their contractual obligation (Bailey, 2008). Contract management is the proactive monitoring, review and an agreement of contractual terms secured through the procurement process to ensure that what is agreed is actually delivered by suppliers or partners.

In contract management 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, programs. 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. 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 is process of systematically and efficiently monitoring contract creation, execution, and analysis to maximize operational and financial performance at an organization while reducing risk. It is part of the procurement process which begins immediately after Contract Award procedure has been successfully completed.

It has two main objectives. The first objective is the successful delivery of the procurement in a timely and economic manner. The second is the specific objective which is to ensure performance by all parties (The procuring entity and the contractor or supplier) to the contract through compliance with the requirements of the contract.

Contract management is a process applicable to the procurement of goods, construction of works and services. For contract administration to be effective, it is imperative to develop the procedures of oversight of contract performance through which the procuring entity will ultimately obtain its money's worth under the contract terms and conditions and within the framework of the applicable law.

Contract management therefore involves planning for this relationship, monitoring its evolution, measuring its achievement and if need be, taking corrective actions to safeguard the interest of the Contracting Entity and to ensure successful execution of the procurement process.

The contract administration function is usually entrusted to a Contract Administrator or Procurement Director, and contract administration fundamentally involves all technical and administrative tasks performed by designated public officials from the time a contract has been awarded until it is successfully completed, accepted or terminated and payment is made and disputes resolved.

Successful contract administration depends on the effective communication between all parties involved by establishing relationship between them in defining responsibilities and by determining the most appropriate administrative procedures. Here, the contractual parties must ensure that the lines of communication should be established and kept open throughout the contract period for the fundamental aspect of creating workable relationship between them (Johns and Sons, 2011).

## **1.2 Background of the organization**

The study has been conducted on the Ethiopian federal Public Procurement and Property Disposal Services (PPPDS). The service was established by Regulation No. 184/2010 of the council Ministries and is executing its activities starting October first 2010. The service is accountable to the Ministry of Finance.

The main objectives of the service is to enable the timely supply of goods and services which are commonly used by public bodies as well as goods and services which have national strategic significance, in the desired quality and at price attributable to economies of scale resulting from bulk purchases. The body established also to enable a speedy disposal by sale of properties of public bodies at fair prices. (Regulation, 184/2010)

Public procurement and property disposal service also works to assist public enterprise in the procurement of goods and services and disposal of assets. The values of this organization includes transparent and accountable service; customer satisfaction centered efficient and quality service; law, regulation and directive for result, culture of disdaining corruption, culture of team work and proactive for learning and change.

The core functions of the body includes carryout efficient and effective procurement implementation by expertise who have accurate knowledge on the law and procedure of the procurement; to be advantageous in the discount resulted from bulk purchases; provide commonly

used goods and services in order to have uniform and similar standard and save the public resources that allocate for unnecessary procurements; use knowledgeable and skillful workers that ensure productive human resource utilization; to save time and money that spends in each organization' for decentralized way of purchasing; to make procurement lead through plan and encourage open tender procurements and promote the system of good governance; to enable monitoring and controlling bulky purchase implementation easily by getting information from one source; to encourage suppliers those have better performance to compete in the bidding processes and to minimize purchasing related complains as far as the whole procurement is done in one center. (Regulation, 184/2010)

### **1.3 Statement of the problem.**

Effective contract management ensures that supplier, contractor, and/or consultant deliverables and obligations are met as agreed under the contract. In addition, more efficient and effective contract management promotes increased and more-timely loan disbursements (ADB, 2018).

Different studies have discussed the cause for poor contract management for goods including, that contracts were not properly signed in some cases, some contracts lacked important documents such as conditions of contracts, drawings and specification and some contained non contract documents as invitation for bids, liquidated damages were not applied for delayed contacts, and site meetings were not conducted. (yehualawork, 2018).

Contract management stage is deemed to be as the separate process to procurement where by procurement specialists do not take part to monitor contract implementation, procurement functions are headed by the non-procurement professional. (Samwel, 2013)

There is a very high dependency of effective project management on suppliers' compliance with terms and conditions, suppliers' technical capability and close monitoring of suppliers during project implementation. (Yehualawork, 2018)

Unless faced with a situation preventing or postponing the execution of a contract, public bodies have to implement any procurement contract they have signed with suppliers promptly. (Mofed, directive, 2010)

According to Public Procurement and Property Disposal Services (Report, 2012) contract management faced problems such as supply of foreign exchange from government side, fee estimation of customs and tax, logistics and supplies, demand supply in equilibrium due to lack of procurement plan, lack of delivery and payment on a time, quality and quantity issues, no exceptional clause in procurement directive to eliminates the problems and no penalty clause for framework agreement.

The conditions of contract administration is not this much good for both parties unless administered properly due the happening of some irregularities and different human factors in relation to the understanding and interpretation of the contract. The problem of poor quality, quantity and cost rising is also a challenge in the contract administration of public procurement.

In a framework agreement public procurement and property disposal service (PPPDS) has been procuring Common user items for 178 Federal Government Institutional and the 22 Universities for the three consecutive budget years (From 2011-2013 E.C) the cost has been covers 14,689,789,159.47 Birr. On the procuring of common user items those institutions had needed 7 lots due to lack of contractual management competency PPPDS accomplished 6 lots (PPPDS report, 2019-2020)

In general, due to several reasons the system of the contractual management of PPPDS seems inefficient. Among those reasons the procuring entities did not sent timely their procurement plan, lack of the disclosure of the procuring entities actual budget , high termination of employer, lack of technical evaluator and lack of adequate capacity building strategy are the major one. (PPPDS Report 2012).

Those problem have been created the inefficient accomplishment the government tasks, minimize value for money, and minimize the development of the country in general, all the above findings;

the researchers were not conducted on the framework contract type. Besides, little study has been done in effectiveness of framework contract management in Ethiopia, especially related to this organization. This study therefore, seeks to fill the gap by empirically assessing the factors that affecting Effectiveness of Centralized Procurement Contract Management in the Case of Public Procurement and Property Disposal Service.

### **Research Questions:**

- a. How does contract management staff competency affect contract management effectiveness in centralized procurement system?
- b. How does Evaluation process affect contract management effectiveness in centralized procurement system?
- c. How does technology adoption affect contract management effectiveness in centralized procurement system?
- d. How does Legal framework affect contract management effectiveness in centralized procurement system?

## **1.4 Objective of the study**

The study is guided by two objectives, those are, General and specific objectives.

### **1.4.1 General objective**

The overall objective of the study is to assess factors affecting effectiveness of centralized procurement contract management, the case of public procurement and property disposal service.

### **1.4.2 Specific objectives**

The study specifically aims to:

- a. To assess the staff competency how affects the effectiveness in centralized procurement contract management;
- b. To find out evaluation process how affects the effectiveness in centralized procurement contract management;
- c. To pinpoint technology adoption how affects the effectiveness in centralized procurement contract management;

- d. To identify legal framework how affects the effectiveness in centralized procurement contract management;
- e. To look in to how factors affecting the effectiveness in centralized procurement contract management;

### **1.5 Significance of the study**

- ✓ It will help the management of PPPDS to know factors that affect contract management
- ✓ It may provide support the other researcher and it helps further other similar study.
- ✓ Public Body also gets advantages by this study. The study will improve contract management practice.

### **1.6 Delimitations of the study**

The study would be delimited to Federal public procurement and property disposal service only. The Contract management to specifically focus on common user items which is procured by PPPDS. The depth of the study is delimited assess factors affecting effectiveness of centralized procurement contract management in PPPDS. The study it looks four variables, namely staff competency, technology adoption, Evaluation process and legal framework. The target population was Procurement directorate, Contract management directorate and Market price study and data directorate employees. The study was conducted October 2019 to June 2020 as per university schedule.

### **1.7 Limitation of the study**

The limitation of this study was depending on the actual data acquiring from the selecting representative samples. And the finding and analysis of this paper is depending up on the quality of the interviewee/respondent response. some researches some limitations occurred by lack of willingness (in various reasons), lack of co-operation, confidentiality but the researcher as much as possible tries to enhance these biases in order to come up with sound conclusion.

## 1.8 Definition of the terms

**Contract management** The entire contracting process from planning through contract administration, including contract close-up.

**Centralized procurement** According to Weele(2010,267), a centralized procurement structure places the purchasing unit in both a central and tactical position. In this thesis, procurement centralization includes the creation of a framework agreement for the use of the whole organization and contract management within a contract period.

**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 utilize a new innovation, (Williamson, 2002).

**Evaluation process** Bid evaluation is the organized process of examining and comparing bids to select the best offer in an effort to acquire goods, works and services necessary to achieve the goals of an organization. And results which affect the long term operation of the business and which relate directly to its purpose and goals.

**Legal framework** Public procurement is governed by the procurement legal framework, which is a law or regulation (or part of a law or regulation) that is sanctioned by the judicial system of a particular country. This sets the rules for the management of public procurement.

## **CHAPTER TWO**

### **REVIEW OF RELATED LITERATURE**

In this chapter, the researcher has reviewed relevant literatures which are in related with the title in the study area. The chapter thus includes concepts and ideas, practices of contract management and centralized Procurement. Conceptual framework of the research and empirical evidences are also included.

#### **2.1 Literature Review**

According to UN procurement practitioner’s Hand Book, “contract management” is commonly understood as a broader and more strategic concept that covers the whole procurement cycle including planning, formation, execution, administration and close out of a contract and goes beyond the day to day “administrative” activities in the procurement cycle.

The purpose of contract management is to ensure that all parties to the contract fully meet their respective obligations as efficiently and effectively as possible, delivering the business and operational outputs required from the contract and providing value for money. It also protects the rights of the parties and ensures required performance when circumstances change.

Contract management is similar to project management. Each contract is a mini-project. It has a unique goal, consumes resources, has a beginning and end date, and requires coordination and planning of relevant activities, as well as documentation in a contract file throughout the process.

Contract management includes monitoring and documenting performance. Depending on the organization and goods or services procured, daily/regular monitoring of the contract may be primarily the responsibility of the requisitioned.

The stages of contract management are intended to ensure that the parties work together to achieve the objectives of the contract. Contract management is based on the idea that the contract is an agreement, a partnership with rights and obligations that must be met by both sides to achieve the goal. Contract management is aimed not at finding fault, but rather at identifying problems and finding solutions together with all contracting parties involved.

### **2.1.1 Different perspective of contract management**

Contract management or contract administration is the management of contracts made with customers, vendors, partners, or employees. The personnel involved in contract administration required to negotiate, support and manage effective contracts are often expensive to train and retain. Contract management includes negotiating the terms and conditions in contracts and ensuring compliance with the terms and conditions, as well as documenting and agreeing on any changes or amendments that may arise during its implementation or execution. It can be summarized as the process of systematically and efficiently managing contract creation, execution, and analysis for the purpose of maximizing financial and operational performance and minimizing risk.

Contract management can be divided into three phases namely,

- pre- contract phase
- contract execution phase
- post award phase (often referred to as contract compliance/governance)

### **2.1.2 Theories related to contract management**

#### **2.1.2.1 Types of Contract Theory**

According to Kenneth Arrow /1960s/ and economists Oliver Hart and Bengt Holmström /2016/ Contract theory is the study of how people and organizations construct and develop legal agreements. It analyzes how parties with conflicting interests build formal and informal contracts, even tenancy. Contract theory draws upon principles of financial and economic behavior as different parties have different incentives to perform or not perform particular actions. It is also useful for understanding forward contracts, and other legal contracts and their provisions. It also includes an understanding of letters of intent and memorandums of understanding.

Practice divides contract theory into three models or types of frameworks. These models define the ways for the parties to take appropriate actions under certain circumstances stated in the contract.

✓ **Moral Hazard**

A model portrays a principal who has an incentive to engage in risky behaviors because the associated costs are absorbed by the other contracting party.

For moral hazard to be present there must be information asymmetry and a contract that proved an opportunity for a party to alter their behavior. To counter moral hazards, some companies create employee performance contracts, which depend on observable and confirmable actions to serve as incentives for parties to act according to the principal's interest.

✓ **Adverse Selection**

A model portrays a principal who has more or better information than the other contracting party and therefore distorts the market process.

Adverse selection is common in the insurance industry. Some insurers provide coverage for policyholders who withhold valuable information during the application process to obtain protection. Without asymmetric information, these policyholders would likely not be insured or would be insured at unfavorable rates.

✓ **Signaling**

The signaling model is when one party adequately conveys knowledge and characteristics about itself to the principal. In economics, signaling includes the transfer of information from one party to another. The purpose of this transfer is to achieve mutual satisfaction for a specific contract or agreement.

**2.1.3 Relational contract theory**

Suggests that priority should be given to the business relations, secondary attention to the economic deal, and the contract should be relegated to a peripheral role. The role of the contract is to act as a device for facilitating economic exchange and giving the possibility of legal sanctions in the event of breach. Inevitably, however, the behavioral norms exhibited outside the particular legal form of contract influence the court just as much (through estoppel).

Behaviors are influenced by the written contract, but are influenced more by the **psychological contract**, represent the mental beliefs and expectations individuals have on the obligations formed within a relationship – the spirit of the agreement. Like the written contract, the psychological contract can be breached. When this occurs, it creates conflict and breaks down trust. This leads to us back to a higher than normal TCE and acting in self-interest (agency theory). These are some of the core theories. There are many more facets of contract theory such as game theory (choices regarding getting a payoff from an action), hold-up.

#### 2.1.4 Agency theory

This theory is emerged in 1970s. At its core, the theory states that parties will act in their own self-interest. Put simply, the provider (agent) will act in a manner that increases margin and/or revenue; the buyer (principal) will take advantage of opportunities to minimize costs. This leads to the problem of **moral hazard** whereby one party maximizes its own interests to the detriment of others. It is this concept to protect against unfair contract terms issued by principals in their standard form contracts.

## 2.2 Empirical literature Review

### 2.2.1 Centralized procurement

The term “centralize” means bringing everything to one main location, which implies that centralized procurement involves bringing all procurement procedures, items and personnel to one place. In larger companies especially, procurement is not always handled in a centralized location, although there are a number of advantages of centralized procurement. Minimize Duplication

In companies that don't have a centralized system of procurement, a lot of time and money is spent through duplication. Every department will have to go through the same procedure over and over again instead of just having one specific department cater to all procurement needs. It takes more time for every department to process its own transactions compared to having them all processed as one.

Centralized procurement it is uses,

- ✓ Increase efficiency
- ✓ Reduced costs
- ✓ Better business relations.

### 2.2.2 Staff competency

The performance of the procurement function in any organization requires that the individuals handling the procurement activity should have the necessary professional qualifications and employee level of skill influences the procurement performance (Samuel & Njeru, 2014).

Saunders (1997) believed that successful functioning of organizational structures and effective operation of planning control systems is dependent on the quality and ability of staff employed.

Leenders and Fearon (2002), noted that the large number of items, huge monetary volume involved, need for an audit trail, severe consequences of poor performance, and the potential contribution to effective organizational operations associated with the procurement function are <sup>qualifications</sup> enhance staff ability to perform, enabling them to make better decisions, work as a team, and adapt to change, while increasing efficiency, quality, productivity and job satisfaction. Training is often for improving immediate work while education develops people for the long term. To enable individuals to create value consistently, both education and training are needed.

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 accessed through the level of education, education specialization, procurement knowledge, professional experience and the technical skills (Mauki, 2014).

### 2.2.3 Technology adoption

Information Technology (IT) is a general term that describes any technology that helps to produce, manipulate process, store, communicate, and/or disseminate information (William, 2005). As a need IT progressed along with socio-economic development in developing countries. In a very short time IT became the back bone in modern industrial society and the major contributor to the progress of both developing and developed countries (Olalla, 2000).

Technology is broadly defined as the pursuit of life by means other than life, and as organized inorganic matter, both material and immaterial, created by the application of mental and physical effort in order to achieve some value. In this usage, it refers to tools and machines that may be used to solve real-world problems (Zee, 2002). Organizations strive to minimize costs and thereby improving on their returns. This is achieved through procurement by sourcing for the best goods and services from suppliers at the right price, quantity, quality and delivered at the right time (Baily, Jessop and Jones, 1994).

Information and Communication Technology (ICT) has helped organizations to broaden their markets through the concept of globalization. Through globalization the division created by diversity in locations is bridged mainly through internet technologies. As a result, people world over are able to communicate irrespective of physical locations.

ICT ensures that this critical role is achieved and access to information is also ensured at a cost effective manner and access is devoid of geographical location and people can thus access information in whichever corner of the world they are in.

Riley (2012) adds three important elements not mentioned by many others, they are ease of understanding, worth the cost and able to meet the needs of the users. Riley emphasizes that in order to achieve the above elements, objectives for which information is sought be defined in advance. Of importance also is to ensure use of current information systems and involvement of users in development of strategies.

The manual processes are further more prone to errors, slow, limited in terms of information sharing hence limiting competition.

#### **2.2.4 Evaluation process**

Fisher (2006) observed that evaluation process within an organization has tremendous benefits in terms of improving and mitigating performance failure in the long run. Consequently, such benefits include sourcing from reputable supplies while at the same time issuing applicable capacity to stabilize business. Based on this, challenges such as cost maintenance and establishment of an effective system that is robust are inevitable. Other challenges include integrity of data using scorecards which are the main root causes of supplier performance problems.

Emmelhainz (2008) stipulated that management of any organization has a mandate of evaluating suppliers through quantitative assessment process. By using the process, a bigger portfolio is built to available and competent supply network. Moreover, assessment of suppliers measures supplier performance with the process of reducing costs, mitigating risks and driving nonstop improvement.

According to Eddie (2006), approved suppliers are re-evaluated on an annual basis through a process known as supplier performance management.

#### **2.2.5 Legal framework**

Public procurement is governed by the procurement legal framework, which is a law or regulation (or part of a law or regulation) that is sanctioned by the judicial system of a particular country. This sets the rules for the administration of public procurement.

The procurement legal framework is usually further developed into policies and procedures, procurement and contract administration manuals and guidelines, including standard solicitation documents that are used to call for offers from contractors, suppliers and service providers. The language of public procurement policies, procedures, guidelines, manuals and standard solicitation documents must align with what is established in the public procurement

legal framework. Adherence to the public procurement law is obligatory; any infraction is punishable by law.

The procurement legal and institutional frameworks (procurement rules) govern everything from the identification of a requirement through to the closing out of a contract; sometimes including disposal, reutilization and destruction of goods.

According to the federal Government Public Procurement Directive, June 2010, Article 27/6 PPPDS framework agreement contracts run to follow this article “The body administering framework procurements shall decide the number of suppliers to be invited to participate in the procurement under a framework agreement along with the selected supplier pursuant to Article 27.5 above and to follow mentioned bellow (a - c)”.

- a) Contract shall be signed with the invited suppliers willing to supply with the price offered by the selected supplier.
- b) The selected supplier shall be given priority of choice on matters pertaining to the contract.
- c) The share of the selected supplier in the supply of goods under a framework contract in which more than one supplier participate shall not be less than 60% of the total value of the procurement pursuant to article 27.5 of this directive.

### **2.2.6 Research Hypothesis**

The research study tested by the following research hypotheses:

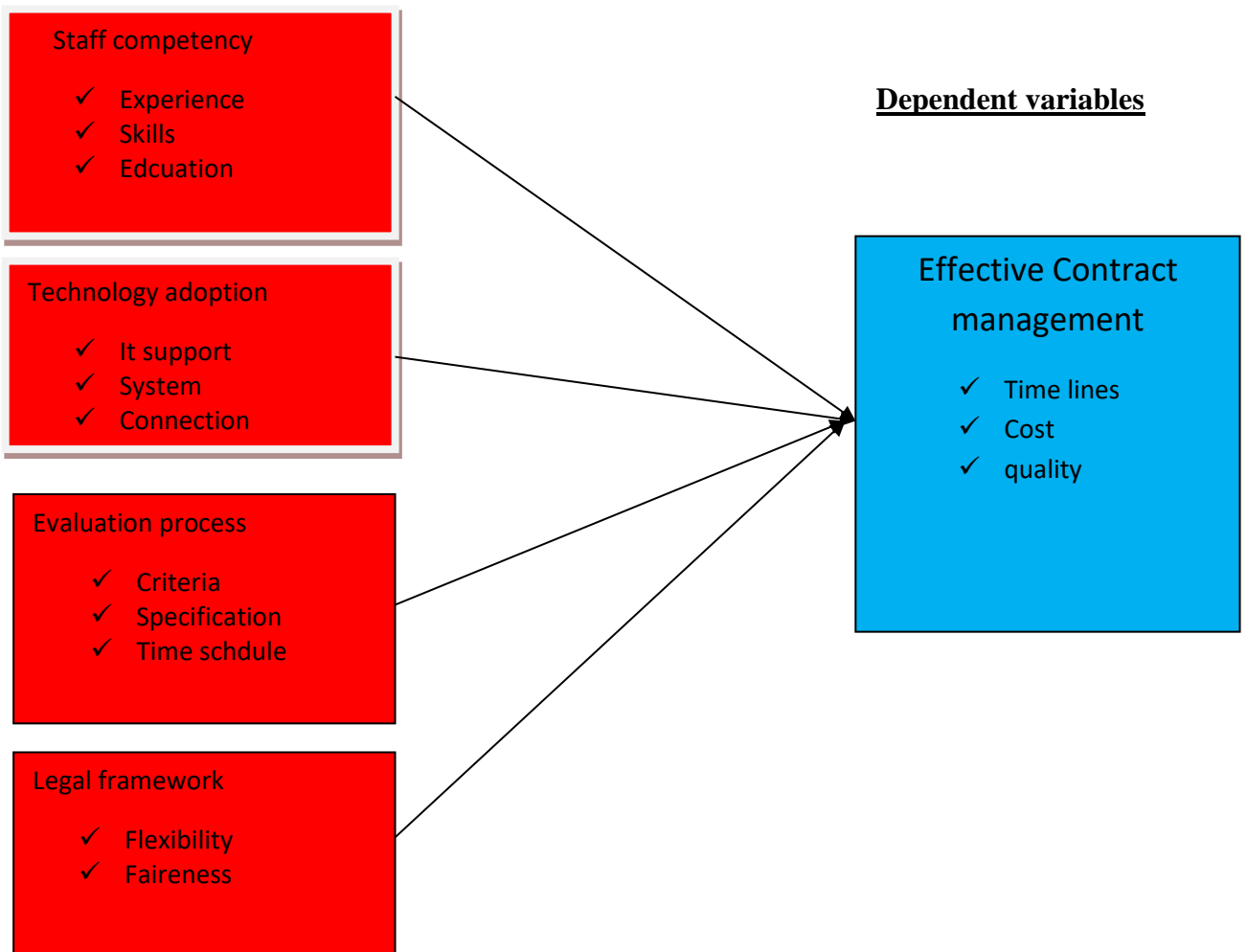
- H1: Staff competency has a significant and positive effect on effective contract management.
- H2: Technology adoption has a significant and positive effect on effective contract management.
- H3: Evaluation process has a significant and positive effect on effective contract management.
- H4: Legal framework has a significant and positive effect on effective contract management.

### **2.2.7 Conceptual Framework**

In conducting the study, a conceptual framework was developed to show the relationship between the independent variables and dependent variable. In this study, the dependent

variable was Effective contract management and the independent variables were Staff competency, Technology Adoption, Evaluation process and Legal Framework. Both independent variable and dependent variable are depicted in figure 2.1below.

### Independent variables



**Source: this model is adapted and modified from Kiage, J. O.(2013)**

**Figure 2: 1 Conceptual framework of the research**

## 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; research approach, sampling design, target population; sample size and sampling technique; source of data, Research instrument, questionnaire design, data analysis method, data processing and analysis, and; validity and reliability.

The primary technique for collecting the primary quantitative data used a self-developed questionnaire containing self-assessment items measured on the 5-point likert type of scales strongly disagree, disagree, undecided, agree, strongly agree data collected.

### 3.2 Research design

According to Chopra et al. (2012), research design is the conceptual structure within which research is conducted. They specifically indicated that “a research design is the arrangement of condition for collecting and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure”. A research design is the arrangement for a precise statement of goals and justification.

In this study the researcher used explanatory research to study the relationship between the dependent variable (effective contract management) and the independent variables (staff competency, technology adoption, evaluation process and legal framework). Questionnaires were analyzed using SPSS version 20.00 and tools like correlation and multiple regressions were employed.

### 3.3 Research Approach

This study employed the quantitative research approach to answer the research questions to know factors affecting effectiveness of centralized procurement contract management. According to Crewel et. al. (2008), quantitative research is a means for testing objective theories by examining the relationship among variables. These variables, in turn, can be

measured, typically on instruments, so that numbered data can be analyzed using statistical procedures. Thus, the researcher applied quantitative approach in this study to test objectively the effect of staff competency, technology adoption, evaluation process and legal framework on effectiveness of centralized procurement contract management.

### **3.4 Sampling Design**

#### **3.4.1 Target Population**

Target population refers to the larger population to which the study ultimately would like to generalize the results of the study (Mugenda and Mugenda, 2003). The total population of the study is 49. (i.e. Procurement Directorate (26), Contract management Directorate (15) and Market price study and research Directorate (8) employees were involved.

#### **3.4.2 Sampling size Determination**

According to Barbie,(1992) sample is defined as a segment of population in which researcher is interested in gaining information and drawing conclusion. Sampling is a set of act, processor technique of selecting a suitable sample or is preventative part of a population for the purpose of determining parameters of characteristics of the whole population. Generally, is the design which minimizes bias and maximizes the liability of the data collected and analyzed is considered a good design? In this study the sample size constitute respondents from PPPDS staffs. A sample of the three department's staff was drawn out of the total number of employees. Judgmental sampling is used in this study to obtain the sample. It involves the selection of individuals who were the most appropriate for the study. Basing on the nature of the study, not all employees could be in position to provide relevant information on contract management. I used judgmental sampling which is a use to ensure inclusion of relevant individuals in the sample for the study.

### 3.4.3 Sampling Technique

Judgmental sampling is a non-probability sampling where the researcher uses his own judgment to select from the population whom he feels will give him the desired or accurate information. Judgmental sampling involves the choice of subjects who are well equipped with information that will be relevant to the researchers focus. **purposively choose** the particular units of the universe for constituting a sample on the basis that the small mass that they so select out of a huge one will be typical or representative of the whole (Kothari, 2004).

In studying the questionnaire was administered to all the three departments which are Procurement directorate, Contract management directorate and Market price study and data directorate employees who make the sampling 100 percent of the population.

### 3.4.4 Source of Data

There are two types of data, namely Primary and secondary data Researcher might use either both or one of the types of data depends on their search type data collect by researcher Saunders et al, 2007. For this research, researcher used both and primary and secondary data.

#### 3.4.4.1 Primary data source

For this research purpose primary data was collected through standardize questionnaire. Primary data are originated by are researcher for the specific purpose of addressing the problem at hand Malhotra and Birks, (2006).

#### 3.4.4.2. Secondary data source

For secondary data, books, manuals, directives, proclamation, annual reports and articles related to procurement activities were used. This data served as reference and guide the focus of clarify research question.

## 3.5 Instruments of Data Collection

For this research purpose primary data was collected through standardize questionnaire. Primary data are originated by a researcher for the specific purpose of addressing the problem at hand Malhotra and Birks, (2006). The researcher used to a primary source of data.

### 3.6 Research instrument

Kombo and Tromp, (2003) data collection methods refer to gathering specific information aimed at providing some facts. There searches Instruments that used by their searcher were used to collect data for this study is questionnaires.

### 3.7 Questionnaire Design

The researcher used adopted questionnaires, those questionnaire were flexible and easily understood for respondents.

### 3.8 Data Analysis Method

The data collected from primary sources through questionnaires and observation obtained from respondent's analyses by using percentages and analyzed through multiple regressions. The analysis of the data used quantitative nature. The collected data interpreted based on the findings. The data and properly interpreting them, summarized based on their importance of findings and followed by the forwarding of appropriate recommendation and suggestions for a concerned parties.

### 3.9 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 have been collecting, the researcher conducting data cleaning, and then the data coded and entering in the computer for analysis using the Statistical Package for Social Sciences (SPSS).Then analyzing using descriptive statistics such as frequency counts, percentages, means and standard deviation.

For regression analysis, the study hypothesized the following regression model:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon \dots\dots\dots \text{Equation 3.1}$$

Where;

Y represented contract management of centralized procurement  
 $\beta_0$  represented a constant and represents the value of Y when  $X_1, X_2, X_3$  and  $X_4=0$   
 $\beta_1, \beta_2, \beta_3, \beta_4$  represented the regression coefficients which measures the average change in the value of the dependent variable

X<sub>1</sub>=Staff Competency

X<sub>2</sub>=Technology Adoption

X<sub>3</sub>= Evaluation process

X<sub>4</sub>= legal framework

ε=Error Term

### **3.10 Validity and Reliability**

#### **3.10.1 Validity**

In order to maintain validity, the questionnaire was given to leaders, experts and adviser to included comments before final distribution and some confusing questions were modified; and questionnaires were submitted to other researchers and academicians for their contributions and checked. Validity measures what the research actually wishes to measure and is the extent to which differences found with measuring tool to reflect the differences among respondents. The content of the research is valid and reliable in terms of adequate coverage of investigative questions guiding the study and relevancy of the respondents because the researcher uses purposive sampling methods and employed cross check mechanism.

Researcher was conducted pilot test on survey instrument (questionnaire) to check the questionnaire is complete, free from any biased and confusion word to selected few respondents. Moreover, to insure the statistical validity of the study, the researcher has collected quantitative data using survey questioner and analysis the data using correct statistical instruments like descriptive statistics, inferential statistics, correlation and regression analysis to see the relationship of the variable and reach concrete conclusion.

#### **3.10.2 Reliability**

Reliability refers to the consistency, stability or dependability of a measurement technique over time and across settings or conditions. It simply means that the measurement instrument does not produce erratic and unpredictable results (Geoffrey et.al.2005).

The data reliability test is measured by using Cronbach's Alpha. Cronbach's Alpha was also calculated as part of the reliability test to assess how valid the results were and should produce similar generalized results if the sample size were increase (Field, 2006). The Alpha value is ranges from a maximum of 1.0 for a perfect score to minimum of zero, good measure of the alpha should be 0.70 or higher (Neuman, 2007). According to William and Barry (2010) scales exhibiting a coefficient alpha between 0.80 and 0.96 are considered to have very good reliability, between 0.70 and 0.80 are considered to have good reliability, and alpha value between 0.60 and 0.70 indicates fair reliability and when the coefficient alpha is below 0.60, the scale has poor reliability. Accordingly, the Cronbach's Alpha values of the survey indicate good reliability and the result are presented in table 3.1.

**Table 3: 1 Cronbach Alpha value**

S. No	Variables	Cronbach's Alpha Value	Number of Items
1.	Staff competency	.958	6
2.	Technology Adoption	.808	6
3.	Evaluation process	.889	7
4.	Legal framework	.797	6
5.	Effective contract management	.752	8

Source: Own survey (2020)

As explained by Tavakol and Dennick, Cronbach's alpha is used to provide a measure of the internal consistency of a test or scale and expressed as a number between 0 and 1. The acceptable values of alpha is ranging from 0.70 to 0.95 (Tavakol and Dennick).

Reliability analysis is made on the main part of the questionnaire which is analyzed through Cronbache alpha. As shown below, the result is 0.756 which is above alpha value of 0.7 of the acceptable value and confirmed the instrument is reliable.

The Cronbach's Alpha range value is between 0.752 and 0.958. Therefore, all variables are acceptable for further analysis.

## **CHAPTER FOUR**

### **Results, Discussion and Interpretation of Findings**

The purpose of this study was to assess the factors that affecting effectiveness of centralized procurement contract management. This chapter presents the main part of the study. Coded responses were entered into Statistical Package for the Social Sciences (SPSS) version 20, for data analysis.

In this study both descriptive statistic and inferential analysis were used to analyze the data. The descriptive statistics utilized in this research is used to analyze the demographic data and independent variables including frequency and percentages. Inferential analysis is concerned with the various test of significance for normality, autocorrelation and multi-collinearity in order to determine with what validity data can be said to indicate some conclusion(s). The data was sorted to group questions according to applicable constructs under test. Finally correlation and standard multiple regression analysis were performed. The discrete variables (dependent and independent) are available in the dataset. Analysis of the data is presented below:

#### **4.1. Response rate and profile of respondents**

In assessing the factors affecting effectiveness of centralized procurement contract management, a questionnaire was administered among the procurement directorate, contract management directorate and market price study and data directorate employees.

The questionnaire was administered to all of 26 procurement directorate, 15 contract management directorate and 8 market price study and data directorate employees of PPPDS. The following table summarizes the responses.

**Table 4: 1 Summary of Respondents**

Working Section	Number of Questionnaire administered	Number of responses	Number of Valid responses
Procurement Directorate	26	26	26
Contract Management Directorate	15	15	15
Market price study and data directorate	8	8	8
Total	49	49	49

Source: survey questionnaire 2020

## 4.2 Descriptive statistics of study variables

This descriptive analysis is used to look at the data collected and to describe that information. It is used to describe the demographic factors for more clarification. It is mainly important to make some general observations about the data gathered for general or demographics questions. The demographics factors used in this research were age, gender, work experience, educational status, position. For the scale typed questionnaires for all variables mean or average response of respondents was used.

One statistical approach for determining equivalence between groups is to use simple analyses of means and standard deviations for the variables of interest for each group in the study (Marczyk et al. 2005). The descriptive statistics (mean and standard deviation) in respect of each variable is shown in the following table. The mean indicates to what extent the sample group on average agrees or does not agree with the different statement. The lower the mean, the more the respondents disagree with the statement. The higher the mean, the more the respondents agree with the statement.

**Table 4: 2 Descriptive Statistics of variables**

	Mean	Std. Deviation	N
Staff competency	3.8016	.50593	49
Technology Adoption	3.1599	1.10237	49
Evaluation process	4.1300	.77481	49
Legal framework	3.1712	.56116	49
Effective contract management	3.7270	.58778	49

Source: Own survey (2020)

Based on table 4.2 above, Evaluation process has the highest mean score of 4.1300 followed by Staff competency with a mean score of 3.8016. Legal framework stood at third level with a mean value of 3.1712. Technology adoption with a mean score of 3.1599.

The interpretation was made based on the following measurement scale intervals or range. Mean scores 4.51-5.00 excellent or very good, 3.51- 4.50 good, 2.51-3.50 average or moderate, 1.51-2.50 fair and 1.00-1.50 is poor (poonlar Btawee,1987)).Accordingly, all the variables lie in the category between 2.51-3.50. This means respondents have moderate perception on each of the variable under consideration.

#### **4.2.1 Tests for Effect of Demographic characteristic variables on Dependent variable**

The study employed stepwise regression analysis to test weather demographic characteristic have effects on Effective contract management or not.

Accordingly, the study conducted stepwise regression analysis for Age, Gender, work experience, Educational status, Position separately.

**Table 4: 3 Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	Education level		Stepwise (Criteria: Probability-of-F-to-enter $\leq$ .050, Probability-of-F-to-remove $\geq$ .100).
2	Position		Stepwise (Criteria: Probability-of-F-to-enter $\leq$ .050, Probability-of-F-to-remove $\geq$ .100).

a. Dependent Variable: Effective Contract Management

Source: Own survey (2020)

As indicated in the table 4.3 for Position and Education level are entered to the equation, however Gender and service year are not entered and not removed. This indicates that the p value for Position and Education level is less than 0.05 and the p value, for Gender and service year is between 0.05 and 0.1. This also shows that the effect of Position and Education level on Effective Contract Management is significant and the effect of Gender and service year on Effective Contract Management is not significant.

**Table 4: 4 Coefficients a for Demographic characteristic variables**

Model		Un standardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
	Education Level	1.761	.192	1.012	9.175	.000
	Position	.532	.092	.515	5.786	.000

a. Dependent Variable: Effective Contract Management

Source: Own survey (2020)

As presented in the table 4.4 the Beta Coefficients that present the contributions or positive or negative relationship of each variable to the model. The t and p values showed the influence of the independent variables on the dependent variable. At 5% level of significance and 95% level of confidence, Age, had a 2.348 level of significance,

Educational Level had 1.761 level of significant and position showed .532 level of significant.

#### 4.2.1.1 Age of respondents

Regarding the age of respondents, as shown in the table 4.5 the sample population was largely dominated by the age group of 21-30 (71.4%) followed by the group between the age of 30-40 (22.4%). This implies that most of the sample respondents were middle aged. The rest of the respondents consisted, with the age of 40-50 (6.1%). The fact that more middle age staffs are working in the PPPDS as more responsibility and burden comes related with the age group. This age group will only require little work to make them an engaged staff.

**Table 4: 5 Summary of Respondents' Age**

Age	Frequency	Percent	Cumulative Percent
21-30 year	35	71.4	71.4
30-40 year	11	22.4	93.9
40-50 year	3	6.1	100.0
Total	49	100.0	

Source: Own survey (2020)

#### 4.2.1.2 Gender of respondents

As indicated in the Appendix-2, Figure 4.1 as the case of PPPDS, male respondents were a bit higher (male 57.1% and female 42.9 %) this might have an effect on the engagement level of the employees.

#### 4.2.1.3 Work experience of respondents

As indicated in the table 4.6 concerning the service years, the sample populations was mainly dominated by a service years less than 3 years, which is 49% and followed by 3-6 years of services (22.4%), 18.4% have used for 6-9 years and 10.2% have used the work experience for over 9 years. This implies that, majority of the respondents have experience of less than three years.

**Table 4: 6 Summaries of respondents' service years**

Work Experience	Frequency	Percent	Cumulative Percent
less than 3 years	24	49	49
3-6 years	11	22.4	71.4
6-9 years	9	18.4	89.8
over 9 years	5	10.2	100.0
<b>Total</b>	49	100.0	

Source: Own survey (2020)

#### 4.2.1.4 Educational status of respondents

As indicated in the Apendex-2, based on Figure 4.2, the largest group of the sample population comprised first-degree holders, which is 79.6% of the total respondents; followed by second-degree holders which comprised 16.3%,The rest of the respondents is diploma holder were (4.1%). This shows that the majority of the respondents were with sufficient educational background to give feedback to the study matter.

#### 4.2.1.5 Position of respondents

As indicating in the table 4.7, concerning the respondents Position, the sample populations were mainly dominated by Professional expert, which is 67.4% and followed by senior

expert employees (26.5%), the rest team leader and Head of the department as 4.1% and 2% respectively.

**Table 4: 7 Summary of respondents' Position**

Respondents position	Frequency	Percent	Cumulative Percent
Head of the department	1	2	2
Team leader	2	4.1	6.1
Senior Expert	13	26.5	32.6
Expert	33	67.4	100.0
<b>Total</b>	49	100.0	

Source: Own survey (2020)

### 4.3 Survey Results

The following descriptive statistical analysis shows the conceptual framework adopted for this study. Particularly, the analysis demonstrates the research questions, which is distributed to the three departments; to make discussions the study used frequency and percentile. to indicate the extent to assess factors that affects Effectiveness of contract management in PPPDS in five scales (1= strongly disagree, 2= disagree, 3= undecided, 4= agree and 5=strongly agree).

#### 4.3.1 Staff competency and its effect on the effectiveness of contract management

Competent staff are effective, efficient and provide solutions to the procurement problems while incompetent staff would be ineffective and inefficient thus contributing to poor performance for the company (Kiage, 2013).

**Table 4: 8 Response summaries on Staff competency**

<b>N</b>	<b>Statement</b>	<b>Scale</b>	<b>Frequency</b>	<b>Percent</b>	<b>Mean</b>	<b>SD</b>
1	Staffs those are knowledgeable...	Undecided	3	6.1	4.1429	.50000
		Agree	36	73.5		
		Strongly Agree	10	20.4		
		Total	49	100.0		
2	Professionally experienced staffs are empowered and motivated	Strongly Disagree	1	2.0	3.8367	.85017
		Disagree	4	8.2		
		Undecided	4	8.2		
		Agree	33	67.3		
		Strongly Agree	7	14.3		
		Total	49	100.0		
3	Staffs with technical skills do things rights the first time	Strongly Disagree	1	2.0	3.7959	.79003
		Disagree	2	4.1		
		Undecided	9	18.4		
		Agree	31	63.3		
		Strongly Agree	6	12.2		
		Total	49	100.0		
4	Staffs with technical skills do things effectively and efficiently	Disagree	4	8.2	3.7551	.75085
		Undecided	9	18.4		
		Agree	31	63.3		
		Strongly Agree	5	10.2		
		Total	49	100.0		
5	Staff with right education performs their tasks efficiently	Strongly Disagree	1	2.0	3.9592	.78949
		Disagree	2	4.1		
		Undecided	4	8.2		
		Agree	33	67.3		
		Strongly Agree	9	18.4		
		Total	49	100.0		
6	Superior level of education improves staffs motivation.	Strongly Disagree	1	2.0	4.000	.76376
		Undecided	8	16.3		
		Agree	29	59.2		
		Strongly Agree	11	22.4		
		Total	49	100.0		

Source: Own survey (2020)

Table 4.8 above indicated the results on factors affecting effectiveness of centralized procurement contract management that, on Staffs those are knowledgeable to help improve effectiveness of centralized procurement contract management, 93.9% of the respondents agree and strongly agree on this factor while 6.1% of the respondents are Undecided (neither agreed nor disagreed). on the issue with a mean of 4.1429 and a standard deviation of .5000. The result indicated that more than half of the procurement staff had the necessary qualification and competence to carry out procurements effectively.

on Professionally experienced staffs are empowered and motivated to carry out their duties well thus improving effectiveness of centralized procurement contract management that, the results indicated that 14.3% of the respondents strongly agree, 67.3% of the respondents agree, 8.2% Undecided, 8.2% of the respondents disagree and 2% of the respondents strongly disagree with a mean 3.8367 and a standard deviation of .85017. This shows that more than half of the procurement staff had the professional experienced and motivated to carry out procurement contracts effectively.

The study also tried see whether Staffs with technical skills do things rights the first time thus improving effectiveness of centralized procurement contract management that. And the result in the above table 4.2 indicated that 12.2% of the respondents strongly agree and 63.3% of the respondents agree while 18.4% undecided, 4.1% disagree and 2% strongly disagree with a mean of 3.7959 and a standard deviation of .79003. The result indicated that staffs have technical skills do things right.

on Staffs with technical skills do things effectively and efficiently, hence improving effectiveness of centralized procurement contract management that, the results indicated that 10.2% of the respondents strongly agree, 63.3% of the respondents agree, 18.4% Undecided, 8.2% of the respondents disagree with a mean 3.8367 and a standard deviation of .85017. The result indicated that staffs have technical skills do things effectively and efficiently.

On Staff with right education performs their tasks efficiently, thus improving effectiveness of centralized procurement contract management that, the results indicated that 18.4% of the respondents strongly agree, 67.3% of the respondents agree, 8.2% Undecided, 4.1% of the respondents disagree and 2% of the respondents strongly disagree with a mean 3.9592 and a standard deviation of .78949. This shows that more than half of the procurement staff had the right education to perform their tasks efficiently.

On Superior level of education improves staffs motivation and by extension effectiveness of centralized procurement contract management that, the results indicated that 22.4% of the respondents strongly agree, 59.2% of the respondents agree, 16.3% Undecided, and 2% of the respondents strongly disagree with a mean 4.000 and a standard deviation of .76376. The result indicated that staffs have Superior level of education to improve staffs motivation and extension of effectiveness of contract management.

#### **4.3.2 Technology Adoption and its effect on the effectiveness of contract management**

ICT adoption is the process of capturing, transmitting and displays data and information technology and develop and communicating by using ICT instead of manual system for the procurement department (Muthuri, 2014).

Table 4: 9 Response summaries on Technology Adoption

N	Statement	Scale	Frequency	Percent	Mean	SD
1	Supporting procurement contract management by information technology	Disagree	22	44.9	3.2041	1.20726
		Undecided	4	8.2		
		Agree	14	28.6		
		Strongly Agree	9	18.4		
		Total	49	100.0		
2	Performing procurement contract management activities by IT is <b><u>increases the speed of doing things</u></b>	Disagree	23	46.9	3.122	1.2013
		Undecided	6	12.2		
		Agree	11	22.4		
		Strongly Agree	9	18.4		
		Total	49	100.0		
3	Information technology helps to <b><u>reducing costs.</u></b>	Disagree	25	51.0	3.1020	1.24574
		Undecided	4	8.2		
		Agree	10	20.4		
		Strongly Agree	10	20.4		
		Total	49	100.0		
4	Information technology support <b><u>increases productivity.</u></b>	Strongly Disagree	1	2.0	3.2653	1.27108
		Disagree	20	40.8		
		Undecided	4	8.2		
		Agree	13	26.5		
		Strongly Agree	11	22.4		
		Total	49	100.0		
5	<b><u>Internet connections</u></b> help to communicate and collaborate more effectively with suppliers	Strongly Disagree	1	2.0	3.0816	1.20479
		Disagree	22	44.9		
		Undecided	6	12.2		
		Agree	12	24.5		
		Strongly Agree	8	16.3		
		Total	49	100.0		
6	Internet connection helps improve communication and collaboration with suppliers, thus <b><u>saving time.</u></b>	Disagree	20	40.8	3.1837	1.14879
		Undecided	8	16.3		
		Agree	13	26.5		
		Strongly Agree	8	16.3		
		Total	49	100.0		

Source: Own survey (2020)

Table 4.9 above indicated the results on factors affecting effectiveness of centralized procurement contract management that, on Supporting procurement contract management by information technology **increase effectiveness**, hence improving effectiveness of centralized procurement contract management that, 18.4% of the respondents strongly agree, 28.6% of the respondents agree, 8.2% Undecided (neither agreed nor disagreed), 44.9% of the respondents disagree with a mean 3.2041 and a standard deviation of 1.20726. This shows that there is a limitation in the organizations use of ICT to facilitate procurement process and this would have its own effect on the effectiveness of centralized procurement contract management.

On Performing procurement contract management activities by information technology is **increases the speed of doing things** effectiveness of centralized procurement contract management that, 18.4% of the respondents strongly agree, 22.4% of the respondents agree, 12.2% Undecided (neither agreed nor disagreed), 46.9% of the respondents disagree with a mean 3.122 and a standard deviation of 1.2013. The result indicated that there is a limitation that Procurement contract management activities performing by information technology.

On Information technology help to improve effectiveness of centralized procurement contract management by **reducing costs** that, 20.4% of the respondents strongly agree, 20.4% of the respondents agree, 8.2% Undecided (neither agreed nor disagreed), 51.0% of the respondents disagree with a mean 3.1020 and a standard deviation of 1.24574. The result indicated that more than half of the respondents disagreed that information technology is reducing costs and help to improve effectiveness of centralized procurement contract management.

On Information technology support **increases productivity**, hence improving effectiveness of centralized procurement contract management that, 22.4% of the respondents strongly agree, 26.5% of the respondents agree, 8.2% Undecided (neither agreed nor disagreed), 40.8% of the respondents disagree and 2% of the respondents strongly disagree with a mean 3.2653 and a standard deviation of 1.27108. The result indicated that 48.9% of the respondents agreed that information technology to support increases productivity and its effects on effectiveness of centralized procurement contract

management. on other hand, 40.8% of the respondents disagree that information technology to support increases productivity and its effects on effectiveness of centralized procurement contract management.

With regard to the question raise to respondents on **Internet connections** help communicate and collaborate more effectively with suppliers at a cost effective manner effectiveness of centralized procurement contract management that, 16.3% of the respondents strongly agree, 24.5% of the respondents agree, 12.2% Undecided (neither agreed nor disagreed), 44.9% of the respondents disagree and 2% of the respondents strongly disagree with a mean 3.0816 and a standard deviation of 1.20479. The result indicated that 40.8% of the respondents agreed that internet connections help to communicate and collaborate more effectively with suppliers and its effects on effectiveness of centralized procurement contract management. on other hand, 44.9% of the respondents disagree that internet connections help to communicate and collaborate more effectively with suppliers and its effects on effectiveness of centralized procurement contract management.

On Internet connection helps improve communication and collaboration with suppliers, thus **saving time** effectiveness of centralized procurement contract management that, 16.3% of the respondents strongly agree, 26.5% of the respondents agree, 16.3% Undecided (neither agreed nor disagreed), 40.8% of the respondents disagree with a mean 3.1837 and a standard deviation of 1.14879. The result indicated that 42.8% of the respondents agreed that internet connections help to communicate and collaborate with suppliers by saving time. on other hand, 40.8% of the respondents disagree that internet connections help to communicate and collaborate with suppliers by saving time and its effects on effectiveness of centralized procurement contract management.

The above findings concur with Abebe (2017) study entitled that “Factors Affecting Public Procurement Performance in Ethiopia: The Case of Public Procurement and Property Disposal Services” shown that information communication technology is one of the factors affecting public procurement performance in the PPPDS.

#### 4.3.3 Evaluation process and its effect on the effectiveness of contract management

Table 4: 10 Response summary on Evaluation process

<b>No</b>	<b>Statement</b>	<b>Scale</b>	<b>Frequen cy</b>	<b>Percent</b>	<b>Mean</b>	<b>SD</b>
1	Evaluation criteria, methodology and technical requirements are not endorsed by procurement endorsing committee	Disagree	5	10.2	4.1633	.94311
		Undecided	3	6.1		
		Agree	20	40.8		
		Strongly Agree	21	42.9		
		Total	49	100.0		
2	Evaluation process has an influence on selection of the best tenders.	Strongly Disagree	1	2.0	4.3673	.85863
		Disagree	1	2.0		
		Undecided	3	6.1		
		Agree	18	36.7		
		Strongly Agree	26	53.1		
		Total	49	100.0		
3	Evaluate bids against other criteria than those stated in the bidding document.	Strongly Disagree	5	10.2	3.9592	1.32223
		Disagree	3	6.1		
		Undecided	4	8.2		
		Agree	14	28.6		
		Strongly Agree	23	46.9		
		Total	49	100.0		
4	Evaluation process is conducted by inadequate qualified procurement Expert.	Strongly Disagree	1	2.0	4.1020	1.04572
		Disagree	4	8.2		
		Undecided	6	12.2		
		Agree	16	32.7		
		Strongly Agree	22	44.9		
		Total	49	100.0		
5	Evaluation committee does not submit the result to the procurement endorsing committee within the bid validity period.	Strongly Disagree	3	6.1	4.0204	1.23305
		Disagree	4	8.2		
		Undecided	6	12.2		
		Agree	12	24.5		
		Strongly Agree	24	49.0		
		Total	49	100.0		
6	Procurement endorsing committee has not Endorse the bid evaluation results within the bid validity period.	Strongly Disagree	2	4.1	4.0204	1.14546
		Disagree	4	8.2		
		Undecided	7	14.3		
		Agree	14	28.6		
		Strongly Agree	22	44.9		
		Total	49	100.0		
7	Evaluation result/decisions	Disagree	5	10.2		

changed by complaint board of PPPAA.	Undecided	4	8.2	4.2653	.99531
	Agree	13	26.5		
	Strongly Agree	27	55.1		
	Total	49	100.0		

Source: Own survey (2020)

Table 4.10 above indicated the results on factors affecting effectiveness of centralized procurement contract management that, on Most of the time parts of bidding documents (especially evaluation criteria, methodology and technical requirements) are not endorsed by procurement endorsing committee it uses for effectiveness of centralized procurement contract management that, 42.9% of the respondents strongly agree, 40.8% of the respondents agree, 6.1% Undecided(neither agreed nor disagreed), 10.2% of the respondents disagree with a mean 4.1633 and a standard deviation of .94311. The result indicated that 83.7% of the respondents (strongly agreed and agreed) that evaluation criteria, methodology and technical requirements are not endorsed by procurement endorsing committee and its effects on effectiveness of centralized procurement contract management.

on Evaluation process has an influence on selection of the best tenders that, 53.1% of the respondents strongly agree, 36.7% of the respondents agree, 6.1% Undecided(neither agreed nor disagreed), 2% of the respondents disagree, 2% of the respondents strongly disagree with a mean 4.3673 and a standard deviation of 1.32223. The result indicated that 89.8% of the respondents (strongly agreed and agreed) that Evaluation process has an influence on selection of the best tenders and its effects on effectiveness of centralized procurement contract management.

on Evaluate bids against other criteria than those stated in the bidding document that, 46.9% of the respondents strongly agree, 28.6% of the respondents agree, 8.2% Undecided(neither agreed nor disagreed), 6.1% of the respondents disagree, 10.2% of the respondents strongly disagree with a mean 3.9592 and a standard deviation of 1.32223. The result indicated that 75.5% of the respondents (strongly agreed and agreed) that Evaluate bids against other criteria than those stated in the bidding document and its effects on effectiveness of centralized procurement contract management.

With regard to the question raise to respondents on Evaluation process is conducted by inadequate qualified procurement Expert that, 44.9% of the respondents strongly agree, 32.7% of the respondents agree, 12.2% Undecided(neither agreed nor disagreed), 8.2% of the respondents disagree, 2% of the respondents strongly disagree with a mean 4.1020 and a standard deviation of 1.04572. The result indicated that 77.6% of the respondents (strongly agreed and agreed) that Evaluation process is conducted by inadequate qualified procurement Expert and its effects on effectiveness of centralized procurement contract management.

On evaluation committee does not submit the result to the procurement endorsing committee within the bid validity period that, 49% of the respondents strongly agree, 24.5% of the respondents agree, 12.2% Undecided(neither agreed nor disagreed), 8.2% of the respondents disagree, 6.1% of the respondents strongly disagree with a mean 4.0204 and a standard deviation of 1.23305. The result indicated that 73.5% of the respondents (strongly agreed and agreed) that evaluation committee does not submit the result to the procurement endorsing committee within the bid validity period and its effects on effectiveness of centralized procurement contract management.

On Procurement endorsing committee has not Endorse the bid evaluation results within the bid validity period that, 44.9% of the respondents strongly agree, 28.6% of the respondents agree, 14.3% Undecided(neither agreed nor disagreed), 8.2% of the respondents disagree, 4.1% of the respondents strongly disagree with a mean 4.0204 and a standard deviation of 1.23305. The result indicated that 73.5% of the respondents (strongly agreed and agreed) that Procurement endorsing committee has not Endorse the bid evaluation results within the bid validity period and its effects on effectiveness of centralized procurement contract management.

On Evaluation result/decisions changed by complaint board of PPPAA that, 55.1% of the respondents strongly agree, 26.5% of the respondents agree, 8.2% Undecided(neither agreed nor disagreed), 10.2% of the respondents disagree with a mean 4.2653 and a standard deviation of .99531. The result indicated that 81.6% of the respondents (strongly agreed and agreed) that Evaluation result/decisions changed by complaint board of PPPAA and its effects on effectiveness of centralized procurement CM.

**4.3.4 Legal framework and its effect on the effectiveness of contract management****Table 4: 11 Response summary on Legal Framework**

No	Statement	Scale	Frequency	Percent	Mean	SD
1	In a framework agreement of PPPDS split the award in such a way that 60% of the total value of contract for First winner and the remain for others winners	Disagree	15	30.6	3.4082	1.05906
		Undecided	5	10.2		
		Agree	23	46.9		
		Strongly Agree	6	12.2		
		Total	49	100.0		
2	A legal framework for special procurement of common user items does not giving a chance for new suppliers to enter the procurement process.	Strongly Disagree	2	4.1	3.1429	1.08012
		Disagree	15	30.6		
		Undecided	10	20.4		
		Agree	18	36.7		
		Strongly Agree	4	8.2		
		Total	49	100.0		
3	In the case of a framework agreement there is a poor Contract management.	Strongly Disagree	1	2.0	2.6327	.88256
		Disagree	27	55.1		
		Undecided	11	22.4		
		Agree	9	18.4		
		Strongly Agree	1	2.0		
		Total	49	100.0		
4	In procurement and contract management of framework agreement, the roles of procuring entities & PPPDS are not Cleary identifies.	Strongly Disagree	4	8.2	3.2449	1.03139
		Disagree	9	18.4		
		Undecided	7	14.3		
		Agree	29	59.2		
		Total	49	100.0		
5	Suppliers complain on the framework agreement's rules and procedures.	Strongly Disagree	1	2.0	3.2245	1.08523
		Disagree	17	34.7		
		Undecided	5	10.2		
		Agree	22	44.9		
		Strongly Agree	4	8.2		
		Total	49	100.0		
6	The issues of contract management not covered in detail in procurement of legal framework.	Strongly Disagree	3	6.1	3.4898	.98155
		Disagree	6	12.2		
		Undecided	6	12.2		
		Agree	32	65.3		
		Strongly Agree	2	4.1		
		Total	49	100.0		

Source: Own survey (2020)

Table 4.11 above indicated the results on factors affecting effectiveness of centralized procurement contract management that, on in a framework agreement of PPPDS split the award in such a way that 60% of the total value of contract for first winner and the remain for others winners could reduce open competition and fairness in long term period that, 12.2% of the respondents strongly agree, 46.9% of the respondents agree, 10.2% Undecided(neither agreed nor disagreed), 30.6% of the respondents disagree with a mean 3.4082 and a standard deviation of 1.05906. The result indicated that 59.1% of the respondents (strongly agreed and agreed) that in a framework agreement of PPPDS split the award in such a way that 60% of the total value of contract for first winner and the remain for others winners could reduce open competition and fairness in long term period and its effects on effectiveness of centralized procurement contract management while 30.6% of the respondents disagree. Those respondents think that not reduce open competition by split the awards.

on a legal framework for special procurement of common user items does not giving a chance for new suppliers to enter the procurement process that, 8.2% of the respondents strongly agree, 36.7% of the respondents agree, 20.4% Undecided (neither agreed nor disagreed), 30.6% of the respondents disagree, 4.1% of the respondents strongly disagree with a mean 3.1429 and a standard deviation of 1.08012. The result indicated that 44.9% of the respondents means less than half of respondents (strongly agreed and agreed) that in a legal framework for special procurement of common user items does not giving a chance for new suppliers to enter the procurement process and its effects on effectiveness of centralized procurement contract management while 30.6% of the respondents were disagreed. Those respondents think that it has giving equal chance for new comers to enter the procurement process.

On in the case of a framework agreement there is a poor Contract management that, 2% of the respondents strongly agree, 18.4% of the respondents agree, 22.4% Undecided (neither agreed nor disagreed), 55.1% of the respondents disagree, 2% of the respondents strongly disagree with a mean 2.6327 and a standard deviation of .88256. The result indicated that 55.1% of the respondents means more than half of respondents (disagreed)

that there is a poor Contract management and its effects on effectiveness of centralized procurement contract management while 18.4% and 22.4 % of the respondents were agreed and Undecided (neither agreed nor disagreed) respectively.

On in procurement and contract management of framework agreement, the roles of procuring entities & PPPDS are not clearly identifies that, 59.2% of the respondents agree, 14.3% Undecided (neither agreed nor disagreed), 18.4% of the respondents disagree, 8.22% of the respondents strongly disagree with a mean 3.2449 and a standard deviation of 1.03139. The result indicated that more than half respondents agreed that the roles of procuring entities & PPPDS are not clearly identifies and its effects on effectiveness of centralized procurement contract management. On Suppliers complain on the framework agreement's rules and procedures that, 8.2% of the respondents strongly agree, 44.9% of the respondents agree, 10.2% Undecided (neither agreed nor disagreed), 34.7% of the respondents disagree, 2% of the respondents strongly disagree with a mean 3.2245 and a standard deviation of 1.08523. The result indicated that 53.1% of the respondents means more than half of respondents (strongly agreed and agreed) that Suppliers complain on the framework agreement's rules and procedures and its effects on effectiveness of centralized procurement contract management while 34.7 % of the respondents were disagreed.

On the issues of contract management not covered in detail in procurement of legal framework that, 4.1% of the respondents strongly agree, 65.3% of the respondents agree, 12.2% Undecided (neither agreed nor disagreed), 12.2% of the respondents disagree, 6.1% of the respondents strongly disagree with a mean 3.4898 and a standard deviation of .98155. The result indicated that 69.4% of the respondents means more than half of respondents (strongly agreed and agreed) that the issues of contract management not covered in detail in procurement of legal framework and its effects on effectiveness of centralized procurement contract management.

**4.3.5 Effectiveness of contract management****Table 4: 12 Response summary on Effectiveness of contract management**

No	Statement	Scale	Frequency	Percent	Mean	SD
1	Procurement contracts are not well administered.	Strongly Disagree	5	10.2	3.5714	1.20761
		Disagree	5	10.2		
		Undecided	5	10.2		
		Agree	25	51.0		
		Strongly Agree	9	18.4		
		Total	49	100.0		
2	Contract does not deliver on time, completed within the agreed price & in the right quantity.	Strongly Disagree	2	4.1	3.5510	.98025
		Disagree	8	16.3		
		Undecided	3	6.1		
		Agree	33	67.3		
		Strongly Agree	3	6.1		
		Total	49	100.0		
3	There is poor communication and relationship between contracting parties.	Strongly Disagree	2	4.1	3.7143	.86603
		Disagree	4	8.2		
		Undecided	3	6.1		
		Agree	37	75.5		
		Strongly Agree	3	6.1		
		Total	49	100.0		
4	Contracts not completed to the required specifications, standards and/or quality.	Strongly Disagree	2	4.1	3.5714	.88976
		Disagree	5	10.2		
		Undecided	7	14.3		
		Agree	33	67.3		
		Strongly Agree	2	4.1		
		Total	49	100.0		
5	There is termination of contracts.	Strongly Disagree	2	4.1	4.0408	.95654
		Disagree	1	2.0		
		Undecided	6	12.2		
		Agree	24	49.0		
		Strongly Agree	16	32.7		
		Total	49	100.0		
6	There is a shortage of effective and efficient	Strongly Disagree	2	4.1		
		Disagree	2	4.1		

	management of performance, delivery and payment.	Undecided	2	4.1	3.8571	.81650
		Agree	38	77.6		
		Strongly Agree	5	10.2		
		Total	49	100.0		
7	There is a contract delay.	Strongly Disagree	1	2.0	4.2449	.82993
		Disagree	1	2.0		
		Undecided	3	6.1		
		Agree	24	49.0		
		Strongly Agree	20	40.8		
		Total	49	100.0		
8	There is no active risk mitigation, management and resolution of issues and disputes	Strongly Disagree	3	6.1	3.2653	1.15064
		Disagree	13	26.5		
		Undecided	6	12.2		
		Agree	22	44.9		
		Strongly Agree	5	10.2		
		Total	49	100.0		

Source: Own survey (2020)

Table 4.12 above indicated the results on factors affecting effectiveness of centralized procurement contract management that, on Procurement contracts are not well administered that, 18.4% of the respondents strongly agree, 51.0% of the respondents agree, 10.2% Undecided (neither agreed nor disagreed), 10.2% of the respondents disagree, 10.2% of the respondents strongly disagree with a mean 3.5714 and a standard deviation of 1.20761. The result indicated that 69.4% of the respondents (strongly agreed and agreed) that Procurement contracts are not well administered in PPPDS and its effects on effectiveness of centralized procurement contract management.

on contract does not deliver on time, completed within the agreed price & in the right quantity that, 6.1% of the respondents strongly agree, 67.3% of the respondents agree, 6.1% Undecided (neither agreed nor disagreed), 16.3% of the respondents disagree, 4.1% of the respondents strongly disagree with a mean 3.5510 and a standard deviation of .98025. The result indicated that 68.4% of the respondents (strongly agreed and agreed) that contract does not deliver on time, completed within the agreed price & in the right quantity in PPPDS and its effects on effectiveness of centralized procurement contract management.

With regard to the question raise to respondents on There is poor communication and relationship between contracting parties that, 4.1% of the respondents strongly agree, 67.3% of the respondents agree, 14.3% Undecided (neither agreed nor disagreed), 10.2% of the respondents disagree and 4.1% of the respondents strongly disagree with a mean 3.7143 and a standard deviation of 86603. The result indicated that 71.4% of the respondents (strongly agreed and agreed) that There is poor communication and relationship between contracting parties in this organization and its effects on effectiveness of centralized procurement contract management.

On Contracts not completed to the required specifications, standards and/or quality that, 4.1% of the respondents strongly agree, 67.3% of the respondents agree, 14.3% Undecided (neither agreed nor disagreed), 10.2% of the respondents disagree, and 4.1% of the respondents strongly disagree with a mean 3.5714 and a standard deviation of .88976. The result indicated that 71.4% of the respondents (strongly agreed and agreed) that Contracts not completed to the required specifications, standards and/or quality in this organization and its effects on effectiveness of centralized procurement contract management.

On there is termination of contracts that, 32.7% of the respondents strongly agree, 49% of the respondents agree, 12.2% Undecided (neither agreed nor disagreed), 2% of the respondents disagree, and 4.1% of the respondents strongly disagree with a mean 4.0408 and a standard deviation of .95654. The result indicated that 81.7% of the respondents (strongly agreed and agreed) that there is termination of contracts in this organization and its effects on effectiveness of centralized procurement contract management.

On there is a shortage of effective and efficient management of performance, delivery and payment that, 10.2% of the respondents strongly agree, 77.6% of the respondents agree, 4.1% Undecided (neither agreed nor disagreed), 4.1% of the respondents disagree, and 4.1% of the respondents strongly disagree with a mean 3.8571 and a standard deviation of .81650. The result indicated that 87.8% of the respondents (strongly agreed and agreed) that there is a shortage of effective and efficient management of performance, delivery and payment in this organization and its effects on effectiveness of centralized procurement contract management.

On there is a contract delay that, 40.8% of the respondents strongly agree, 49% of the respondents agree, 6.1% Undecided (neither agreed nor disagreed), 2% of the respondents disagree, and 2% of the respondents strongly disagree with a mean 4.2449 and a standard deviation of .82993. The result indicated that 89.8% of the respondents (strongly agreed and agreed) that there is a contract delay in this organization and its effects on effectiveness of centralized procurement contract management.

On there is no active risk mitigation, management and resolution of issues and disputes that, 10.2% of the respondents strongly agree, 44.9% of the respondents agree, 12.2% Undecided (neither agreed nor disagreed), 26.5% of the respondents disagree, and 6.1% of the respondents strongly disagree with a mean 3.2653 and a standard deviation of 1.15064. The result indicated that 55.1 % of the respondents (strongly agreed and agreed) that there is no active risk mitigation, management and resolution of issues and disputes in this organization and its effects on effectiveness of centralized procurement contract management while 26.5% of the respondents disagreed.

#### **4.4 Preliminary Analysis and Assumption Tests**

This study used inferential analysis is concerned with the various tests of significance for normality, autocorrelation and multicollinearity in order to determine the validity of data. The data was sorted to group questions according to applicable constructs under test. Finally correlation and standard multiple regression analysis were performed. Tests and analysis of the data are presented below:

##### **4.4.1 Normality Test**

Frequency distributions come in many different shapes and sizes. It is quite important, therefore, to have some general descriptions for common types of distributions. In an ideal world our data would be distributed symmetrically around the center of all scores. As such, if we drew a vertical line through the center of the distribution then it should look the same on both sides. This is known as a normal distribution and is characterized by the bell-shaped curve. This shape basically implies that the majority of scores lie around the center of the distribution (so the largest bars on the histogram are all around the central value (Field, 2006).

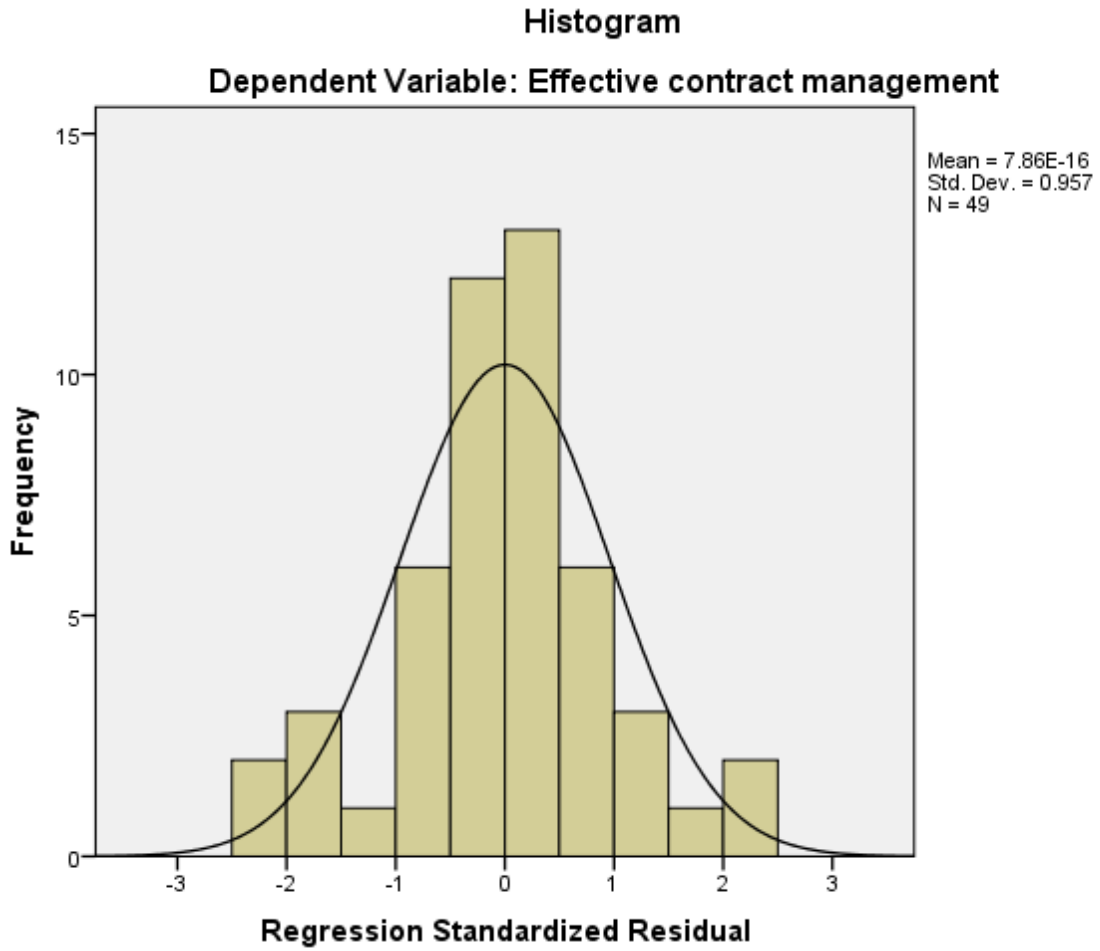
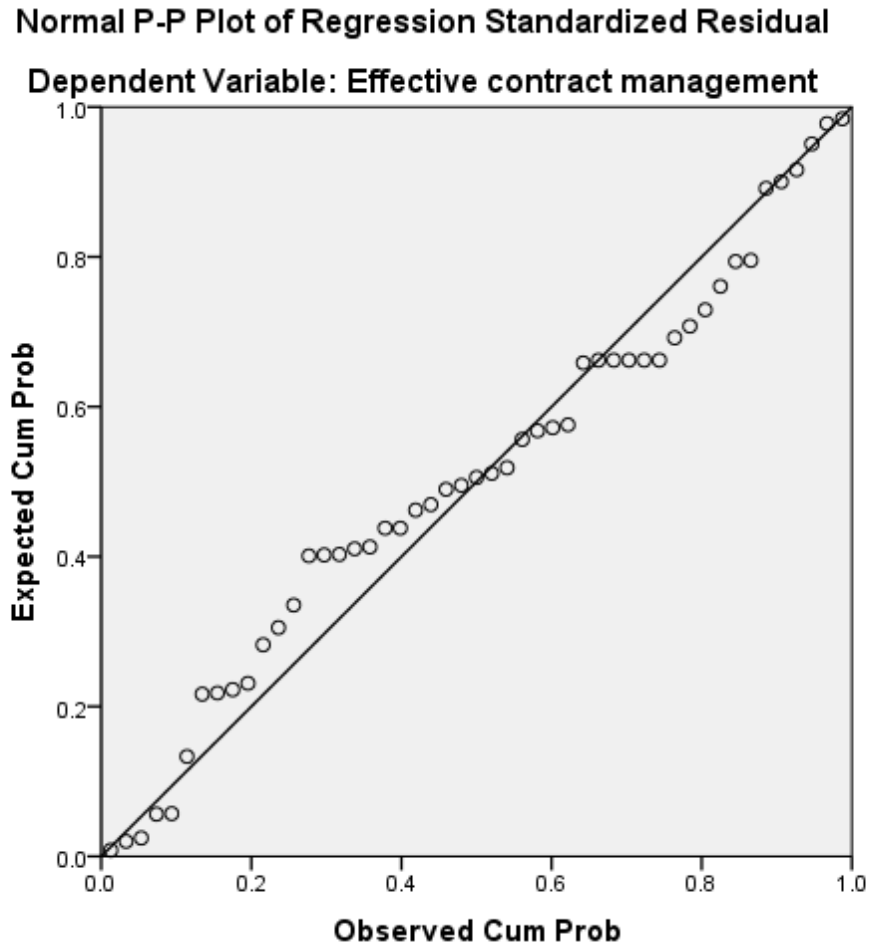


Figure 4: 1 Normal distributions of the data



Source: Own survey (2020)

Figure 4: 2 Normal distributions of the data

#### 4.4.2 Multicollinearity Assumptions

Multicollinearity exists when there is a strong correlation between two or more predictors in a regression model (Saunders et.al, 2007). There should be no perfect linear relationship between two or more the predictors. So the predictor variables should not correlation too highly (Ho, 2006). If there is perfect collinearity between predictors it becomes impossible to obtain unique estimates of the regression coefficients because there are an infinite number of combinations of coefficients that would work equally well. Perfect collinearity is rare in real-life data, but less than perfect collinearity is virtually unavoidable (Field, 2006). This research data multi-collinearity assumption is checked by the Pearson correlation Coefficient and Collinearity Statistics:

### a. Assumption test using Spearman's Correlation Coefficient

The first assumption is checking the value of Pearson correlation coefficient among predictor's variables. If Pearson correlation coefficient ( $r$ ) value among predictors are below  $<0.9$ , there is no substantial correlation between predictor variables so there is no multi-collinearity problem (Field, 2006). All the Pearson correlation coefficient values ( $r$ ) between predictors are below 0.90. Therefore, it is satisfied multi-collinearity assumption and don't have collinearity problem so that it is able to obtain unique estimates of the regression coefficient.

### b. Assumption test using Collinearity Statistics

The other way of checking the multicollinearity assumption is that by looking SPSS analysis output correlation table of collinearity statistics value of Tolerance and VIF (Field, 2006). The VIF indicates whether a predictor has strong linear relationship with the other predictor(s). Field (2006), and suggest that if the average VIF is greater than 10, then multicollinearity may be biasing the regression model. Related to the VIF is the tolerance statistics, which is a reciprocal of VIF ( $1/VIF$ ). Such values below 0.2 are worthy of concern. The Tolerance column value below 0.02 and VIF value above 10 pose a multicollinearity problem. Having this, the Tolerance and VIF value is shown in coefficient table 4.13 below and the analysis indicate that there is no multicollinearity problem.

Table 4: 13 Collinearity statistics value

Model	Collinearity Statistics	
	Tolerance	VIF
Staff competency	.689	1.451
Technology Adoption	.521	1.918
Evaluation process	.356	2.813
Legal framework	.691	1.447

Source: Survey Result (2020)

#### 4.4.3 Auto-correlation Assumption /Durbin–Watson test/

It is the assumption of independent error tenable or reasonable test. Durbin-Watson used to test for serial correlation between errors. The test statistic value  $d$  can vary between 0 and 4, with a value of 2 meaning the residuals are uncorrelated. A value greater than 2 indicates a negative correlation between adjacent residuals, whereas a value below 2 indicates a positive correlation (Field, 2006). Similarly, Ott and Longnecker (2001) defines when there is no serial correlation, the expected value of the Durbin–Watson test statistic  $d$  is approximately 2.0; positive serial correlation makes  $d < 2.0$  and negative serial correlation makes  $d > 2.0$ . Although, values of  $d$  less than approximately 1.5 (or greater than approximately 2.5) lead one to suspect positive (or negative) serial correlation. If serial correlation is suspected, then the proposed multiple regression models are inappropriate and some alternative must be sought. In this research model the value of the test is 1.71, so it can be safely assumed that there is no problem of autocorrelation.

#### 4.4.4: Correlations Analysis:

Correlation analysis shows the degree of association between variables and indicates the direction in which the variables associate - positively or negatively (Reimann et.al, 2008). The correlation coefficient is a measure of this relationship and depends on the variability of each of the two variables. Because of covariance, correlation coefficient can take a number with + or – sign (Reimann et.al, 2008).

One of the widely used methods to calculate a correlation coefficient is the Pearson product moment correlation. This method results in a number between  $-1$  and  $+1$  that expresses how closely the two variables are related,  $\pm 1$  shows a perfect 1:1 relationship (positive or negative) and 0 indicates that no systematic relationship exists between the two variables (Reimann et.al, 2008). The result of correlation is presented on following the tables and interpreted by the guide line suggested by Field (2006); he mentioned that the Pearson correlation coefficient is shown the relationship between the predictor and outcome variable. The relationship is measured in the range of 0.1 to 0.29 is weak relationship, 0.30 to 0.49 is moderate, above 0.50 shows strong relationship; while the positive and negative sign is for the direction of their relationship (Field, 2006).

In this study, bivariate Pearson correlation was used to examine the relationship between

each of the independent variables and the dependent variable using a two tailed test of statistical significance at the level of 99% confidence and significance < 0.01.

**Table 4: 14 Correlation table for independent and dependent variables**

<b>Correlations</b>		Staff competency	Technology Adoption	Evaluation process	Legal framework	Effective contract management
Staff competency	Correlation Coefficient	1.000	0.124	.427**	0.249	.656**
	Sig. (2-tailed)		0.395	0.002	0.085	0.000
	N	49	49	49	49	49
Technology Adoption	Correlation Coefficient	0.124	1.000	.532**	0.025	.453**
	Sig. (2-tailed)	0.395		0.000	0.866	0.000
	N	49	49	49	49	49
Evaluation process	Correlation Coefficient	.427**	.532**	1.000	.397**	.684**
	Sig. (2-tailed)	0.002	0.000		0.005	0.000
	N	49	49	49	49	49
Legal framework	Correlation Coefficient	0.249	0.025	.397**	1.000	.585**
	Sig. (2-tailed)	0.085	0.866	0.005		0.001
	N	49	49	49	49	49
Effective contract management	Correlation Coefficient	.656**	.453**	.684**	.585**	1.000
	Sig. (2-tailed)	0.000	0.000	0.000	0.001	
	N	49	49	49	49	49

**\*\*.** Correlation is significant at the 0.01 level (2-tailed).

As indicated in the correlation table 4.14 Pearson correlation coefficient was used to determine the strength of relationship between the dependent (effectiveness of contract management) and independent variables (Staff competency, Technology Adoption,

Evaluation process and Legal framework). It is a non-parametric technique which gives a measure of the strength of association between two variables.

As it can be shown in the above correlation matrix, each variable is perfectly correlated with itself. Staff competency is positively and strongly related to Effective contract management with Spearman's correlation coefficient of  $r= 0.656$ ,  $P=0 <0.01$ , and also, there is found to be a positive and significant relation between Technology adoption and Effective contract management as shown by a correlation figure of  $r= 0.453$ ,  $P= 0 <0.01$ .

This shows that there was positive correlation or strong relationship between Technology Adoption and Effective contract management, Evaluation process is positively and significantly related to Effective contract management with Pearson correlation coefficient of  $r= 0.684$ ,  $P= 0 <0.01$ , this indicates that Evaluation process is strongly related to Effective contract management, there is found to be a positive correlation and significant relation between Legal framework with Effective contract management as shown by a correlation figure of  $r= 0.585$ ,  $P=0 <0.01$ .

This shows that there was strong correlation between Legal framework with Effective contract management. The correlation between all independent variables and dependent variable is proved to be positive and significant which means the improvement in any or all of the independent variable results in Effective contract management.

#### 4.4.5 Multiple Regression Results

The study conducted a **multiple regression analysis** so as to test the effect of independent variables (Staff competency, Technology Adoption, Evaluation process and Legal framework) on the **effectiveness of contract management**. The researcher applied the statistical package for social sciences (SPSS) to code, enter and compute the measurements of the multiple regressions for the study.

Regression of the effect of independent variables (Staff competency, Technology Adoption, Evaluation process and Legal framework) on **Effective contract management** is presented below.

#### I. Coefficient of Determination

Model summary table describes the overall model whether the model is successful in predicting dependent variables. It gives a value of R square, which measure of how much

of the variability in the outcome is accounted for the predictors. In addition, this summary table tells us whether auto-correlation assumption is satisfied or not through Durbin Watson value (Field, 2006).

**Table 4: 15 Model Summaries**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.870 <sup>a</sup>	0.757	0.735	0.30235	1.71

a. Predictors: (Constant), Staff competency, Technology Adoption, Evaluation process, Legal framework

b. Dependent Variable: Effective contract management

From Table 4.15, the independent variables that were studied, explain only 75.7% of the variables that are Effective contract management as represented by the  $R^2$ . This means that other factors not studied in this research contribute 24.3% affecting Effectiveness of contract management in the case of PPPDS. Therefore, further research should be conducted to investigate the other factors (24.3%) that influence the Effective contract management. Moreover, the adjusted R square gives some idea of how well the model generalizes and ideally it would like its value to be the same or close to, the value of R square (Field, 2006). The model generalization value is the difference between R square and adjusted R square, refer table 4.16,  $0.757 - 0.735 = 0.022$ , about 2.2%. Therefore, the adjusted R square value for the model shows that 75.7% of goodness of fit of the model is good.

## II. Analysis of Variance /ANOVA/ Test

ANOVA model is more likely to be significant, indicating that at least one group mean is different from another group mean. ANOVA is the appropriate statistical technique to examine the effect of a less-than interval independent variable on an at-least interval dependent variable. If the F test result is not significant, the model should be dismissed and there is no need to proceed to further steps (William and Barry, 2010).

Table 4: 16 ANOVA table

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	12.561	4	3.140	34.353	.000 <sup>b</sup>
	Residual	4.022	44	.091		
	Total	16.584	48			

a. Dependent Variable: Effective contract management

b. Predictors: (Constant), Legal framework, Technology Adoption, Staff competency, Evaluation process

Source: Survey Result (2020)

The ANOVA test result of competitive performance is indicated on above table 4.16, it is noticed that F value 34.353 is significant at  $P=0<0.001$  levels. Therefore, from the result, it can be concluded that the combination of the independent variables (Staff competency, Technology Adoption, Evaluation process and Legal framework) significantly predicts the dependent variable (Effective contract management)

### III. Regression Coefficients or Model for hypothesis testing

Standardized regression coefficient (Beta) is the estimated coefficient indicating the strength of relationship between an independent variable and dependent variable expressed on a standardized scale where higher absolute values indicate stronger relationships (range is from -1 to 1) (William and Barry, 2010).

Table 4: 17 Coefficients table

Model	Un standardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.086	.419		2.593	.013
Staff competency	.342	.104	.295	3.294	.002
Technology Adoption	.214	.055	.401	3.899	.000
Evaluation process	.351	.094	.335	3.750	.001
Legal framework	.219	.094	.288	2.315	.025

a. Dependent Variable: Effective contract management

Source: Survey Result (2020)

Table 4.17 shows the Beta Coefficients that present the contributions or positive or negative relationship of each variable to the model. The t and p values showed the influence of the independent variables on the dependent variable. At 5% level of significance and 95% level of confidence, Staff competency had a 3.294 level of significance, Legal framework had 2.315 level of significant and Technology adoption showed 3.899 level of significant and Evaluation process showed 3.750 level of significant. Hence the most significant factor is technology adoption and the least one is technology adoption.

According to beta coefficient results, all predictors (Staff competency, Technology Adoption, Evaluation process and Legal framework) are positively related to dependent variables and significantly affect Effective contract management. The study conducted a multiple regression analysis to determine the relationship between independent variables and dependent variable.

From the regression equation established, taking all factors (Staff competency, Technology Adoption, Evaluation process and Legal framework) constant at zero, Effective contract management at PPPDS would be 1.086. Further, if all the other variables (Staff competency, Technology Adoption, Evaluation process and Legal framework) are kept constant, a unit increase **Staff competency**, there is an increase of 0.295 in Effectiveness of contract management at PPPDS, a unit increase in **Technology adoption**, there is an increase of 0.401 in Effectiveness of contract management at PPPDS. keeping all other variables (Staff competency, Technology Adoption, Evaluation process and Legal framework) are constant, if all the other variables (staff competency, Technology Adoption and Legal framework) are kept constant, a unit increase in **Evaluation process**, there is an increase of 0.335 in Effectiveness of contract management at PPPDS. And also a unit increase in **Legal Framework** will lead to a 0.288 increases in Effectiveness of contract management at PPPDS keeping all other variables (Staff competency, Technology Adoption, and Evaluation process) are constant.

The study discovered that the degree of effect of the effectiveness of contract management can determine by those identified independent or predictor variables. The study developed below regression model:

$$ECM = 1.086 + 0.288LF + 0.335EP + 0.401TA + 0.295SC + \varepsilon$$

By examining the un standardized regression coefficient ( $\beta$ ) for each of the predictor variables, the result found that Staff competency ( $\beta = 0.295$ ,  $p(0) < 0.05$ ), Technology Adoption, ( $\beta = 0.401$ ,  $p(0.003) < 0.05$ ), Evaluation process ( $\beta = 0.335$ ,  $p(0) < 0.05$ ) and Legal framework ( $\beta = 0.288$ ,  $p(0) < 0.05$ ) show significant positive relationship with effectiveness of contract management. So, there is a positive relationship between the predictors (Staff competency, Technology Adoption, Evaluation process and Legal framework) and outcome (Effective management). As Staff competency, Technology Adoption, Evaluation process and Legal framework in a good position, Effective contract management is also improved.

## CHAPTER FIVE

### SUMMARY, CONCLUSION AND RECOMMENDATION

This chapter presents a summary of the findings, conclusions and recommendations made to help and improve the Effectiveness of centralized procurement contract management in PPPDS based on the objectives of the study. The chapter also concludes with recommended areas for further research work.

#### 5.1 Summary of Finding

According to data analysis in the previous sections summary of findings is presented separately under each objectives of the study as follows.

##### 5.1.1 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 management, professionally experienced staff being empowered and motivated to carry out their duties well thus improving contract management, the role of staff with technical skills doing things right the first time, and doing things effectively and efficiently. Also included were staffs with right education performing their tasks efficiently to improve contract management and while superior educational levels leading to staff motivation. All the metrics for the staff competencies fell between 3.7 and 4.1 therefore leading to a conclusion that on average the respondents agreed that the staff competencies improved contract management.

The standard deviation of the six components of staff competencies fell between 0.5 and 1 (least standard deviation being 0.5 and the highest being 0.85) 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 management aspects.

Regression analysis shows that this variable contributed 0.295 to effective procurement contract management. This means that the procurement contract management is improved

by a magnitude of 0.295 when there is a unit improvement staff competencies with other factors held constant.

From Spearman's correlation coefficient, Effectiveness of centralized procurement contract management in PPPDS is positively related to Staff competency with Spearman's correlation coefficient of  $r_s = 0.656$ ,  $P < 0.01$ .

From the regression model, a unit increase in Staff competency in effective procurement contract management, there is an increase of 0.295 in effectiveness of contract management at PPPDS. This implies that Staff competency accounts for 29.5% of variations in effective contract management at PPPDS. The results as shown that Staff competency is one of the factors that hinder Effectiveness of centralized procurement contract management at PPPDS.

The study also found out there was poor contract management at the PPPDS characterized by late delivery of goods, delays in payments to suppliers and lack of proper controlling mechanism.

### **5.1.2 Technology Adoption**

The means of the six components of the Technology Adoption were calculated through use of SPSS software. These included supporting procurement contract management by IT increases effectiveness, speed of doing things, IT helps in cost reduction and increase in productivity, Internet connections it helps communicate with supplier and thus saving time were in this range resulting in improvement of contract management. All the metrics for the Technology Adoption fell between 3.0 and 3.2 therefore leading to a conclusion that on average the respondents agreed that the Technology Adoption improved contract management.

The standard deviation of the six components of Technology Adoption fell between 0.5 and 1 (least standard deviation being 1.14 and the highest being 1.27) 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 Technology Adoption aspects on contract management aspects.

Regression analysis shows that this variable contributed 0.401 to effective procurement contract management. This means that the procurement contract management is improved by a magnitude of 0.401 when there is a unit improvement Technology Adoption with other factors held constant.

From Spearman's correlation coefficient, Effectiveness of centralized procurement contract management in PPPDS is positively related to Technology Adoption with Spearman's correlation coefficient of  $r_s = 0.453$ ,  $P < 0.01$ .

From the regression model, a unit increase in Technology Adoption effective procurement contract management, there is an increase of 0.401 in effectiveness of contract management at PPPDS. This implies that Technology Adoption accounts for 40.1% of variations in effective contract management at PPPDS. The results as shown that Technology Adoption is one of the factors that hinder Effectiveness of centralized procurement contract management at PPPDS.

The study also found out there was poor use of IT at the PPPDS characterized by contract management activities were not performed by Information technology while most activities were done as like manually.

### **5.1.3 Evaluation process**

The means of the seven components of the Evaluation process were calculated through use of SPSS software. These included bidding documents like evaluation criteria, technical requirement endorsing by PEC it uses for effectiveness of contract, evaluation process, stated criteria, and evaluation process conducted by adequate qualified procurement experiment it increase effectiveness of contract management while evaluation results submitted and approved by PEC on within the bid validity period and it minimizes complaints on Evaluation process . All the metrics for the Evaluation process fell between 3.95 and 4.36 therefore leading to a conclusion that on above average the respondents agreed that the Evaluation process improved contract management.

The standard deviation of the seven components of Evaluation process fell between 0.5 and 1 (least standard deviation being 0.85 and the highest being 1.32) 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 Evaluation process aspects on contract management's aspects.

Regression analysis shows that this variable contributed 0.335 to effective procurement contract management. This means that the procurement contract administration is improved by a magnitude of 0.335 when there is a unit improvement staff <sup>competencies</sup> with other factors held constant.

From Spearman's correlation coefficient, Effectiveness of centralized procurement contract management in PPPDS is positively related to Evaluation process with Spearman's correlation coefficient of  $r_s = 0.684$ ,  $P < 0.01$ .

From the regression model, a unit increase in Evaluation process in effective procurement contract management, there is an increase of 0.335 in Effectiveness of centralized procurement contract management in PPPDS. This implies that Evaluation process accounts for 33.5% of variations in Effectiveness of centralized procurement contract management in PPPDS. The results as shown that Evaluation process is one of the factors that hinder Effectiveness of centralized procurement contract management in PPPDS.

The study also found out there was Evaluation process gabs, like small number of staffs does not cover all procurement contract activities to perform on a time and schedule. Besides this evaluation process has three stages in PPPS due to these reasons delaines is happened.

#### **5.1.4 Legal framework**

The means of the six components of the Legal framework were calculated through use of SPSS software. These included in FA split of award, giving a chance for new supplier to improve effectiveness of centralized procurement contract management. On other hand the roles of procuring entities and PPPDS are clearly identify, minimizing suppliers complaint and in a legal framework to include most issues about contract management in detail is also improve contract management performance. All the metrics for the Legal framework fell between 2.63 and 3.48 therefore leading to a conclusion that on average the respondents agreed that the Legal framework improved contract management.

The standard deviation of the six components of Legal framework fell between 0.5 and 1 (least standard deviation being 0.88 and the highest being 1.08) 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 Legal Framework aspects on contract management aspects.

Regression analysis shows that this variable contributed 0.288 to effective procurement contract management. This means that the procurement contract management is improved by a magnitude of 0.288 when there is a unit improvement Legal framework with other factors held constant.

From Spearman's correlation coefficient, Effectiveness of centralized procurement contract management in PPPDS is positively related to Legal framework with Spearman's correlation coefficient of  $r_s = 0.585$ ,  $P < 0.01$ .

From the regression model, a unit increase in Legal framework in effective procurement contract management, there is an increase of 0.288 in Effectiveness of centralized procurement contract management in PPPDS. This implies that Legal framework accounts for 28.8% of variations in effectiveness of centralized procurement contract management in PPPDS. The results as shown that Legal framework is one of the factors that hinder Effectiveness of centralized procurement contract management in PPPDS.

The sought that split of award for the first winner is 60% of the total and the rest 40% for others is does not giving a chance for new suppliers. The legal framework should be seen and revised by regulatory body which is PPPAA.

#### **5.1.5 Effective contract management**

Effective Procurement Contract management 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 3.26 to 4.24. This led to

the conclusion that on average the respondents agreed on the stated contract management metrics.

In the context of the standard deviations, the study revealed that the standard deviations for all the metrics fell between 0.5 and 1 indicating an average variation of responses relative to the mean (least standard deviation being 0.81 and the highest being 1.20). A conclusion was therefore reached that there was a moderate consensus amongst the respondents in respect to the contract management aspects.

The study also found out there was a contract does not deliver on time, within agreed price, right quantity and contracts not completed to required specification, standards and/or quality.

There was also a shortage of effective and efficient contract management performance, common user items does not deliver at a time for public bodies, there is also termination, delay while in PPPDS there were not risk mitigation strategies, scientific mechanism to resolution of contract management issues and disputes.

## **5.2 Conclusion**

The study concluded that all the staff competency, Technology Adoption, Evaluation process and Legal framework have statistically significant influence on the effectiveness of centralized procurement contract management in PPPDS.

The Evaluation process had the greatest influence on ( $\beta=0.684$ ) followed by Staff competency had influence on ( $\beta=0.656$ ) next, Legal framework had influence on ( $\beta=0.585$ ), finally Technology Adoption had influence on ( $\beta=0.453$ ) it is mean that legal framework had not impacts on effectiveness of centralized procurement contract management in PPPDS.

All independent variables had impacts on effectiveness of centralized procurement contract management in PPPDS.

### 5.3 Recommendation for PPPDS

- The study established that Staff competency affects effectiveness of centralized procurement contract management. The study recommends that Staffs should have knowledge, experience, skills, ability to perform their tasks efficiently and effectively besides that staffs motivation is needed for to improve effectiveness of centralized procurement contract management.
- PPPDS should be preparing professional Trainings for staffs.
- PPPDS should be preparing motivational strategies for staffs and to give training on SKAs.
- Incentives also needs for staffs to improve contract management effectiveness.
- The study established that Technology Adoption affects effectiveness of centralized procurement contract management. The study recommends that PPPDS should be transfer manual works to electronics based.
- PPPDS Should be performing works by information technology rather than manuals.
- This organization is one of a pilot entities within seven selected entities to choose by PPPAA for applying to e-GP system Implementation, PPPDS should be applying this system which developed by PPPAA.
- PPPDS should be transfer manual works to electronics based.
- The study established that evaluation process affects effectiveness of centralized procurement contract management. The study recommends that PPPDS should apply electronics software to minimize workloads from staffs.
- Evaluation should perform by adequate qualified procurement experts.
- Evaluation team's members should be increase by numbers.
- Evaluation process procedures should precise and evaluation results should finish within a bid validity date.
- Endorsing committee should approve every document from bid preparation documents to evaluated bids.
- The study established that Legal framework also affects effectiveness of centralized procurement contract management. The study recommends that PPPDS should be

discussing with PPPAA to revisiting /revision of proclamation and directive to be flexible and easy.

- The roles of procuring entities and PPPDS should clearly identify.

Finally, the study observed that there was a contract termination, delay, shortage of effective and efficient management of performance, delivery and payment while procurement contracts are not well administered. So that PPPDS should have prepared strategies for to overcome the above problems.

#### **5.4 Suggestion for Further Study**

The scope of this research was attempted to assess factors affecting **effectiveness of centralized procurement contract management**, in Federal Public Procurement and Property Disposal Service. The study found that the variables considered; staff competency, Technology Adoption, Evaluation process and Legal framework 75.7% variability in contract management effectiveness; implying that the 24.3% could be due to other factors beyond the scope of this study.

It is therefore recommended that this research helps other researcher or other interested organizations that necessitate conducting detailed research in contract management its might uses study as a preliminary for further and detailed studies.

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## APENDEX-1

**RESEARCH QUESTIONNAIRE**  
**FACTORS AFFECTING EFFECTIVENESS OF CENTRALIZED**  
**PROCUREMENT CONTRACT MANAGEMENT, THE CASE OF PUBLIC**  
**PROCUREMENT AND PROPERTY DISPOSAL SERVICE OF (ETHIOPIA)**  
**(AAU, College of Economics and Business, MBA)**

**Dear respondent,**

The objective of this study collecting data related with contract management by looking on the reasons to what **factors affecting effectiveness of centralized procurement contract management**, in PPPDS. You are kindly requested to respond to the questions to the best of your knowledge and feel free. Your response will highly contribute to the achievement of this research of which its results are intended to have multiple effects to the Procurement Professionals, Local Government, Government Agencies, Ministries and Nation as whole. Furthermore the researcher wishes to assure you anonymity and the information obtained will be treated as confidential and solely for the purpose of this research and not otherwise.

My name is Natnaiel Asfaw, Your co-operation and assistance will be highly appreciated. If you need any clarification or information: **Mob.0912-15-10-26**

**E-mail.** [natnaielasfaw@gmail.com](mailto:natnaielasfaw@gmail.com)

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

**PART A: Respondent's General information**

1. Age?

21– 30 yrs [35]      30 – 40 yrs [11]    40 – 50 yrs [3 ]    Over 50 yrs [ ]

2. Gender?

Male [28]    Female [21]

3. Relevant work experience?

Less than 3 yrs [24]    3-6 yrs [11]    6-9 yrs [9]    more than 9yrs [ 5 ]

4. Educational status?

Diploma [ 2 ]

Bachelor degree[ 39]

Master's degree [ 8 ]

PHD [ ]

5. Position.....

Head of department [ 1 ]

Senior expert [ 13]

expert [ 33]

If other, team leader [2]

**PART B:** Relate to Your organization, what is your opinion on those below questions?  
(Use the Scale: SA 5 – Strongly Agree, A 4– Agree, U 3– Undecided, D 2 – Disagree, SD 1– Strongly Disagree)

	<b>Staff competency</b>	<b>SA</b>	<b>A</b>	<b>U</b>	<b>D</b>	<b>SD</b>
1.	Staffs those are knowledgeable to help improve effectiveness of centralized procurement contract management.					
2.	Professionally experienced staffs are empowered and motivated to carry out their duties well thus improving effectiveness of centralized procurement contract management.					
3.	Staffs with technical skills do things rights the first time thus improving effectiveness of centralized procurement contract management.					
4.	Staffs with technical skills do things effectively and efficiently, hence improving effectiveness of centralized procurement contract management.					
5.	Staff with right education performs their tasks efficiently, thus improving effectiveness of centralized procurement contract management.					
6.	Superior level of education improves staffs motivation and by extension effectiveness of centralized procurement contract management.					

	<b>Technology Adoption</b>	<b>SA</b>	<b>A</b>	<b>U</b>	<b>D</b>	<b>SD</b>
7	Supporting procurement contract management by information technology <b>increase effectiveness</b> , hence improving effectiveness of centralized procurement contract management.					
8	Performing procurement contract management activities by information technology is <b>increases the speed of doing things</b> effectiveness of centralized procurement contract management.					
9	Information technology help to improve effectiveness of centralized procurement contract management by <b>reducing costs</b> .					
10	Information technology support <b>increases productivity</b> , hence improving effectiveness of centralized procurement contract management.					
11	<b>Internet connections</b> help communicate and collaborate more effectively with suppliers at a cost effective manner effectiveness of centralized procurement contract management.					
12	Internet connection helps improve communication and collaboration with suppliers, thus <b>saving time</b> effectiveness of centralized procurement contract management.					
	<b>Evaluation Process</b>	<b>SA</b>	<b>A</b>	<b>U</b>	<b>D</b>	<b>SD</b>
13	Most of the time parts of bidding documents (especially evaluation criteria, methodology and technical requirements) are not endorsed by procurement endorsing committee it uses for effectiveness of centralized procurement contract management.					
14	Evaluation process has an influence on selection of the best tenders.					
15	Evaluate bids against other criteria than those stated in the bidding document.					

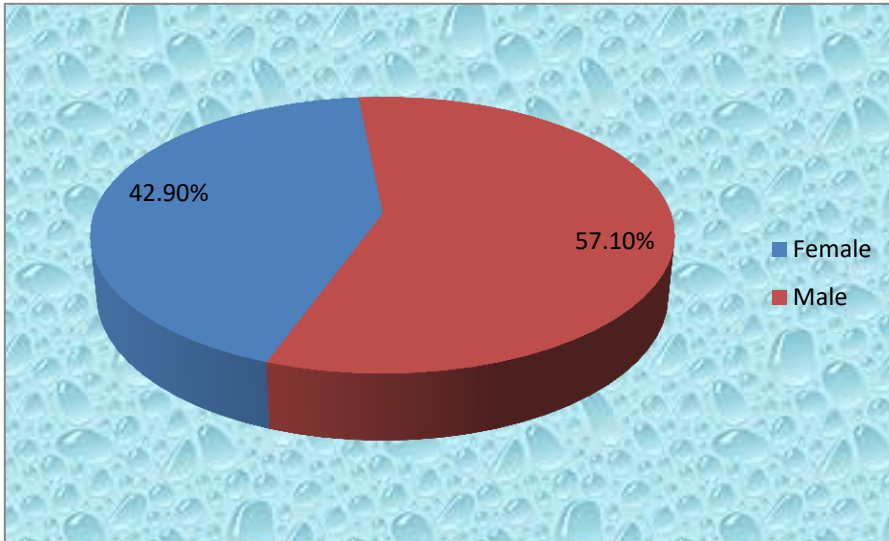
16	Evaluation process is conducted by inadequate qualified procurement Expert.					
17	Evaluation committee does not submit the result to the procurement endorsing committee within the bid validity period.					
18	Procurement endorsing committee has not Endorse the bid evaluation results within the bid validity period.					
19	Evaluation result/decisions changed by complaint board of PPPAA.					
	<b>Legal Framework</b>	<b>SA</b>	<b>A</b>	<b>U</b>	<b>D</b>	<b>SD</b>
20	In a framework agreement of PPPDS split the award in such a way that 60% of the total value of contract for First winner and the remain for others winners could reduce open competition and fairness in long term period.					
21	A legal framework for special procurement of common user items does not giving a chance for new suppliers to enter the procurement process.					
22	In the case of a framework agreement there is a poor Contract management.					
23	In procurement and contract management of framework agreement, the roles of procuring entities & PPPDS are not Clearly identifies.					
24	Suppliers complain on the framework agreement's rules and procedures.					
25	The issues of contract management not covered in detail in procurement of legal framework.					
	<b>Effective contract management</b>	<b>SA</b>	<b>A</b>	<b>U</b>	<b>D</b>	<b>SD</b>
26	Procurement contracts are not well administered.					
27	Contract does not deliver on time, completed within the agreed price & in the right quantity.					
28	There is poor communication and relationship between contracting parties.					

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29	Contracts not completed to the required specifications, standards and/or quality.					
30	There is termination of contracts.					
31	There is a shortage of effective and efficient management of performance, delivery and payment.					
32	There is a contract delay.					
33	There is no active risk mitigation, management and resolution of issues and disputes					

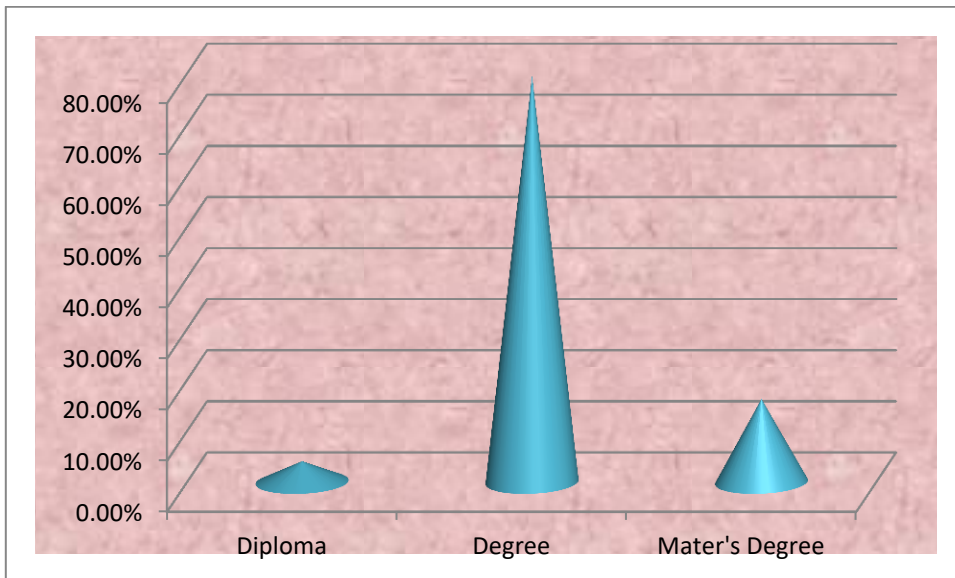
Thanks for your quick response!!

## APPENDEX-2



Source: Own survey (2020)

Figure 4: 3 Summary of Respondents' Gender



Source: Own survey (2020)

Figure 4: 4 Summary of Respondents' Academic Qualification