THE EFFECT OF PROCUREMENT MANAGEMENT PRACTICE ON THE PROJECT PERFORMANCE: THE CASE OF ETHIOPIAN PUBLIC HEALTH INSTITUTE

By
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DECLARATION

I, the undersigned, hereby state that the effort enclosed in this project work is my own original work and that I have not formerly in its entirety or in part submitted at any university for a degree or diploma or other organization of advanced education.

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LETTER OF CERTEFICATION

This is to verify that the project work conducted by Zelalem Gebreyesus, entitled: "**The effect of procurement practice on project performance in Ethiopian public health institute**" submitted in partial fulfillment of the requirements for the degree of master of Arts in project Management fulfils with the procedures of the university and encounters the recognized standards from the originality and quality perspectives.

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Acronyms

EC: Electronic Commerce

EPHI: Ethiopian public health institute

GTP: Growth and transformation plan

MDG: Millennium Development Goals

WB: World Bank reports

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Abstract

Procurement is a multidisciplinary function that assures the identity, sourcing, access, and control of outside suppliers that an employer wants or may want to meet its strategic goals. There are a lot of health projects implementing with in the country and many health-care projects waste a lot of money on unmanaged equipment and non-strategic purchases. The aim of this study is therefore to increase the understanding of how a broad range of procurement procedures affect various aspects of project performance. The study employed a combination of qualitative and quantitative approaches. The study used Statistical Package program for Social Sciences version 20 for data analysis and interpretations. The findings of the study elaborated that, all the null hypothesis are excluded and the alternative hypothesis of all dimensions are acknowledged, which states that procurement practice elements have direct impact on project performance in Ethiopian public health institute projects. The institute are implementing contract management ineffectively and the finding of the study also revealed that contract management significantly influences project performance. The four dimensions of procurement practice are positively relate with each other and interlinked significantly with project performance. Supplier sourcing, inventory management and need assessment and contract management also needs to be improved through increasing information network with in the institute and outside, strategic partnership with suppliers, emplacing computerized system, level of collaboration and the level of support among the stakeholders. The researcher recommends further research to investigate the role of other procurement practice attributes on performance.

Key Words: Procurement, Project, Sourcing, Inventory

CHAPTER: ONE
INTRODUCTION

Procurement is a multiprofession function that assures the identity, sourcing, access, and control of outside suppliers that an employer wants or may want to meet its strategic goals. Procurement has a significant contribution for supply market opportunities and for implementations of strategic sourcing.

1.1 Background to the Study

Different literatures illustrated project implementation in different ways. Chan (2007) stated that, it's a basis for organizational structure adoption for successful project completion and processing. The performance of projects has varied in relation to the type of procurement process implemented within the project.

Procurement is a critical activity in public organizations to ensure transparency and efficient utilizations of the budget allocated for achievement of different projects goals. Carr and Smeltzer (1997) illustrated that procurement is a method implemented to search the need and fill a gap by the purchasing company in order to maximize efficiency while reducing cost and time. Other research findings conducted by Weele (2010) defines procurement as the process of selecting suppliers, conducting strategic vetting, establishing payment conditions, selecting, negotiating, and purchasing products. Lim (2014) indicated that procurement is the method of obtaining products, services, and work that are critical to an organization's success.

Today's situations and global environment are changing at alarming rate and businesses face numerous challenges (Lee and Gebauer, 2006). To combat this change different organizations are implementing various supply chain strategies and techniques.

The models and strategies designed by various researchers on public sector entities are placing a great role. Weele (2010) showed that, procurement has a major effect a company achievement and goals besides procurement adds value to a company. Procurement is a function that adds for higher organizational efficiency (Leenderset et al, 2008). Weele (2010) elaborated that, familiar

procurement practice and procedures are the preferences of most of public companies for a better success.

Still now there is a dilemma on procurement topic because its subjects to changes in one way and the other. Weele (2010) states that any purchase of products, services, and works by a procuring body using funds is known as procurement. The Ethiopian public property and other concerned partners have been made different efforts to improve their procurement processes but the mechanism is still largely subjecting to inefficiency, corruption, and undercutting. A considerable amount of money is depleted because of such poor practices implemented within the public bodies. Ensuring consistent, cost effective and efficient fund utilizations are the main objectives of procurement management in governmental agencies.

The research conducted by Freweyni (2019) indicated that dynamic nature of procurement selection and subsequent management has been a challenging for the clients and has also a contribution for low project performance. Eriksson and Laan (2007) also elaborated on their studies that, traditional competitive procurement practices, activate adversarial relationships and numerous problems at all stages of the purchasing process.

1.2 Procurement in health sector

Effective procurement practice is crucial for successful completion of health projects and its process supports healthcare delivery and includes activities related to purchasing and managing inputs, such as demand management, selection and contracting, relationship management, and operational delivery (Yani, 2017). The procurement decisions in health sectors should be guided by principles of transparency and the money should be spent efficiently because the each and every coin are related to saving of lives of people (Donald, 2018). However, there is a confrontation between the clinicians and administrators and clinicians have less input into the process than administrators.

The procurement decisions made in health systems needs a critical thinking and usually take long-term clinical results into account. The procurement process can contribute to quality assurance by tracking and monitoring the clinical performance of orthopedic implants (Donald, 2018). The outcome data including the length of time certain implants last (implant survival), and used to define implant survival requirements are used to measure clinical performance

1.3 Statement of the Problem

The Ethiopia's government is exerting a lot of efforts and spending a lot of money to improve the healthcare system and align it with the Millennium Development Goals. According to World bank (2019), Ethiopia has a massive, largely rural and subsistence agriculture population with poor access to clean water, housing, sanitation, food, and health services. Starting from two decades ago, the government has made major investments in public health, which have resulted in better health outcomes (Freweyni, 2019). There are a lot of health projects implementing with in the country and many health-care projects waste a lot of money in unmanaged equipment and on non-strategic purchases (EPHI, 2019).

Even though the Federal public property authority has designed and developed various rules and regulations have been enacted, the country procurement practices faced a lot of problems on efficient resource utilizations and the process are greatly subjects for corruption (World Bank, 2012). In the public sector, no studies have adequately identified the effect of procurement on health project results (Freweyni, 2019).

According to the OECS (2013) report, procurement operational lapses are contributing to poor service delivery and customer frustration, which has become a global problem (OECS, 2013). The Ethiopian public health institute's procurement management is seldom regarded as adequate by program staff and donors (EPHI, 2019). Several researches have been conducted on procurement effects on project performance in the field of donor funding, but as far as I know, no research have beed conducted on procurement management of governmental agency success in project execution (EPHI, 2018).

Besides the importance of procurement procedures for project success, earlier research on this topic is limited to a few investigations focusing on how only one or a few procurement aspects affect a few project outcomes. In order to achieve effective governance of health projects a holistic and systemic approach to procurement procedures is crucial (Cox and Thompson, 2017, Eriksson, 2018). The aim of this study is therefore to increase the understanding of how a broad range of procurement procedures affect various aspects of project performance.

Poor performance of projects has been reported repeatedly by the annual project performance and monitoring reports of the institute (EPHI, 2020). The reports indicated that excessive

purchase, late and lengthy procurement process, poor material quality are the common problems observed in the projects implemented with in the institute (EPHI, 2020). Therfore, this study clarify and clearly pointed out the significance components of procurement practice that affect the project performance.

1.4. RESEARCH QUESTIONS

The research questions that were addressed in this study are:

1. What is the effect of need assessement on the performance of projects in Ethiopian public health institute?
2. What is the effect of supplier sourcing on the performance of projects in Ethiopian public health institute?
3. What is the effect of contract management on the performance of projects in Ethiopian public health institute?
4. What is the effect of inventory management on the performance of projects in Ethiopian public health institute?
5. What is the correlation between need assessment, supplier sourcing, contract management and inventory management?

The sub - questions were:

1. How need assessment affect project performance at EPHI.
2. How supplier sourcing affect project performance at EPHI
3. How contract management affect project performance at EPHI
4. How inventory management affect project performance at EPHI
5. What is the association between need assessment, supplier sourcing, contract management and inventory management?

1.4. OBJECTIVE OF THE STUDY

1.4.1GENERAL OBJECTIVE:

The main objective of the paper was to determine the effect of procurement management on project performance at Ethiopian public health institute.

1.4.2. SPECIFIC OBJECTIVES:

The study was the following sub- objectives:

1. To assess the effect of need assessment on project performance at EPHI.
2. To measure the effect of supplier sourcing on project performance.
3. To check the effect of the contract management on project performance.
4. To assess the effect of inventory management on project performance.
5. To determine the association between need assessment, supplier sourcing, contract management and inventory management

1.5. SCOPE OF THE STUDY

The study was conducted to identify the effect of procurement on the performance of projects in Ethiopian public health institute. The project performance was assessed from the respect of schedule, cost and quality but it lacks other project performance parameters like profitability. The study was considered the projects staffs involved in EPHI activities as a procurement staffs, project officers, project managers finance staffs and end users and it didn't consider the view of other actors in the supply chain. Geographically, the study was also incorporated the employees working in various departments of EPHI at Addis Ababa.

1.6. SIGNIFICANCE OF THE STUDY

Different research was conducted on the effect of procurement on the performance of projects on different sectors like manufacturing and business enterprise and unfortunately no research was conducted on health sector at national and regional level. As a consequence, the study is an eye-opening for the sector at the national level for further assessment.

The issue of applying integrated procurement practices in the implementations of health projects is a fairly new phenomenon in Ethiopia; hence the research findings contribute significantly for successful completion of projects by considering each and every procurement practices.

The knowledges and models developed from the study will support to generate new way of doings and thinkings to be used by various projects to achive its strategic goals. The findings generated by the study will be valuable to multidiplinary professionals and actors at different levels. The model developed by the study will help the health sectors projects and others on the field of procurement methodology by interpreting the procurement constructs and project performance dimensions from quality and cost perspectives.

1.7 DEFINITIONS OF TERMS

In the study, the following conceptual and procedural will be used:

public procurement: The purchase of goods, assets, and works by a procuring body using public funds is referred to as (Eriksson and Vennstrom, 2012).

Procurement: is the identification and acquisition of goods and services. It encompasses all activities from finding possible suppliers to distribution from the supplier to the customers, and it includes sourcing and purchasing (Dada, 2012).

Quality: characteristics of a product that meet a customer's needs and, as a result, provide customer loyalty (Juran and Godfery 1998, p.67).

Procurement planning: a strategy that allows planners to assess whether demands are reasonable, especially those of requesting agencies, which typically expect their needs to be met on short notice and in a shorter time frame than the procurement process allows (Manthosi and Thawala, 2012).

Service delivery performance: achieving set goals and planned standards (Hashim, 1999).

Procurement management: this is a form of management in which products and services are obtained from another organization. Procurement management is known for helping a company save a significant amount of money when buying products and services from outside sources.

Need Assessment: A structured method for assessing and resolving needs or "gaps" between present and desired conditions of "wants" is known as "need assessment" (Alhazini and McCaffer, 2000).

Project Results: Ventures are started in order to achieve business goals. The project goals are merely a means to that end. When assessing a project's progress, it's important to concentrate on the project's goals and how they compare to the timeline and budget estimates (Ogunsanmi, 2013).

Contract management: A contract management strategy helps contract managers in effectively managing contracts by handling transitions, which is an essential aspect of the procurement cycle (Shiyamni et al., 2006).

1.8 ORGANIZATIONS OF THE STUDY

Based on the basic research writing principles, the project work is organized in to five chapters. The first chapter delas on the study's context, procurement practice definition, and procurement practice in the health sector, research issue, research concerns, study rationale and significance, and planned managerial and theoretical contributions. This chapter provides context for the thesis' key concepts and addresses the current state of previous research on the topic. The study's overall goal, research goals, and scope are defined. The second chapter examines the literature on procurement, need evaluation, project success, and procurement and project planning in the health sector. The third chapter discusses the research design and methodology. The methodology chapter discussing on the overall structure and research design in this research thesis, as well as a description of the applied methodological approaches. The fourth chapter presents, data analysis and results and discussion of results. Finally, the fifth chapter presents conclusion and recommendations, including the theoretical and practical implications of this research, study limitations, and future research.

CHAPTER TWO

RELATED LITERATURE REVIEW

2.1 INTRODUCTION

This chapter reviews the prior research conducted related to procurement practice and project performance. The chapter also tries to elaborate the existing situation related to the Ethiopian public health sectors.

2.2. THEORETICAL REVIEW

2.2.1 SYNOPSIS OF PROCUREMENT

Chan and Lee (2013) elaborated that the role of procurement has become significantly important and it has a major determinant of any projects and organization success. Different factors affects procurement functions and from these globalization, advances, technological developments, cost pressure, and regulatory compliance have the upper hand related to cost savings and achieving more value for money (Khi V. Thai, 2014)

Procurement has a significant correlation with organizational money and wealth and as a result it has a decisive role for any business (Chan & Lee, 2003). Procurement is a procedure for assessing and purchasing of goods and services. It incorporates a lot of activities and from finding possible suppliers to delivering goods from suppliers to consumers.

There is a little probability to get a good quality, quantity of goods and service at the required place at the lowest possible cost to meet the buyer's requirements. Similarly, the situations are more serious in a public procurement system (Hines, 2006). Public procurement are the methods implemented by government delegates and its highly structured. It leads by state procurement boards, that overseeing procurement in some cases. Purchasing is one components of procurement and its role associated with the physical purchase of products and services from suppliers (Manga, et al, 2008).

Procurement is a crucial activity for public organizations and business companies and it’s a cross-cutting action that affects and touches each and every company's departments. Procurement

is a method of obtaining goods, facilities or informations by fulfilling the five R principles (Right source, quality, time, quantity and price) to achive the organisations strategic objectives. (Giunipero, et al, R., 2006; Hines, 2006; Porter 2008; Triantafillou, 2007; Van, 2010). In one and other way Mangan et al. (2008) defined as procurement is the way of identifying and purchasing products and services. The activities implemented under procurement is vast and includes all operations from finding prospective suppliers to distribution to the beneficiary, including procurement and purchasing.

According to Van (2010), the subject of procurement incorporates purchasing of good and services, hiring, or other contractual agreement settlement to get the required products, works, consulting, or other services. The process of procurement in public sector starts from need assessment and then deciding on procurement strategy. Some literatures illustrated that risk assessment is the first steps and the assessment focuses on finding supernumerary clarifications, award provision by accompanying contract agreement, reciveing of goods and financial settlement for property and/or services, and, where applicable, contract management and evaluation of contract options. Proper disposal of good are neglected in most organizations but it's one parts of procurement (Van, 2010).

According to Robert, et al (2010) the process of buying, hiring, renting or trading to get material products, plant and/or machinery, goods, works, or services are included under the subject of procurement. Furthermore, he reported that, procurement need a multidisciplinary profession because the activities include the issues of prioriting and selecting service and goods providers, negotiations based on the core procurement strategic directions, develop terms and conditions and reaching on agreement, manging supplier performance, managing orders and materials, and changing purchasing systems (Robert, et al, 2010).

2.2.2 Procurement Management

Different literatures define procurement management differently and Eduwardo (2004) defines as the process of purchasing or obtaining the goods, services, or outcomes needed from outside the company to complete the work are referred to as procurement management. It's a broad term and it includes a management of any contract negotiation, settlement and administration with outside entity (George Belev, 2004).

The procurement methods implemented in project at operation level are considered uncertainty analysis, right skills evaluations, detail plan preparation, broad based bid selection techniques development of a wise, fair contract methods. Besides a Systematized management strategy are needed to ensure authorities, accountability, timeliness, and money for for effective procurement (Eduardo Talero, 2004).

2.2.3. THE THEORY OF PROCUREMT

Public procurement has a great role and it has a significant contribution for the development of economic, environmental, and social components of a country and because of this the theory got a considerable attention. In most developing countries, public procurement strategies and policies have been established properly to reduce poverty and provide well-being, housing, education, and other services, as a consequence the process leads to best use of public resources (Tesfahun, 2011). The budget allocated for procurement is more than 20 % of the total government budget and a lot of budget are also spending though donation and therefore most government bodies give attentions to streamline and harmonize legal and recognized frameworks (Mlinga, 2009). In Ethiopia, the public procurement is managed by the federal public procurement agency and the system undoubtedly have a significant impact on the country's rising economy, resulting in budgetary reserves and competence in government spending, resulting in stability and poverty reduction (Tesfahun, 2011).

Public procurement utilizes a considerable budget and so it is the major government activity. As Khi V. Thai (2004) stated the cost spends for procurement process are huge and it has an effect on the economy directly or indirectly and must be properly managed. In most countries, the expenses related to procurement ranges from 10% to 30% of GNP. Proper monitoring and control of such large procurement costs competently has become a source of concern for policymakers and managers, as well as a burden for public procurement staff (Khi V. Thai, 2004).

The process of managing public procurement require a decision-making skill from need assessment to contract management. The decisions making process are based on the requirements developed at the initial stage of the process and based on that criteria choose one or reject all of them. The final section process is a one winner selection from a number of

commutants, in which substitutes are compared simultaneously using a previously agreed, standardized standards framework. Procurement procedures requires the integration and collaboration of different actors in the supply chain and so stakeholder negotiations are an important part of achieving the job (Thai, 2001). The basic elements of procurement are obtaining the required equipment, material supplier, and service in the right quality, quantity, price, and from the right source (Alijan, 2012).

2.2.4 Role of Procurement

Different scholars illustrated that procurement is a a challenge in any supply chain. The role of procurement is vast and it touches the overall success of any project implementation. Satisfying demands into real products/commodities or services based on the predefined requirements are some of the roles of procurement with in the supply chain management (Caldwell et al, 2009). The role of procurement is wider and it makes a significant contribution to organizational efficiency, and organizations should put in place efficient procurement processes to protect shareholders' funds. Any management strategy is designed by considering the issues of procuring and its helps for decisions making.

Procurement has a great linkage with manufacturing and trade sectors and both of them have a significant effect on a company's performance. Procurement has considered as a main function in many companies and subjected to the mega trends of the market. Its role touches by making a greater procurement volume by concentrating of business on core competences, globalization of procurement markets, growing market dynamics as well as the ever-shorter product lifecycle.

Organizational efficiency and effectiveness enhancement are the main role of procurement. Due to tremendous efforts of procurement experts, goods and services are purchased and obtained at the right time, price, place quantity and quality for the consumptions of all tsections and departments in the organization. As a result the the organisations obtained a graet strategic advantage to satisfy the need and requirements of the customers at a higher degree (Snider and Rendon,2001). Any failure in the procurement procedures at the departments affects all the other departments and therefore procurement has a great impact on the organization’s flow of materials and informations from the source to consumers.

Currently the contributions of procurement function in any companies has vast and a great attention acquired and incorporated on its strategies and policies. Organizational policy are achieved through proper implementation of strategic procurement approach because such types of approach has a contributions to achieve the objectives of value for money in procurement of goods and services (Gian, 2012).

The study conducted by Mason and Leek (2018), indicated that companies got a better competitive position rather than any other organization in the market place by implementing a best procurement method component. This procurement component can contribute for the achievement of the strategic goal of a agiven company or organisations. Procurement has the characterstics of enhancing the degree of quality of a given product or service and this features of procurement has a upper hand for the enhancement of the capacity of suppliers, the proportions of market share by emplacing sustainable flow of good and services from the source to end customers by maximum cash flow and maintaining inventory levels (Mason and Leek, 2008). Procurement has a direct correlations with organizational efficiency and competitiveness among other benefits and these benefits are ensured by proper implementations of all factors that have an influence on the performance of the procurement implementations at strategic level (cox, 2010).

2.2.5 Elements of Procurement management

2.2.5.1. Inventory Management practice

In simple words, inventory is the materials in stock. Some literatures define as an idle resource located in the organizations. The definitions of inventories are broad and generally it represent the stocked items in the warehouse for sale or they are in the process of manufacturing or they are in the form of materials, which are yet to be utilized (Anil Kumar, 2009).

There are numerous and complex decision-making process with in inventory management and this process requires a detail analysis of multifactor determinants. Decisions are made in conditions of uncertainty. Some of the most common and practical methods of determining inventory levels include Economic Order Quantity (EOQ) model, the Re-Order Point (ROP) models and Re-Order Cycle (ROC), Krzyzaniak, Cyplik, (2007). Safety stock aims to cover the unexpected changes in the demand, Grzybwska, (2010). Inventory Management (IM) is an inter-

disciplinary concept (Larson and Halldorsson, 2014). Inventory management revolves around a cross-functional and across the boundaries of the firm (Ellram and Cooper, 2014). Halldorssonet al (2007) argues that key aspects of inventory management are ranges from the design of the structure and arrangement of an organizations to a management of the structure through inter-organizational relationships.

Proper management of inventory is vital and otherwise its costs a higher price. Therefore wise information management is crucial and each and every information should accurate, timely, reliable and consistent. By efficient information management, you can carry fewer inventories, reduce cost and get products to customers faster (David, 2014). Efficiency and responsiveness can be achieved by emplacing sound inventory management with in a company. The objectives of inventory managements are fulfilling customers requirement at higher rate, attaining acceptable efficiency level of purchasing and production, higher inventory investment and profit margins with in the given elapsed time (David, 2014)

Inventory management has a huge contribution for all types of companies from large companies to small-sized companies. Success is measured within the supply chain by measuring the effectiveness of e inventory flow management. Mismatch between the demand and supply is the practical challenge of any inventory management in various companies. All companies have a plan to satisfy the need of the customer at the required quantity and quality without no lost sales due to inventory stock-outs. Avoiding too much inventories with in the warehouse are the other concerns of companies. So enough but not too much is the ultimate objective of any inventory management strategies (Coyle, Bardi and Langley, 2003). Ineffective and inefficient management of inventory are a serious problem for survival and growth of any companies because these conditions forced the companies to customers loses and decline of sales. Wise inventory management are tremendous benefits for the companies including: reduction of depreciation, pilferage, and wastages while ensuring availability of the materials as at when required (Ogbadu, 2009). Now adays, inventory management is critical to an organization's success by ensuring competitiveness with in a dynamic market.

2.2.5.2 Need Assessment Practice

According to Sollish and Semanik (2017), the objectives, goals, expectation and customer satisfaction are the determinates on the performance of the Procurement process within the public system directly or indirectly. The leading and crucial procedures in procurement process is identifying and understanding of the specific needs of the requester, the ways to pay for these needs and an assessment of the all output of the procurement process. (Emmert and Crocker 2008).

Adell et al (2009) clearly showed that needs assessment is a road map in the process of procurement management and it encourages innovation through procurement. The researchers are also pointed out that, need assessments creates an opportunity of transparency and clarity during procurement process and guarantee the product quality by the third-party certification.

Different companies have various experience of need assessments procedures and the level of commitment practiced by the companies are also varies from one organization to another. There are different types of approaches of need assessments including: customer request, legal requirement, market demand, and business needs. A proper identification of need at the initial stage of a project reduces the risk of changes and delay during project scope definition. Effective needs identification has a linkage with a scope definition and it has a contribution for adequate risk identification and management and protect the projects from failure (Fageha and Aibinu, 2014).

2.2.5.3 Supplier Sourcing Practice

Sourcing is a broad term and it evolves from traditional purchasing approach and there are different definitions for sourcing by various scholars. There are different types of sourcing and namely a strategic sourcing and global sourcing. Supplier sourcing has composed of a number of activities that are interlinked one to another and comprised of the design of plan development, assessing, executing and supervising all sourcing actions undertaken by an organization to achieve its long-term goals (Carr and Smeltzer 2007). In order to attain and enhance the compettivness of any companies by emphasizing on the core cpmpetencies, the organization should made a wise decisions on supplier sourcing phenomena.

Carr and Pearson (2019) reported that, supplier sourcing is the process of developing a plan, executing activities, directing, and assessing the key activities of purchasing to attain the

strategic goal of the organisations. Supplier sourcing is a major issue in any organizations and the decisions related to sourcing is made by the top management of the organizations because the decisions affect a firm's resources utilizations that support its capabilities and competitive advantage (Carr and Pearson, 2002; and Reck and Long, 2008).

2.2.5.4 Contract Management Practice

There are many definitions of contract management from different perspectives because of the broad activities incorporated with in the term. There are different parts of contact management and these includes negotiating about situations and terms of a contract, managing a compliance, documentation and deviation of any changes from a contract (vander will, 2013).

Contract management works on vendor performance and measured the performance against the contracts and managed properly for successful completion of the project. Measurement of the performance of suppliers are vital in contract management era, because companies are narrowing down their base of suppliers. A sole supplier contract management need a serious and strategic decisions because the supplier is the only choice for the provisions of products or srvicres to meet the need of the organizations or to avoid any disturbance on the productions of the organaizations (Michael Hugos, 2011).

Proper tracking of company performance is vital to manage the suppliers based on the agreed contact. Michael Hugos (2011) stated that any company should routinely collect data about the performance of suppliers at different stage of the contracts by setting a requirement. Companies should asses the performance of suppliers at different levels and based on the asssessement results, a firm that got a minimum requirement results should be pointed out and made a correction actions to enhance its performance. Suppliers should implement and exercise the responsibility for tracking their own performance to take a correction measures at early stage.

2.2.6 PROCUREMENT EFFECTS ON PROJECT PERFORMANCE

Traditional competitive procurement is a basis for modern procurement strategies and the traditional practice are subjected to confrontations with suppliers and faced many problems at different stages of procurement (Cheung etal., 2009, Eriksson and Laan, 2007). Cox and Thompson (2007) stated that, the objectives of any procurement procedures are contributing and

putting an effort for the achievement of project objectives but customers are selecting a procurement procedure based on its familiarity instead of any differences between projects (Laedre et al., 2016. All companies should understand the effects of procurement procedures based on various natures and characteristics of project performance in different types of project from initial to project completion stages (Eriksson, 2018).

Laedre et al (2006) reported on his study that proper understandings of procurement procedure based on the project context are vital for successful completion of project and execution. Other researchers conducted by Wardani et al, (2006) indicated that companies are should familiar with the procurement procedures and assess its performance at different stage of project executions based on the nature of the projects.

A research conducted on health sectors by Derman (2018) showed that procurement processes implemented on orthopaedic have an impact on clinical practice and outcome and effective procurement practice has a strong corelations with effective health project completions. Health project completion require continuous procurement implentations improvements to prevent any shortage on clinical inputs. Any regulations and practices for decision-making of helath sector procurement have a large influence on clinical practice implantation and effectivness. In all the health systems as Derman (2018) reviewed, there was tension between cost and quality, and concern about the interaction between procurement and the user. A considerable relationship should be established between procurement staffs and orthopaedic specialists or any other health staffs for effective decisions making in the execution of projects. Cost is not the predominant factors in health-related projects during procurement procedure implementations because to assure and monitor long-term effects on the health of patients implanted (Derman, 2018).

Different reseach was conducted on the effect of procurement on project performance. For instance, Chan (2017) stated that procurement components have a strong correlations and influence on project performance in a business company. He was also revealed that procurement as the system that represents the organizational structure adopted by clients for the implementation of project processes and eventual operations of the project. The project performance in terms of delivery, cost and quality is highly influenced by the type of project procurement method used to deliver the project. Therefore, selection of the best method of procurement is vital to achieve better project results. There are different forms of project

performance exists through the different stages of project phase and accordingly there are terms of allocation of activities, sequencing, process and procedure and organization approach in project performance. From the project performance outcomes, time, cost and quality are a strong relationship with procurement methods.

2.2.7 Factors that affect procurement performance

I. Supply Chain Integration components

Supply chain integration is strategy implemented by the supply chain actors for improving business performance in highly competitive environments. In order to achieve such objectives, various organizations are implementing different aspects of a supply mangemnt stategy at different stage and within the path of different actors (Morash & Clinton, 2018). According to Saunders (2017), there are different kinds of supply chain integrations including: internal integration, information integration and external integration and this synergy focusese on the alignment through customer, producers, distributors, and purchaser from the source to end customers (Saunders, 2017).

According to Saunders (2017), there are two types of integration and the first one focusing on the coordination and synergy of the different actors for thr forward flow of good or srvices in a given supply chain system. In contrary, the second type of integration focused on the backward flow of goods and services. A better forecasting of the input price and acceptable investment judgment making are the advantages obtained from backward integrations. Supply chain integration creates an opportunity for a business firms to links with its client, goods or service providers and other paticipants with in the supply chain by creating a synergy and a linkage between activities, functions, procedure, and positions effectively and efficiently.

Different scholars on supply chain management elaborated that supply chain integration is closely associated with activities performed to achieve the goal of the project. We can get various integrated activities behind achieving a given goals and these including's movement of goods from one end to other, designing a plan and monitoring, arranging, and movement of information for different requirements (Donk & Van Der Vanet, 2005).

Bowersox (2016) stated that effective supply chain management process is started from the integrations of supplier and customer. We can achieve a successful and effective supply chain integration by ccreating a sustainable synergy between the varios logistic functions with in the organizations, emplacing planned connections with the various stakeolders of the supply chain and by objective focus information sharing mechanisms. For virtual types of enterprises, global manufacturing and networks manufacturing, coordination of supply chain operations is vital and advantageous (D'Amours, 2013).

Time is a key component to meet the need of customer and market because shorter delivery time is a basis for customers satisfactions. A unique customer can be satisfied through implementations of the concepts of flexibility and agility. The issue of obtaining a given required product or service at the reuired place, price and time is a key for securing the existence of the customers at different requirement level. In order to compete and survive in today's volatile market environment, the organizations should implement the logic of the right product accessibility, in the exact place at the exact time of the requirement (Anatan, 2016).

II. Top Management support

The top management staffs of an organization have a great contributions for the effectiveness of procurement strategy implementations in a given company. The way in which the companies going to implement a plan to improve the way in which a company buys supplies and manages them are not a simple job and implemented easily. The top managers of the companies should pay attentions for avoiding old operating strategies, inconvienient ordering procedures and other inefficient actions with in the supply chain otherwise the companies plan will peter out for lack of support. Effective companies characterize with the implementations of well-designed procurement management plan and the plan treats and places all the members of the organization at different levels with the same understandings to enhance the accomplishments of the given supply chain mangement goals (Sany, 2018)

A reason for successful procurement management is the supports of upper management for any inquires and adjustements happened with in the supply chain. The top management has different perspectives for various issues related to supplier selection and management. Some mangers focus on short term benefits and a onetime partnership with the suppliers and in contrary others

focused on supplier's loyalty and establishments of long-term relations. Therefore, inclusions of top management bodies in the process of procurement planning are vital and crucial. To achieve this objective, some companies establish a procurement council to monitor the procurement strategy implemented by the organizations (Lauren, 2018).

III. Information Communication Technology

Strategic procurement functions are the common features of most organizations in the new era and because of this the newly developed technology creates an opportunity for relooking the procurement process to upgrading and implementing the principles of accountability, transparency and reporting capabilities. This phenomenon enhance the flow of informations with in the the procurement cycle and creates an opportunities for suppliers from the perspectives of accessiablity (Charles, 2018). Information technology has a numerous contribution and helps organizations to hasten procurement processes by creating synergy between suppliers at different level and by implacing effective inventory management practices based on right stock level management strategy.

Information technology helps a new way of doing in the area of store management, information management, inventory control, customers handeling, process monitoring and evaluations. Simatupang and Sridharan (2015) stated that the components of information is the key and serves as an ignition point to bind organizations together and can also be used to create synergy bewtween procurement process activities within a single process of the procurement activities and across compound processes. Information technology has also a basis for the concepts of demand forecasting and replenishment that helps for integration of planning and control. Both internal integration for cross-functional processes and external integration for outside customers and suppliers are designed with the central concepts of information integrations. There are various types of relationship with a different strength level that focusese from pliminary market negotiations, cooperation and coordination to the highest mutual relatios and partnership management. Mutual realtions without information sharing technology and strategies is nothing. Mutual relations can be achived through establishing a linkage and allignment between decisions making, information managemen, performance measurement in the SC (Simatupang and Sridharan, 2005).

Thomas and Rainer (2005) stated that the linkage of procurement systems and information technology are long years ago and its starts with the implementation of ERP systems in the 1990s. Later the technology was advanced to EDI connections with the selected goods or service providers via developing delivery schedule systems by linking the information system at the hands of suppliers and customers. ICT creates decentralizations on operational procurement processes and in contrary favors for centralizations of strategic ones due to higher transparency. Strategic aspects of procurements process were frequently ignored by most organizations and at the consequence the customers that buy a given goods or service have losses their power of influence on the selections of suppliers and purchased products. The advancement of internet technologies facilitates faster and more efficient operational procurement processes and as a consequence manager can concentrate on strategic tasks.

Christopher (2015) Synchronizations of supply and demand in multiple markets have been achieved by using information technology dimensions in ever-shorter time frames. As a result, the suppliers to react in real-time to market changes. Effective and efficient connection between various stages of the system can be achieved by information technology and these helps to allow them to create synergy and profitable supply chain actors. This types of connections are vital for implementations of successful procurement process. Kim and Rogers (2014) declared that studies have studied business-to-business (B2B) dealings on different operational performance variables includings inventory cost, cycle time, and producer flexibility. The alarming increment of the technology related to ICT is the evidence for the enhancement of information influence on procurement performance. This is attained through the use of information technology outcomes including internet, intranet and extranet. Though, companies should considers a trade-off between efficiency and responsiveness.

ICT helps to collects demand data, to establish a data base system and establishing a platform for order transmissions systems (Bowersox, et al, 2007). Besides, It serves to manages the source supplies from initial stages of a supply chain to ensure smooth operations.

2.3 Empirical Review

The study conducted by Freweyni (2017) at commercial bank of ethiopia indicated that employee commitment to need assessment has a significant effect on project performance of CBE. The hypothesis tests of her study also confirmed supplier management has a significant effect on Project Performance of CBE. She asserted that it is important to involve suppliers in decision making, encouraging information, sharing and looking for new ways to integrate upstream activities.

The study conducted by Adell, Esquerra and Estevan (2009) elaborated that needs assessment enhance innovation through procurement. They further found that need assessment provides transparency and clarity during procurement process and guarantee the product quality by the third party certification. They further pointed out in their report that most countries which included Spain, UK, Denmark, Portugal and Sweden that participated in procurement assessment have a Green/ Sustainable Public Procurement (GPP/SPP) strategy or action plan.

Thomas (2001) illustrated that the selection and use of an appropriate procurement system is crucial to project success. The results indicate that there are nine procurement selection criteria commonly used by Australian clients: speed, time certainty, price certainty, complexity, flexibility, responsibility, quality level, risk allocation and price competition. Only time certainty and price certainty were seen by the respondents as unambiguous criteria, as the completion date and price can be objectively predicted by the client beforehand.

Rono (2017) stated on his research that, the connection between procurement procedures and the performance of an organization. Proper structures and systems in procurement ensured transparency, accountability, reduced costs and improved quality and specifications. Continuity of the workforce greatly contributed to organizational performance. The study confirmed that procurement practices actually contribute to increased organizational performance. Procurement practices enable organizations achieve differentiation through better customer service and reduced lead times (Rono, 2017).

2.4. CONCEPTUAL FRAMEWORK

The study will introduce a conceptual framework that investigates the relationship between procurement practice and project performance. In more detail, the conceptual framework of the study will examine causal relationships between five research variables (constructs):

a. Need assessment (independent variable),
b. Supplier sourcing (independent variable),
c. contract management (independent variable)
d. inventory management (independent variable) and
e. Project performance (dependent variable)

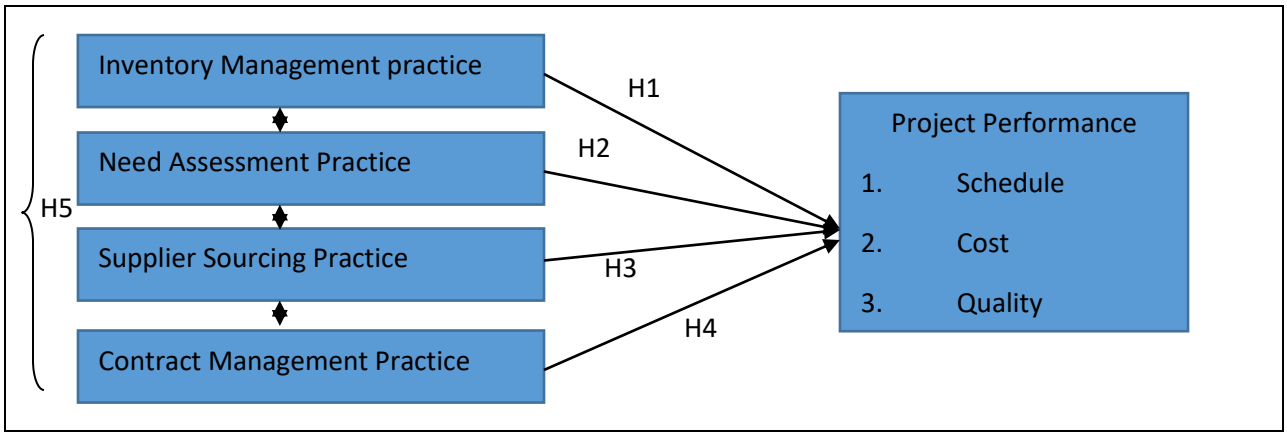

Figure 1: Conceptual framework (Christopher, 2015)

2.4.1 Hypothesis

The following will be the research hypothesis;

i. H01: Need assessment does not have a significant effect on Project Performance

ii. H02: Supplier Sourcing Practice does not have a significant effect on Project Performance of

iii. H03: Contract management does not have a significant effect on Project Performance

iv. H04: Inventory management does not have a significant effect on Project Performance

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 INTRODUCTION

Research methodology is a key for conducting any research findings and it's a means and a model for the analysis, describing the approach and techniques used to investigate a particular subject. Accordingly, the research methodology parts clearly described the activities performed starting from sample determination to data analysis and presentations.

3.2. DESCRIPTION OF THE STUDY AREA

The research was carried out at Addis Ababa in Ethiopian public health institute. The study encompasses all the projects implementing under the institutes.

3.3. RESEARCH DESIGN

A research study's design is a predetermined wide concept and it has an upper hand role in research environment to ensure reliability. It encompasses a variety of distinct but related issues (Blaxte 2010, p. 65). According to Ornstein (2013), research design is an ideal framework for conducting a study by considering the linkage between research questions and the implementation or execution of the research. Exploratory, descriptive, and explanatory are the three types of research methods that can be used according to the nature of the research (Saunders and Lewis, 2014). From the different kinds of research design, this research used explanatory research design because the study focused on the cause-and-effect relationship between procurement procedure and project success in EPHI cases. The study reviewed the health sector's procurement profile from the results of various projects.

3.4. RESEARCH APPROACH

The study employed a combination of qualitative and quantitative approaches because such types of combinations reduce the limitations and improve the accuracy and flexibility of the results (Robinson, 1998).

3.4 STUDY POPULATION, SAMPLE AND UNIT OF ANALYSIS:

3.3.1. TARGET POPULATION

According to Creswell (2013), target population is a group of people and things that can be considered and included in the study and subject of a scientific investigation. The sample of a population is a portion of the entire population of a certain group and selected from the sample technically and from which the values of the variables of interest can be collected and analyzed (Welman, 2005). Therefore, the institute's various programs and projects were the study's target population.

3.3.2. Sampling Technique

In order to enhance data reliability and validity, the study used probability sampling techniques. According to Kothari (2004), probability sampling gives equal chances for each and every member with in the target population.

Currently the institute implementing 25 health related projects by using the various funds and these projects has a total of 465 employees at various levels in project management, procurement management, monitoring and evaluation and research investigation positions. The data was gathered from these multidisciplinary positions and these are vital for from reliability and validity point of view. The study used the primary data collected by Likert scale and triangulate with other secondary data obtained from reports and projects master documents. According to Taro Yamane (1973), the study employed a simplified formula to determine the appropriate sample size at 95 percent confidence level, permissible error = 0.05 percent, and number of respondents at each level,

$$n = \frac{N}{1+N(e)^2}$$

Where:

'n' is the sample size,

N is the total number of employees in the projects, and

'e' is the level of precision. Substitute numbers in formula:

$$n = \frac{465}{1+465(0.05)^2}$$

$$n = 215$$

Based on the calculations results of Yamane formula, the numbers of sample is **215**. The study employed a 15 percent contingency and accordingly a total of 261 respondents were participated on the study proportionally across all the projects.

3.3.3 UNIT OF ANALYSIS

The different staffs working in 25 projects at different position level are the unit of analysis of the study. As a result, the organizational level is the unit of analysis of the study. In order to ensure data reliability, the data obtained from primary data were triangulated with secondary data.

3.4 DATA SOURCE AND TYPES

The study employed both primary and secondary data source in order to answer the research questions. A standard questionnaire of liker scale used to collect primary data from the employee. The secondary data were collected from annual reports, journal papers, books, the internet, and other sources. Employees at various levels of various projects within the institute were used a self-administered likert scale. The indicators of procurement practice are evaluated by a five-point Likert scale (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree and 5 = strongly agree) where higher values indicated stronger agreement.

3.5. DATA ANALYSIS

The study used Statistical Package program for Social Sciences version 20 for data analysis and interpretations. Descriptive statistics in the form of frequency and percentage was used to analyzed and described the respondents' basic information in the form of frequency data and percentage data. Central tendency metrics data in the form of mean and standard deviation were utilized to analyze the practice of procurement. The study used correlation and regression analysis to look into the relationship and effect of procurement on project performance. To verify the acceptance of the formulated hypotheses, the study used a Pearson correlation and simple

linear regressions analysis. For triangulation of primary data, secondary data was used under data interpretations. The regression equation will be:

$$Y= \beta_0+ \beta_1X_1+\beta_2X_2+ \beta_3X_3+ \beta_4X_4+\alpha$$

Where: **Y** is Project Performance, the dependent variable

β_0: is the regression coefficient,

β_1, β_2, β_3 and **β_4:** are the slopes of the regression equation,

X_1: is Inventory Management practice

X_2: is Need Assessment Practice

X_3 is Supplier Sourcing Practice,

X_4 is Contract Management Practice,

3.6. ETHICAL CONSIDERATION

The study ensured informants confidentiality by hiding and securing the respondent's name or any other identifiers. The respondents were informed that the data collection process will take place whenever they are able to comply during the study. Furthermore, the study confirmed the utilizations of the data collected via the instrument for academic purpose only.

3.7 VALIDITY AND RELIABILITY TEST

The material validity of the study was assured by testing a variety of data sources, including previous research and expert interviews and this helps to improve and update the model and interventions. The study arranged the questionnaire according to the systematic goals to ensure construct validity which are the contributions for the accuracy of the questions. The other validity issues is internal validity, the study relies on explanations derived from procurement management theory and existing literature, as well as competing explanations for the findings. The study used Cronbach's Alpha coefficient value to verify the reliability. Serkam (2015) indicated that Cronbach Alpha should be greater than 0.70 to create a consistent scale and he stated clearly that any scale with a Cronbach Alpha less than 0.70 should be eliminated.

Table 1: Reliability statistics of the pilot study

Cronbach's Alpha	N of Items
.947	33

Source; Survey Results and Own Computation, 2021

CHAPTER FOUR:

RESULTS AND DISCUSSION

4.1 INTRODUCTION

This chapter illustarates the results obtained by using the methodology adopted and related analysis of the data to answer the research questions on the effect of procurement on project performance in Ethiopian public health institute. The findings and the analysis of the raw data were leads to answer the study's research questions. The study adopted a number of techniques such as: descriptive analysis, correlation matrix, and linear regression for analysis of the collected information from the selected participants of the study. The data collected by using five scale Likert scale was evaluated by means of Statistical Package for Social Science (SPSS v.20) software.The data was collected from 242 project staffs with in the istitutes by using the formulated research methodology and design and data collection and verification tools and techniques. From the total 261 questionnaire distributed 242 were returned, this represented a 92% response rate. This is a reliable response rate for data analysis **as** Mugenda (2003) revealed that 50% and above response rate is the the minimum range for drawing a conclusions, 60% is good response rate and a response rate of 70% and above is adequate and reliable range for further analysis.

4.2 DATA EDITING AND CODING

After a data collection completed from the project staffs of the institute at different level, editing of the collected data was undertaken in order to check the omission, completeness, and consistence of the data. According to Zikmund (2003), editing is a the initial stage of data processing and analysis stage.The data collected indicated that, there wasn't any missing data obtained from all measurement items in the constructs for the conceptual model and basic information section.

Table 2: Missing data on variable basis

	N	Mean	Std. Deviation	Missing		No. of Extremes[a]	
				Count	Percent	Low	High
NeedAssessment	242	3.1787	.57690	0	.0	0	3
suppliersourcing	242	2.8378	.76678	0	.0	0	0
Contractmanagement	242	2.9470	.61416	0	.0	0	0
Inventorymangement	242	2.3736	.49290	0	.0	0	8
projectperformance	242	2.9869	.88515	0	.0	0	0

Source; Survey Results and Own Computation, 2021

4.3.2. OUTLIERS AND NORMALITY

The normality of the collected data for a particular variable was checked. The study employed skewness and kurttosis to verify whether the data is normally distributed or not. Skewness is an indicator of normality and can assesses whether the distribution of responses are heavily concentrated on one end of the scale or not. Any deviation from the normality of distribution was determined using skewness and kurtosis results. Haire etal (2006) defined skewness as the determinants of symmetry of the distribution of data incomparisions with a normal distribution. He defined Kurtosis also as the measure of the peakedness or flatness of distribution in comparisions with the normal distribution. In this study, there was no reason to exclude variables based on skewness because all variables in this study are based on Likert-type scales. A data characterizes with tightly distributed or distantly distributed around the mean have subjected to kurtosis problems.

Table: 3 Skewness and kurtosis result

	N	Mean	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Std.Er	Statistic	Std. Error
NeedAssessment	242	3.1787	.781	.156	-.249	.312
suppliersourcing	242	2.8378	.492	.156	-1.238	.312
Contractmanagement	242	2.9470	.602	.156	-.761	.312
Inventorymangement	242	2.3736	.747	.156	.139	.312
projectperformance	242	2.9869	.342	.156	-1.285	.312
Valid N (listwise)	242					

Source; Survey Results and Own Computation, 2021

The seriousness of skewness and kurtosis of the distribution can be measured or assessed by using Fishers skewness and kurtosis coefficient (kellar and kelvain 2012). If the results of fishers skewness falls between -1.96 and 1.96, the results suggests that the distribution is not significantly different from normal distribution (kellar and kelvain 2012). Table 3 showed that, the Fishers skewness and kurtosis coefficient of the study were lies between -1.96 and 1.96 and therefore the data were free from any skewness and kurtosis problems. Any variable value with an absolute of kurtosis value under dependent and independents components greater than 10.0 showed the existence abnormality in the data, and any kurtosis result above 20.0 showed the severity of the data quality from normality perspectives (Kline 2005, p.11). Consequently, the normality analysis of the study showed that the value of kurtosis were in the acceptable range.

4.4. DEMOGRAPHIC DATA PRESENTATION AND ANALYSIS

The study analyzed the demographic profile of the respondents to check the reliability of the data collected from different perspective. Accordingly, the respondents were asked to respond to their year of experience, level of education and rank in their organizations. The information collected from the target population were processed by SPSS and summarized. So this section presents the respondent basic informations from 242 questionnaire.

Table: 4 Profile of the respondents

	Frequency	Percent	Cumulative Percent
Education level			
Diploma or less	43	17.8	17.8
Bachelor	159	65.7	83.5
Masters	37	15.3	98.8
Doctorate	3	1.2	100.0
Position of the respondents			
High level	134	55.4	55.4
Middle level	67	27.7	83.1
Low level	41	16.9	100.0
Department			
Supply chain managment	150	62.0	62.0
project manger	9	3.7	65.7
Monitoring and evaluation	48	19.8	85.5
Mangment	33	13.6	99.2
Other	2	.8	100.0
Experience			
<or equal 5	34.7	34.7	34.7
5-10	43.8	43.8	78.5
10-15	14.5	14.5	93.0
>15	7.0	7.0	100.0

Survey Results and Own Computation, 2021

4.4.3 Education level of the respondents

The data on table 4 indicated that, a large proportions of the respondents (65.7 %) had a first degree and thirty seven (37) respondents i.e. 15.3 % were qualified in master degree. The data collected on educational background of the project staffs indicated that more than half of the respondents have first degree and above qualification and this educational status makes the respoindent relaiable to answer the inquires of the study .

4.4.1 POSITION OF THE RESPONDENT IN THE ORGANIZATION

Participant job position is the variable which was considered and collected in the study. The study included the questions on job position of the respondents in the study to see whether the data were collected from the right and concerned staffs.

The figures in table 4, indicated that the majority of the respondents 55.4% (n=134) were high level, whereas 27.7% (n=67) were middle level. The rest of the participants were low level position 16.9% (n=41). In terms of the respondent's position in the sector, the majority of the respondents were high level. The results indicated that, the respondents participated on the study were appropriate to give right and reliable informations and they were in a suitable and critical job position. Besides, the study result illustrates that participants from all levels were incorporated to see their diversified perceptions towards the subject matters.

The data was collected from project staffs of different projects to gain valuable informations from different points of view and perspectives. Majority (62%) of the respondents were working at supply chain department, 19.8% were in Monitoring and evaluation positions, 13.6% were management department while the rest 4.2% of the respondents were serving at other departments. This implies that all departments that were targeted by the study were involved and that the finding is reliable.

4.4.4 Experiences of the Respondents

Respondents experience is critical to obtain a wise and objective response. The table below depicts the experience of respondents in the institute. The majority of the respondents were worked on the sector for 5 to 10 years, comprising 43.8 % (n=106) of the total participants. Seventy nine (84) respondents i.e. 34.6 % has been within the organization for 5 and less years, whereas only 5% (n=12) were worked for 15 and more years. Among the participants 14.5 % (n=35) were worked for 10-15 years.

4.5. DESCRIPTIVE ANALYSIS

Descriptive analysis explains and discusses the results of the research constructs based on the analysis done on the data collected on each and everi dimensions. The results of the study were

discussed by triangulating the different information obtained through primary and seconderay data collection. Consequently, this section investigate and analyze the necessary assumptions on the relationship between variables for further statistical analysis and then present the results of descriptive analysis and ANOVA analysis. The discussion attempts to accomplish the objectives of the study and answer the research questions raised during study design.

4.5.1. Descriptive Analysis of procurement practice

To measue the effect of procurement on project performance, the study invited the project staffs to measure the level of performance by a means of a five-point Likert scale measurement (1=Very strongly disagree, 2= Disagree, 3= neutral, 4= Agree and 5=Very high strongly agree. The data collected by using the likert scale measurement were summarized by using stastical mean analysis and the analysis was analysed by the assumptions of the mean score value of less than 2.5 represent the disagreement of the respondents, the mean score value of 2.5 represents the neutrality of the respondents for the raised questions and the mean score value of greater than 2.5 express the agreement of the project staffs with the statement. A standard deviation of >0.9 implies a significant difference on the procurement practices of the variable among the respondents.

4.5.1.1. Need Assessment

Table: 8 summarizes respondents' level of agreement on need assessment practice of the institute via implementation of the procurement practice. Most of the respondents showed that, their projects involved in the development of scorecard for procurement evaluation by a mean score of 4.01 and SD of 1.041 which is the highest of all the other need assessemnt dimensions. The respondents were also agreed that their projects practiced annual Procurement Report (M=4.0 and SD=0.41). Most of the respondents were agreed that their projects establish a Procurement Database training program by a mean score of 3.33 and SD of 0.44 and their projects is keen to hold International competitive bidding (M=2.73 and SD=0.68). The issue of Procurement review committee score M=2.82 and SD=0.68. The respondents were also agreed that their project practice proper advertising (M=2.69 and SD=0.67) and the uses a Need functions, planning, assessing the risk with the mean of 2.55 and standard deviation of 0.64.

The findings indicated that, need assessment have been adopted at a higher extent as indicated by the composite (Mean=3.18 and standard deviation=0.49) with in the institute. This shows that the institute have adequate need assessment to achieve organizational strategic goals.

Table: 8 Mean value of Need Assessment

	N	Mean		Std. Deviation
	Statistic	Statistic	Std. Error	Statistic
There is a Need functions, planning, assessing the risk	242	2.55	.064	.994
International competitive bidding	242	2.73	.068	1.061
There is proper advertising	242	2.69	.067	1.039
There is Procurement review committee	242	2.82	.068	1.053
There is Scorecard for Procurement Evaluation	242	4.01	.041	.641
There is Procurement Database	242	3.88	.044	.680
There is Procurement Plans	242	2.75	.062	.962
There is Annual Procurement Report	242	4.00	.041	.638
Mean of mean		3.18		

Source; Survey Results and Own Computation, 2021

4.5.1.2. Supplier sourcing

The process of sourcing products or services is the first step in the supply chain process. Sourcing means finding the right suppliers that provide the quality you need at a price point that gives you the margin you need. A strategic sourcing process can be a difference-maker when it comes to your bottom line.

Table: 9 Mean value of Supplier sourcing

	N	Mean		SD
	Stat	Statistic	Std. Error	Statistic
NGO organization is linked up to its suppliers and end users	242	2.89	.068	1.057
The implementation of the purchasing manual is complete	242	2.88	.066	1.020

Proposals are made and submitted to all potential suppliers	242	2.88	.067	1.042
The workers of the EPHI serve suppliers objectively	242	2.88	.065	1.018
EPHI management has fully implemented procurement policy	242	2.86	.064	.995
EPHI employees have fully adopted acceptable tendering regulation	242	2.79	.059	.924
EPHI has procurement functions are in line with PPDA (2015)	242	2.76	.062	.960
The process involved in project implementation are efficient	242	2.75	.057	.887
Average		2.84		0.98

Source; Survey Results and Own Computation, 2021

The table above depicts that the respondents agree slightly on the existence of strong supplier sourcing with SC partners through linking with NGO organization to its suppliers and end users and through the implementation of the purchasing manual is complete (M=2.89 and SD=0.068) and (M=2.88 and SD=0.066) respectively. Correspondingly, the respondents agree slightly on the adoption of Proposals submission to all potential suppliers and service the suppliers objectively with the score of (M=2.88 and SD= 0.67) and (M=2.88 and SD=0.65) respectively. The respondents also expressed their agreement on the existence of management on implementation of procurement policy (M=2.86 and SD=0.64). Finally, the respondents showed their agreement towards the existence of efficient project implementation are (M=2.35 and SD= 0.983), alignment of procurement functions in line with PPDA (M=2.76 and SD =0.62). and which are the lowest scores from all supplier sourcing dimensions.

The average mean of supplier sourcing (M=2.84 and SD=0.98) showed the slight agreement of the respondents to various supplier sourcing practice. The sector should focus to enhance supplier soucing practice because higher level of integration with suppliers in supply chain, the greater the potential benefits (Frohlich & Westbrook 2001, p.48).

4.5.1.3. Contract management

The next independent variable on the study is the adoption of effective contract management in the Ethiopian public health institute. Contract management refers to the process of managing agreements, from their creation through to their execution by the chosen party, and to the eventual termination of the contract..

Table: 10.Mean value of Contract management

	N	Mean		SD
		Statistic	Std. err	Statistic
The organization appraises the suppliers you use in a year	242	2.70	.057	.881
Procurement department go through process needs of organization	242	2.86	.065	1.017
Delivered are goods rejected due to non-conformity to specification	242	2.87	.066	1.033
Contracts of the organization managed fairly and justly	242	2.88	.066	1.030
Most projects completed in timeline	242	2.88	.067	1.042
Suppliers fail to honor their obligation.	242	3.49	.053	.821
Mean of mean		2.95		0.97

Source; Survey Results and Own Computation, 2021

The table above depicts that the respondents slightly agree on the existence of timely appraisal of supplier and procurement implementation through process needs of organization with the score of (M=2.70 and SD=0.881) and (M=2.86 and SD=1.017)respectively. The respondents were also agree on the presence of delivery of goods rejection due to non-conformity to specification and on fairly and justly Contracts mangement with the score of (M=2.87 and SD=1.033) and (M=2.88 and SD=1.030)respectively. The respondents strongly agree on failurity of Suppliers to honor their obligation with the score of (M=3.49 and SD=0.821).

Generally, the respondents were agree on Contract management with in the institute partners with a mean score of (M=2.95 and SD=0.97). The result showed that, the adoption of contract management was medium and this affects significantly the project performance of the institute because contract management has a significant influence on projectquality and completion time.

a critical emphasis on contract mangement without the interest of integrating contracts information will not contribute to associate organizations together.

4.5.1.2. Inventory mangement

The other dimensions of procurement practice is inventory mangement and it's defined as the systematic approach to sourcing, storing, and selling inventory, both raw materials and finished goods..

Table: 11 Mean value of Inventory mangement

	N	Mean		SD
	Statistic	Statistic	Std. Error	Statistic
Procuring of goods and services add to cost reduction to the organization	242	1.6777	.04399	.68432
Rate your Organization level of stores management practice	242	2.02	.065	1.004
Able to deliver quality service to end users of the project	242	2.3719	.04584	.71303
Organization level of reduction in inventory costs	242	2.88	.066	1.023
Inventory purchases often fail to meet the demand and supply principle	242	2.92	.068	1.057
Mean of mean	242	2.37		0.89

Source; Survey Results and Own Computation, 2021

Most of the respondents showed that, their projects Procuring of goods and services add to cost reduction to the organization by a mean score of 1.67 and SD of 0.68 Which is the lowest of all the other inventory mangement dimensions. The respondents were also disagreed on the level of stores management practice (M=2.02 and SD=1.004). Most of the respondents were disagreed that their projects deliver quality service to end users of the project by a mean score of 2.37 and SD of 0.71. The respondents were also agree on the presence of level of reduction in inventory costs and Inventory purchases failurity to meet the demand and supply principle with the score of (M=2.88 and SD=0.066) and (M=2.92 and SD=1.057) respectively. Generally, the respondents were disagree on Inventory mangement with in the institute partners with a mean score of (M=2.37 and SD=0.89).

4.5.1.4. Project performance

The table below depicits that, the average mean of project performance was ranging from 2.93 to 3.00 and standard deviation ranges from 1.040 to 1.062. Therfore, this results showed that there is a slight agreement among the institute on the implementation of project performance dimensions.

The table below elaborated that the respondents were agreed to the practice of the institrute towards the level of Minimization of procurement expenditure (M=2.93 and SD=1.040) and the respondents agreed on the existence of funds utilization in your organization (M=3.00 and

SD=1.056). The respondents were provided the same scores (M=3.00) for the existence usability of goods procured, the levels of cost reduction control, satisfaction with cost reduction my organization makes through procurement function and quality of procured goods.

Table: 12 Mean value of Inventory management

	N	Mean		Sd
	Statistic	Statistic	Std. Error	Statistic
What is the level of Minimization of procurement expenditure	242	2.93	.067	1.040
How can you rate funds utilization in your organization in the past five years	242	3.00	.068	1.056
How would you rate usability of goods procured	242	3.00	.068	1.062
What are the levels of cost reduction control	242	3.00	.068	1.062
I am satisfied with cost reduction my organization makes through procurement functions	242	3.00	.068	1.062
What percentage would you give quality of procured goods	242	3.00	.068	1.058
Mean of mean		2.99		1.05

Source; Survey Results and Own Computation, 2021

4.5.1.5. SUMMARY OF STUDYVARIABLES

Table 13: Summary of study variables

	N	Mean		Std. Deviation
	Statistic	Statistic	Std. Error	Statistic
Inventorymangement	242	2.3736	.03168	.49290
suppliersourcing	242	2.8378	.04929	.76678
Contractmanagement	242	2.9470	.03948	.61416
projectperformance	242	2.9869	.05690	.88515
NeedAssessment	242	3.1787	.03708	.57690
Valid N (listwise)	242			

Source; Survey Results and Own Computation, 2021

The above table indicated that, the mean of mean score of all variables of procurement practice dimensions and project performance.The mean of most of the dependent and independent variable were above the average and the dimensions of need assessment scored the highest score and in contrary inventory mangement tilts to the disagreed side more. It is evident that procurement practice has been considered as a means to reduce project costs and project inefficiencies, and improve the service level in an organization. Lack of integration between procurement members results in operational inefficiencies and hinders the performance of the project (Lambert 2004)

4.6. CORRELATION ANALYSIS

The degree of relationship between two variables are measured by the bivariate Pearson's coefficient of correlation and is denoted by small letter r. Burns (2008) showed that, a Pearson product-moment correlation attempts to draw a line of best fit through the data of two variables, and the Pearson correlation coefficient was conducted to examine the relationship between variables, r, indicates how far away all these data points are to this line of best fit (how well the data points fit this new model/line of best fit). The Pearson correlation coefficient, r, can take a range of values from +1 to -1. A value of person corelations coefficients zero express that there is no association between the two variables (B.Burns & R.Burns 2008).

Burns (2008) stated that, the correlation coefficient value in the ranges of 0.1 to 0.20 showed slight and small correlation, the value with in the interval of 0.20 to 0.40 represents low correlation or weak relationship between the variables, the value between 0.40 to 0.70 showed a moderate relations; the value which scored between 0.70 to 0.90 presented high correlation or substantial relationship with in the variables and high corelations was expressed when the value reached between 0.90 to 1.00 (B.Burns & R.Burns 2008).

Interpretation of correlation coefficient (r) size is as follows: if the correlation coefficient falls between 0.1 to 0.20, it is slight correlation or small; if it is between

Table: 14 corelation analysis

		NeedAssessment	suppliersourcing	Contractmanagement	Inventory mangement	projectperformance
NeedAssessment	Pearson Correlation	1	.740**	.542**	.642**	.682**
	Sig. (2-tailed)		.000	.000	.000	.000
	N		242	242	242	242
suppliersourcing	Pearson Correlation		1	.803**	.736**	.765**
	Sig. (2-tailed)			.000	.000	.000
	N			242	242	242
Contractmanagement	Pearson Correlation			1	.599**	.729**
	Sig. (2-tailed)				.000	.000
	N				242	242
Inventorymangement	Pearson Correlation				1	.655**
	Sig. (2-tailed)					.000
	N					242
projectperformance	Pearson Correlation					1
	Sig. (2-tailed)					
	N					

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

Source; Survey Results and Own Computation, 2021

The results of the analysis showed that there is high correlation between need assessment and supplier sourcing with a value of 0.740. The result showed that need assessment and contractmanagement with a Pearson coefficient of value of 0. 542. The results indicated that need assessment and inventory mangement with a Pearson coefficient of value of 0. 642. The table above depict that need assessment and projectperformance with a Pearson coefficient of value of 0. 682. In addition, it was found that suppliersourcing and Contractmanagement with a value of 0. 803. The correlation analysis was also indicated the Pearson coefficient of suppliersourcing and Inventorymangement with a value of 0. 736. The results of the analysis showed that there is high correlation between, supplier sourcing and projectperformance with a value of 0. .765. The result showed that contractmanagemen and inventory mangement with a Pearson coefficient of value of 0. 599.

The results indicated that inventory mangement and project performance with a Pearson coefficient of value of 0. 642. The correlation analysis indicated that need assessment and project performance corelate with a pearson coefficient value of 0. 655.

4.7. REGRESSION ANALYSIS

Regression analysis is a stastical method that considered the average value distributions of a dependent variable and one or more independent variables. The method used independent variable as an inputs and assessed the effects on project performance variables. The study applied a linear regression model.

4.7.1. MULTI-COLLINEARITY

Multicollinearity is the part of stastical analysis that shows the occurrence of high corealtions between a particular independents variables. VIF and tolerance value are the two parameters that express the level of the multicolinarity problem (Hair et al. 2006).

Table: 15 Multi-Collinearity

Model		Collinearity Statistics	
		Tolerance	VIF
1	NeedAssessment	.424	2.358
	Contractmanagement	.349	2.867
	Inventorymangement	.437	2.290
	suppliersourcing	.196	5.093

Source; Survey Results and Own Computation, 2021

The colinarity statistics table indicated that the VIF values are less than 10 and the tolerance values are more than 0.2. This indicates that the independent variables of the study were free from any multi-collinearity problems.

4.7.2. REGRESSION MODEL

The below regression model table illustrated the predictions of project performance with the known values of the four procurement practice variables values. R square shows the proportion of the variance for a project variable that's explained by procurement practice variable or variables in a regression model.

Table: 16 regression model

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.819[a]	.671	.665	.51231

Source; Survey Results and Own Computation, 2021

Table 17: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	126.616	4	31.654	120.605	.000[b]
	Residual	62.203	237	.262		
	Total	188.820	241			

a. Dependent Variable: projectperformance

b. Predictors: (Constant), suppliersourcing, Inventorymangement, NeedAssessment, Contractmanagement

Source; Survey Results and Own Computation, 2021

The results of R square value of the study was 67.1% and this indicated that 67.1% of the project performance variables changes were explained by the procurement practice variable, since (R^2=67.1%, F=120.6, Sig.=0.000). Based on the analysis of variance, the null hypothesis is excluded and the alternative proposition is acknowledged, which states that procurement practice elements have direct impact on project performance in Ethiopian public health institute, at ($\alpha \leq 0.05$).

Table 18 Multiple Regression Analysis

The regression model predicts the value of dependent variables by considering the given known values of independent variables.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1.015	.231		-4.388	.000
	Need Assessment	.413	.088	.269	4.703	.000
	Contract management	.519	.091	.360	5.704	.000
	Inventory mangement	.245	.101	.137	2.422	.016
	Supplier sourcing	.203	.097	.176	2.093	.037

a. Dependent Variable: projectperformance

Source; Survey Results and Own Computation, 2021

A regression equation is in no way a mathematical linking two variables but serves as a pointer to questions to basically, the regression analysis is used in two distinct ways; (1) as a means of considering data taking into account any other relevant variables by adjustment of the random variable; and (2) to generate mathematical forms to be used to predict the random variable from the other (independent) variables. The study formulate the following regression model:

$$Y= 0.413X_1+0.519X_2 + 0.245X_3 + 0.203X_4 - -1.015$$

Where: Y: is project performance,

X_1: is Need Assessment

X_2: is Contract management

X_3 is Inventory mangement

X_4 is Supplier sourcing

According to the regression equation established, assuming all factors (Need Assessment, Contract management, Inventory management and Supplier sourcing) fixed at zero, project performance will be -1.015 as a consequence of the independent variables. The results of the study revaled that, assuming entire independent variables at zero, a single unit escalation in need assessment will lead to a 0. 413 enhancement in project performance.

The regression analysis indicated that a single unit rise in contract management will lead to a 0.519 unit growth in oproject performance in the institute. The result showed that a single unit escalation on inventory mangement will create a 0. 245 rise in project performance in the sector. Besides the studies illustarated that a single unit growth on supplier sourcing will lead to 0.519 upturn in oproject performance in the institute.

This therefore implies that all the four variables have a positive relationship with organization goal and contributing more to project performance in the institute, while level of Supplier sourcing contributes the least to project performance in the sector.

4.8. HYPOTHESIS TESTING

The multiple regression table indicated that, need assessement is a positive direct effect on project performance, as (Beta= .413, t=4.703, sig. 0. .00, $p<0.05$), the null proposition is rejected and the alternative hypothesis is acknowledged, this clarify the substantial effect of need assessement on project performance at ($\alpha \leq 0.05$).

The above table also depict that there is a positive direct effect of contract mangement on performance, since (Beta= 0.519, t=5.704, sig. 0. .00, $p<0.05$), the null proposition is excluded and the alternative proposition is acknowledged, this clarify the substantial effect of contract mangement on project performance at ($\alpha \leq 0.05$).

The result of the study also indicated a positive direct effect of inventory managemnt on project performance, since (Beta= 0.245, t=2.422, sig. 0.016, $p<0.05$), the null proposition is excluded and the alternative proposition is acknowledged, this clarify the substantial effect of inventory managemnt on project performance at ($\alpha \leq 0.05$).

The above table also illustrated that there is a positive direct effect of supplier sourcing on performance, since (Beta= 0.203, t=2.093, sig. 0. .037, $p<0.05$), the null proposition is excluded and the alternative proposition is acknowledged, this clarify the substantial effect of supplier sourcing on project performance at ($\alpha \leq 0.05$).

CHAPTER FIVE: SUMMARY,

CONCLUSION AND RECOMMENDATIONS

5.1 INTRODUCTION

The main findings of the study to answer thw research questions are presented and summarized in this chapters. Moreover the chapter presents the summarised data findings of effects of procurement practice on project performance of Ethiopia public health institute The chapters comprises valuable conclusion and recommendation.

5.2 SUMMARY OF FINDINGS

Ethiopian public health institute is implementing different projects realated to health. The objectives of this study were to determine procurement practice approaches adopted by the institute and to determine the effect of the procurement dimensions on project performance. The study also clarified the relationship that exists between the project performance and procurement dimensions.

The outcomes indicated that, need assessment have been adopted at a higher extent as indicated by the composite (Mean=3.18 and standard deviation=0.49) with in the institute. This shows that the institute have adequate need assessment to achieve organizational strategic goals. The average mean of supplier sourcing (M=2.84 and SD=0.98) showed the slight agreement of the respondents to various supplier sourcing practice. The sector should focus to enhance supplier soucing practice because higher level of integration with suppliers in supply chain, the greater the potential benefits (Frohlich & Westbrook 2001, p.48). The result showed that, the adoption of contract management was medium and this affects significantly the project performance of the institute because contract management has an effects on project deliverables quality and project completion date. Generally, the respondents were disagree on inventory mangement with in the institute partners with a mean score of (M=2.37 and SD=0.89). all the independent variables have appositive corelations with each other and project performance. The null proposition is excluded and the alternative hypothesis is acknowledged, which states that

procurement practice elements have direct impact on project performance in Ethiopian public health institute projects, at ($\alpha \leq 0.05$).

5.3. CONCLUSIONS:

The study sought to find out the effect of procurement practices on project performance of EPHI. Based on the findings in relation to specific objective, the study concluded that:

- The institutes are implementing need assessment ineffectively and only an encouraging results obtained on two need assessment practices such as; Procurement Report and database. The findings indicated that need assessment are has a moderate relationship with all independent and dependent variables. It was therefore concluded that to improve organization project performance in respect to quality, cost and time there is need to enhance the need assessment.
- The dimensions of Supplier sourcing were rated below the average mean value of 2.84 and therefore it gives a clue for the poor existence of supplier sourcingin the sector. The finding of the study also revealed that supplier sourcing significantly influences project performance. It was therefore concluded that to improve project performance in terms of quality, cost and time, there is need to enhance the supplier soucing practice in respect to timely selection, level of collaboration and the level of strategic selection.
- The institute are implementing Contract management ineffectively and the finding of the study also revealed that contract management significantly influences project performance. It was therefore concluded that to improve project performance in terms of quality, cost and time, there is need to enhance the contract management practice in respect to supplier follow up, stable procurement, computerized ordering system, frequent contacts, establishment of quick ordering system with major customer.
- The four dimensions of procurement practice are positively relate with each other and interlinked significantly with project performance.

5.4. RECOMMENDATION:

Based on the study research findings, the researcher recommends the following:

- In order to improve project performance in the institute, need assessement of all projects, vendors and suppliers scope of work that defines what they will produce or supply to the projects should be properly defined. Need assessement and supplier sourcing documents of the projects of the institutes also needs to be aligned with other channel members. The projects should select appropriate relationships and contract approaches for each type of purchased goods or outsourced service and evaluating partnership opportunities.
- The institute should adopt procurement management plan like all other management plans. It is a subsidiary of the project management plan. The projects should use tools and techniques for procurement planning stage include make-or-buy analysis and definition of the contract type. The institute should select effective contract type and any contracts made with in the institute projects should include an incentive for completing the work on an important milestone for the project.
- To improve the general performance of the project in the institutes, the procurement sections should improve the understandings of officials on procurements, hire professionals across all disciplines, increase budget allocation for regulations and procedure operations and provide modern equipments and IT apparatus among others.
- Supplier sourcing, inventory management and need asssement and contract mangement also needs to be improved through increasing information network with in the institute and outside, strategic partnership with suppliers, emplacing computerized system, level of collaboration and the level of support among the stakeholders. Monitor and evaluate the level of customer relationship management, the level strategic partnership and the level of customization of customer needs as well and segmentation of service periodically.
- The institute could introduce procurement software in all projects so as to ease the procurement cycle and to enhance project delivery time.
- It is advisable to pay more attention to the strategic relationship with suppliers through enhancing joint programs and activities to increase the coherence and harmony.
- This study focused on four procurement practices (inventory management, contract management, supplier and sourcing and need asssessement) and their effects on project performance of Ethiopian public health institute. The researcher recommends further

research to investigate the role of other procurement practice attributes on performance. The researcher was also focuses on time and quality aspects of project performance and further research should emphasis on the other dimensions of project performance such as safety.

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APPENDIX I: QUESTIONNAIRE

ADDIS ABABA UNIVERSITY

SCHOOL OF COMMERCE

Dear Participants,

I would like to extend my deep appreciation for your time in responding to the research questions provided below. I'm a postgraduate student at Addis Ababa university school of commerce under the department of project management. The title of my thesis is**: THE EFFECT OF PROCUREMNT PRACTICE ON PROJECT PERFORMANCE IN ETHIOPIAN PUBLIC HEALTH INSTITUTE .** We ask your kindly cooperation in answering the questions as truthfully as possible and your response will be highly confidential. This questionnaire will only be used for a student project work purposes only. Your participation in this survey is completely voluntary.

SECTION A: Demographic information

1. Gender: □ Male □ Female
2. Age (years): □25 – 35 □ Between 35 – 45 □Between 45 – 55 □above 55
3. Education: □Diploma or less □Bachelor □Master Doctorate □
4. Position: □ High level □Middle level □ Supervisors
5. Division: □ Supply chain mgt □R&D □ Marketing □ Management □Others
6. Years of experience: □ Less or equal 5 □Between 5 – 10 □ Between 10 – 15 □Above 15

SECTION B: THE EFFECT OF PROCUREMNT PRACTICE ON PROJECT PERFORMANCE IN ETHIOPIAN PUBLIC HEALTH INSTITUTE

The following 34 items tap into procurement practice and its effect on project performance. Please, answer these questions based on actual and current situation and not on beliefs.

1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree] based on how you feel about the statement.

	Please indicate the extent of integration of your enterprise. (1=strongly disagree;2=disagree;3=neutral ;4=agree;5=strongly agree)	1	2	3	4	5
	Need Assessment					
1	There is a Need functions, planning, assessing the risk					
2	There is proper advertising					
3	International competitive bidding					
4	There is Procurement review committee					
5	There is Scorecard for Procurement Evaluation					
6	There is Procurement Database					
7	There is Procurement Plans					
8	There is Annual Procurement Report					
	Supplier sourcing function					
9	EPHI has procurement functions are in line with PPDA (2015)					
10	EPHI employees have fully adopted acceptable tendering regulation					
11	EPHI management has fully implemented procurement policy					
12	The implementation of the purchasing manual is complete					
13	The process involved in project implementation are efficient					
14	The workers of the EPHI serve suppliers objectively					
15	Proposals are made and submitted to all potential suppliers					
16	NGO organization is linked up to its suppliers and end users					
	Contract Management					
17	Delivered are goods rejected due to non-conformity to specification					
18	The organization appraises the suppliers you use in a year					
19	Suppliers fail to honor their obligation.					
20	Procurement department go through process needs of					

	organization					
21	Contracts of the organization managed fairly and justly					
22	Most projects completed in timeline					
	Inventory Management					
23	Inventory purchases often fail to meet the demand and supply principle					
24	Rate your Organization level of stores management practice					
25	Organization level of reduction in inventory costs					
26	Able to deliver quality service to end users of the project					
27	Procuring of goods and services add to cost reduction to the					
28	organization					
	Project performance					
29	What is the level of Minimization of procurement expenditure					
30	What are the levels of cost reduction control					
31	How would you rate usability of goods procured					
32	The organisations give emphasis for quality of procured goods					
33	The organisations implemented effective fund consumptions toachive organization goal.					
34	The organisations implemented a cost minimizations by applying successful procurement procedures.					

Appendices -2 List of projects

1. COVID-19 Emergency response project
2. Pandemic preparedness and response project
3. Africa CDC regional investments financing projects
4. Public Health Emergency project
5. Global health security project
6. Bacteriology pool funds project
7. Center for Disease and control and Prevention (CDC) project
8. Nutrition program pool project
9. Sustanable development goal
10. World health program project component -1
11. World health program project component -2
12. World health program project component -3
13. Corona aid relief for security act
14. Ebola response projects
15. Influenza and other respiratory disease control project
16. HIV and TB control project project
17. Measles control and management project
18. Neonatal Tetanus response project
19. Rabies response project
20. Smallpox control project
21. Yellow fever response and control project
22. Cholera early assessement project
23. Dracunculiasis / Guinea worm radication project
24. Typhus assessement and reduction project
25. Anthrax management and response project