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College Of Business and Economics

Master of Business Administration

"Effects of Procurement Practices on Organizational Performance: The Case of Ethiopian Roads Administration"

A Thesis Submitted to Addis Ababa University in Partial Fulfillment of the Requirements for the Award of Master's Degree in Business Administration.

By:

Kibur Amaha Diana

Advisor:

Tsegabrehan Mekonnen (Ph.D)

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By

Kibur Amaha Diana

Advisor: Tsegabrehan Mekonnen (Ph.D)

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By

Kibur Amaha Diana

Approved By

The Board of Examiners

Tsegabirhan Mekonen (PhD)		2/7/2024
Advisor	Signature	Date
Temesgen B. (PhD)		02/07/24
External Examiner	Signature	Date
Habtamu F.		1-7-24
Internal Examiner	Signature	Date

DECLARATION

I, undersigned, declare that this thesis is my original work and have not submitted this paper to acquire another degree in any university. Additionally, all the authors that were stated throughout this paper have been duly acknowledged.

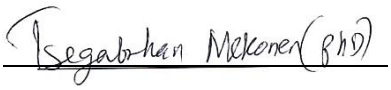
Kibwe Amaha

Author

Signature

ENDORSEMENT

This thesis has been submitted to Addis Ababa University, Faculty of Business and Economics for examination with my approval as a university advisor.



Advisor

Addis Ababa University

Signature

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LIST OF ABBREVIATIONS

ERA	Ethiopian Roads Administration
GDP	growth domestic production
IHA	Imperial Highway Authority
ETCA	Ethiopian transport construction authority
RSDP	Road Sector Development Program
MDG	Millennium Development Goals
USD	united states dollar
PAT	Principal-Agency Theory
KPI	Key Performance indicators
RRA	The rural roads authority
WRO	Wereda roads office
WB	World Bank
ADB	African Development Bank
EU	European Union
NDF	Nordic Development Fund
BADEA	Bank of Arab for Economic Development in Africa
OFID	OPEC Fund for International Development
EABSC	East African Bottling Share Company

ABSTRACT

Procurement is one of the prominent drivers of growth and development in any country. It even plays a vital role in the road sector, as most public procurement activities in the sector come through project delivery systems. This research investigates the effect of procurement practices on the organizational performance of Ethiopian Roads Administration (ERA). The study adopted an exploratory research design along with quantitative research approach. Both primary and secondary data were used to accomplish its objectives. A structured questionnaire that utilized a five-point Likert scale was distributed to 142 employees across five directorates that were directly involved in the procurement process of the organization. 107 questionnaires were returned and analyzed using IBM SPSS statistics 27 software. Descriptive statistics such as frequency, mean and standard deviation, as well as inferential statistic, particularly correlation and multiple regression analysis were used to analyze the questionnaires. The findings revealed that all procurement practices had positive and significant relationship with organizational performance. Ethical practice, buyer to supplier relationship, and procurement planning had a high correlation to organizational performance while organizational capacity and contract management had a moderate correlation. The study recommends ERA to use historical data from other similar projects when trying to forecast their schedules and costs during their planning phase, put adequate efforts on employing better human and technology resources and apply better contract management practices in order to boost their organizational performance.

Key words: procurement practice, procurement planning, contract management, organizational capacity, buyer to supplier relationship, ethical practice, and organizational performance.

CHAPTER 1

1. INTRODUCTION

1.1 Background of the study

Procurement is one of the most prominent drivers of growth and development across the globe. A great deal of governmental budget expenditure goes into procurement practices. In most countries a large part of government resources are consumed on procurement of goods, services and works that's required in government departments (Basheka & Tumutegyereize, 2010). The economic significance of public procurement activities, coupled with the substantial allocation of public funds to these functions, underscores the utmost importance of ensuring their effective organizational and national economic performance (Changalima et al., 2021; Ahmed & Mohamed, 2023).

Lim (2014) defines procurement as the procedure that is employed to obtain the necessary works, goods and services that an organization needs in order to achieve its organizational goals and objectives. Hutt and Speh (2012) describe procurement as the principal and definitive functional procedures that are used by organizations in order to acquire goods and services.

The management of procurement is essential for the success of any organization, as they can contribute to the efficiency, effectiveness and strategic operational success resulting from their proper management. Chikwere, Chikazhe & Tukuta (2023) indicate the value brought to business leaders if they know how to effectively integrate procurement practice into their organizational strategy. Moreover, within the realm of value generation, procurement holds strategic significance and serves as a crucial driver of competitive advantage (Knight et al., 2017; Schütz et al., 2019).

At first, there has been opposing thoughts concerning the contribution of procurement practice in value addition to organizations. While Leenders et al. (2008) argue that purchasing can add value, Baily et al. (2008) considered procurement as a task that doesn't add value to organizations, but afterward Baily (2011) admitted that the integration of procurement practices has indeed enhanced the performance of several organization when it was integrated into activities such as coordinating

demands, delivering the necessities of customers and harmonizing manufacturing through innovative procedures. Patrucco et al. (2019) indicated the crucial role procurement is playing to organizational performance by stating how it has gone through a momentous evolution by transforming from a more dormant and tactical role to that of a strategic one.

When executed appropriately, public procurement can result in better performance of organizations. On the contrary, when poorly executed, it has a significant consequence. Shirima (2009) indicated that this tends to cause delays in project execution, which can generally result in poor execution of projects, escalation in project costs and delivery delays in the benefit of the beneficiary of the procurement required. In addition, Thai (2010) states that, a malpractice in procurement has the potential to hurt the reserved prices and effectiveness of an organization.

Procurement practice is an area that can be improved to further contribute to organizational performance **(**Kipkemoi, 2017). Consequently, the ability to optimize procurement processes and strategies has become a focal point for organizations seeking to maximize their overall performance (Cao & Wang, 2022; Mohamud et al., 2023). For that reason, this study was conducted in order to investigate the effects of procurement practices on organizational performance in the Ethiopian roads administration (ERA).

1.1.1 Background of the organization

The Ethiopian Roads Administration (ERA), formerly known as Ethiopian road authority, is the study area for this research. It is located in Addis Ababa, Mexico right in front of Wabi Shebele Hotel. The Ethiopian roads administration is a government bureau responsible for the administration of federal roads across the country. The bureau is heavily budgeted by the government to administer and oversee the construction of federal roads. It achieves this objective by conducting procurement of works and services from eligible national and international contractors and consultants. The bureau has been around for more than 70 years and is responsible for financing and overseeing the construction of major federal roads in Ethiopia. It is also responsible for the frequent maintenance and rehabilitation of these roads.

According to Ethiopian Roads Authority Annual Magazine (2015), ERA was established in 1951 with the name of Imperial Highway Authority (IHA) and started with 650 staff member.

Originally, from 1951 – 1977, it was responsible for the construction and maintenance of roads. However, by proclamation No 189 of 1980 declared in 1980, the bureau's responsibility was further extended to accommodate the construction of railways, municipal roads, seaports and airports. During that time it's name was also changed to Ethiopian transport construction authority (ETCA), and this policy reformation granted ERA the command to supervise and administer contracts and to include road maintenance works. The transitional government proclamation No 63/1993, established ERA under the board's leadership to conduct a robust administrative duties. In 1997, through proclamation No. 80/1997, ERA was re-established to enhance the prevailing conditions which included administering highway constructions. The name of the bureau changed three times from the day of its establishment and now has changed to the Ethiopian Roads Administration.

The main goal of ERA (2012) is to enhance transport operational efficiency while reducing the cost of road transport, provide adequate access to rural regions of the country and also improve the institutional capacity of the road sector. In order to achieve this objective, ERA has developed different road development programs throughout the period. The most popular and successful program is the Road Sector Development Program (RSDP). The program started in 1997 and had five phases, RSDP I - V, and currently it is on its fifth phase. For a five-year development program, the total budget was Br 323.3 billion (Road Sector Development Program Phase 5, 2015). In ERA's 2022 annual magazine, the vision of ERA is stated as "Global competence and best roads to prosperous Ethiopia by 2030"and its mission as to "Develop and manage sustainable roads through institutional competency and optimal utilization of resource."

The Ethiopia Roads Administration is fit for this research as it had been successful in administering four RSDP's successfully and has now transitioned to its fifth phase. The organization has been procuring works and services for more than twenty years and has been successful in its administration. According to a 19 year assessment report (2016) of RSDP, the road network has increased from 26,550 km to 113,066 km, a 326% increase from 1997 to 2016. The report also states that the road network is in good conditions which grew from 22% (1997) to 72% (2016). This indicates that the procurement practice followed by ERA to accomplish its objective has rendered to be fruitful. Thus, the bureau was chosen for this study.

1.2 Statement of the problem

Procurement plays an important and key role in the development of countries. Besheka (2021) stated that a significant percentage of the total capital spend in developing countries goes to procurement and the capital allocated for that appears to be increasing. However, the presence of mismanagement and malpractices has led to a less than satisfactory performance of procurement activities in numerous organizations, thereby raising concerns among stakeholders and academics alike (Changalima et al., 2022). The perceived benefits of an effective procurement management regime cannot be overemphasized as it contributes to social-economic goals of a country (Thai, 2004). Odongo & Kazungu (2022) indicated that the establishment of a workforce that is competent in procuring organizations plays a dynamic role in order to improve the operations of procurement as well as increase the general performance of organizations.

Thai (2004) denoted that similar problems are being faced by procurement professionals even though each country has different social, cultural, economic and political environment. Often times when a government's bureau is undergoing procurement, heavy bureaucratic procedures are imposed as part of the process to get the final procured goods and services. Kiage (2016) argues that this leads to a reduced productivity, escalated costs and leaks that cause heavy national budgets instead of a prosperous public financial management and performance.

Globally, the two major challenges that frequently occur in public procurement are violations in laws, regulations and corruption. These practices are a major impediment in the creation of a sustainable procurement system. Tian (2003) argue that while public procurement rules that enforced its development were received, it could not be ignored that serious challenges were experienced in that sector. Gelderman et al. (2006) indicated that one of the major deterrents to making procurement effective is non-compliance to the procurement laws. Roman (2017) supports this argument, but adds that inadequate understanding of rules & regulations, vague procurement processes, inadequate commitment of government bureaus on improving public procurement practices are also notable mention that adds to the challenges. This creates a formidable issue for many countries as many policies and rules created to regulate procurement practice are being violated frequently. Another great enduring challenge is the corruption that is experienced across the globe during procurement periods. Hellman et al. (2004) mentioned that the estimated annual bribes paid exceeds 1 trillion USD and roughly 200 billion USD exchanges hands through bribes

in the public procurement sector per annum alone. Moreover, Balaeva et al., (2021) stated that the insufficient procurement quality performance found within public sector can frequently be ascribed to corrupt behaviors within procurement.

In this information age, technology has changed how businesses operate. Many Organizations are in need of growth and demanding systems that can improve their operations and contribute to cost savings. One of these systems in procurement is electronic procurement (E-procurement). E-procurement have played a key in reducing procurement processes, and is widely adopted in many developed countries. Despite that, it faces resistance in many developing countries in being adopted. Wambui (2013) indicated that difficulties often arise in developing countries when trying to adopt to new procurement practices. Kipkemoi (2017) argues that organizations choose to stick to their accustomed procurement procedures instead of choosing the ones that are relevant and beneficiary to the prosperity of their organization. The other issue raised in procurement is inadequate planning. Mamiro (2010) argues that poor procurement planning is one of the major hurdles in public procurement along with its management. The author points out that budgets that are unreal, needs that are not clearly recognized as well as procurement staff's skill and capacities that are not adequate are major problems that need to be addressed. On another note, a subtle but significant challenge in procurement is the organization's relation with its suppliers. Despite the vital role communication plays, it is often overlooked by most procuring organizations. Monczka Handfield, Giunipero, and Patterson (2015), point out that effective communication plays a crucial role in buyer-supplier relationships and it safeguards in expectation alignment, conflicts resolution, and general coordination in undertakings among the parties.

In a local perspective, the major challenges of public procurement in Ethiopia, according to Belachew (2018), frequently arise from inadequate periodic reviews of procurement planning and implementation, lack of proper investment in organizational capacity(job relevant skill training and development, insufficient staffing of qualified personnel), turnover in qualified personnel , a narrow aptitudes in conducting needs assessment and clarification, improper scheduling and costing in procurement, poor monitoring, poor contract management, lack of official announcement in annual procurement plan, and untimely submissions of requirements were among the few identified. Procurement practices face different challenges in many countries, this prompts

a need for a study on the subject. This research investigates how procurement practices (procurement planning, contract management, organizational capacity, buyer to supplier relationship and ethical practice) can affect organizational performance.

Some Ethiopian researchers have conducted studies on the procurement practices in relation to ERA. George (2013) studied the impacts of procurement process on contractor selection, Ersido (2019) studied the types of procurement methods and their impact on the project success and Bilen (2017) studied Procurement Practices and It's Impacts on Ethiopian Road Construction. None of these researches revolved around the effect that procurement practice has on organizational performance.

Conversely, there are Ethiopian researchers who took interest in investigating the effects of procurement practice on organizational performance, such as Argachew (2021) who did a research on Ethiopian defense force higher educational institutions, Tamiru (2020) on Jimma University and Ayub (2020) on East Africa bottling Share Company. Two of the researchers focused on the education sector and the other on a private company. There exist limited research on the effects of procurement practice (procurement planning, contract management, organizational capacity, buyer to supplier relationship, ethical practice) on organizational performance in the road sector, this includes both the public (ERA and its regional counterparts) and private sector (road contractors) in Ethiopia. Therefore, this research attempts to fill the gap by addressing the effects of procurement practice on organizational performance in the case of the Ethiopian Roads Administration (ERA).

1.3 Research question

The research question to be answered by this research are:

1. How does procurement planning affect the performance of ERA?

2. To what extent does contract management affect the performance of ERA?

3. To what extent does organizational capacity affect the performance of ERA?

4. How does buyer to supplier relationship affect the performance of ERA?

5. How does ethical practice affect the performance of ERA?

1.4 Objectives of the study

1.4.1 General objectives

The major objective of this study is to investigate the effect of procurement practices on the organizational performance of Ethiopian Roads Administration (ERA).

1.4.2 Specific objectives

The specific objectives for this study are:

1. To analyze how procurement planning can affect the performance of organizations.
2. To examine the effects of contract management on organizational performance.
3. To determine the effect that organizational capacity has on organizational performance.
4. To examine the extent to which buyer to supplier relationship can affect the performance of organizations.
5. To analyze how ethical practice affects the performance of an organization.

1.5 Significance of the study

The findings of this study helps in providing insights into how procurement practices followed by ERA influences the organization's performance and how this challenges in their procurement process can be mitigated. It would help ERA's engineering procurement department head and employees in understanding how their organization is being affected by certain procurement practices and what they can do to increase the effectiveness of the organization's performance, which are be provided at the recommendations section at the end of this paper. The study also paves way for other researchers interested in the topic to conduct further studies on related issues of procurement in ERA using other performance indicators.

1.6 Scope of the study

This study focuses on the effects of procurement practice on organizational performance in Ethiopian Roads Administration (ERA). ERA's head office is found in Addis Ababa, around Mexico. ERA is the main public procuring body for federal road construction in Ethiopia. It frequently procures work, goods and services from the private sector to achieve the organizations objectives.

This research is also limited to the road sector and is about the public road construction governing body. It is not about the private sector. Finally, it is also important to denote that since this study is limited to ERA, the findings are specific to the organization and thus cannot provide a generalization of the relationship between procurement practice and organizational performance in other organizations.

1.7 Limitations of the study

There were some limitations that were encountered while conducting this study. The first was lack of adequate research on the topics of the effects of procurement practice on organizational performance in Ethiopia's road sector. The researcher didn't find adequate research publication related to the road sector on the given topic and international publications were also limited. Finding secondary source that were up to date concerning Ethiopian roads administration's project performance was also a challenge. The available secondary source was almost a decade old, and up to date publications concerning the planned and actual output performance of the organization could have contributed to the quality of the work.

The scope of the study was also limited to only include employees of Ethiopian roads administration. This was done in order to work effectively within the available time and budget constraint. For that reason, contractors and consultants views about the organization's performance was not included in this study. Furthermore, the data collection took more time than anticipated. Some of the employees were frequently visiting project sites and attend meetings, which stretched the period of the data collection phase. All directorates and some team leaders were also not accessible during the data collection phase.

1.8 Organization of the study

The study is divided into five chapters. In the first chapter, the focus is on providing background information about the study, stating the problems being addressed, outlining the objectives, discussing the significance, as well as highlighting the limitations and scope of the study. Moving on to the second chapter, it revolves around the review of related literature. Chapter three covers the methodological aspects of the study, including research design, population, sampling techniques, data sources, data collection instruments, procedures, analysis methods, and ethical considerations. Analysis and interpretation of the data are presented in chapter four followed by a

discussion section, while the final chapter concludes with a summary of findings, conclusions, and recommendations.

1.9 Operational definition of terms

Procurement practice: This refers to the procedures that an organization follows in order to acquire the goods, works and services that the organization needs in order to achieve its objectives. It includes procurement planning, contract management, buyer to supplier relationship, ethical practice and organizational capacity.

Procurement planning: This refers to the procurement plan that the organization has prepared in order to achieve its short term and long term objectives. It involves defining the needs of the organization as well as the expected deliverables of the procured item.

Contract management: This refers to the mechanism in which the organization enters into a binding agreement with its suppliers and manages the supplier's deliverables. The management of the contract includes the lifespan of contracting, including its administration and closeout of the contract during handing over of the project.

Buyer to supplier relationship: This refers to the strategic and operating relationship that exists between the buyer (client) and the supplier that is well defined in order to make the interaction fruitful. It involves sharing information, dispute resolution and value exchange.

Ethical practice: This refers to the principles and rules the organization follows while conducting public procurement. It involves qualities such as transparency, integrity, openness (honesty), fairness (impartiality), competition, economy, efficiency and effectiveness.

Organizational capacity: This refers to the capacity of the organization in terms of technological advancement and human resource development. In terms of technology advancement practices such as integration of automation of business process, data management systems are included whereas, in terms of human resource development recruitment and keeping personnel's with adequate skills and qualifications, advancements through training and development are included.

Organizational performance: This refers to the outputs or results that the organizations achieves in comparison to the objectives it set within the planned period. The input (planned output) to output (actual performance) achieved are used to measure the performance of the organization.

CHAPTER 2

2. LITRATURE REVIEW

2.1 Introduction

This chapter starts by defining procurement as stated by different authors as well as which definition is adopted for the study. The theories chosen for the research are presented next. The elements of the procurement practices (procurement planning, organizational capacity, buyer to supplier relationship, contract management and ethical practice) which will be the variables that are thought to have an effect on organizational performance are presented after. Next, concept of organizational performance is introduced followed by an assessment of ERA's performance history in order to clarify the historical input to output performance of the organization. Afterwards, the empirical reviews are presented and following that the conceptual framework is presented. Finally, the research hypothesis is presented.

2.2 Definition of procurement

Knight (2012) defines procurement as the act of obtaining goods and services for the direct or subsidiary advantage of the organization in the right quality, right quantity, right price, right time and right place. Caldwell, Roehrich and Davies (2009) define procurement as list of activities pertaining to acquisitions of goods and services and the management of their inflow towards the organization and finally to the end users. In order to accomplish successful procurement, methods or procedures are used to properly plan, monitor, deliver and evaluate the procured goods, work and service provided.

Molenaar et al. (2009) define the procurement procedures as an integrated process that involves various engineers, contractors, and different consulting professionals coming together to design, construct and finally deliver the project to their intended clients. Perna (2009) argues that procurement plays a vital role in project life cycles and is mainly divided in to five stages: defining needs of the business, supplier selection and evaluation, managing relationships with the suppliers, goods and service delivery, and assessing and refining the procurement process.

Public procurement plays a vital role in the road sector, as most procurement in road construction come through project delivery systems. Procurement method determines the level of integration of design, construction and ongoing maintenance for a given project, and it supports the main project objectives in terms of risk allocation, delivery incentives and so on (Keith Potts, 2008).

In general, from the above definitions it can be understood that procurement is centered on the acquisitions of good, work or services by a client from a supplier and the purchasing is done with a specific objective of fulfilling the organization's need. In the road sector, project delivery systems are used for the procurement of work and services, where project deliverables are packaged into a set of activities that must be accomplished in order to fulfill the organization's objectives. Since this study revolves around the procurement practice of the Ethiopian roads administration, the definition of Keith potts (2008) best describes the procurement in the organization.

2.3 Theoretical review

2.3.1 Principal-agency theory:

This theory is the foundation theory employed in this study. According to Lawal (2013), the Principal-Agency Theory is a model of agency which was developed by economists and it deals with circumstances by which a client (principal) is at a point to influence an agent to complete some activities on his/her behalf or interest but not on the interest of the agent. The Principal-Agency Theory (PAT) comes into play when a person appoints another person to perform certain activities on their behalf.

This legitimate handing of power from one entity to another to act on their behalf and perform certain duties is the foundation that this theory rests on. This plays a role in procurement as well as in organizational performance. For instance, the ministry of transports which is in this case the principal of Ethiopian Roads Administration chooses management (agents) to act on its behalf. For that reason, the procurement management is given power to make decisions on behalf of the ministry of transport.

Potential threats concerning supplier's quality of deliverables arise for the buyers in this kinds of agency relations. Usually, the expectations of the buyers is in receiving high end quality goods and services from their suppliers and the suppliers may not care as much to the quality of the

deliverables. This creates a conflict of interest among the parties. Zu and Kaynak (2012) propose that in due time, this difference in views and needs of the buyers and suppliers will lead to them only focusing on their own needs and wants.

Accordingly, the theory implies that procurement activities of the government are given to procurement managers, in order for the procurement managers to perform those activities of the government on their behalf. It is therefore suggestive that if there is a flawed communication between them then it will impact their connection, leading to other potential issues. Thus, this study highlights on this theory in order to find out the procurement practices' function on the performance of Ethiopian Roads Administration.

2.3.2 Legitimacy theory

The Legitimacy Theory states that organization has the mandate to state its activities to the stakeholders, more specifically to the public and state the benefits the society gets from it (Wilmshurst and Frost, 2000). Magness (2006) pointed out that the rationale behind legitimacy theory is that in order to build respectable reputation among the society and stakeholders, officers engage in public disclosure of their activities. This is done by procurement officers in order for the society to build the perception of trust and acceptance in their activities. Legitimacy is a perception that the acts of the organization are acceptable in the constructed system of behavior in the society that it exists in (Suchman, 1995).

Deegan et al. (2002) mention that, according to the legitimacy theory, the choice made to legitimize the strategic executions of the local authority by government officials is based on the interpretation of the department and local authority, different officers have different views concerning what the public actually expects from them and whether they are viewed by the public as actually complying to standards set for them during their execution.

In the case of ERA, the procurement practice followed by them has to be transparent to the public and the stakeholders involved in their activity. The expectations set on ERA is to follow the public procurement and property disposals laws and procedures when conducting their procurement activities locally and in making procurement activities that involve international participants. In case of international participants, they have to follow also the procurement laws suggested to them by their donors. The World Bank and European Union commonly have procurement laws and

guidelines of their own and whenever they are donating funds for the construction of roads to ERA, they in turn expect the organization to follow their procurement laws and procedures. Following this laws and procedures during procurement can give a positive reputation to ERA. It is also worthy to mention that procurement laws have norms and ethical principles associated with them that procuring entities are obliged to follow like openness, competition, fairness, transparency, integrity, economy, efficiency, effectiveness that is expected to be followed. Application of these ethical principles during procurement period can raise the reputation of an organization and exude trust in the eyes of the public.

2.4 Procurement practice

2.4.1 Procurement planning

Procurement planning is one of the primary functions that is applied during public procurement. It is a function that sets in motion the entire acquisition/procurement processes (Basheka & Tumutegyereize, 2010). Brown and Hyer (2010) stated that planning is a function that encompasses the identification of the needs, needs of the customer, scope clarification, estimation of delivery time in accordance to the costs that will be incurred and the schedule, identification of the tasks involved in the procurement, as well as assigning responsibilities to the people involved in the project among other things. Ezeh (2012) added to this by mentioning that procurement planning also includes pointing out what is to be procured and the needs of the organization that will be met by it, what procurement strategies to adopt, and setting the accountability measures for the procurement process. Mbae (2014) states that planning, in literatures of management, suggest managers to consider their actions as well as their goals carefully beforehand and that their acts should be guided by plans, procedures or logic instead of gut feelings.

The first process in procurement planning is needs identification. It is the way of pointing out what the organization needs in order to achieve its goals or solve its problems, but frequently it engages in this practice in order to achieve the organizational objective. For that needs assessment is done, for the purpose of identifying needs. Mbae (2014) defines needs assessment as a systematic procedure that an organization enters into in order to determine and address its needs or shortfalls between its current status and desired outcome.

In order to accomplish its procurement objective an organization needs to draft its procurement plan. The Industry Manual (2008) states that a procurement plan is a mechanism used by an organization to implement its budgets. The industrial manual also states that the user department should be the one to prepare it, in order to avoid votes that are excess from the budget of the organization and unless adequate funds have been raised, that the procurement don't commence. Kibet and Njeru (2014) state that procurement performance can be enhanced if an organization strictly adheres to the procurement plan. This is because the procurement plan is originally drafted in order to fulfill the requirement of the organization and organizations engaged in procurement planning engage in the process in order to increase their performance.

Specification is an essential component of procurement planning. A specification details out the item number, the description of the procured item, the quantity that needs to be purchased, the price of the procured item, the amounts needed, as well as the total cost of the procured item for the organization. Korda and Snoj (2010) argue that specification is a basic necessity in the procurement function. This is because organizations are limited by the budgets they have, and a specification can reflect what is and isn't possible for procuring. Specifications, whether simple or complex, depends on the nature of procurement (Caldwell, Roehrich & Davies, 2005). Although these facts reflect the importance of procurement planning, many organizations in many countries don't engage adequately in the practice.

Poor procurement planning is a limiting factor to the economic development of Africa as a number of African countries have not paid enough attention to proper management of public resources (Basheka and Bisangabasaija, 2010). According to Wittig (2008) procurement planning has the potential to limit the millions of government funds that are collected from the public and being misused because of poor planning. For a public institution to succeed in its operations and service delivery, procurement planning is vital (Basheka and Bisangabasaija, 2010). Angela (2016) advocates that the only way to achieve efficient and effective procurement process is by proper planning and hiring competent staff, if that's not the case then the procurement process in organizations is expected to have a flaw.

2.4.2 Buyer-supplier relationship

Hughes and Jonathan (2010) indicated that one of the primary causes for poor organizational performance is unproductive supply chains. This unproductive behavior is attributed to the luck of coordination between the buyer and supplier. Lega, marsilio and villa (2013) state that a crucial component for having front-line supply chain in an organization is the existence of a quality buyer to supplier partnership. This keeps the efficiency of the organization to meeting it's procurement needs by having the deliverables it wants at the right place, right time, right quality, right quantity and right quantity.

Baker, Croucher & Rushton (2017) argue that the direct, long-term communications, engaging in mutual planning schemes and efforts in resolving challenges are required in buyer to supplier partnerships. This collaboration is beneficial, as it allows the sharing of roles to overcome hurdles that can negatively affect the supply chain. Strategic partnerships with suppliers enable organizations to work more effectively with a few important suppliers who are willing to share responsibility for the success of the products (Baker et al., 2017).

Petcavage and Pinkerton (2010), indicated that most supplier and buyer partnership have progressed from having a transactional nature to that of collaborative. The reason behind this is that frequent contact with a supplier builds reputation in the mind of the supplier.
Wagner et al. (2011) argue that, in supply chain, in the relationship between the buyer and supplier, the reputation of the supplier plays a critical role. A supplier consistent with their delivery will have a good reputation, which can lead the buyer in trusting them. Buyers will also have to be consistent with their payments to suppliers, for the supplier to see them as reliable and trust them. Kwon and Suh (2005) argue that the foundation for building trust in the relationship between the exchanging parties, they have to have assurance in their integrity and reliability. This, in time, will lead to collaboration among the parties. Benefits that result from collaborative relationships come in the form of an organizations ability to engage suppliers and other partners in mutually beneficial activities (Chin-Chun, 2008).

Melnyk et al. (2011) indicated that for a proper relationship between buyer and supplier, strategic sourcing codes of conduct can be used as good indicators. These codes of conduct are knowing the suppliers capacity and limits, and engaging in strategic outsourcing. Strategic sourcing is the

outsourcing of activities of the buyer to that of the supplier, this is done by organizations to save time and focus on other important activities inside the organization.

Knowing the suppliers limits and capabilities is equally important in order to manage expectations of the buyer. Paul *et al* (2008) pointed out that in order to align the strategic and operational objectives of the buying organization as well as change the behavior of the manager, measuring the performance of the supplier is key. This measurement of performance can have a positive effect for both the supplier and buyer but for this, a clear communication and information exchange is a necessity on both sides. Information sharing with suppliers enhances quality, cost savings and faster delivery times (Janda et al., 2002).

Hughes (2010) pointed out that organizations that embrace this strategies of maintaining and developing a strategic relationships with main suppliers can lead in integrating new ways of looking at the supply chain and supply chain transparency. According to Ambrose et al. (2010), both suppliers and buyers have to see the benefits they will have by managing this relationship, in order to have a successful and sustainable relationship.

2.4.3 Organizational capacity

Parsons (1960) stated that, an organization is a strategic social division that is structured intentionally for the sole purpose of achieving a specific objective. An organization is limited to achieving its goals in accordance to the capacity it possesses. Kariuki and Onditi (2018) indicated that the capacity of an organization is comprised of the processes, information and resources deployed by it, in order to achieve its goals. The authors' further state that organizational capacity is composed of its physical infrastructure, human resource staffing, strategic leadership style, technology employed, financial assets, management of programs and processes, and its networks and links with external organizations. Ker (2003) argue that an organization's capacity relies on its ability to apply the skills and resources it possesses successfully, in order to accomplish its objectives and satisfy the expectations of its stakeholders.

The organization's capacity processes and resources comes from two main aspects. The human resource capacity and the infrastructure capacity it possesses. The human resource capacity includes the capability of the organization in organizing the human capital it possesses, this is

composed of all the individual's knowledge, competencies, motivations, attitudes and behaviors. It is perceived to be the key element that impacts directly on all other capacities (Hall et al, 2003). Developing this capacity inside the organization can increase its efficiency as well as benefits and can lead to organizational expansion. Competent human resources is linked to financial capacity and organizational performance, where greater access to stable funding would enable nonprofit and voluntary organizations to better develop human resources capacity (Sanders, 1998).

For continuous growth of an organization, constant monitoring and evaluation of performance using performance indicators is important. Horton (2001) state that, concerning evaluation, there should be methods that should be developed and applied in order to evaluate the capacity efforts deployed in organizations. Rowe (1999) also mentions that evaluation methods should be used in order to encourage organizational performance. Key Performance indicators (KPI's) are the commonly adopted measurement techniques used in organizations. These performance indicators are divided into financial (revenue, profit margin, return on investments, cash flow, earnings per share) and non-financial (quality, innovation, customer satisfaction, employee engagement, time to market) KPI's. Organizations can use them in order to align their actions with that of their objectives.

Organizational process alignment can be defined as the organizational effort required making processes and platform for organizational structure, strategic planning and information technology (Sabherwal et al., 2001). Strategic planning, organizational structure and the use of information technology have helped organizations streamline their processes which in turn has caused improvement in their performance. Neely (1999) stated that the word improvement here means, all concepts that are capable of changing the organization's technology, processes, and performance in order for the firm to achieve it's business goals, quality and procedure performance goals.

2.4.4 Contract management

Agyemang (2019) specifies that an organization manages it's affiliation with external organization's by using contracts. Cleland and Bidanda (2009) confirm to this by stating that, most projects function by managing the relationships among parties through contract management in this intricate and complex world. Contracts are an essential component of business to business interactions. Bailey (2008) state that contract management is comprised of the actions performed

by a purchaser in a specified contract duration in order to guarantee that both exchanging parties fulfill their contractual obligations. In order to fulfill this management of deliverables is a key component in contract management.

Delivery management ensures that whatever is ordered is then delivered to the required level of quality and performance as stated in the contract; contract administration handles the formal governance of the contract and any permitted changes to documentation during the life of the contract and also keeps the relationship between the two parties professional, open and constructive, with the aim of resolving or easing tensions and identifying potential problems at an early stage, while also identifying opportunities for improvement (Moffat & Mwangangi, 2019).

Cristian et al (2009) state that, for construction procurements, construction contract undergo two core phases which are formation of the contract and administration of the contract. Both of these phases are also comprised of two phases each. The formation of a contract has a tendering phase and contractual agreement phase, while the contract implementation has the execution and maintenance phase. Tendering involves inviting interested parties for bidding to undertake specific construction work, while contractual agreement specifies the finalizing of the tender through contract awarding.

Sherman (1996) notes that the term Contract administration refers to the activities that are executed right after the involved parties sign the contract. This is the most important stage as it brings the project plans to the ground. A good contract administration practice will lead to the delivery of the intended outcome and project success. On the contrary, Nguyen (2013) argues that unintended costs, elevated risks, decreased customer satisfaction and reduced operational control are caused by inefficient contract administration. Davison and Wright (2004) state that successful completion of projects should be the goal of any procurement of goods or services.

2.4.5 Ethical practice

Gotterbarn, Miller, and Rogerson (2018) define ethics as form of values or moral principles that is prominent or is distinguishing of a particular group or culture. Ethical practices are practices that are based on transparency, accountability and integrity. Public organizations need to have this conducts in order to maintain a good image in the eyes of the public. The public is also demanding

greater accountability and better service (Ramanathan & Gunasekaran, 2010). In procurement, this conducts becomes even more important for public procurement professionals.

The elevation of procurement as a core task empowers purchasing managers to spend huge amounts of money in the purchase of products and services (Bastian and Zentes, 2010). But with all that public funds being controlled by purchasing managers it is eminent that some will be tempted to engage in unethical behaviors. Purchasing professionals are held to higher standards of ethical conduct than people in other professions, yet some do not even know what is expected of them (Williamson & Zeng, 2010). The procurement principles are an essential code of conduct for public professionals, in order to overcome challenges that procurement environments impose on them. Kangogo& Kiptoo (2013) state that the general procurement atmosphere can generate an environment that is favorable to unethical behaviors. Corrupt behaviors still remains one of the most prevalent challenges in public procurement.

Tuval-Mashiach (2017) indicated that the determining factor for the level of ethical behavior in procurement staff depends on the organization's senior management, absence of scholarly support and limitations in productive resources inside the organization. It is thus important that in order to increase the levels of ethical behavior inside an organizations this factors have to be given sufficient attention. Halter, De Arruda & Halter (2009) indicated that, there exists in all markets, an absence of transparency in a sense that the lack of information on procedures and rules could function as an obstacle to commerce and it may impact to a greater extent foreign suppliers compared to the local suppliers.

Diabagate, Azmani and El Harzli (2014) state the importance of conducting public procurement functions with transparency, integrity and accountability in fashion that assures value for money. This becomes even more important in public procurement when procuring goods, work and services. Since contracts play a major role in public procurement, emphasis on ethical conduct is increasingly important and conducting competitive bids in order to award contracts to the most competent bidders. The transparency of the procedures used in awarding contracts and the right which the agreement would give to aggrieved suppliers to challenge the decisions would restrain both domestic and foreign suppliers from making under the table payments and deter public

officials and political parties from receiving such payments (Raymond, 2008). The issue of transparency and accountability is indeed an important practice because it allows openly reporting and being accountable for the decisions made on behalf of stakeholders. Therefore, transparency promotes trust by allowing stakeholders to see and judge the quality of actions and decisions (Lee, Oh & Kwon, 2008).

2.5 Concept of organizational performance

The concept of organizational performance is broad, as performance can be measured in different ways in different sectors. For this study, it is measured in terms of achieved goals and outputs delivered by the organization in comparison with the planned output. Armstrong (2006), suggested that performance can be seen from the perspectives of 'output' achieved through the form of achieved goals. Ho (2008) argues that accomplishment of objective is used as a means to measure the performance of an organization by appraising the effectiveness and efficiency of that organization.

Organizational performance is the actual output or outcomes of an institution and its intended outputs or goals and objectives (Upadhaya, Munir and Blount, 2014). This implies measuring the actual output produced by the organization in comparison with the planned output of the organization. Not only is it important to measure the actual output, but how effectively the delivered outputs are in terms of cost, time and quality. Mchopa and Panga (2014) argue that the quality of goods/services delivered, the lead time in delivery, the levels of productivity and cost reduction are good indicators in measuring organizational performance.

Hernon, et al. (2014) proposed that the right deliverables must be produced with few possible inputs in order for the organization to have a strong performance. Not only is that required but also to keep costs and time to a minimum, while maximizing the quality of the deliverables. Robbins (2019) argues that, in order to manage performance and gain appropriate outcomes, it is required to plan targets that need to be achieved and to have a checklist to measure quality. This can aid in enhancing the effectiveness and efficiency of the organization in achieving its intended goals and objectives.

Since this study is conducted on the Ethiopian roads administration (ERA) which is responsible for administering federal road projects, the organizational performance is measured in terms of achieved project output in comparison with its goals. The objectives of ERA have been laid out in the form of the road sector development program (RSDP) by which they are being administered predominantly through procurement of works and services (consultancy). The quality, cost, and time of the output delivered are used as indicators to assess the performance of the organization.

2.5.1 Assessment of ERA's performance history

The performance of an organization can be measured by comparing the planned output to the actual output produced. The planned output signifies the objective the organization is trying to achieve. Thus, this section assesses the Road Sector Development Program (RSDP), which is the program ERA undertook as its objective, and the results it produced. This section is meant to shed light on the past performance of ERA from 1997 – 2015, in terms of financial and physical outputs delivered, and the details can be referenced from ERA's report "road sector development program: 19 years performance assessment (2020)". This section only include federal roads performance over the 19 year period, because the construction, maintenance and upgrade of federal roads is the responsibility of ERA. The rural roads authority (RRA) and wereda roads office (WRO) were also included in the report but are not relevant to this study.

The RSDP was conceived by the Government of Ethiopia in 1997 and have been integrated and implemented by ERA ever since, to address the problems of scarcity in road network coverage and existing roads that were in bad shape that hindered economic growth and recovery. The program was also set not only to accelerate socio-economic development but to also aid in poverty reduction. The program was packaged into five phases: RSDP I (1997-2002), RSDP II (2002-2007), RSDP III (2007-2010), RSDP IV (2010-2015), RSDP V (2015-2020). This study only covers the period of 1997-2015. All the programs had a five year plan except for RSDP III, which was a three year plan.

ERA set three objectives for the RSDP. First, to increase efficiency in transport operation and decrease road transport costs for cargo and passengers in order to foster production, distribution and export. Second, to offer access to formerly deserted rural regions experiencing food shortage and provide efficient production, exchange and circulation all over the country. Third, to develop

sufficient institutional capacity of the central and regional road sub-sector. In order to accomplish this, adequate financial support was needed as this objectives needed procurement of works and services for road projects.

The majority of the projects were financed by the Government of Ethiopia (73.3%), office of the road fund (6.1%), the community (1.6%) and by development partners (19%) such as world bank (WB), African Development Bank (ADB), European Union (EU), Nordic Development Fund (NDF), government of Japan, United Kingdom, Germany, Ireland, Bank of Arab for Economic Development in Africa (BADEA), OPEC Fund for International Development (OFID), Saudi fund for development, Abu Dhabi Fund, Government of China and the Kuwait Fund were donors of the program.

The program had a major impact in terms rural accessibility and improvements in road network. From 1997 – 2016, the road network grew from 26,550 Km to 113,066 Km which indicates there has been a 326% increase in road network. The road condition that were in good condition grew from 22% to 72% during the programs period. The road density (length of the country's total road network measured in Km) per square kilometers has increased from 24.1 km to 102.8 km over the 19 year period. Road density is an indicator of road infrastructure connectivity, quick transportation and economic growth (as it facilitates trade and supports industrialization in emerging regions). The program has also enhanced policy and institutional reforms that led to an increase in institutional capacity in the road sector.

In terms of physical works performance of RSDP over 19 years (1997-2015), the total actual performance (128,470 Km) compared to the total physical plan (149,633 Km) was 86%. Physical works here were achieved by means of procurement of works. From the total physical plan of 149,633 Km, the total plan for constructing federal roads was programmed to be 35,475 Km and the actual performance was 34,195 Km, which is 96%. The rest of the program was undertaken by the regional roads authority and Woreda.

In terms of financial performance of RSDP over 19 years, the total financial disbursements (266.2 billion birr) compared to the total budgeted plan (232.5 billion birr) was 115%. This indicates that cost over runs were experienced during the program period. Furthermore, during the 19 year period, 74.7% of the total expenditures went to federal road. 37.8% of that expenditure went to

federal roads rehabilitation and upgrade project, 29.6% on construction of link roads and 4.5% on maintenance.

The program has also increased the capacity of local contractors and consultants. During the program period, 45% (82.7 billion birr) of the works contract amount was awarded to local contractors, while 62% (3.9 billion birr) of the consultancy services amount was awarded to local consultants. Of the 1358 contracts for both construction and consultancy, local companies were awarded 1032 contracts, while the rest of the contracts were awarded to foreign companies. This shows that the capacity of local companies as procurement suppliers, have grown substantially.

Although ERA has moved on into RSDP V later on, the output performance from RSDP I to RSDP IV was a success. ERA has gone on to modernize and enhance most of it's operations. It can be seen from above that its planned output and actual outputs are matched although it suffers from project cost and time overruns, which is a big issue in the road sector in Ethiopia, the organization manages to finish its started projects at the end of the day and venture on to new ones. This has helped it maintain its image in the eyes of the public and its donors.

The organization has a website and is present on social media, constantly updating its stakeholders of the status of different projects, it reports each project's planned cost for completion and announces bid winners for new road projects. It also makes publicly available relevant reports concerning ongoing projects to the public. The government of Ethiopia generally allocates a substantial budget for road sector development and there are many donors with vested interest in seeing development of roads in Ethiopia thus the organization have been accomplishing its duties diligently.

2.6 Empirical review

Munyawera, Mulyungi & Ismail (2018) stated that inadequate planning of user needs in organizations by using real identifications can lead to immoral activities in procurement departments like inappropriate resource utilizations, exceeding votes in budgets and corruptions. This can hurt the performance of the organization. Mamiro (2010) in his research shades light on this by stating that one of the primary hindrances experienced in public procurement is the poor practice of procurement planning and lack of management in procurement process including

poorly identified and estimated needs, budgets that are impractical, and insufficient skills of procurement staff that work in the procurement department. Miuende (2017) conducted a study on procurement management practices and organizational performance of construction firms in Nairobi. The findings of the research showed that procurement management practices has an effect on the performance in the constructions firms to a moderate degree.

Leiyan (2016) conducted a study on procurement practices and organizational performance at the University of Nairobi. The objective of her study was to assess the practices in procurement and its effects on organizational performance in Nairobi University. The hypothesis adopted for the research was that good inventory management; procurement monitoring; procurement controls; procurement planning; and training of workforce can have a positive outcome on organizational performance. Descriptive research design was used and the target population were employees in the department of procurement from which data was collected using structured questionnaire. Descriptive and regression methods were used for data analysis. The study found that the University implements procurement practices to a moderate extent. It also found that procurement planning and training workforce impact's organization's performance. Tamiru (2020) have also conducted similar studies and tested similar variables like leiyan (2016) but in Jimma university, and have found that procurement planning has a positive effects on organizational performance.

Chepkesis and Keitany (2018), conducted a research on the effect of Procurement Planning on Suppliers Performance in Public Institutions in Kenya and have revealed that procurement planning contributed to the advancement of supplier's performance in service delivery, and more importantly improving value for money and quality delivered. Caritas, Julius, and Zenon (2016) conducted research on impact of procurement methods on the performance of Rwandan government building projects and the findings revealed that procurement planning has positively contributed the performance of the institution.

Relationships with external organizations are managed through contracts (Mutua et al., 2014). Costello (2008) argues that suppliers get interested in doing business with companies having robust contract divisions where, deadlines and needs met, actions are direct and costs are controlled, which in turn can increase the organization's operational performance. Cherotich (2014) conducted a research on contract management practice and operational performance of state

corporations in Kenya revealed that contract management can have a direct effect on the quality of operational performance. Similar studies including Lysons & Farrington. (2006), Basheka (2009) and Lesere (2018) reveal that a positive relationship exists between contract management and organizational performance.

Adamu, Gyamfi and Billa (2021) conducted a study on the effect of procurement practices on public institutions in Ashanti region of Ghana's metropolitan, municipal and district assemblies. They used purposive sampling technique. They used questionnaire as their tool for data collection. 113 people responded to their questionnaire. They used Probit Regression Model as their data analysis technique. The study revealed that procurement practices such as procurement planning, procurement sourcing, and contract management have a considerable positive relation to organizational performance.

Mokogi, Mairura and Ombui (2015), conducted a research on the Effects of Procurement practices on the Performance of Commercial State Owned Enterprises in Nairobi County. The main objective was to find the effect of procurement practices on performance of commercial state owned enterprises in Nairobi. The study utilized a descriptive design. Questionnaire was used to gather data from managers in procurement, production, Sales and Marketing and finance departments on the selected enterprises. The findings exposed that supplier selection procedures, buyer-supplier relationships, procurement process management and organizational capacity had a solid impact on the performance of the enterprises.

Ayub (2020), conducted a study on effects of procurement practice on the performance of east African bottling share company (EABSC). The main objective was to study the effects of procurement practices on organizational performance within the EABSC. The variables tested for the research were procurement planning, buyer-supplier relationship, supplier selection procedure, ethical issues, and organizational capacity. For that the study used explanatory research. A sample of 177 respondents were sampled and 144 responded. The study used stratified random sampling technique for the research. Questionnaire was used for data collection. Descriptive and inferential statistical techniques was used to analyze the data collected, of which frequency, standard deviation and mean was used for the descriptive statistics and multiple regression and correlation analysis was used for the inferential statistics. The finding revealed that all five procurement

practices had a considerably effect on organizational performance, the highest observed was by organizational capacity.

Kipkemoi (2017) conducted a research on the effect of procurement practices on organizational performance on the public sector of East African Portland Cement Company limited. The research's aim was determining how organizational performance is affected by procurement practices. Questionnaires were used for data collection. The study population for this research were the finance and procurement employees in the company. 46 questionnaires were collected out of the 58 given to the participants. The research used a descriptive design for the study. The study recommends the building of robust relationships with key suppliers in order to guarantee consistent supply and quality delivered in the inputs.

Dubey et al. (2018) emphasized on the importance of integrating supplier management in any organisation's strategies, as it can enhance performance. A research done by Lubale and Kioko (2016) discovered that supplier incentives, supplier evaluation, and supplier partnership have a positive and significant effects in an organization's performance. Khan, Liang and Shahzad (2015), argues that buyer-supplier partnerships play an important role in achieving supply chain performance through the antecedent of information integration. Similar studies conducted by Panahifar, Byrne, Salam and Heavey (2018), Gopal, Subashini and Velmurugan (2019), Suh, Jung, Zank and Arend (2019), Jimenez-Jimenez, Martínez-Costa and Sanchez Rodriguez (2019) and Fatemi et al. (2018) reveal that a significant positive relationships exists between buyer to supplier partnership and organizational performance.

Shale and Hussein (2014) conducted a case study research on Unilever Kenya limited company in order to forecast the implications of sustainable procurement practice on the performance of a manufacturing firms. The findings revealed that sustainable procurement practices are enhanced when a company follows ethical principles. Fakadu (2018) conducted a research on the effect that procurement practices have in Care Ethiopia's project implementation efforts and found that procurement ethics have an effect on the procurement process of health care supplies to a great extent in the public sector and recommended that sufficient control mechanisms should be set to reduce corruption and increase health center's performance.

2.7 Conceptual framework

According to Mathieson (2007), a conceptual framework is a written or virtual product that explains, either in narrative or in graphically form, the main things to be studied, the key elements (variables) involved, the concepts and the relationships that exists among them. It is frequently utilized to show the relationship that exists between the procurement practice and organizational performance. In this context, the study sought to investigate the effects of the procurement practice on organizational performance, in the case of the Ethiopian roads administration. In accordance to that, the diagram below demonstrates the conceptual framework for this study:

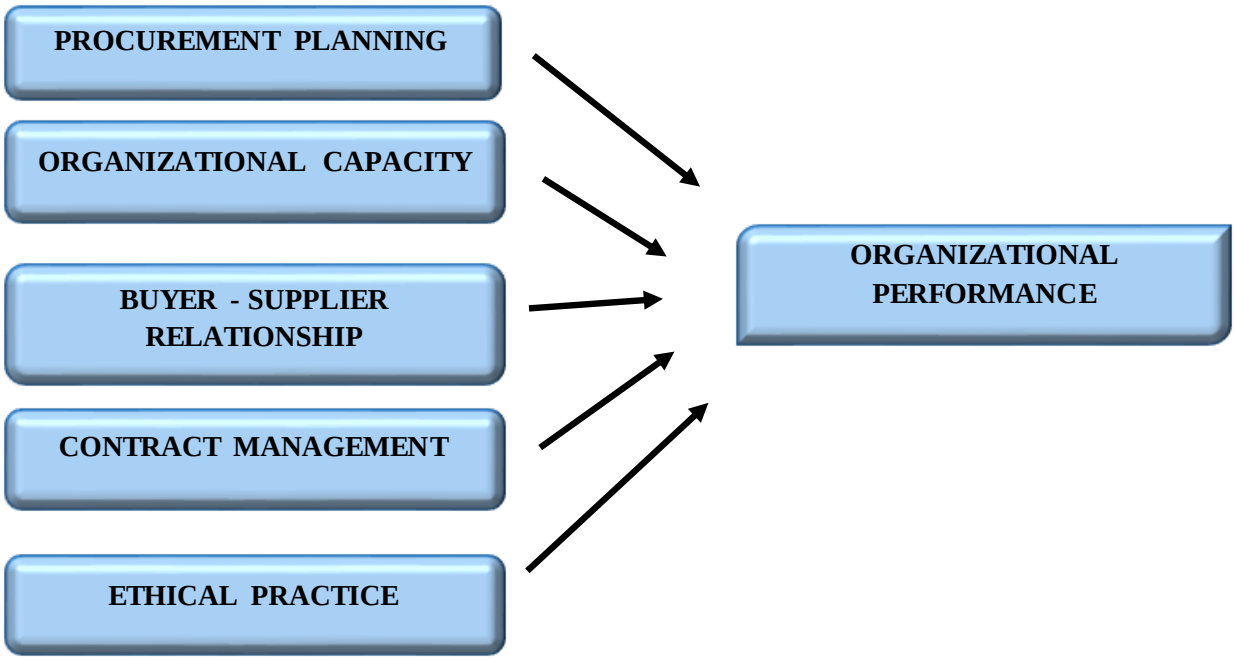

Figure 2.1: Conceptual framework

Source: (Adamu, Gyamfi, and Billa 2021; Kipkemoi, 2017) adapted by the researcher

Procurement planning here is hypothesized to have a positive effect with organizational performance because it identifies the organization's needs, identifies the schedule and costs involved, indicate the expected deliverables and clarifies who is assigned responsible to perform what task. It also provides the procedures to be taken for procuring the deliverables sought by the organization. Empirical evidence from Leiyan (2016), tamiru (2020), chepkesis & keitany (2018) and Caritas, Julius, and Zenon (2016), as mentioned in the empirical review above, indicate that procurement planning has a positive contribution to organizational performance.

Organizational capacity is hypothesized to have a positive effect on organizational performance because it encourages hiring skilled and qualified staff, training and development initiatives, technology deployment, process automations that can help the organization in achieving its objectives. Empirical evidence from Leiyan (2016), Mokogi, Mairura and Ombui (2015) and ayub (2020) indicated that organizational capacity has a positive contribution to organizational performance.

Buyer-supplier relationship is hypothesized to have a positive effect on organizational performance because it advocates long term communication, mutual planning schemes, strategic relationships and trust among the parties involved. Empirical evidence from Mokogi, Mairura and Ombui (2015), Ayub (2020), Lubale and Kioko (2016) and Khan, Liang and Shahzad (2015), indicate that there is a positive relation between buyer-supplier relationship and organizational performance.

Contract management is hypothesized to have a positive effect on organizational performance due to reasons that, relationships among parties, quality standard required, outcome of deliverables, duration of projects, required project specification along with their associated costs are defined and are agreed upon by both parties. Empirical evidence from Lysons & Farrington. (2006), Adamu M., Gyamfi K. and Billa G. (2021) and Cherotich (2014), pointed out that there is a positive relationship that exists between contract management and organizational performance.

Ethical practice is hypothesized to have a positive effect on organizational performance because it fosters accountability, transparency, integrity and maintaining good public image. This practices is beneficial to organizations, as they frequently report to the public taxpayers and donors of how public and foreign funds are being spend and doing so in an ethical manner is important. Empirical evidence from Ayub (2020) and Shale and Hussein (2014) indicate that there exists a positive relationship between ethical practice and organizational performance.

2.8 Research hypothesis

In accordance to the conceptual framework presented above, along with the reasons why each of the variables are hypothesized to have an effect on organizational performance, the following research hypothesis was developed:

H_1: Procurement planning has a positively significant effect with organizational performance.

H_2: Organizational capacity has a positively significant effect with organizational performance.

H_3: Buyer to supplier relationship has a positively significant effect with organizational performance.

H_4: Contract management has a positively significant effect with organizational performance.

H_5: Ethical practice has a positively significant effect with organizational performance.

CHAPTER 3

3. RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

This chapter is dedicated for the methodology applied in order to conduct this research. Research methodology can be described as the framework associated with a particular set of assumptions that can be used to conduct research (Leary, 2004).

3.2 Research design

Polit & Beck (2004) define research design as the overarching plan followed in order to get answers to the study's questions and for overcoming some of the challenges that are faced during the process of research. The choice of research design fundamentally depends on the nature of the problem; the knowledge already available about the problem; and the resources available for the study (Kothari, 1985). To achieve the objective of this research and answer the research questions, the study adopted an exploratory research design. Exploratory researches are often used when there is limited available research or a deficient body of knowledge within the researched area such as in the current topic of procurement practices its impact on organization performance (Kolb, 2008). This research design was thought to be suitable for the study because there are limited studies conducted on the effects of procurement practice on organizational performance in Ethiopia's road sector. Furthermore, prior studies done by researchers (Caritas, Julius, and Zenon (2016), Adamu M., Gyamfi K. and Billa G. (2021), Mokogi, Mairura and Ombui (2015), Kipkemoi (2017), Lubale and Kioko (2016) and Shale and Hussein (2014)) on other sectors have not fully agreed on identifying which factors of procurement practice are actually contributing to organizational performance, and thus, no definite insight can be drawn enough to make any generalizations yet. Accordingly, this study contributes to the further understanding of the issue at hand and in identifying the relationship that exists between procurement practice and organizational performance.

3.3 Research method

This research employs quantitative method in order to numerically quantify the strength of relationship that exists between procurement practice and organizational performance. Survey design was used for this study as it offers, according to Creswell (2008), a numerical and quantitative description of the attitudes, trends, and opinion of the general population by assessing the sample of that population.

3.3 Target population

The objective of the study is to determine the effects of procurement practice on organizational performance. To achieve this study's purpose, only head office employees who are directly engaged in the procurement process were involved. The procurement process in ERA goes through a cyclical process where different departments are involved in the work. The process goes like this, as indicated by ERA's east region directorate team leader to the researcher:

1st. Procurement Planning Directorate

2nd. Design Management Directorate

3rd. Engineering Procurement Directorate

4th. Program Management Directorate (formerly, construction project management directorate)

5th. Road Asset Directorate.

It is cyclical because the roads asset department engages in needs identification (identifying, upgrading and maintenance needs of roads) and reports to the planning department, the planning department also engages in needs identification (in the case of new roads) but most of it comes from the asset management department's reporting and this reinitiates the process of procurement.

Accordingly, since this five directorates (departments) are interconnected in their activities, they have been picked by the researcher for the study. In this five directorates, each of the department has directorate heads, team leaders and individual engineers and professionals (economists, sociologists, and environmentalists mostly) that are managed by team leaders. The table below, shows the directorates, team leaders, and individual engineers and professional engaged in the procurement process.

No.	DIRECTORATES	Number of Directorates	Number of Team Leaders	Number of Individual Professionals	Total Sum
1	Procurement Planning Directorate	1	1	12	14
2	Design Management Directorate	1	4	24	29
3	Engineering Procurement Directorate	1	4	26	31
4	Program Management Directorate	6	12	84	102
5	Road Asset Management Directorate	2	6	36	44
	Total	**11**	**27**	**182**	**220**

Table 3.1: list of directorates that are involved in the procurement process and the number of employees that work in each of this directorates.

Source: ERA's human resource department

Thus, the target population chosen for the study were this five directorates (Procurement Planning, Design Management, Engineering Procurement, Program Management and Road Asset management) with a total population size of 220.

3.4 Sampling technique and sample size determination

Kothari (2006), stated that sample size corresponds to the number of samples that are to be selected and are thought to be representing the population at large. This study adopts probability sampling technique to ensure that sample subjects of the population have equal chance at being selected for the study. Stratified random sampling technique was chosen to be fitting as the sampling method. Stratified sampling is used when the populations from which the sample to be picked is not homogeneous and are mutually exclusive groups. This method was suitable because the organization is stratified into department and the target population picked for the study involve 5 departments (procurement planning, engineering procurement, design office, program management, and road asset management) and each department was a mutually exclusive group. The target population size in all the department was 220. Accordingly, by using the Yamane (1967) formula:

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

Where:
N = the population size =220

n = sample size

e = the acceptable sample error = ± 5

Given confidence level of 95% and precision rate of ±5 percent

Thus, $$n = \frac{220}{(1 + 220\ (0.05)^2)}$$

$$\underline{\underline{n = 142}}$$

Next, once the desired sample size was determined, the sample size for each stratum (department) was determined by using the proportionate stratified random sampling formula developed by Llewellyn and Wilson (2003):

nh = (Nh/ N) *n

Where:

nh = Sample size for hth stratum

Nh = Population size for hth stratum

N = Entire population size and

n = Entire sample size

In accordance to that, the sample size to pick for each of the departments is as presented below:

No.	DIRECTORATES	Total Sum	Stratified sample size
1	Procurement Planning Directorate	14	9
2	Design Management Directorate	29	19
3	Engineering Procurement Directorate	31	20
4	Program Management Directorate	102	66
5	Road Asset Directorate	44	28
	Total	**220**	**142**

Table 3.2: proportionate stratified random sampling method applied on the determined sample size

3.5 Measuring instruments development and data collection

3.5.1 Instrument development process

The choice of measuring instrument for conducting the study was a structured questionnaire. It employed a five-point Likert ranking scale that was used to measure the extent of the respondent's agreement to the raised question, where 1 indicated very low extent agreement to the statement proposed while 5 indicated an agreement of very great extent to the statement proposed. The questionnaire developed had questions that was three pages long. It included a total of 39 items (questions) and were divided into two sections.

The first section contained five items. These items were prepared in order to find out relevant background information that was necessary to understand the demographics of the respondents. The second section contained the items that were relevant to answer the research questions and fulfill the study's objective. For each of the five procurement practice factors (procurement planning, organizational capacity, buyer to supplier relationship, contract management and ethical practice), six items were proposed in terms of statements, while for organizational performance indicator, the items prepared was four.

The questionnaire was prepared by the researcher and no items were adopted from other researchers. The items for each of the variables were prepared based on the information that were provided in the literature review. Furthermore, the questionnaire was further tested for validity and reliability.

3.5.2 Validity

According to Lewis (1999), a validity measures the degree in which an instrument measures the truthfulness of a result in a research or what was originally intended to be measured. As such, the instrument used for this study was a questionnaire and the questionnaire were validated using content and construct validity.

Lewis (1999) indicates that content validity is associated with the research instrument's design to cover the topics to the depth and extent that it was intended to cover. In order to ensure the content validity for the questionnaire, all questions were prepared in accordance to the information that was expressed in the literature review section and all the questions were validated by the researcher's advisor in order to make all the necessary modifications according to the feedback received.

For the construct validity, two experts engaged in the field of procurement that are familiar with the construct were requested to assess the questionnaire. Both experts examined the items in order to validate whether each items were measuring what they were intending to measure. Necessary revisions and modifications were made in order to finalize the questionnaire. In addition, in order to ensure external validity, all the questionnaires were distributed to the respondents by the researcher himself to ensure that they didn't give it to other people not involved in the study to fill it for them.

3.5.3 Reliability

In order to assess the Reliability of the questionnaire, a pilot test had to be conducted. Catherine (2007), suggests the need to conduct a pilot study in order to validate the questionnaire after they are designed. The rule of thumb used when conducting a pilot test is to conduct it on 10% of the planned sampled size by selecting samples that is thought to be representative of the target population. As such, 14 employees in ERA engaged in different departments were selected to fill out the questionnaires. Afterwards, the reliability coefficient scale was analyzed by using IBM SPSS statistics 27.

Lewis (1999) stated that in order to examine the reliability of a questionnaire that utilizes a Likert scale the method that is fitting is the Cronbach's alpha coefficient. Morgan et al. (2004), emphasizes that Cronbach's Alpha are commonly used in order to assess the internal consistency and thus, are common for measuring reliability. The ranking for Cronbach's Alpha results, used as a rule of thumb, is presented as follows:

Source: Tavakol and Dennis (2011) Reliability index interpretation for Cronbach's alpha

RANGE	RANKING
$0.9 \leq \alpha$	Excellent
$0.8 \leq \alpha < 0.9$	Good
$0.7 \leq \alpha < 0.8$	Acceptable
$0.6 \leq \alpha < 0.7$	Questionable
$0.5 \leq \alpha < 0.6$	Poor
$\alpha < 0.5$	Unacceptable

Table 3.3: Cronbach's Alpha range and ranking

The Cronbach's coefficient alpha was calculated for each of the field in the questionnaire and the results yielded for each of the variables were:

FIELD TO BE MEASURED	CHRONBACH'S ALPHA
Procurement Planning	0.739
Organizational Capacity	0.842
Buyer to Supplier Relationships	0.841
Contract Management	0.9
Ethical Practice	0.844
Organizational Performance Indicator	0.829

Table 3.4: Cronbach's alpha result for each of the procurement practice and the indicator of organizational performance

For an internal consistency to be thought acceptable, the Cronbach's Alpha coefficient value should be above 0.7. As indicated in the above table, the results were all found to be above 0.7, which is in the acceptable range. Furthermore, the Cronbach's Alpha for the entire questionnaire yielded **0.905**, which shows that the reliability is excellent as seen overall.

3.6 Sources and types of data

The study uses both primary and secondary data in order to accomplish its objectives. The primary data was collected using structured questionnaires. In order to gain additional information, a secondary data was used, this included articles, books, dissertations, ERA's publications, manuals, and reports.

3.7 Data collection procedure

A request for cooperation letter was received by the researcher from Addis Ababa University in order to administer the study. The letter was presented to the Ethiopian Roads Administration in two instances. First, during the pilot study stage and then during the data collection stage. During the pilot study, 14 participants were selected from engineering procurement and program management department, using the lottery method to fill out the questionnaires. These participants who were involved in this pilot study were not included during the main data collection stage. The actual data collection stage was self - administered by the researcher which involved going to each of the five departments and randomly distributing the questionnaire to hand-picked individual professionals. While approaching the participants, the request for cooperation letter was presented and the researcher's intent for the approach was respectfully stated. Directorates were not accessible for the study and the team leaders were only willing to assist in the questionnaire to be filled by their teams but were not involved in filling the questionnaire themselves, which had

reduced the sample size achieved for the study. The data collection stage was administered from the date February 10, 2024 to March 4, 2024. Out of the 142 questionnaires that was distributed to the five departments (engineering procurement, procurement planning, design office, program management and road asset management), 107 questionnaires were returned. This implies that a response rate of 75.3% was achieved for the study. Thus, the data analysis and findings were based on the 107 responses obtained.

3.8 Data analysis

In order to fulfill the objectives of the study, descriptive statistic was used in order to analyze the background information or the demographic data and the research questions. The reason for the choice of descriptive statistics is because demographic data are best expressed using descriptive statistics.

The data analysis was done using the IBM SPSS statistics 27 software. The data was cleaned and preparation by using Microsoft excel. Tables were used in order to indicate the frequency in distributions of the demographic data. Descriptive statistics such as frequency, mean and standard deviation were also used for the research questions before conducting correlational and regression analysis. This was done to give clarity of the outputs for the correlational and regression analysis.

Inferential statistic, particularly correlation and multiple regression analysis was used for the study. Correlational analysis was used, according to Smith (2019), to measure strength and direction of the relationship that exist between procurement practice and organizational performance. In order to determine the strength and direction of the relationship between the independent and dependent variables, Pearson correlation coefficient was used.

After determining that a relationship does exist among the variables, multiple regression analysis was used in order to describe the nature of the relationship that exists between the procurement practice (procurement planning, organizational capacity, buyer to supplier relationship, contract management and ethical practice) and organizational performance. To achieve that, the multiple linear regression models was constructed as follows:

$Yi = \alpha_o + \sum ß_i\ x_i + \varepsilon$

Where Yi – Dependent Variable

α_o – indicates the intercept

ßi - indicates coefficient of x_i

x_i - indicates the explanatory variables

Ɛ- The error term

Specifically, the model used to study the effects of procurement practice on organizational performance was constructed as follows:

$$OP = \alpha_o + ß_1(PP) + ß_2(CM) + ß_3(OC) + ß_4(BSR) + ß_5(EP) + \varepsilon$$

Where:

OP = indicates organizational performance

PP = indicates procurement planning

CM = indicates contract management

OC = indicates organizational capacity

BSR = indicates buyer to supplier's relationship

EP = indicates ethical practice

Ɛ = indicates the error term

This was, therefore, the model that was analyzed for the study in order to find the relationships that exist between procurement practice and organizational performance.

3.9 Ethical considerations

Strict adherence to ethical rules is important while conducting research. The researcher received a letter of cooperation from Addis Ababa University to collect data for the research in ERA. Participant involved in the study were primarily informed concerning the objectives of the research and were told that their inputs were used only for the sole fulfillment of academic purpose. Attention concerning respecting the participant's rights, requests, and values as well as maintaining the confidentiality of the provided data was done diligently.

CHAPTER 4

4. RESULTS AND DISCUSSION

4.1. Introduction

This chapter is dedicated for presenting the data analysis results followed, along with discussions of the results. This data was the primary source of data and was obtained from the questionnaire that were distributed in the Ethiopian Roads Administration (ERA) in order to fulfill the objectives of the study. A total of 142 questionnaire was distributed in the five departments (Engineering procurement, procurement planning, design office, program management and road asset management), out of which 107 were returned. The response rate achieved was 75.3%.

The questionnaire had two sections, the first section was comprised of demographic data while the second section was dedicated for the research questions. The demographic data was presented using descriptive statistics, where tables were used to describe the nature of the demographic data. The second section, starts by using descriptive statistics in order to analyze the frequency, mean and standard deviation of the data then it proceeds to correlational analysis using Pearson's correlation. Finally, violations of the five assumptions in regression (linearity, multicollinearity, normality, homoscedasticity and no autocorrelation) are tested and then the regression outputs are explained thoroughly. Finally, the results are discussed thoroughly.

4.2 Demographic profile of the respondents

The demographic profile of the respondents that participated in the study is described in two forms. Table is used to indicate the frequency count along with the percentage composition that make up the total.

4.2.1 Gender of participants

The gender distribution of the participants that were involved in the study is comprised of 47 Females and 60 Males, the percentage composition was thus 44% and 56%, respectively. The table below shows the gender distribution of the participants:

Gender	Count	Percentage
Female	47	44%
Male	60	56%
Total	**107**	**100%**

Table 4.1: Table showing the gender distribution of the participants

Source: Own survey, 2024

This indicates that the male employees are slightly more in ERA but there is no significant gap among gender distribution in the organization. In terms of willing participation, some male participants were not as willing as the females to involve in the study, but the majority of the male participants were willing as seen overall.

4.2.2 Age of participants

The questionnaire was designed in a way in order to evoke a response from the participants. Since most people might not be willing to reveal their age, a range was used to indicate the age of the participants. To elicit a great response, each category was designed to have a wide age range. All the participants were thus, comfortable to fill out this section. The table below show that the majority of the workforce, 60% of the participants, were all under 30 years of age. 38% of the workforce was within the age range of 31 to 40 years, while only 2% were within the age range of 41 to 50 years. There were no participants within the five departments (engineering procurement, procurement planning, design office, program management and road asset management) that were above 51 years.

Age of participant	Count	Percentage
less than 30 years	64	**60%**
31 to 40 years	41	**38%**
41 to 50 years	2	**2%**
above 51 years	0	**0%**
Total	107	**100%**

Table 4.2: Table showing the age distribution of the participants

Source: Own survey, 2024

This indicates that, within the five departments, majority of the workforce are below 51 years old. This is because employees in ERA that are above the age of 51 years are in management position like directorate level.

4.2.3 Education of participants

In order to find out the educational attainment of the participants for the study, the questionnaire included four educational levels. Diploma, undergraduate (B.Sc/B.A), postgraduate (M.Sc/M.A/MBA) and Ph.D. The findings revealed that 63% of the respondents were undergraduates, 36% were postgraduates while only 1% was a diploma. The table below shows the distribution of educational attainment in the organization:

Education	Count	Percentage
Diploma	1	**1%**
Undergraduate	67	**63%**
Postgraduate	39	**36%**
Total	**107**	**100%**

Table 4.3: Table showing the Educational background of the participants

Source: Own survey, 2024

This indicates that 99% of the participants had higher levels of education and ERA is keen on employing people with advanced educational qualification for its organization.

4.2.4 Number of years

The next item was concerned with the number of years of employment the respondents spent in the organization. For this, the response for this question was classified into four categories. Each category contained a measure of 5 years in the organization in ascending order. From the table, it can be observed that 59% of the respondents had worked 0-5 years, 35% had worked for 6-10 years, while 4% had worked in ERA for 11-15 years. The number of respondents that worked above 16 years was found to be only 2%. The table below shows the distribution of respondents and the number of years they worked in the organization:

Number of years	Count	Percentage
0-5 years	63	59%
6-10 years	38	35%
11-15 years	4	4%
Above 16 years	2	2%
Total	**107**	**100%**

Table 4.4: Table showing the participants number of years working in the organization.

Source: Own survey, 2024

This implies that the majority of the respondents (94%) working in the organization had spent less than 10 years, while only 6% of the respondents were seniors with more than 10 years in the organization. The spike in the 0-5 years (59%) might indicates that new graduates, whether undergraduates or post graduates, with less than 5 years of experience were more employed by the organization in order to increase the organizational capacity in terms of having an educated workforce.

4.2.5 Department of participants

The department of the participants on the questionnaire was classified into five categories. This was done to include the relevant directorates that was engaged in the procurement process of the organization. As such, the questionnaire incorporated the relevant directorates which are engineering procurement, procurement planning, design office, program management and road assets management in order to identify from which department the participants were from. This will show where most of the responses came from. From the 107 respondents that were involved in the study, the highest number of participant recorded for the study came from the program management department at 36%. This was because the department was further classified into north, east, west, south and central to manage road projects scattered across Ethiopia. Design office and road assets management department had equal number of participants at 19% each. The engineering procurement department who participated in the study were 14%, while 13% of the participants were from the procurement planning department.

DEPARTMENT	COUNT (ACTUAL)	PERCENTAGE (ACTUAL)	DESIGNED STRATIFIED SAMPLE SIZE (PLANNED)
Engineering Procurement	15	**14%**	**31**
Procurement Planning	14	**13%**	**14**
Design Office	20	**19%**	**19**
Program Management	38	**36%**	**66**
Road Assets Management	20	**19%**	**28**
Total	**107**	**100%**	**142**

Table 4.5: Table showing the department of the participants

Source: Own survey, 2024

Before the data collection phase started, stratified sample size was designed in order to target specific number of respondents in each of the department. This was expressed in chapter three

under the section "sampling technique and sample size determination". After the data collection phase, a comparison of the actual sample size to that of the planned was done and the results showed that a fair and representative data was collected from the respondents from each of the departments. The table above shows the planned and actual sample size achieved for the study.

4.3 Descriptive analysis of the measurement variables

This section presents the findings of the measured variables by utilizing descriptive statistics acquired from ERA's respondents. Measurements of frequency, mean and standard deviation of the variables is presented in the table below. Each construct was measured using a likert scale in order to quantify the effect of procurement practice on organizational performance. Accordingly, the ranking was as follows:

Very great extent = 5; great extent = 4; moderate extent = 3; low extent = 2; very low extent = 1.

When interpreting the mean value of the data for the procurement practice variables (procurement planning, organizational capacity, buyer to supplier relationship, contract management, and ethical practice), the interpretation used was as follows:

Mean interval value	Description	Interpretation
4.50 – 5.00	Very High	The procurement practice variable is always practiced in ERA
3.50 – 4.49	High	The procurement practice variable is often practiced in ERA
2.50 – 3.49	Moderate	The procurement practice variable is sometimes practiced in ERA
1.50 – 2.49	Low	The procurement practice variable is seldom practiced in ERA
1.00 – 1.49	Very Low	The procurement practice variable is not practiced at all in ERA

Table 4.6 Interpretation of the mean interval value for the procurement practice variables

These intervals are also used to interpret the grand mean for the procurement practice variables. The standard deviation is a measure of how well the data points are spread. It shows if the data is either gathered or scattered around the mean. If the values of the standard deviation are small, less than 1, it indicated that the date sets are close to the mean showing the respondents had gave a consistent answer for the question whereas, a high standard deviation indicates that the respondents had gave different answers to the proposed question.

4.3.1 Procurement planning

The first section of this part was prepared in order to measure ERA's procurement planning practice. To achieve this, six items were framed. The findings are presented below.

Research Questions	Ranking	Frequency	Percent	Cumulative Percent
The procurement plans are prepared in a way that addresses the organization's needs **(PP1)**	very low extent	0	0	0
	low extent	5	5	5
	moderate extent	25	23	28
	great extent	52	49	77
	very great extent	25	23	100
	Total	107	100	
The organization's procurement planning procedures are clear for the staff to follow **(PP2)**	very low extent	0	0	0
	low extent	6	6	6
	moderate extent	31	29	35
	great extent	48	45	79
	very great extent	22	21	100
	Total	107	100	
Procurement plans are prepared in accordance to the organization's budget **(PP3)**	very low extent	1	1	1
	low extent	8	7	8
	moderate extent	26	24	33
	great extent	46	43	76
	very great extent	26	24	100
	Total	107	100	
The procurement outputs are in line with the procurement plans **(PP4)**	very low extent	2	2	2
	low extent	14	13	15
	moderate extent	28	26	41
	great extent	45	42	83
	very great extent	18	17	100
	Total	107	100	
Specifications and requirements are outlined in the procurement plans **(PP5)**	very low extent	0	0	0
	low extent	7	7	7
	moderate extent	29	27	34
	great extent	46	43	77
	very great extent	25	23	100
	Total	107	100	
Competent staffs are assigned to handle procurement planning in the organization **(PP6)**	very low extent	1	1	1
	low extent	4	4	5
	moderate extent	23	21	26
	great extent	50	47	73
	very great extent	29	27	100
	Total	107	100	0

Table 4.7(1): frequency and percentage distribution for each item of procurement planning
Source: From questionnaire, 2024

Statistics								Grand mean and Std. Deviation
		PP1	PP2	PP3	PP4	PP5	PP6	
N	Valid	107	107	107	107	107	107	
	Missing	0	0	0	0	0	0	
Mean		3.91	3.80	3.82	3.59	3.83	3.95	**3.816**
Std. Deviation		.807	.829	.920	.981	.863	.851	**0.875**

Table 4.7(2): mean and standard deviation for each item of procurement planning

Source: SPSS output, 2024

The first item reveals the extent to which ERA respondents believe how well the procurement plans are designed to addresses the organization's needs. A total of 72% of the respondents believe that the procurement plans indeed are designed in a way to address the organization's needs at least to a greater extent and 23% of the respondents believe that it does to a moderate extent. On the other hand, 5% of the respondents believe it does to a low extent but no respondent thought it addresses it to a very low extent. The mean response was 3.91 with a standard deviation of 0.807.

The second item indicates the extent to which ERA staff (respondents) believed how clear the procurement planning procedures are for the staff to follow. A total of 66% of the staff believe the procurement planning procedures are clear for the staff to follow at least to a greater extent and 29% of the staff believe that it is to a moderate extent. On the contrary, 6% think it's clear to a low extent. The mean response was 3.80 with a standard deviation of 0.829.

The third item reveals the extent to which Procurement plans are prepared in accordance to the organization's budget. A total of 67% of the respondents believe the Procurement plans are prepared in accordance to the organization's budget at least to a greater extent and 24% of the staff believe that they are to a moderate extent. In contrast, a total of 8% of the respondents believe it is at least to a lower extent. The mean response was 3.80 with a standard deviation of 0.920.

The fourth item indicates how well ERA staff (respondents) believed that procurement outputs are in line with the procurement plans. 59% of the respondents believe that procurement outputs are indeed in line with the procurement plans at least to a greater extent and 26% of the respondents believe it is be to a moderate extent. On the other hand, a total of 15% of the respondents believe the procurement outputs are in line with the procurement plans at least to a lower extent. The mean response was 3.59 with a standard deviation of 0.981.

The fifth item indicates whether Specifications and requirements are outlined in the procurement plans. A total of 66% of the respondents believe that Specifications and requirements are outlined in the procurement plans at least to a greater extent and 27% of the respondents believe it is be to a moderate extent. On the other hand, 7% of the respondents believe it is to a low extent but no respondent rated this item to a very low extent. The mean response was 3.83 with a standard deviation of 0.863.

The sixth and last item evaluates if competent staffs are assigned to handling procurement planning within ERA. A total of 74% of the respondents believe that competent staffs are assigned to handling procurement planning within ERA at least to a greater extent and 21% of the respondents believe it is to a moderate extent. On the other hand, a total of 5% of the respondents believe it is at least to a lower extent. The mean response was 3.95 with a standard deviation of 0.851.

The grand mean and standard deviation for the six items was 3.816 and 0.875, respectively. The grand means, 3.816, indicates that procurement planning is often practiced in ERA. The standard deviation, 0.875, indicates that the distribution of the data points (from the responses) are fairly clustered around the mean which implies that most of the respondents gave a relatively consistent answer (somewhat similar) to the proposed questions.

Procurement planning is one of the primary functions that organizations engage in order to address their organizational needs. In the case of ERA, this activity is very crucial as it addresses the expenditure of public and donor funds. Planning involves a set of activities that endeavor to clarify the project deliverables, project time schedule, budget allocation, scope of the project, quality standards, specifications and requirements, and resource utilization (man power, material and equipment). It also has to be clear enough for the staff to understand and follow because every decision making process of the staff will have to reflect their adherence to the plan. Since planning requires technical and strategic expertise, procurement planning should be conducted by experienced and skilled staff that can help the organization achieve its intended objectives. At best, if the planned outputs are reflected by the actual outputs then the organization is indeed performing well.

4.3.2 Organizational capacity

The second section of the research questions was prepared in order to measure ERA's organizational capacity. Accordingly, six items were set. The findings are presented below.

Research Questions	Ranking	Frequency	Percent	Cumulative Percent
The organization recruits skilled and qualified staffs **(OC1)**	very low extent	1	1	1
	low extent	5	5	6
	moderate extent	23	21	27
	great extent	52	49	76
	very great extent	26	24	100
	Total	107	100	
The organization employs the use of IT Infrastructure to modernize its business processes **(OC2)**	very low extent	0	0	0
	low extent	3	3	3
	moderate extent	33	31	34
	great extent	48	45	79
	very great extent	23	21	100
	Total	107	100	
The organization engages the staff in skills training and development **(OC3)**	very low extent	1	1	1
	low extent	5	5	6
	moderate extent	26	24	30
	great extent	45	42	72
	very great extent	30	28	100
	Total	107	100	
The organization engages in monitoring and evaluating the performance of its employees **(OC4)**	very low extent	0	0	0
	low extent	6	6	6
	moderate extent	31	29	35
	great extent	48	45	79
	very great extent	22	21	100
	Total	107	100	
The organization takes time in strategizing on how to deploy its resources in order to achieve its objectives **(OC5)**	very low extent	0	0	0
	low extent	8	7	7
	moderate extent	30	28	36
	great extent	53	50	85
	very great extent	16	15	100
	Total	107	100	
The organization uses its connections and links with external organizations to achieve its objectives **(OC6)**	very low extent	1	1	1
	low extent	4	4	5
	moderate extent	25	23	28
	great extent	58	54	82
	very great extent	19	18	100
	Total	107	100	

Table 4.8(1): frequency and percentage distribution for each item of organizational capacity
Source: From questionnaire, 2024

Statistics								Grand mean and Std. Deviation
		OC1	OC2	OC3	OC4	OC5	OC6	
N	Valid	107	107	107	107	107	107	
	Missing	0	0	0	0	0	0	
Mean		3.91	3.85	3.92	3.80	3.72	3.84	**3.84**
Std. Deviation		.853	.787	.891	.829	.810	.791	**0.826**

Table 4.8(2): mean and standard deviation for each item of organizational capacity

Source: SPSS output, 2024

The first item assesses the extent to which ERA employs skilled and qualified staff in the organization. Accordingly, a total of 73% of the respondents believe the organization employs skilled and qualified staff at least to a greater extent. 21% of the respondents believe it does to a moderate extent while a total of 6% rated it at least to a lower extent. The mean of for this item was 3.91 with a standard deviation of 0.853.

The second item deals with ERA's use of IT infrastructure in order to modernize its business process. A total of 66% of the respondents believe the organization does indeed employ the use of IT infrastructure to modernize its business operations at least to a greater extent. 31% of the respondents believe it does to a moderate extent while only 3% of the respondents rated this item to a low extent but no respondent rated it as very low extent. The mean of this item was 3.85 with a standard deviation of 0.787.

The third item deals with the organization engaging the staff in skills training and development. A total of 70% of the respondents believe the organization does engage the staff in skills training and development at least to a greater extent and 24% of the respondents believe that to a moderate extent. On the contrary, 6% of the respondents rated this item at least to a lower extent. The mean response was 3.92 with a standard deviation of 0.891.

The forth item deals with the organization's engagement in monitoring and evaluation practice to assess the performance of its employees. A total of 66% of the respondents in total believe that the organization does in fact monitor and evaluate the staff's performance at least to a greater extent and 29% of the respondents believe that to be the case to a moderate extent. 6% of the respondents rated this item to be low extent but no respondent has rated it to a very low extent. The mean response was 3.80 with a standard deviation of 0.829.

The fifth item assesses if the organization takes it's time in strategizing on how to deploy its resources in order to achieve its objectives. A total of 65% of the respondents in total believe that it does take it's time in strategizing on how to deploy its resources at least to a greater extent and 28% of the respondents think it does to a moderate extent. In contrast, only 7% of the respondents rated this item as low extent and no respondent has rated it as very low extent. The mean response was 3.72 with a standard deviation of 0.810.

The sixth item deals with the organization's use of its connections and networks (it's relationships as a form of resource) with other organization in order to achieve its objectives. A cumulative 72% of the respondents believe the organization does utilize its relationships and networks in order to achieve its objectives at least to a greater extent and 23% of the respondents (staff) think that it does to a moderate extent. A total of 5 % of the respondents think that it does at least to a lower extent. The mean of this item was 3.84 with a standard deviation of 0.791.

The grand mean and standard deviation for the six items was 3.84 and 0.826, respectively. The grand means, 3.84, indicates that organizational capacity is often practiced in ERA. The standard deviation, 0.826, indicates that the distribution of the data points (from the responses) are fairly clustered around the mean which implies that most of the respondents gave a relatively consistent answer (somewhat similar) to the proposed questions.

Organizational capacity plays an important role in determining the capability of an organization in achieving its objectives. To increase the capacity and capability of an organization, the right elements have to come in to play. Hiring skilled and qualified staffs and engaging those staff in skills training and development, employing IT infrastructure to enhance business operations, strategic deployment of organizational resources, and utilizing networks, connections and relationship with other organization in order to achieve the organizations objective can have a great impact when as a whole. For an organization to be swift and agile, its organizational capacity plays an important role to not only support its visions but to make it competitive in the market as well. Thus, the question in organizational capacity were believed to be adequate in measuring ERA involvement in these activities.

4.3.3 Buyer to supplier relationship

The third section of the research questions was prepared in order to measure ERA's buyer to supplier relationship. Hence, six items were prepared. The findings are presented below.

Research Questions	Ranking	Frequency	Percent	Cumulative Percent
The organization engages in mutual planning and objectives setting with its supplier **(BSR1)**	very low extent	0	0	0
	low extent	8	7	7
	moderate extent	44	41	49
	great extent	35	33	81
	very great extent	20	19	100
	Total	107	100	
The organization sees its suppliers as reliable and consistent in their project delivery **(BSR2)**	very low extent	0	0	0
	low extent	6	6	6
	moderate extent	41	38	44
	great extent	41	38	82
	very great extent	19	18	100
	Total	107	100	
The organization engages in information exchange and updates with its suppliers **(BSR3)**	very low extent	0	0	0
	low extent	1	1	1
	moderate extent	41	38	39
	great extent	44	41	80
	very great extent	21	20	100
	Total	107	100	
The organization knows the capacity and limits of its suppliers **(BSR4)**	very low extent	0	0	0
	low extent	11	10	10
	moderate extent	29	27	37
	great extent	48	45	82
	very great extent	19	18	100
	Total	107	100	
Reputation and qualification of suppliers in project delivery is highly considered by the organization **(BSR5)**	very low extent	0	0	0
	low extent	11	10	10
	moderate extent	27	25	36
	great extent	35	33	68
	very great extent	34	32	100
	Total	107	100	
The organization measures the performance of its suppliers **(BSR6)**	very low extent	2	2	2
	low extent	6	6	7
	moderate extent	38	36	43
	great extent	41	38	81
	very great extent	20	19	100
	Total	107	100	

Table 4.9(1): frequency and percentage distribution for each item of buyer-supplier relationship
Source: From questionnaire, 2024

Statistics								Grand mean and Std. Deviation
		BSR1	BSR2	BSR3	BSR4	BSR5	BSR6	
N	Valid	107	107	107	107	107	107	
	Missing	0	0	0	0	0	0	
Mean		3.63	3.68	3.79	3.70	3.86	3.66	**3.72**
Std. Deviation		.874	.831	.762	.882	.985	.911	**0.874**

Table 4.9(2): mean and standard deviation for each item of buyer-supplier relationship

Source: SPSS output, 2024

The first item deals with the organization's engagement of ERA in mutual planning and objectives setting with its suppliers (contractors and consultants). A total of 52% of the respondents believe that the organization does engage in mutual planning and objectives setting with its suppliers at least to a greater extent and 41% of the respondents believe that it does to a moderate extent. 7% of the respondents have rated this item as low extent and no respondent has rated it as very low extent. The mean response was 3.63 with a standard deviation of 0.874.

The second item assesses if the organization does see its suppliers as reliable and consistent in their project delivery. A total of 56% of the respondents believe that it does see its suppliers as reliable and consistent at least to a greater extent. 38% of the respondents believe that it does to a moderate extent while only 6% of the respondents believe that it does to a low extent but there were no respondents that rated this item as very low extent. No respondent has rated this item as very low extent. The mean response was 3.68 with a standard deviation of 0.831.

The third item measures the organization's engagement in information exchange and updates with its suppliers. A total of 61% of the respondents believe that the organization does indeed engage in information exchange and updates with suppliers at least to a greater extent and 38% of the respondents believe that it does to a moderate extent. Only 1% of the respondent believe that it does to a low extent but there were no respondents that rated this item as very low extent. The mean response was 3.79 with a standard deviation of 0.762.

The fourth item measures if the organization knows the capacity and limits of its suppliers. A total of 63% of the respondents believe that it does know the capacity and limits of its suppliers at least to a greater extent and 27% of the respondents believe that it does to a moderate extent. 10% of the respondents think that it does to a low extent but no respondent believes that it does to a very low extent. The mean response was 3.70 with a standard deviation of 0.882.

The fifth item assesses if the organization highly considers the reputation and qualification of its suppliers in project delivery. A total of 65% of the respondents believe that the organization definitely does highly consider the reputation and qualification of its suppliers in project delivery at least to a greater extent and 25% of the respondents believe that it does to a moderate extent. 10% of the respondents rated this item as low extent but no respondent rated it as very low extent. The mean response was 3.86 with a standard deviation of 0.985.

The sixth and last item assesses if the organization measures the performance of its suppliers. A total of 57% of the respondents believe that the organization does measure the performance of its suppliers at least to a greater extent and 36% of the respondents believe that it does to a moderate extent. A total of 8% of the respondents believe that it does at least to a lower extent. The mean response was 3.66 with a standard deviation of 0.911.

The grand mean and standard deviation for the six items was 3.72 and 0.874, respectively. The grand means, 3.72, indicates that buyer to supplier relationships are often practiced in ERA. The standard deviation, 0.874, indicates that the distribution of the data points (from the responses) are fairly clustered around the mean which implies that most of the respondents gave a relatively consistent answer (somewhat similar) to the proposed questions.

Buyer to supplier relationship deals with the relationship that the organization has with its supplier. For ERA, this relationship has an impact in how well the organization performs because it is the suppliers that performs a majority of the project that the organization has, if not all. Thus, continuously strengthening its relationship with its suppliers will yield fruitful results for the organization both in its short term and long term endeavors. Buyer to supplier relationship contains the elements of mutual planning and objectives setting with suppliers, seeing suppliers as reliable and consistent with their project delivery, knowing their capacity, sharing of information and updates, long term communication, knowing suppliers capacity and limits, measuring their performance, and developing trust among the parties.

4.3.4 Contract management

The fourth section of the research questions was prepared in order to measure ERA's contract management practices. Accordingly, six items were prepared. The findings are presented below.

Research Questions	Ranking	Frequency	Percent	Cumulative Percent
The organization clearly states the quality requirements of the deliverables to its suppliers **(CM1)**	very low extent	0	0	0
	low extent	7	7	7
	moderate extent	18	17	23
	great extent	55	51	75
	very great extent	27	25	100
	Total	107	100	
The organization informs stakeholders the progress of the project during contract administration **(CM2)**	very low extent	0	0	0
	low extent	5	5	5
	moderate extent	20	19	23
	great extent	58	54	78
	very great extent	24	22	100
	Total	107	100	
Permitted changes in contracts are communicated to stake holders on time **(CM3)**	very low extent	0	0	0
	low extent	4	4	4
	moderate extent	32	30	34
	great extent	44	41	75
	very great extent	27	25	100
	Total	107	100	
The organization resolves any claims and disputes that arise during contract administration phase **(CM4)**	very low extent	0	0	0
	low extent	4	4	4
	moderate extent	29	27	31
	great extent	50	47	78
	very great extent	24	22	100
	Total	107	100	
The organization systematically monitors and reviews contract performance **(CM5)**	very low extent	1	1	1
	low extent	3	3	4
	moderate extent	22	21	24
	great extent	57	53	78
	very great extent	24	22	100
	Total	107	100	
Proper risk managements and allocations are defined early on before the project begins **(CM6)**	very low extent	0	0	0
	low extent	11	10	10
	moderate extent	30	28	38
	great extent	45	42	80
	very great extent	21	20	100
	Total	107	100	

Table 4.10(1): frequency and percentage distribution for each item of contract management
Source: From questionnaire, 2024

Statistics								Grand mean and Std. Deviation
		CM1	CM2	CM3	CM4	CM5	CM6	
N	Valid	107	107	107	107	107	107	
	Missing	0	0	0	0	0	0	
Mean		3.95	3.94	3.88	3.88	3.93	3.71	**3.88**
Std. Deviation		.829	.775	.832	.798	.792	.901	**0.82**

Table 4.10(2): mean and standard deviation for each item of contract management

Source: SPSS output, 2024

The first item deals with how well the organization clearly states the quality requirements of the deliverables to its suppliers (contractors and consultants). A total of 76% of the respondents believe that the organization does clearly state the quality requirement to its suppliers at least to a greater extent and 17% of the respondents believe that it does to a moderate extent. On the contrary, 7% of the respondents have rated this item as low extent but no respondent has rated it as very low extent. The mean response was 3.95 with a standard deviation of 0.829.

The second item assesses if the organization informs its stakeholders the progress of the project during contract administration phase. A total of 76% of the respondents believe that it indeed does inform stakeholders the progress of the project at least to a greater extent and 19% of the respondents believe it does to a moderate extent. However, 5% of the respondents believe that it does to a low extent but no respondent has rated this item as very low extent. The mean response was 3.94 with a standard deviation of 0.775.

The third item measures whether or not permitted changes in contracts are communicated to stakeholders in a timely basis. A total of 66% of the respondents in total believe that permitted changes in contracts are definitely communicated to stakeholders in a timely basis at least to a greater extent and 30% of the respondents believe that it does to a moderate extent. On the other hand, 4% of the respondents believe that it does to a low extent but no respondent has rated this item as very low extent. The mean response was 3.88 with a standard deviation of 0.832.

The fourth item measures if the organization resolves any claims and disputes that arise during contract administration phase. A total of 69% of the respondents believe the organization does resolve any claims and disputes that arise during contract administration phase at least to a greater extent and 27% of the respondents believe that it does to a moderate extent. However, 4% of the

respondents believe that it does to a low extent but no respondent has rated this item as very low extent. The mean response was 3.88 with a standard deviation of 0.798.

The fifth item assesses whether the organization systematically monitors and reviews contract performance. A total of 75% of the respondents believe the organization does systematically monitors and reviews contract performance at least to a greater extent and 21% of the respondents believe that it does to a moderate extent. However, a total of 4% of the respondents believe that it does at least to a lower extent. The mean response was 3.93 with a standard deviation of 0.792.

The sixth and last item measures whether the organization defines early, before project begins, the risk management and allocation with its suppliers. A total of 62% of the respondents believe that the organization does indeed define early on the risk management and allocation before the project begins at least to a greater extent and 28% of the respondents believe that it does to a moderate extent. 10% of the respondents believe that it does to a low extent but no respondent has rated this item as very low extent. The mean response was 3.71 with a standard deviation of 0.901.

The grand mean and standard deviation for the six items was 3.88 and 0.82, respectively. The grand means, 3.88, indicates that contract management is often practiced in ERA. The standard deviation, 0.82, indicates that the distribution of the data points (from the responses) are fairly clustered around the mean which implies that most of the respondents gave a relatively consistent answer (somewhat similar) to the proposed questions.

A Contract is a binding agreement that is made among two or more parties. In contracts, value exchange plays a central role and their management have an impact in how well those value exchanges take place. For ERA, many of its procurement activities done with their suppliers (contractors and consultants) involve the use of contracts. Contracts outline the quality requirements for the deliverables, defines the relationship among the parties, expected outcomes, specification and requirements, duration of projects, and cost of the project. Effective contract management involves informing stakeholders the progress of the project, communicating permitted changes to contracts to the stakeholders, stating quality requirements of the deliverables to suppliers, managing claims and disputes, monitoring contract performance, defining early the risk allocation and its management with suppliers.

4.3.5 Ethical practice

The fifth section of the research questions was prepared in order to measure ERA's ethical practices. Accordingly, six items were prepared. The findings are presented below.

Research Questions	Ranking	Frequency	Percent	Cumulative Percent
The organization emphasizes staff's adherence to procurement principles and codes during procurement procedures **(EP1)**	very low extent	0	0	0
	low extent	2	2	2
	moderate extent	30	28	30
	great extent	50	47	77
	very great extent	25	23	100
	Total	107	100	
Senior management are involved in enforcing ethical procurement practices in the organization **(EP2)**	very low extent	0	0	0
	low extent	7	7	7
	moderate extent	18	17	23
	great extent	50	47	70
	very great extent	32	30	100
	Total	107	100	
The organization undertakes procurement procedures in a transparent manner **(EP3)**	very low extent	0	0	0
	low extent	4	4	4
	moderate extent	20	19	22
	great extent	45	42	64
	very great extent	38	36	100
	Total	107	100	
Corrupt behaviors are properly punished by the organization if they arise **(EP4)**	very low extent	2	2	2
	low extent	9	8	10
	moderate extent	23	21	32
	great extent	41	38	70
	very great extent	32	30	100
	Total	107	100	
Public and donor fund expenditure are reported openly by the organization **(EP5)**	very low extent	0	0	0
	low extent	8	7	7
	moderate extent	20	19	26
	great extent	45	42	68
	very great extent	34	32	100
	Total	107	100	
Bids are kept competitive during tendering phase **(EP6)**	very low extent	0	0	0
	low extent	3	3	3
	moderate extent	17	16	19
	great extent	43	40	59
	very great extent	44	41	100
	Total	107	100	

Table 4.11(1): frequency and percentage distribution for each item of ethical practice

Source: From questionnaire, 2024

Statistics								Grand mean and Std. Deviation
		EP1	EP2	EP3	EP4	EP5	EP6	
N	Valid	107	107	107	107	107	107	
	Missing	0	0	0	0	0	0	
Mean		3.92	4.00	4.09	3.86	3.98	4.20	**4.01**
Std. Deviation		.766	.858	.830	1.004	.901	.806	**0.86**

Table 4.11(2): mean and standard deviation for each item of ethical practice

Source: SPSS output, 2024

The first item deals with how the organization emphasizes staff's adherence to procurement principles and codes during procurement procedures. A total of 70% of the respondents believe that the organization does emphasize staff's adherence to procurement principles and codes during procurement procedures at least to a greater extent and 28% of the respondents believe that it does to a moderate extent. However, a mere 2% of the respondents have rated this item as low extent but no respondent has rated it as very low extent. The mean response was 3.92 with a standard deviation of 0.766.

The second item deals with senior management's involvement in enforcing ethical procurement practices in the organization. A total of 77% of the respondents believe that senior management's do involve in enforcing ethical procurement practices in the organization at least to a greater extent and 17% of the respondents believe that they do to a moderate extent. On the contrary, 7% of the respondents believe that they do to a low extent but no respondent has rated this item as very low extent. The mean response was 4.00 with a standard deviation of 0.858.

The third item assesses whether the organization undertakes procurement procedures in a transparent manner. A total of 78% of the respondents believe that the organization does undertake procurement procedures in a transparent manner at least to a greater extent and 19% of the respondents believe that it does to a moderate extent. On the other hand, 4% of the respondents believe that it does to a low extent but no respondent has rated this item as very low extent. The mean response was 4.09 with a standard deviation of 0.830.

The fourth item assesses whether corrupt behaviors are properly punished by the organization if they arise. A total of 68% of the respondents believe that corrupt behaviors are properly punished by the organization if they arise at least to a greater extent and 21% of the respondents believe that

it does to a moderate extent. On the other hand, a total of 10% of the respondents believe that it does at least to a lower extent. The mean response was 3.86 with a standard deviation of 1.004.

The fifth item deals with whether the organization openly reports the expenditure of public and donor funds. A total of 74% of the respondents believe that the organization does openly reports the expenditure of public and donor funds at least to a greater extent and 19% of the respondents believe that it does to a moderate extent. On the other hand, 7% of the respondents believe that it does to a low extent but no respondent has rated this item as very low extent. The mean response was 3.98 with a standard deviation of 0.901.

The sixth and final item measures whether bids are kept competitive during the tendering phase. A total of 81% of the respondents believe that bids are kept competitive during the tendering phase at least to a greater extent and 16% of the respondents believe that it is to a moderate extent. On the other hand, a mere 3% of the respondents believe that it is to a low extent but no respondent has rated this item as very low extent. The mean response was 4.20 with a standard deviation of 0.806.

The grand mean and standard deviation for the six items was 4.01 and 0.86, respectively. The grand means, 4.01, indicates that ethical practice is often practiced in ERA. The standard deviation, 0.86, indicates that the distribution of the data points (from the responses) are fairly clustered around the mean which implies that most of the respondents gave a relatively consistent answer (somewhat similar) to the proposed questions.

Ethical practice plays an important role in procurement practice as it guides the organization with principles and rules when trying to achieve its objectives. In the case of ERA, ethical practice plays a big role as most of its fund comes from the public and its donors. How those funds have been used should be communicated transparently and the organization is assumed to be accountable for its action on the expenditure of those funds. Ethical practice is not just limited to moral actions, it is the principle that guides the organizations behavior and decision making process. The elements of ethical practice include staff's adherence to procurement principles and codes, senior management involvement in enforcing ethical procurement, transparency, and accountability, punishing corrupt behavior, and keeping bids competitive during the tendering phase so that the most competent bidders can win.

4.3.6 Organizational performance

The last section of the research questions was prepared in order to measure ERA's performance. Hence, four items were prepared. The findings are presented below.

Research Questions	Ranking	Frequency	Percent	Cumulative Percent
The achieved project outputs of the organization are in alignment with its planned project outputs **(OPI1)**	very low extent	0	0	0
	low extent	10	9	9
	moderate extent	29	27	36
	great extent	46	43	79
	very great extent	22	21	100
	Total	107	100	
Procurement practices of the organization have resulted in cost reduction **(OPI2)**	very low extent	0	0	0
	low extent	9	8	8
	moderate extent	36	34	42
	great extent	39	36	79
	very great extent	23	21	100
	Total	107	100	
Procurement practices of the organization have resulted in better quality of deliverables **(OPI3)**	very low extent	0	0	0
	low extent	6	6	6
	moderate extent	35	33	38
	great extent	41	38	77
	very great extent	25	23	100
	Total	107	100	
Procurement practices of the organization have resulted in reduction in delivery time **(OPI4)**	very low extent	3	3	3
	low extent	11	10	13
	moderate extent	31	29	42
	great extent	35	33	75
	very great extent	27	25	100
	Total	107	100	

Table 4.12(1): frequency and percentage distribution for each item of organizational performance

Source: From questionnaire, 2024

Statistics						Grand mean and Std. Deviation
		OPI1	OPI2	OPI3	OPI4	
N	Valid	107	107	107	107	
	Missing	0	0	0	0	
Mean		3.75	3.71	3.79	3.67	**3.73**
Std. Deviation		.891	.901	.866	1.053	**0.93**

Table 4.12(2): mean and standard deviation for each item of organizational performance

Source: SPSS output, 2024

The first item measures if the achieved project outputs are in alignment with its planned output. A total of 64% of the respondents believe that the actual outputs are in alignment with the planned output at least to a greater extent and 27% of the respondents believe that it is to a moderate extent. On the contrary, 9% of the respondents believe that it is to a low extent but no respondent thinks that it is to a very low extent. The mean response was 3.75 with a standard deviation of 0.891.

The second item assesses if the procurement practice of ERA have resulted in cost reduction. A total of 57% of the respondents believe that the procurement practice of the organization has resulted in cost reduction at least to a greater extent and 34% of the respondents believe that it did to a moderate extent. In contrast, 8% of the respondents have believe that it did to a low extent but no respondent believes that it did to a very low extent. The mean response was 3.71 with a standard deviation of 0.901.

The third item measures if the procurement practice of ERA have resulted in better quality of deliverables. A cumulative percentage of 61% of the respondents believe that it has indeed resulted in better quality deliverables at least to a greater extent and 33% of the respondents believed that it did to a moderate extent. On the contrary, 6% of the respondents believe that it did to a low extent but no respondent believes that it did to a very low extent. The mean response was 3.79 with a standard deviation of 0.866.

The fourth and last item measures if the procurement practice of ERA have resulted in reduction in time of delivery. A total of 58% of the respondents believe that the procurement practice has certainly resulted in a reduction in delivery time at least to a greater extent and 29% of the respondents believe that it did to a moderate extent. In contrast, a total of 13% of the respondents believe that it does at least to a lower extent. The mean response was 3.67 with a standard deviation of 1.053.

The grand mean and standard deviation for the four items was 3.73 and 0.93, respectively. The grand means, 3.73, indicates that organizational performance is often practiced in ERA. The standard deviation, 0.93, indicates that the distribution of the data points (from the responses) are fairly clustered around the mean which implies that most of the respondents gave a relatively consistent answer (somewhat similar) to the proposed questions.

Organizational performance is a measure of the planned output to the actual output of an organization. The alignment of an organization's plan to actual output is a sufficient indicator of how well it is performing. In ERA, since most of the outputs are packaged in the form of road projects, they are measured in how well ERA's procurement practice has allowed it to save costs, have quality deliverables of projects and quick time in project delivery. This can collectively indicate how well the organization is performing.

In general, the overall results of the procurement practice and organizational performance variables have shown a positive result reflected especially on their mean and standard deviation. The next section, discusses the correlational analysis.

4.4 Relationship between procurement practice and organizational performance

This study's aimed at finding out if there exists a relationship between procurement practice (procurement planning, organizational capacity, buyer to supplier relationship, contract management, and ethical practice) and organizational performance along with the magnitude and direction of their relationship. To that regard, the magnitude and direction of the relationship between procurement practice and organizational performance can be determined using Pearson Correlation coefficients.

The Pearson correlation coefficient indicate the kind of relationship that exists between the variables and range between -1 to +1. If there is a perfect negative correlation then it is valued at -1 while if there is a perfect positive correlation then it is valued at +1 and if there is no correlation between the variables then the value is 0. In reality though, this perfect relationships are rarely encountered but are good standards of measure for correlation.

The table below shows how the numerical values generated by the person correlation coefficient are supposed to be interpret, in order to understand the kind of relationship that exists between variables.

Source: Selvanathan, M., Jayabalan, N., Saini, G. & Supramaniam, M. & Hussain, N. (2020)

Scale of correlation coefficient	Value
$0 < r \leq 0.19$	Very Low Correlation
$0.2 \leq r \leq 0.39$	Low Correlation
$0.4 \leq r \leq 0.59$	Moderate Correlation
$0.6 \leq r \leq 0.79$	High Correlation
$0.8 \leq r \leq 1.0$	Very High Correlation

Table 4.13: Table for valuing Pearson's correlation coefficients

Regarding the correlation that exists between procurement practice and organizational performance, the table below shows findings of the correlational analysis for each dimensions.

Correlation							
		Procurement Planning	Organizational Capacity	Buyer Supplier Relationship	Contract Management	Ethical Practice	Organizational Performance
Procurement Planning	Pearson Correlation	1					
	N	107					
Organizational Capacity	Pearson Correlation	.685**	1				
	Sig. (1-tailed)	0					
	N	107	107				
Buyer Supplier Relationship	Pearson Correlation	.664**	.518**	1			
	Sig. (1-tailed)	0	0				
	N	107	107	107			
Contract Management	Pearson Correlation	.655**	.682**	.556**	1		
	Sig. (1-tailed)	0	0	0			
	N	107	107	107	107		
Ethical Practice	Pearson Correlation	.608**	.589**	.546**	.605**	1	
	Sig. (1-tailed)	0	0	0	0		
	N	107	107	107	107	107	
Organizational Performance	Pearson Correlation	.605**	.491**	.661**	.453**	.689**	1
	Sig. (1-tailed)	0	0	0	0	0	
	N	107	107	107	107	107	107

Table 4.14: Correlation coefficients for the procurement practice determinants and organizational performance

Source: SPSS output, 2024

The relationships that exist between the procurement practice variables and organizational performance can be seen from the table above. The result shows that there is a positive and significant relationship that exists between procurement practice and organizational performance. As indicated by Selvanathan, M., Jayabalan, N., Saini, G., Supramaniam, M. & Hussain, N. (2020) in table 4.13, a Pearson's correlation coefficient with values ranging from 0.4 to 0.59 have a moderate correlation while values ranging from 0.6 to 0.79 have a high correlation with the dependent variable. This means ethical practice (0.689), buyer to supplier relationship (0.661) and procurement planning (0.605) have high correlation to organizational performance. Organizational capacity (0.491) and contract management (0.453) have moderate correlation with organizational performance. Although these variables have substantial contributions to the organizational performance of ERA, there are other important variables that exist but were not addressed in this paper that can have an effect on organizational performance. Some of this procurement practice variables that might have an effect on organizational performance are supplier selection procedures, identified by Ayub (2020); green purchasing, identified by Kilonzo (2014); and procurement sourcing, identified by Adamu, Gyamfi, and Billa (2021).

The first ranked variable that has a high correlation to organizational performance is ethical practice. This indicates how staff's adherence to procurement practice, involvement of senior management in ethical practice, transparency in procurement procedures, punishment of corrupt behaviors, openly reporting public and donor funds expenditures and keeping bids competitive during the tendering phase can have an effect on organizational performance. The more these ethical practices are executed diligently by the organization the higher its performance will be.

The second ranked variable with a high correlation to organizational performance is buyer to supplier relationship. This shows the relationship of the organization with its suppliers can have an impact on the performance of the organization. Engaging in mutual planning and objectives setting, having reliable and consistent suppliers with their project delivery, information exchange and updates, knowing supplier's capacity and limits, considering supplier's reputation and qualifications, and measuring their performance can be a determining factor in how well the ERA performs.

The third ranked variable with a high correlation to organizational performance was procurement planning. Preparing procurement plans in a way that addresses the organization's needs, keeping procurement planning procedures clear for the staff to follow, keeping procurement plans within budget, keeping procurement outputs in line with procurement plans, properly outlining specifications and requirement in the procurement plan and recruiting competent staff to handle procurement planning are important contributors to organizational performance.

Organizational capacity and contract management also have a positive and moderate relationship with organizational performance. Increasing the organizations capacity by recruiting skilled and qualified staff, employing IT infrastructures, skills training and development, monitoring and evaluating employee performance, strategic resource deployment, using the organization's connections and links for goal achievement can have a positive contribution to the performance of the organization. In terms of contract management, stating quality requirement to suppliers, informing stakeholders of project progress during contract administration, communicating to stakeholders all the permitted changes in the contract, timely resolution of claims and disputes that may arise, and properly defining risk management and allocation early on before project commencement can have positive benefit to organization and increase its performance.

4.5 Test for violation of assumption in regression

Before conducting the actual regression for the study, it is necessary to know that no violations have been made or else all the result of the regression will be biased and the conclusion, inaccurate. Therefore, this section presents the output of all the five assumption in regression (linearity, multicollinearity, normality, homoscedasticity and no autocorrelation) in order to verify that no violations have been made and the results presented will be accurate.

4.5.1 Linearity

The first assumption states that the relationship that exists between the independent variable and the dependent variables is supposed to be linear. This means that a scatter plot will be used in order to visually inspect weather the residuals are closer to the diagonal line. The more closer they are to the diagonal line the more the relationship is considered linear. In linearity assumption, the dependent variable has to be a continuous data in order to fulfill the requirement. In accordance to that, the graph indicates the distribution of the residuals around the diagonal line.

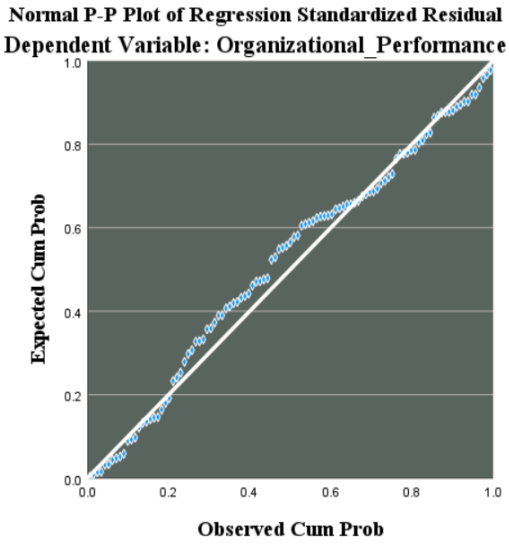

Figure 4.1: Scatter (Linearity) plot

Source: SPSS output, 2024

As seen in the graph above, the distribution of the residuals are very close to the diagonal line while some are centered on the line. This suggests that the relationship that exists between the dependent variable (organizational performance) and the independent variable (procurement practice) exhibits a linear relationship, thus the first assumption has been met.

4.5.2 Multicollinearity

Multicollinearity primarily occurs when there is a strong correlation between two or more independent variables. Other cases that might cause this are erroneous numerical results in the data and large variance in the coefficient of the estimates. The recommended method for checking the existence of multicollinearity is by using VIF (Variance Inflation Factor) and tolerance level test. Tabachnick and fidell (2001) pointed out that, if the tolerance value is <0.1 and the VIF is >10, it indicates the presence of multicollinearity in the data. The table below shows the obtained output for the test:

Factors	Collinearity Statistics	
	Tolerance	VIF
Procurement Planning	**0.368**	**2.717**
Organizational Capacity	**0.422**	**2.369**
Buyer to Supplier Relationship	**0.516**	**1.938**
Contract Management	**0.43**	**2.325**
Ethical Practice	**0.52**	**1.922**

Table 4.15: output for VIF and Tolerance for each of the independent variables

Source: SPSS output, 2024

As seen from the above table, the values generated for the independent variable are greater than 0.1 for tolerance and below 10 for VIF, thus indicating that multicollinearity does not exist among the independent variables.

4.5.3 Normality

The normality test indicates how well the collected data's distribution is. Two tests are recommended in order to check the normality distribution. First is visually inspection. Ideally, the graph should have a bell shape curve distribution but in the reality, not all data will be perfectly distributed and a close resemblance to a bell shape will suffice in most cases. Second is checking the graph's skewness and kurtosis. Skewness indicates where the graph is leaning towards (left is for negative and right is for positive) while kurtosis shows the bulk in distribution on the tail of the graph. This two are an important measure of the data's distribution. The figure below shows the normality distribution from the collected data:

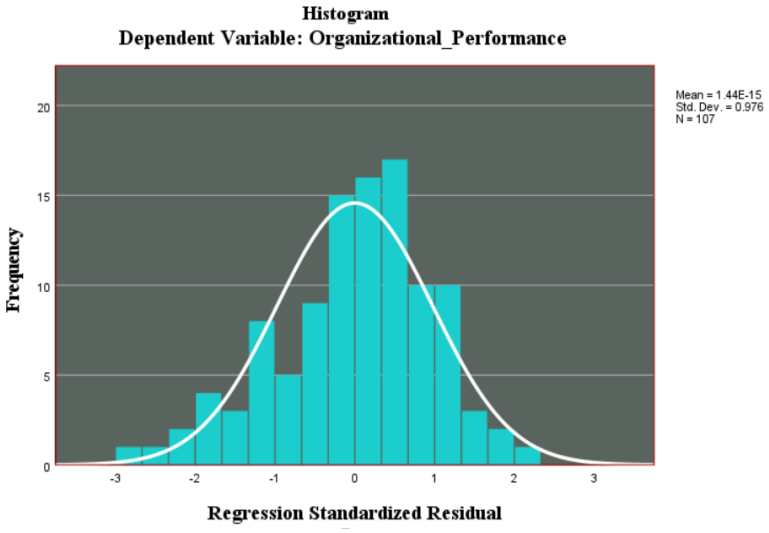

Figure 4.2: Normality plot

Source: SPSS output, 2024

As the figure above indicates, the distribution is considered to be normal but the skewness and the kurtosis of the data should also be checked. The acceptable range for kurtosis and skewness is between -2 and +2 for normally distributed data. The table below shows this results:

Descriptive Statistics									
	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Organizational Performance	107	2.25	5.00	3.7313	.77528	**-.080**	**.234**	**-.924**	**.463**
Valid N (list wise)	107								

Table 4.16: table showing the skewness and kurtosis of the data
Source: SPSS output, 2024

As indicated in the table above, the skewness for the data is -0.08 while the kurtosis is -0.924. The negative sign shows that the graph is leaning to the left and that the tail is slightly longer in that direction. Nevertheless the distribution is within the acceptable range.

4.5.4 Homoscedasticity

This assumption states that the variance of the residuals are constant or nearly similar at each point across the model. This implies that the spread of the residuals should be fairly constant at each point of the independent variables. Achieving the opposite breeds hetroscedasticity where the residual's variance are different across the points of the predictor variable. The test used to know if the residuals are homoscedastic is by using a scatter plot and the residuals should not be excessively collected at one point and should be fairly spread apart. The figure below shows the homoscedasticity test of the data:

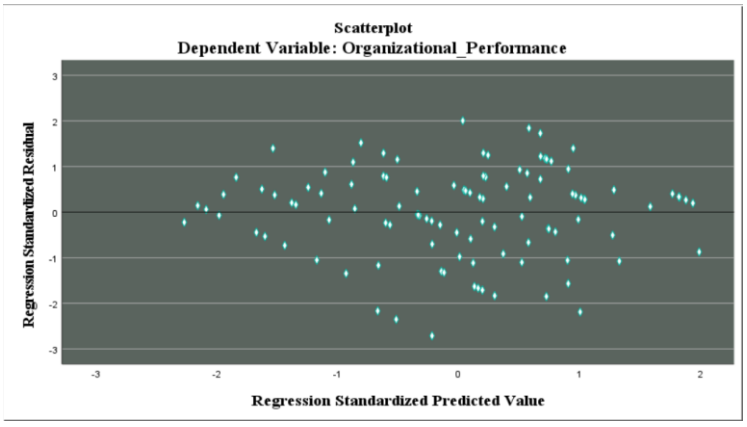

Figure 4.3: Homoscedasticity test
Source: SPSS output, 2024

As can be seen from the above figure, the residuals are fairly constant across the graph which indicates that the data exhibits homoscedasticity.

4.5.5 Autocorrelation

This assumption states that the residual's (error terms) value in the data should be independent of each other. This implies that there shouldn't be an existing pattern of correlation found among the residuals. This can be tested using the Durban-Watson statistics, which ranges from 0 to 4. The more the value is close to 2, the freer the data is from autocorrelation. Values <1 and >3 are usually cause for concern and can make the analysis inaccurate. To that regard, the table below shows the Durban-Watson statistics from the analysis:

Model Summary					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	**Durbin-Watson**
1	.780[a]	.608	.588	.49749	**1.807**
a. Predictors: (Constant), Ethical Practice, Buyer Supplier Relationship, Organizational Capacity, Contract Management, Procurement Planning					
b. Dependent Variable: Organizational Performance					

Table 4.17: Durban-Watson statistics for the model
Source: SPSS output, 2024

The Durban-Watson test value for the model is 1.807. Since the value is closer to 2, the residuals are considered to be independent of each other and autocorrelation is not a problem.

In summary, all the assumptions of regression have been met and thus, the results proposed in the following sections are considered to be valid.

4.6 Multiple regression analysis

Since none of the assumptions of regressions have been violated, the next step is to conduct the multiple regression, in order to know the magnitude of the relationships that exists between the independent variable (procurement planning, organizational capacity, buyer to supplier relationships, contract management and ethical practice) and dependent variables (organizational performance). The table below shows the model's regression output summary from the data:

Model Summary					
Model	R	**R Square**	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.780	**.608**	.588	.49749	1.807
a. Predictors: (Constant), Ethical Practice, Buyer Supplier Relationship, Organizational Capacity, Contract Management, Procurement Planning					
b. Dependent Variable: Organizational Performance					

Table 4.18: model summary output from the regression
Source: SPSS output, 2024

As indicated in the model summary above, the independent variables have an adequate and positive relationship with the dependent variable. The R^2 generated by the model have a value of 60.8% which means that Procurement planning, organizational capacity, buyer to supplier relationships, contract management and ethical practice can explain 60.8% of the variation that exists in organizational performance. There are still other determinants that can account for the remaining 39.2 % of the variation that exists in organizational performance that are not included in this study but are, nevertheless, significant contributors to organizational performance. The table below shows the ANOVA result of the model:

ANOVA						
Model		Sum of Squares	df	Mean Square	F	**Sig.**
1	Regression	38.715	5	7.743	31.286	.001[b]
	Residual	24.997	101	.247		
	Total	63.713	106			
a. Dependent Variable: Organizational Performance						
b. Predictors: (Constant), Ethical Practice, Buyer Supplier Relationship, Organizational Capacity, Contract Management, Procurement Planning						

Table 4.19: ANOVA table for the model
Source: SPSS output, 2024

The ANOVA table as indicated above shows if the independent variable (procurement planning, organizational capacity, buyer to supplier relationships, contract management and ethical practice) can adequately predict the dependent variable (organizational performance). This can be determined by checking the model; if the p-value is below 0.05 then there is a statistically significant relationship between the dependent and independent variable. As can be seen from the table, the p-value is less than 0.05 which indicates that there is a statistically significant relationship

between the independent and dependent variable. The next table presents the beta coefficient values of the predictor variables:

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	**.096**	.356		3.271	.000
	Procurement Planning	**.188**	.119	.162	2.578	.001
	Organizational Capacity	**.021**	.122	.016	2.170	.008
	Buyer Supplier Relationship	**.427**	.099	.376	4.334	.000
	Contract Management	**.014**	.012	.160	3.679	.009
	Ethical Practice	**.515**	.094	.472	5.460	.000

Table 4.20: beta (B) coefficients of the procurement practice variables
Source: SPSS output, 2024

The beta values in the unstandardized coefficients indicate the magnitude values of the procurement practice variables influence on organizational performance. As indicated in the table above all the five variables show a statistically significant effect on organizational performance. Ethical practice exudes the major and highest influence with a beta value of 0.515. This means for every unit of increase in ethical practice, the value of organizational performance will also increase by 0.515. Since the P-value (0.000) is less than 0.05, then the null hypothesis is rejected and the alternate hypothesis is accepted.

The second variable with the highest influence on organizational performance was buyer to supplier relationship with a beta value of 0.427. This means that for every unit increase in buyer to supplier relationship, organizational performance will also increase by 0.427. Since the P-value (0.000) is less than 0.05, then the null hypothesis is rejected and the alternate hypothesis is accepted.

The third ranking variable with the highest influence on organizational performance was procurement planning with a beta value of 0.188. This indicates that for every unit increase in procurement planning, organizational performance will also increase by 0.188. Since the P-value (0.001) is less than 0.05, then the null hypothesis is rejected and the alternate hypothesis is accepted.

The fourth and fifth variables with moderate and significant influence on organizational performance are organizational capacity with respective beta values of 0.021. This indicates that for every unit increase organizational capacity, organizational performance will also increase by 0.021. Since the P-value for organizational capacity was 0.008 which is less than 0.05, then the null hypothesis is rejected and the alternate hypothesis is accepted.

The fifth variable with moderate and significant influence on organizational performance is contract management with a beta value of 0.014. This indicates that for every unit increase contract management, organizational performance will also increase by 0.014. Since the P-value for contract management was 0.009 which is less than 0.05, then the null hypothesis is rejected and the alternate hypothesis is accepted.

In summary, the multiple regression output has indicated that all the five variables have a positive and significant relationship with organizational performance. While ethical practice, buyer to supplier relationship and procurement planning have a high influence on organizational performance, organizational capacity and contract management have a moderate influence. Thus, to complete the model construction, when the unstandardized coefficient are added the final model will be as follows:

$$OP = 0.096 + 0.188\ (PP) + 0.014\ (CM) + 0.021\ (OC) + 0.427\ (BSR) + 0.515\ (EP)$$

Where:

OP = indicates organizational performance

PP = indicates procurement planning

CM = indicates contract management

OC = indicates organizational capacity

BSR = indicates buyer to supplier's relationship

EP = indicates ethical practice

4.7 Discussion

Ethical practice was ranked as the first procurement practice variable that has an effect on organizational performance. This implies that ethical practice highly affects the performance of the organization. Practices such as transparency, accountability, punishing corrupt behaviors and keeping bids competitive play a crucial role in how well the organization performs. This findings were in line with Shale and Hussein (2014) and Fakadu (2018). All this authors recommended that since ethical practices have a high influence on organizational performance, firms should implement ethical principles and practices diligently in order to increase their organizational performance.

Buyer to supplier relationship ranked as the second procurement practice variable that has an effect on organizational performance. This implies that buyer to supplier relationship also has a high effect on the performance of the organization. Practices like mutual planning and objectives setting with suppliers, seeing suppliers as reliable and consistent with their project delivery, knowing their capacity, sharing of information and updates, long term communication, knowing suppliers capacity and limits, measuring their performance can have a positive effect in how well the organization performs. This findings are in line with the Panahifar, Byrne, Salam and Heavey (2018), Gopal, Subashini and Velmurugan (2019), Suh, Jung, Zank and Arend (2019), Jimenez-Jimenez, Martínez-Costa and Sanchez Rodriguez (2019) and Fatemi et al. (2018). This authors recommend that in order to increase the performance of organizations, relationships between buyers and supplier should be strengthened sufficiently.

Procurement planning ranked as the third procurement practice variable that has an effect on organizational performance. It showed a high correlation which indicates that it has a high effect in how well an organization performs. Activities such as clarifying the project deliverables, project time schedule, budget allocation, scope of the project, quality standards, specifications and requirements, and resource utilization (man power, material and equipment) can positively contribute the organization's performance. This findings are consistent with Leiyan (2016), Caritas, Julius, and Zenon (2016), Chepkesis and Keitany (2018) and Tamiru (2020). These authors recommended that in order to increase organizational performance sufficient attention should be given to procurement planning.

Organizational capacity ranked as the fourth procurement practice variable that has an effect on organizational performance. It showed a moderate correlation to organizational performance which indicates that certain practices can positively contribute to how well the organization performs. Practices such as hiring skilled and qualified staffs, engaging staff in skills training and development, employing IT infrastructure to enhance business operations, strategic deployment of organizational resources, and utilizing networks can help increase the performance of the organization. This findings are consistent with Mokogi, Mairura and Ombui (2015) and Ayub (2020). The authors recommended that, in order to increase organizational performance, firms should emphasize on increasing the organization's capacity.

Contract management ranked as the fifth procurement practice variable that has an effect on organizational performance. It showed a moderate correlation to organizational performance which indicates that certain practices can positively contribute to how well the organization performs. Activities such as informing stakeholders on the progress of the project, communicating permitted changes to contracts to the stakeholders, stating quality requirements of the deliverables to suppliers, managing claims and disputes, monitoring contract performance, defining early the risk allocation and its management with suppliers can help boost the performance of the organization. This findings are also supported by Lysons & Farrington. (2006), Basheka (2009) and Lesere (2018) and Adamu, Gyamfi and Billa (2021), where the authors revealed that contract management has a positive influence on organizational performance and that in order to increase a firm's organizational performance, contract management practices should be given sufficient attention. Furthermore, while ethical practice, buyer to supplier relationship and procurement planning are of great importance to how well an organization performs (in terms of achieving its planned objectives) organizational capacity and contract management also play an important and positive role to an organization's performance.

On another note, it is to be recalled that in the beginning of chapter two the governing theories that were selected for this study were the principal-agency theory and legitimacy theory. This were selected because other authors like Leiyan (2016), Ayub (2020), Tamiru (2020) and Argachew (2021) among others, who also based their research on the effects of procurement practice on organizational performance also based their theory on principal-agency and legitimacy theory

because it heavily emphasize the important relationship that an organization have with that of its suppliers and with the public at large.

The principal-agency theory states how an organization (the principal) assigns an agent to complete some tasks or activities on its behalf but not on the interest of the agent's. To bring it to context, this deliberate transfer of power or willful assignment from one public body (ERA) to another (contractors and consultants) is not just handing off tasks, it also creates a relationship between the principal and the agent. If there is a lack of adequate and clear communication between an organization (buyer) and a private firm (supplier) then conflicts will rise, which can end up affecting both parties interests.

Conversely, this theory also implies that procurement managers are also assigned by the organization to procure goods, works and services on their behalf in order to achieve the objectives of the organization. In both of this cases, working on the ethical practice and buyer to supplier relationships in an organization will yield more useful benefit as it strengthens the organization's performance.

Next was the legitimacy theory which states that organizations should publicly disclose their state of affairs with the stake holders and more importantly to the public at large. This is done by organizations in order to foster positive reputation and build trust in the eyes of the public. Disclosing the activities of an organization not only keeps the stakeholders and public up to date about their strategic decisions, it also puts a heavy responsibility on the organization to be careful in their courses of actions. The legitimacy theory implicitly indicates that an organization should have a high moral standard in order to gain and continually maintain the trust of it's stakeholders as well as the public, this will over time build a good reputation for the organization.

These two theories also supported the findings of this study that ethical practice and buyer to supplier relationship have a high correlation to how well an organization performs in the long run. This means that ERA can maintain, or in fact, enhance its performance by strengthening its ethical practice through better acts of accountability, transparency, integrity and maintaining its good public image. Additionally, it can also strengthen its relationship with its suppliers to increase its performance through better and long term communication, mutual planning schemes, strategic relationships and developing trust with its suppliers.

It should be also stated that procurement planning had a high correlation to how well the organization performs and thus, enhancing its procurement planning through better identification of the organization's needs, better planning of project schedule and costs, clearly defining the expected deliverables and better assignment of responsibilities to the right people can better aid in increasing the output performance of the organization.

4.8 Testing the hypothesis

As per the findings, the decision made for the hypothesis test goes as follows:

No.	HYPOTHESIS	Decision
1	Procurement planning has a positively significant relationship with organizational performance.	Accepted
2	Organizational capacity has a positively significant relationship with organizational performance.	Accepted
3	Buyer to supplier relationship has a positively significant relationship with organizational performance.	Accepted
4	Contract management has a positively significant relationship with organizational performance.	Accepted
5	Ethical practice has a positively significant relationship with organizational performance.	Accepted

Table 4.21: Decision made for the hypothesis test

CHAPTER 5

5. SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Introduction

This section starts by summarizing the major findings of the research. Next, conclusions are presented in order to point out the essential elements that can be derived from the study. Finally, recommendations are given, concerning best procurement practices, which can potentially contribute to narrow the gap between the planned and actual output of the ERA.

5.2 Summary

From the 107 analyzed questionnaires obtained from ERA respondents the findings are summarized as follows:

- In regards to procurement plans being designed in a way that address the organization's needs, a total of 72% of the respondents believe that's the case at least to greater extent.
- A cumulative of 66% of the staff believe the procurement planning procedures are clear for the staff to follow at least to a greater extent.
- Concerning Procurement plans being prepared in accordance to the organization's budget, a total of 67% of the respondents believe that at least to a greater extent.
- A total of 59% of the respondents believe that procurement outputs are indeed in line with the procurement plans at least to a greater extent.
- As to specifications and requirements being outlined in the procurement plans, a total of 66% of the respondents believe that's true to a greater extent.
- A total of 74% of the respondents believe that competent staffs are assigned to handling procurement planning within ERA at least to a greater extent.
- In regards to the organization employing skilled and qualified staff, a total of 73% of the respondents believe that's true at least to greater extent.
- Concerning the organization employing the use of IT infrastructure to modernize its business operations, a total of 66% of the respondents believe it does at least to a greater extent.
- A total of 70% of the respondents believe the organization does engage the staff in skills training and development at least to a greater extent.

- In regards to the organization monitoring and evaluating its staff's performance, a total of 66% of the respondents believe it does at least to a greater extent.
- Concerning the organization taking it's time in strategizing on how to deploy its resources, a total of 65% of the respondents believe it does at least to a greater extent.
- In relation to the organization utilizing its relationships and networks in order to achieve its objectives, a total of 72% of the respondents believe it does at least to a greater extent.
- As to the organization engage in mutual planning and objectives setting with its suppliers, a total of 52% of the respondents believe it does at least to a greater extent.
- A total of 56% of the respondents believe that it does see its suppliers as reliable and consistent at least to a greater extent.
- In regards to the organization does indeed engage in information exchange and updates with suppliers, a total of 61% of the respondents believe it does to a greater extent.
- In relation to the organization knowing the capacity and limits of its suppliers, a total of 63% of the respondents believe it does at least to a greater extent.
- As for the organization highly considering the reputation and qualification of its suppliers in project delivery, a total of 65% of the respondents believe that it does at least to a greater extent.
- A total of 57% of the respondents believe that the organization does measure the performance of its suppliers at least to a greater extent.
- Concerning the organization clearly stating the quality requirement to its suppliers, a total of 76% of the respondents believe that it does at least to a greater extent.
- A cumulative of 76% of the respondents believe that it indeed does inform stakeholders the progress of the project at least to a greater extent.
- As for permitted changes in contracts being communicated to stakeholders in a timely basis, a total of 66% of the respondents believe it's done at least to a greater extent.
- In relation to the organization resolving any claims and disputes that arise during contract administration phase, a total of 69% of the respondents believe that it does at least to a greater extent.
- Concerning the organization systematically monitoring and reviewing contract performance, a total of 75% of the respondents believe it does at least to a greater extent.

- A total of 62% of the respondents believe that the organization does indeed define early on the risk management and allocation before the project begins at least to a greater extent.
- In regards to the organization emphasizing staff's adherence to procurement principles and codes during procurement procedures, a total of 70% of the respondents believe that it does at least to a greater extent.
- A cumulative of 77% of the respondents believe that senior management's do involve in enforcing ethical procurement practices in the organization at least to a greater extent.
- As for the organization undertaking procurement procedures in a transparent manner, a total of 78% of the respondents believe that it does at least to a greater extent.
- Concerning corrupt behaviors being properly punished by the organization if they arise, a total of 68% of the respondents believe that it will at least to a greater extent.
- In relation to the organization openly reporting the expenditure of public and donor funds, a total of 74% of the respondents believe that it does at least to a greater extent.
- A total of 81% of the respondents believe that bids are kept competitive during the tendering phase at least to a greater extent.
- In regards to the alignment of the actual outputs with that of the planned output, a total of 64% of the respondents believe that it is at least to a greater extent.
- In regards to the procurement practice of the organization resulting in cost reduction, a total of 57% of the respondents believe that it did at least to a greater extent.
- A cumulative percentage of 61% of the respondents believe that it has indeed resulted in better quality deliverables at least to a greater extent.
- Concerning the procurement practice resulting in a reduction in delivery time, a total of 58% of the respondents believe that it did at least to a greater extent.
- The result shows that all the procurement practice variables had a positive and statistically significant relationship with that of organizational performance.
- Ethical practice (0.689), buyer to supplier relationship (0.661) and procurement planning (0.605) had high correlation to organizational performance while organizational capacity (0.491) and contract management (0.453) have moderate correlation with organizational performance.
- The R^2 generated by the model have a value of 60.8% which indicate that the five variables can explain 60.8% of the variation that exists in organizational performance.

- The first variable with the highest influence on organizational performance was ethical practice with a beta value of 0.515.
- The second highest was buyer to supplier relationship with a beta value of 0.427.
- The third highest was procurement planning with a beta value of 0.188.
- Organizational capacity and contract management were the fourth and fifth variable with a respective beta values of 0.021 and 0.014.

5.3 Conclusion

This study was conducted in order to better understand the effect of procurement practice on organizational performance. In this section, the research questions that were formulated in chapter one will be answered in reference to the research findings in chronological order.

The first research question inquires how procurement planning affects the performance of ERA. The findings showed that the grand mean score for this variable was categorized towards a great extent, which indicates that ERA often implements procurement planning practices. This variable had a high correlation to organizational performance with a Pearson's correlation coefficient of 60.5%. It was ranked as the third variable with a significant positive correlation to ERA's performance. This strong procurement planning practice has helped the organization better plan projects in terms of anticipated quality of deliverables, costs, duration and scope.

The second research question inquires the extent to which contract management affects the performance of ERA. The findings showed that the grand mean score for this variable was categorized towards a great extent, which indicates that ERA often implements contract management practices. This variable had a moderate correlation to organizational performance with a Pearson's correlation coefficient of 45.3%. It was ranked as the fifth (last) variable with a moderate correlation to ERA's performance. Contract management practice shows the level of engagement of the organization in stating quality requirements of the deliverables to suppliers, informing stakeholders the progress of the project, managing claims and disputes and monitoring contract performance.

The third research question inquires the extent to which organizational capacity affects the performance of ERA. The findings showed that the grand mean score for this variable was categorized towards a great extent, which indicates that ERA often implements organizational

capacity practices that can increase its capacity. This variable had a moderate correlation to organizational performance with a Pearson's correlation coefficient of 49.1%. It was ranked as the fourth variable with a moderate correlation to ERA's performance. Organizational capacity shows the level of engagement of the organization in the use of IT infrastructures, employing better skilled and qualified staff and training and development.

The fourth research question inquires how buyer to supplier relationship affects the performance of ERA. The findings showed that the grand mean score for this variable was categorized towards a great extent, which indicates that ERA often implements buyer to supplier relationship practices, this means the organization frequently interacts with its suppliers which can build a strong relationship between them. This variable had a high correlation to organizational performance with a Pearson's correlation coefficient of 66.1%. It was ranked as the second variable with the highest significant positive correlation to ERA's performance. This strong relationship with the suppliers has helped ERA increase its performance as almost all of its projects are given to suppliers through procurement of work and service.

The fifth research question inquires how ethical practice affects the performance of ERA. The findings showed that the grand mean score for this variable was categorized towards a great extent, which indicates that ERA is often engages in ethical practices. This variable had a high correlation to organizational performance with a Pearson's correlation coefficient of 68.9%. It was ranked as the first variable with the highest significant positive correlation to ERA's performance. This strong practice in ethical behavior will gives ERA a better image, trust and integrity in the eyes of the public and its donors. This can lead to better engagements and funds.

5.4 Recommendation

The organization (ERA) has been performing well on areas such as ethical practice, buyer to supplier relationships and procurement planning. So, these areas are already in a strong position but there is always room for improvement. The organization usually plans road project's to be finished in limited time usually 3 to 5 years for reasons that the projects are usually assumed to be carried out by competent and qualified contractors and consultants. This act of limiting the duration (time) of the project will also affect the final cost of the project and because of this, cost and time overruns are frequently experienced by ERA. Thus, during planning instead of planning with

optimism, projects should be scheduled and their costs determined from historical base projects that were already finished, usually with similar conditions as the one being planned out. This creation of a point of reference using historical data from similar projects will help forecast a project's schedule and cost. Similar past projects can be of great reference especially if they share a commonality with the planned project in terms of topographic data, environmental and social influence in the region, scope of the prior project, significant incidents that were recorded, etc. can better predict the future outcome and considering those will yield a more realistic schedule and time for project planning.

The organizational capacity and contract management needs improvement inside the organization. Concerning the organizational capacity, the findings in show that improvements ERA needs to strengthen its human and technological resources. Putting effort on hiring better skilled and qualified staff, employing IT infrastructures to enhance its business operations, strategic organizational resource deployment, and frequently engaging its employees on skills training and development that can enhance the organizational performance should be the focus areas for strengthening its performance. Concerning contract management, the efforts of ERA in this area needs to be strengthened as contract management plays a big role in the success of the organization. Putting effort to strengthen monitoring contract performance, better risk allocation and management with suppliers, management of claims and disputes, stakeholder management, and clearly stating quality requirements of the deliverables to suppliers should be the focus are for strengthening the performance of the organization.

5.5 Future research direction

Further research should be conducted on the effects of procurement practice on organizational performance on ERA from the perspective of the suppliers, like the contractors and consultants. This study was limited to only ERA's respondents and in order to have a more clear understand of the issue the stakeholders of that are in constant contact with the organization should also give their valuable insight in to how the procurement practice of their employer can have an effect on the organization's performance, their (contractors and consultants) insights can contribute greatly to this body of knowledge.

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7. APPENDIX

INTRODUCTORY LETTER

Dear Respondents in Ethiopian Roads Administration (ERA),

I am a graduate student at Addis Ababa University pursuing a Master's degree in Business Administration (MBA). As a partial fulfilment of the course, I am conducting a research to identify the "**Effects of Procurement Practice on Organizational Performance: The case of ERA".**

Answering the questions will take **8-10 minutes** in total and thus, I kindly request you to spare some time to fill out the questionnaire. The result of the study will be significant to organization engaged in procurement.

The response from this questionnaire will be used purely for academic purposes and confidentiality is strictly emphasized while conducting the study. You are not requested to include your name. Any additional information that you might feel is necessary for this study is welcomed.

General Instruction

- ✓ This questionnaire is to be filled by permanent employees of ERA.
- ✓ You are not required to write your name
- ✓ All questions are close – ended and should be answered by placing a tick **(✓)** mark with in the box provided.
- ✓ Don't skip any questions, all inputs are equally important

Scale the extent of your agreement for the raised questions as follows:

[**1**] *Very low extent* [**2**] *Low extent* [**3**] *Moderate extent*

[4] *Great extent* [**5**] *Very great extent*

Thanks in advance for your support.

Section 1: Background Information

1. Gender of respondent

Female [ ] Male [ ]

2. Age of respondent

Less than 30 years [ ] 31 to 40 years [ ]

41 to 50 years [ ] above 51 years [ ]

3. Highest level of education

Certificate [ ] Diploma [ ] Undergraduate [ ]

Postgraduate [ ] PH.D [ ]

Please indicate if not included above _____

4. Number of years working in ERA

0-5 years [ ] 6-10 years [ ]

11-15 years [ ] above 16 years [ ]

5. Current department assigned in

Engineering Procurement [ ] Procurement Planning [ ] Design Office [ ]

Program Management [ ] Road Assets Management [ ]

Section 2: Research questions

No.	1. PROCUREMENT PLANNING	1	2	3	4	5
1	The procurement plans are prepared in a way that addresses the organization's needs					
2	The organization's procurement planning procedure are clear for the staff to follow					
3	Procurement plans are prepared in accordance to the organization's budget					
4	The procurement outputs are in line with the procurement plans					
5	specifications and requirement are outlined in the procurement plans					
6	Competent staffs are assigned to handle procurement planning in the organization					
No.	**2. ORGANIZATIONAL CAPACITY**	**1**	**2**	**3**	**4**	**5**
1	The organization recruits skilled and qualified staffs					
2	The organization employs the use of IT Infrastructure to modernize its business process					
3	The organization engages the staff in skills training and development					
4	The organization engages in monitoring and evaluating the performance of its employees					
5	The organization takes time in strategizing on how to deploy its resource in order to achieve its objectives					
6	The organization uses its connections and links with external organization to achieve its objectives					
No.	**3. BUYER TO SUPPLIER RELATIONSHIPS**	**1**	**2**	**3**	**4**	**5**
1	The organization engages in mutual planning and objectives setting with its supplier					
2	The organization sees its suppliers as reliable and consistent in their project delivery					
3	The organization engages with suppliers in information exchange and updates					
4	The organization knows the capacity and limits of its suppliers					
5	Reputation and qualification of suppliers in project delivery is highly considered by the organization					
6	The organization measures the performance of its suppliers					

No.	**4. CONTRACT MANAGEMENT**	**1**	**2**	**3**	**4**	**5**
1	The organization clearly states the quality requirements of the deliverables to its supplier					
2	The organization informs stakeholders the progress of the project during contract administration					
3	Permitted changes in contracts are communicated to stakeholders on time					
4	The organization resolves any claims and disputes that arise during contract administration phase					
5	The organization systematically monitor and review contract performance					
6	Proper risk managements and allocations are defined early on before the project begins					
No.	**5. ETHICAL PRACTICE**	**1**	**2**	**3**	**4**	**5**
1	The organization emphasizes staff's adherence to procurement principles and codes during procurement procedures					
2	Senior managements are involved in enforcing ethical procurement practices in the organization					
3	The organization undertakes procurement procedures in a transparent manner					
4	corrupt behaviors are properly punished by the organization if they arise					
5	Public and donor fund expenditure are reported openly by the organization					
6	Bids are kept competitive during tendering phase					
No.	**6. ORGANIZATIONAL PERFORMANCE INDICATORS**	**1**	**2**	**3**	**4**	**5**
1	The achieved project outputs of the organization are in alignment with its planned project outputs					
2	Procurement practices of the organization have resulted in cost reduction					
3	Procurement practices of the organization have resulted in better quality of deliverables					
4	Procurement practices of the organization have resulted in reduction in delivery time					