
**ADDIS ABABA UNIVERSITY**

**COLLEGE OF BUSINESS AND ECONOMICS,**

**SCHOOL OF COMMECE, GRADUATE STUDIES**

**DEPARTMENT OF LOGISTICS AND SUPPLY CHAIN MANAGEMENT**

# ASSESSEMENT OF PROCUREMENT PERFORMANCE AND ITS LINK WITH OPERATIONAL EFFECIENCY IN CASE OF ETHIOPIAN ELECTRIC UTILITY

**By: Belay Tariku**

**Advisor: Solomon Markos, PhD**

**A THESIS SUBMITTED TO ADDIS ABABA UNIVERSITY, SCHOOL OF COMMERCE IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF LOGISTICS AND SUPPLY CHAIN MANAGEMENT.**

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**By**

**Belay Tariku**

Approved by The Board of Examiners:

| | | |
|---|---|---|
| Solomon Markos (PHD) | _____ | _____ |
| Advisor | Signature | Date |
| Busha Temesgen (PHD Candidate) | _____ | _____ |
| Internal Examiner | Signature | Date |
| Goitom (PhD) | _____ | _____ |
| External Examiner | Signature | Date |

## Statement of Certification

This is to certify that Belay Tariku has carried out his research work on the topic entitled **"*Assessment of procurement performance and its link with operational efficiency in case of Ethiopian Electric utility".***

The Work Is Original in nature and is suitable for submission for the award of Master Degree in Logistics and Supply Chain Management (M.A in LSCM).

Advisor: Solomon Markos, PhD

Signature_____ Date_____

# Statement of Declaration

I, Belay Tariku, hereby declare that this thesis entitled "Assessment of procurement performance and its link with operational efficiency in case of Ethiopian Electric Utility submitted by me for the award of the degree of Master of Logistics and Supply chain management, Addis Ababa University at Addis Ababa, Ethiopia, is my original work and it has never been presented in any university. All sources and materials used for this thesis have been duly acknowledged.

Name: Belay Tariku Erena

Signature: _____

Place: Addis Ababa

Date of Submission: Jun, 2016

# Dedication

This research study is dedicated to my family and friends for their encouragement and continuous support throughout MA Program and especially during this research project.

# Acknowledgements

I wish to express my sincere gratitude to all those who contributed towards the completion of this work. First and foremost I owe special thanks to God Almighty for seeing me through. I sincerely acknowledge my supervisor Solomon Markos(PHD), University of Addis Ababa in School of commerce for giving me the required guidelines all the way till I was through. All my friends especially Yohannes Ayele and Umer Mohammed who assisted me in various ways cannot be forgotten for their contribution had a positive impact in the research study.

Last but not the least, the respondents who provided valuable information through their response to the questionnaires administered: without you, the study would not have taken place.

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# List of Acronym and Abbreviation

| | |
|---|---|
| **COMESA** | Common Market for Eastern and Southern Africa |
| **FDRE** | Federal Democratic Republic of Ethiopia |
| **GDP** | Gross Domestic Product |
| **MoFEC** | Ministry of Finance and Economic Cooperation |
| **OECD** | Organization for Economic Co-operation and Development |
| **SPSS** | Statistical Package for Social Sciences |
| **TCO** | Total Cost of Ownership |
| **UNOPS** | United Nations Office for Project Service |

# Abstract

*Procurement largely contributes to spending of the public funds, thus the procurement process must be highly monitored on how the procurement process are administrated to ensure efficiency and effectiveness. This research sought to Asses procurement performance and its link with operational efficiency in Ethiopian Electric utility. The study mainly focused factors affecting procurement performance and operational efficiency and relationship between procurement performance and operational efficiency in Ethiopian Electric utility. The study adopted Explanatory method of research since the study intended to explain cause and effect relationship between procurement performance and operational efficiency in Ethiopian Electric utility. The target population was employees of EEU. Total number of respondents in this study was 42. Primary data was gathered using structured questionnaires. Descriptive statistics was used to summarize the data. This included percentage and frequencies. Tables and other figural presentations were appropriately used to present the data that was collected for ease understanding and analysis. Correlation analysis was used to identify the relationship between procurement performance and operational efficiency. A statistical package for social science version 20 was used for data analysis.From the study findings it was concluded that procurement performance have a link with operational efficiency in Ethiopian electric utility thus the researcher recommended that the organization management should give attention to procurement planning to reduce delays in procurement process, give training for procurement unit, audit and other stakeholders about the process of procurement to enhance accountability and transparency. The organization should also work with reliable supplier whose delivery schedule are realistic and within the organization requirements.*



*Key Words:* ***Procurement Performance and Operational efficiency***

# CHAPTER ONE

## INTRODUCTION

Under this chapter the researcher tried to introduce readers about background of the study, statement of the problem, objective of the study, significance of the study, scope /delimitation of the study and limitation of the study.

### 1.1 Background of the study

Procurement is a crucial Element in the working functions of any state. It refers to purchasing of goods and services in the right quality, from the right source and right price all to meet a specific need.

The Procurement function has undergone significant changes in many countries moving from reactive to strategic one, in order to keep pace with the expansion of Procurement activities and enhance procurement performance (Macbeth & Ferguson, 1994; Dimitriades & Maroudas, 2007). Procurement Excellence is increasingly becoming an important factor in delivering efficient operations within successful companies. During downturn, when companies must consider every avenue for cutting costs in order to survive, the Procurement Function plays an increasingly important role in achieving this strategic goal (Schiele & McCue, 2006). It is utilized not only to secure goods and service required by public sector organizations for their mission and to support services provided to taxpayers, but it is also used to implement national policies and to achieve social and other objectives (Thai, 2005).

According to annual report of bulletin of 2014 of the Federal Public Procurement and Property Administration Agency (FPPPAA), in Ethiopia Public Procurement Expenditure take the lion share from the Annual government budget by taking 64 Percent of Annual Budget and 14 percent of the GDP. Unless the Procurement Process is administered effectively and efficiently, the performance of the procurement entities will be highly affected (Wanjiru, 2013).

One of the main Principles of Public Procurement is to obtain the best value for money in the use of public fund for procurement. To this end, it is important to consider the optimum of "the whole life cost" (Eg. Acquisition cost, Cost of Maintenance and Running Cost, disposal Cost) of a purchase and its fitness for purpose (e.g. quality and ability to meet the contracting authority's requirements). This enables contracting authorities to compile a Procurement specification which includes social, economic and environmental policy objectives within the Procurement process (Peter, 1999, p. 17).

Effective and efficient procurement systems and collaborative relationships are essential to the achievement of organizational goals, cost reduction and supply chain performance. This is achieved by identifying key saving potential areas and driving innovative sourcing models which can enable operators to reinvent their cost structures. According to Thai (2005), every organization that purchases goods or services must have effective standard procurement procedures, the methods they use to acquire those things required for an organization to provide goods/services to its clients.

According to Council of Minister Regulation No. 303/2013, Ethiopian Electric Utility is established for indefinite duration to construct and maintain electric distribution Networks, to contract out the distribution networks construction to contractors as required, administer electric distribution networks, to purchase bulk electric power and sell electric energy to customers.

According to Ethio-Recourse Group (2009) study, Electricity is a critical economic infrastructure. If not delivered where and when needed, serious damage ensues for the economy. Considerable Potential Output has been lost due to power cuts in the past few years. According Ethiopian Electric Power Corporation (EEPC) annual Bulletin of 2011/2012, concerning quality of supply, the service quality in the electrified areas is not satisfactory. This is due to Poor design, low quality of transformer and lack of scheduled maintenance. As the situations become more urgent, Ethiopia Electric Utility require purchasing large quantities and high quality of equipment more than ever and since procurement cost account for more than 50 percent of overall costs of Ethiopia Electric Utility (EEU), how to effectively reduce these costs is very important. The researcher is

motivated to conduct this research because of procurement and operational efficiency is overlooked concept and thus the need to study the procurement performance and its link with operational efficiency.

## 1.2 Statement of Problem

Procurement is one business functions that can contribute tremendously to the organizations efficiency and effectiveness. If the procurement department bought all that is required into the organization at the right price, right time, right place, right quantity and right quality all other departments within the organization would drive great benefits from this and would be able to serve their customers (both internal and external) better. If the procurement function is inefficient in its acquisition of goods and services or even works, other departments would be affected and sometimes the consequences can be grave (Snider and Rendon, 2001).

As cited in Kakwezi and Nyeko (2010) study, most entities in developing countries have been known for their poor performance and corruption, resulting from no adherence to processes and procedures, poor resources utilization, poor personnel management and training, inadequate payment and benefits. In addition, the procurement departments is faced with the problem of not having enough information about the procurement procedure, its inputs, outputs, resource consumption and results and are therefore unable to determine their efficiency and effectiveness. This problem requires establishment of clear procurement procedures and performance standards. Performance when adopted provides the decision makers in the procurement department with unbiased and objective information regarding the performance of the procurement function and how this affects operations in the company (Knudsen, 1999).

The need to have coherent methods of performance of the procurement function in public entities, particularly in developing countries, has never been as sound as it is now. Delaying will worsen the already deteriorating performance, loss of professionals, and organizations will continue incurring unnecessary costs (DCD/DAC, 2003). However, it is important that

appropriate performances are implemented. It should not be any performance. The issue of basing on financial performance and neglecting or ignoring non financial performance is not helping the procurement function because only partial performance is considered (Lardenoije, Van Raaij, & Van Weele, 2005

Several researches have already been carried out on procurement performance. Ngugi and Mugo (2007) analyzed the effect of procurement activities on the operation and effectiveness of public sectors in Kenya. Andrew B. (2011) published a research report that presented a comprehensive, industry-wide view into what is happening in the world of procurement today by drawing on the experience, performance, and perspective of nearly 250 Chief Procurement Officers and other procurement executives. The report included the main procurement performance and operational benchmarks that procurement leaders use to gauge the success of their organizations. This report found that the average procurement department manages 60.6% of total enterprise spend. This measure commonly called "spend under management" refers to the percentage of total enterprise spend (which includes all direct, indirect, and services spend) that a procurement organization manages or influences. The average procurement department also achieved an annual savings of 6.7% in the last reporting cycle; sourced 52.6% of its addressable spend, and has a contract incompliance rate of 62.6%. However this study focused more on performance measurement and did not take into account factors affecting procurement performance and the link of procurement performance on operation efficiency.

A study conducted by Kamaru (2012) on lean supply chain practices in road construction projects: A case of class “A” construction companies in Nairobi focused on the actual roads construction rather that procurement entities and the procurement process. The study concluded that benefits accrued from implementation of lean supply chain included cost reductions, waste elimination and profit maximization. The study did not deal with the aspect of procurement performance measurement and Operational efficiency.

Nassra Billow Hussien(2013) studied Procurement performance and operational efficiency in telecommunication industry in kenya. The study also established a significant relationship

between procurement performance and the independent variables; maximized resource utilization minimized waste of inputs, technology and reduced internal costs.

Kakwezi and Nyeko (2010) studied procurement process and performance and concluded that procurement efficiency and effectiveness of the purchasing function are measure of procurement performance. Lloyd, (2004) examined supply chain management practice and its effect on performance at Kasapreko company limited (KCL) and indicated that Supply chain management practice had significant influence on KCL business performance. Nantage (2011) asserts that strategic procurement management has a direct impact on the financial performance of Banks in Uganda. On other hand Hassan (2012) concluded that procurement planning and strategies have a direct positive impact on the performance of humanitarian organization in delivery of relief and emergency services.

Locally Sisay T. (2015) Studied Impact of Public Procurement towards Project Operational Performance in case of three federal institutions. The study concluded that procurement planning, procurement control and procurement monitoring impacted project operational efficiency. Though Sisay studied on the procurement practices and Project Operational efficiency he did not look at the performance measurement of the procurement process and the link procurement performance has with operational efficiency. While Worku G.( 2014) studied on the effects of Public Procurement on Public Financial Management he concluded that Ministry of Education of Ethiopia are not considering the best value for money principles in public procurement while they are making procurement decision. The study focused on effect of inefficient and ineffective public procurement on public finance management. However, there lacks conclusive studies in Ethiopia as majority of reviewed studies focus in different aspects and in other cultures and countries. This forms the research gap. It is for this research gap that the study wished to answers the following research questions:

1. What are the key factors that influence procurement performance and Operational efficiency?
2. What is the relationship between procurement performance and operational efficiency?

3. How does procurement performance impact operational efficiency?

## 1.3 Objectives of the Study

### 1.3.1 General objective

The general objective of this study is to assess procurement performance and its link with operational efficiency in case of Ethiopian Electricity Utility Enterprise.

### 1.3.2 Specific Objectives

The study aims to achieve the following specific objectives

1. To identify the factors that affect procurement performance
2. To indentify factors that affect operational efficiency.
3. To determine the relationship between procurement performance and operational efficiency.
4. To investigate the link of procurement performance with operational efficiency.
5. To provide necessary recommendation based on the results of the study.

## 1.4 Significance of the study

This study will be of importance to various stakeholders among them being the management of Ethiopian Electric utility, procurement professionals, policy makers in both private and public sector and also scholars. Management of Ethiopian Electric utility will appreciate the factors affecting procurement performance measurement among the organization. For example through the findings of this study, they will be able to understand the link of procurement performance with operational efficiency of their organization. It will therefore be possible for management to know the areas within their procurement functions that will require improvement for the betterment of the overall organization. This Study would therefore, be a great importance not only for the organization under study but for the country at large.

Procurement as a profession is dynamic and is experiencing new improvements on a regular basis. The findings of this study will inform procurement professionals on areas that require their attention both at their working places and in their other professional engagements. For example there are many aspects of procurement which will need to be included in the organizational performance metrics in order to appreciate the contribution of procurement to the overall organizational performance and effectiveness.

Lastly, the study will contribute to the field of knowledge in procurement and other researchers wishing to carry out further research and contribute to existing literature in the field of Public procurement. The research findings, will help other researchers who would want to undertake the same study to come up with more comprehensive research work or highlight the necessary adjustment that were not dealt with in depth by this research.

## 1.5 Scope of the study

The research was conducted in Ethiopian Electric Utility head office. The Study involved professional Employees of Ethiopian Electric utility head office. The Study specifically gathered data on Procurement procedure, time, quality and cost under procurement performance and Minimize waste of inputs, maximize resource utilization and minimization of cost under operational efficiency in Ethiopian electric utility.

## 1.6 Limitation of the study

The major limitation of the study is unable to incorporate all EEU branches which are found through the country. Besides, this study is conducted on a single public organization, so the results will be hard to generalization to all public body. All the problems stated above, would have some impact on the result of the study that will call up for other researchers to study further.

## 1.7 Organization of the Study

This research will have five chapters. The first chapter provides background information of the study, which includes introduction, problem statement, research questions and objectives, significances and scope of the study. The literature on procurement performance and operations efficiency was reviewed in chapter two. Research design, target population, sample design, data collection instruments and data analyze which form the methodology of this study is captured in chapter three. Chapter four analyzed the data while chapter five presented a summary of the findings, recommendations and the conclusion of the study.

# CHAPTER TWO

# LITERATURE REVIEW

This chapter presents a review of the related literature on the subject under study presented by various researchers, scholars, analysts and authors. The specific areas covered here were the conceptual framework and the empirical literature review.

## 2.1 The concept of Procurement

According to Article 2/5 of Ethiopian Federal Public Procurement and Property Administration Agency Proclamation No. 649/2009 (FPPPAA), **"Procurement"** means obtaining goods, works, consultancy or other services through, purchasing, hiring or obtaining by any other contractual means; Procurement encompasses the whole process of acquiring property and/or services. It begins when an agency has identified a need and decided on its procurement requirement. Procurement continues through the processes of risk assessment, seeking and evaluating alternative solutions, contract award, delivery of and payment for the property and/or services and, where relevant, the on-going management of a contract and consideration of options related to the contract. Procurement also extends to the ultimate disposal of property at the end of its useful life (Waters, 2004).

Similarly, Procurement is a process of the acquisition of property, plant and/or equipment, goods, works or services through purchase, hire, lease, rental or exchange from any source (UNOPS, 2010, P. 6). Additionally, it is the process of different type of acquisition (e.g. leasing, rental, contracting) as well as the associated work of identifying and selecting suppliers, negotiating, agreeing terms, expediting, monitoring suppliers performance, analyzing orders, materials administration, and developing purchasing systems (Robert, Larry, James , Land & Donald, 2010, P. 11).

According to the World Bank report (2003, p.17) public procurement is a key economic activity of government that represents significant percentage of gross domestic product

(GDP) generating a huge financial flow estimate on average at 10 percent - 15 percent of GDP across the world. Mahmood, (2010) also reiterated that public procurement represents 18.42% of the world GDP. In developing countries, public procurement is increasingly recognized as essential in service delivery (Basheka & Bisangabasaija, 2010), and it accounts for a high proportion of total expenditure. For example, public procurement accounts for 60% in Kenya (Akech, 2005), 58% in Angola, 40% in Malawi and 70% of Uganda's public spending (Wittig, 1999; Government of Uganda, 2006) as cited in Basheka and Bisangabasaija (2010). According to annual report of the Federal Public Procurement and Property Administration Agency (FPPPAA, 2014), in Ethiopia Public Procurement Expenditure take the lion share from the Annual government budget by taking 64 Percent of Annual Budget and 14 percent of the GDP.

Due to the colossal amount of money involved in government procurement and the fact that such money comes from the public, there is need for accountability and transparency (Hui *et al,* 2011). Therefore, a well-functioning procurement system based on transparency, competition, economy, efficiency and accountability is critical for good economic management and addressing leakages of government funds, improving the effectiveness of public expenditure in poverty reduction and enhancing the public's confidence in government intentions and programs. Failure to properly manage the procurement process and systems can lead to wasted effort and poor development results consequently increased poverty and deprivation of social and economic rights of the citizens. Thus, integrity of procurement performance and operations efficiency is very important to satisfy both internal and external customers.

## 2.2 The functions of the Procurement department

According to Lysons (1992:10-11) "the classic definition of the overall procurement function is to obtain materials of the right quality in the right quantity from the right source delivered to the right place at the right time at the right price". He argued further that, an expanded statement of the procurement function for a manufacturing or service organization would be along the following lines:

- To make the maximum contribution to the competitiveness, profitability and survival of the organization.
- To ensure continuity of supplies to meet the requirements of production and all other functions.
- To buy industrial equipment, materials, supplies and services at the lowest cost commensurate with acceptable standards of quality and delivery.
- To ensure that investment in inventory is at the lowest level compatible with safety.
- To keep losses in inventory arising from duplication, waste deterioration, obsolescence or pilferage to a minimum and dispose of surplus items on the most favorable terms.
- To build up supplier goodwill by such means as fair dealing, the provision of cooperation and assistance and prompt payment.
- To integrate the purchasing activity with all related functions of the undertaking by working in close collaboration with those function especially concerning the interchange of information and expertise etc.

## 2.3 Benefits from good procurement activities

According to (Robert.Bet. al 2010, pp: 13) good procurement activities provides the following benefits:

- Provides an efficient services to internal customers( who are all the internal users for whom materials are acquired)
- Gives reliable flow of materials in to an organization, ensuring that they are available when needed.
- Identifies and selects the best suppliers and develops goods relations with them.
- Encourage product innovation and improvement, through co-operations with suppliers.
- Improved product quality, by using the best available suppliers and materials.
- Negotiation goods terms that reduce the unit cost of purchased materials.
- Encourage the use of standard and readily available materials, again reduce costs.

- Reduce the amount of stock needed to cover for uncertainty.
- Gives fast flow of materials through the supply chain, again reducing the stock.
- Allows more flexible operation and better service to customers.

## 2.4 Procurement Performance

For any organization to change its focus and become more competitive, performance is a key driver to improving quality of services. Batenburg and Versendaal (2006) noted that use of inappropriate means can be a barrier to change and may lead to deterioration of procurement operations. Organizations which do not have performance means in their processes, procedures, and plans experience lower performance and higher customer dissatisfaction and employee turnover. Measuring procurement performance yields benefits to organizations such as cost reduction, enhanced profitability, assured supplies, quality improvements and competitive advantage.

According to Martinez-Martinez (2008) performance is defined as achieving the set objectives and responsibilities from the perspective of the judging party. Consequently, indicators have to be gathered relating to activities conducted by procurement officers, the outputs produced by the activities, the intended outcomes (improved performance) and impact (more value for money).

However, coming up with a precise meaning of Procurement performance is still difficult. This is because procurement performance covers broader areas of procurement, for instance: performance of the purchasing function, the purchasing department, the purchasing process on a given contract, employees of the procurement department, the supplier base and many others (Knudsen, 1999).

Further, procurement performance is the extent to which operational procurement outcomes demonstrate high levels of improved performance in lead time, cost, labor-productivity, and capacity utilization (Martinez-Martinez, 2008). Similarly Van Weele (2002) defines

**Procurement performance** as a measure of identifying the extent to which the procurement function is able to reach the objectives and goals with minimum costs.

In order to achieve performance goals and increase the value of the procurement function, the two most fundamental dimensions of performance are efficiency and effectiveness. Efficiency measures how successfully the inputs have been transformed into outputs while effectiveness measures how successfully the system achieves its desired output (Kumar, Ozdamar & Ng, 2005; Neely, 1999). According to Van Weele (2000) and Knudsen (2009), effectiveness is defined as the extent to which, by choosing a certain course of action, a previously established goal or standard is being met while efficiency is defined as the relationship between planned and actual sacrifices made in order to be able to realize a goal previously agreed upon. Efficiency is a rather narrow concept, focusing on the internal workings of the function, and is generally defined as the amount of resources used to produce a unit of output, which is time or cost based. Effectiveness, on the other hand, has been defined in terms of the degree to which a function meets its goals; the ability of the function to acquire needed resources; the internal health or internal processes of the function; or the degree to which the function meets the needs of its constituencies (Dumond, 2004). Thus, performance can be considered as the extent to which the procurement officer is able to realize their predetermined goals at the sacrifice of a minimum of the organization's resources (Van Weele, 2000; Knudsen, 2009).

Procurement performance starts from purchasing efficiency and effectiveness in the procurement function in order to change from being reactive to being proactive to attain set performance levels in an entity. Performance provides the basis for an organization to assess how well it is progressing towards its predetermined objectives, identifies areas of strengths and weaknesses and decides on future initiatives with the goal of how to initiate performance improvements.

This means that purchasing performance is not an end in itself but a means to effective and efficient control and monitoring of the purchasing function (Lardenoije, Van Raaij, & Van Weele, 2005).

According to Murray (2012) measuring Procurement performance is important as the Procurement department plays an ever increasingly important role in the supply chain in an economic downturn. A reduction in the cost of raw material and services can allow companies to competitively market the price of their finished goods in order to win business. An obvious performance measure of the success of any purchasing department is the amount of money saved by the company. Procurement performance provides a basis for effective control and stewardship of resources and demonstrates the value of the procurement function. Most organizations have no performance measures in place for assessing procurement efficiency and effectiveness. Lardenoije, van Raaij andvan Weele (2005) asserted that basing on financial performance and neglecting non-financial performance cannot improve the procurement operations because only partial performance is considered.
Some common areas of measurement of operational procurement performance according to Baily p. et al, (2008) are; Quality which can be viewed into performance quality where supplies staffs are concerned with quality of design or specifications. They are interested in specifying the right material for the job, and communications to the supplier in clear and unambiguous manner. Conformance quality is concerned with the supplier providing materials in accordance with the specifications which are usually inspected to evaluate the procurement performance on quality one would seek to know the percentage of rejects in goods received, percentage of goods rejected in production and percentage of raw materials rejected in production.

According to Garvin (2003), quality is defined using five different approaches namely; the transcendent approach; the product-based approach; the user-based approach; the manufacturing-based approach; and the value-based approach. The transcendent approach equates quality with Innate excellence: The product-based approach defines quality as a sum or weighted sum of the desired attributes in a product: The user-based approach identifies a high quality item as one that best satisfies consumer needs or wants.

Gronroos (2001) defined service quality as a measure of how well the service level delivered meet customer expectations. A common definition of service quality is that service should correspond to the requirements (Edvardsson, 1998)**.** Despite rigorous academic debate and

attention to issues related to understanding service quality from an external customer's perspective, research on the procurement needs domain is relatively new (Gremler *et al*. 1994).Edvardsson (1998) contends that specification is an integral part of the procurement function. Without a quality specification the process can be filled with pitfalls and obstacles for the purchasing department. He lists the characteristics of a good specification as follows; Identifies the minimum requirements of the end user, allows for a fair and open procurement process, provides for testing/inspection to insure the goods/services received meet the standard set forth in the specification and provides equitable award at the lowest possible cost.

Baily p. et al, (2008) also states that to evaluate procurement performance using quantity one would seek to know the quantity percentage of stock that has not moved over a specified period, number of stock outs and the number of small value orders, number of emergency orders, and comparison of stock with the target stock.

Christopher (1992) stated that in the past it was often the case that price was paramount as an influence on the buying decision. He went on to suggest that, while price is still important, a major determinant of choice of supplier or brand is the cost of time. The cost of time is simply the additional costs that a customer must bear while waiting for delivery or seeking out alternatives. To evaluate procurement performance using time one would seek to know the timing of supplier's actual delivery performance against promised, time taken to process requisitions and time taken up with remedial action.

To evaluate the procurement performance using price one would seek to know if the price paid against standard market price, price paid for key items compared with market indexes, price paid against budget cost and the price at the time of use against price at the time of purchase (Baily P. et al, 2008).

## 2.5 Concept of Operational Efficiency

The concept of operational efficiency in public entity can be defined in number of ways such as effectiveness that may range from enforcement of the laws and regulations with which

they have been charged to enduring that all possible stakeholders have the opportunity to participate in the policy process. The size of the organization and operational technology employed by the organization has also been considered as an important factor of operational efficiency.

Operational efficiency refers to the efficient utilization of human and material resources or the efficient use of people, machines, tools and equipment, materials funds. Better utilization of any or a combination of these, can increase output of goods and services and reduce costs. Operational efficiency is the tactical planning of an organization to keep a healthy balance between cost and productivity. It identifies the wasteful processes that contribute to drainage of resources and organizational profits. It deals with minimizing waste and maximizing the benefits of resource to provide better services to the customers. To face tough competition lowering costs is a best option as internal wastage contributes to enhanced cost. Any input that is not processed through system into useful output is waste. It means producing more goods and services with no greater use of resources or maintaining the same level of production using fewer resources.

Similarly Muhittin & Reha(1990) stated that operational efficiency denotes the organization's ability to minimize waste of inputs and maximize resource utilization so as to deliver quality, cheaper products and services to their customers. It is a useful measure utilized in managing the available resources. Though operational efficiency is driven by operational aspects of human resource management, supply chain management, quality control management, technology deployed etc, it is also a function of both customer satisfaction and public perception (Scheraga, 2004). To achieve operational efficiency Scheraga (2004) noted that all data of an organization must be collected, recorded, and analyzed to determine the extent of profitability. Secondly, many organizations do not fully assess all areas of their business; and because success might only be measured by one or two elements/criterion, many early signs of a crisis are missed. Thirdly, both broad and very specific measures of success should be developed and continually monitored over time. Finally, keep in mind, the effect of arbitrary support-department allocations on the measured cost of products and services can be profound. Operational efficiency is therefore the capability of an enterprise to deliver products or services to its customers in the most cost-

effective manner possible while still ensuring the high quality of its products, service and support.

In order to attain operational efficiency a company needs to minimize redundancy and waste while leveraging the resources that contribute most to its success and utilizing the best of its workforce, technology and business processes (Muhittin & Reha, 1990). The reduced internal costs that result from operational efficiency enable a company to achieve higher profit margins or be more successful in highly competitive markets. Operational efficiency is often achieved by streamlining a company's core processes in order to more effectively respond to continually changing market forces in a cost-effective manner.

## 2.6 Operational Efficiency and Procurement Performance

The procurement process starts with identification of procurement needs. Each department within the public bodies identifies the required goods, services and works (COMESA, 2010, p.42). By understanding the steps involved with procurement, it is possible to get a better understanding of the real cost involved with attaining any good or service (Lardenoije et al, 2005).

According to Ethiopian Public Procurement and Property Administration Proclamation number 649/2009 Article 5 "*Ensuring value for money in the use of public fund for procurement"* is one of generally principle for procurement. Correspondingly, the main purpose of public procurement is to obtain the best value for money.

Best Value for Money is defined as the "Optimization of whole-life costs and quality needed to meet the user's requirements, while taking into consideration potential risk factors and resources available". Its goal is to achieve maximum benefit for the Organization (as cited in Worku thesis, 2014). Along with to do this, it is important to consider the optimum combination of "the whole life cost" (example: acquisition cost, cost of maintenance and running costs, disposal cost) of a purchase and its fitness for purpose (example: quality and ability to meet the contracting authority's requirements). This definition enables contracting

authorities to compile a procurement specification which includes social, economic and environmental policy objectives within the procurement process (Peter, 1999, p. 17)

Procurement has direct and indirect costs that clearly affect the effectiveness. The organizational structure, division of work and operation efficiency is components that modify the effectiveness of procurement function. The procurement processes and procedures have a close relation to other functions on the organization and on their efficiency as well. As an example, improvements in quality issues and on the delivery times reflect to the total costs on the logistics and production side. Reducing the total costs can be perceived as reduced quality of products. Cost efficient procurement doesn't imply that the quality of products would decrease (Javier, Lorenzo & Inked, 2010).

Knudsen, (1999) suggested that procurement performance starts from purchasing efficiency and effectiveness in the procurement function in order to change from being reactive to being proactive to attain set performance levels in an entity. For any organization to change its focus and become more competitive Amaratunga and Baldry (2002) suggest that performance is a key driver to improving quality of services while its absence or use of in appropriate means can act as a barrier to change and may lead to deterioration of the purchasing function. Organizations which do not have performance means in their processes, procedures, and plans experience lower performance and higher customer dissatisfaction and employee turnover (Amaratunga & Baldry, 2002). Measuring the performance of the purchasing function yields benefits to organizations such as cost reduction, enhanced profitability, assured supplies, quality improvements and competitive advantage as was noted (Batenburg & Versendaal, 2006).

## 2.7 Review of Related Empirical study

It appears that during the past few years purchasing has begun to play an ever more important role in the strategy of the firm (Ellram, 1994; Carter and Narasimhan, 1996. In order to survive, managers have begun to rethink their competitive priorities and their value chain. Increasing numbers of organizations have recognized that effective purchasing holds the potential to transform their competitive performance for the better. It is generally agreed that purchasing has evolved from a clerical buying function into a strategic business function

that contributes to the competitive position of companies (Ellram, 1994; Carter and Narasimhan, 1996). Empirical evidence indicates that firms can indeed obtain competitive advantage by managing supplier relations (Paulraj et al, 1997).

Rwoti (2005) found that 60% of Kenyan manufacturing firms measure the efficiency and effectiveness of their procurement process. As regards the performance measurement systems used in measuring procurement performance the study shows that 66.7% of large manufacturing firms in Nairobi use the non-traditional performance measurement systems in measuring their procurement performance. The study further revealed that these firms measure their procurement performance based on varied dimensions and indicators. Those who measure also showed that they enjoy various benefits, which their counterparts may not be enjoying. On the other hand the study found out that many firms encounter various challenges, which in a way hamper their effort to sustain continuous and objective procurement performance measurement. Such challenges include lack of professionalism in procurement, lack of defined measurement indicators and poor data management systems.

Nantege (2011) researched the effect of procurement management on the financial performance of banks in Uganda with a case study of FINA Bank Uganda Ltd. Specifically the study reviewed procurement planning, controls and monitoring and how they affected the performance of banks. It was hypothesized in the study that procurement planning, controls and monitoring positively affect the performance of banks. The key findings of the study indicated that the three procurement management attributes i.e. Procurement planning, controls and monitoring positively affected the performance of the bank. This was because there were significant relationships that were established from the study between these variables and the financial performance of the bank.

Ayitey francis, 2012 investigated the extent to which the implementation of the Public Procurement Reform affect the performance of public entities. This study explores the major issues involved in public procurement in Ghana and analyses the potential impact of this reform on public procurement organizations performance. The finding shows that there is

relationship between performance and principles of compliance within the public procurement reforms.

Ngugi and Mugo (2012) did a study on the internal factors affecting procurement process of supplies in the public sector; a survey of Kenya government ministries. The findings revealed that accountability, ICT adoption and ethics affected procurement process of health care supplies in the public sector to a great extent. The study therefore recommended that adequate controls should be put in place reducing opportunities for corruption.

Kumar (2005) conducted a study on procurement performance measurement systems in the health care industry. The results of the study showed that there is no one method that covers every purchasing department in any organization, and a number of key measures were found to be common in evaluating performance, these include, cost saving, vendor quality, delivery metrics, price effectiveness and inventory flow. Although these key measures are common, the weight placed on these measures was by no means uniform and will vary between industry to industry and business to business. In addition, the importance of these measures to the overall effectiveness of a purchasing department will change over time and therefore need to be assessed and modified on a periodic basis.

For a public entity in a developing country to conduct procurement performance there are numerous challenges that are encountered including: many ways of measuring performance that may be in use, most measures are irrelevant, there is no way of standardizing the measurement and conducting performance measurement is costly Kakwezi et al (2002). The reasons for these challenges were given by centre for excellence London, (2006) as being inaccurate information, lack of link between procurement measures and corporate objectives, measurement of procurement performance is regarded as an overhead and not an integral part, people do not understand the benefit of measuring procurement performance and interference of stake holders and mainly the measures were developed in a different environment.

Mamiro (2010) in his findings underscores these facts and concludes that one of the major setbacks in public procurement is poor procurement planning and management of the procurement process which include needs that are not well identified and estimated, unrealistic budgets and inadequacy of skills of procurement staff responsible for procurement. Similarly, Kakwezi et al., (2010) argue that procurement performance is not usually measured in most procurement entities as compared with the human resource and finance functions. They conclude in their findings that failure to establish performance of the procurement function can lead to irregular and biased decisions that have costly consequences to any public procuring entity. Therefore, this study was conceived by the limited scientific literature documenting the relationship between procurement performance and factors such planning, resource allocations, staff competency and contract management more specifically at Ministry of Energy.

## 2.8 Summary of literature review and research gap

Numerous studies have been carried out on concept of procurement performance in various cultures and industries. Kumar (2005) conducted study on procurement measurement system in health care industries. The results of the study showed that there is no one method that covers every purchasing department in any organization, and a number of key measures were found to be common in evaluating performance, these include, cost saving, vendor quality, delivery metrics, price effectiveness and inventory flow. Nantege (2011) looked at the effect of procurement management on the financial performance of banks in Uganda with a case study of FINA Bank Uganda Ltd. Specifically the study reviewed procurement planning, controls and monitoring and how they affected the performance of banks. Kakwezi(2002) examined challenges that are encountered to conduct public procurement performance. Rwoti (2005) did a study on procurement performance measurement systems of large manufacturing companies in Nairobi but did not address the procurement performance measurement in public organization. Ayitey Francis (2012) also studies the major issues involved in public procurement in Ghana and analysis the potential impact of the reform on public procurement organizational performance.

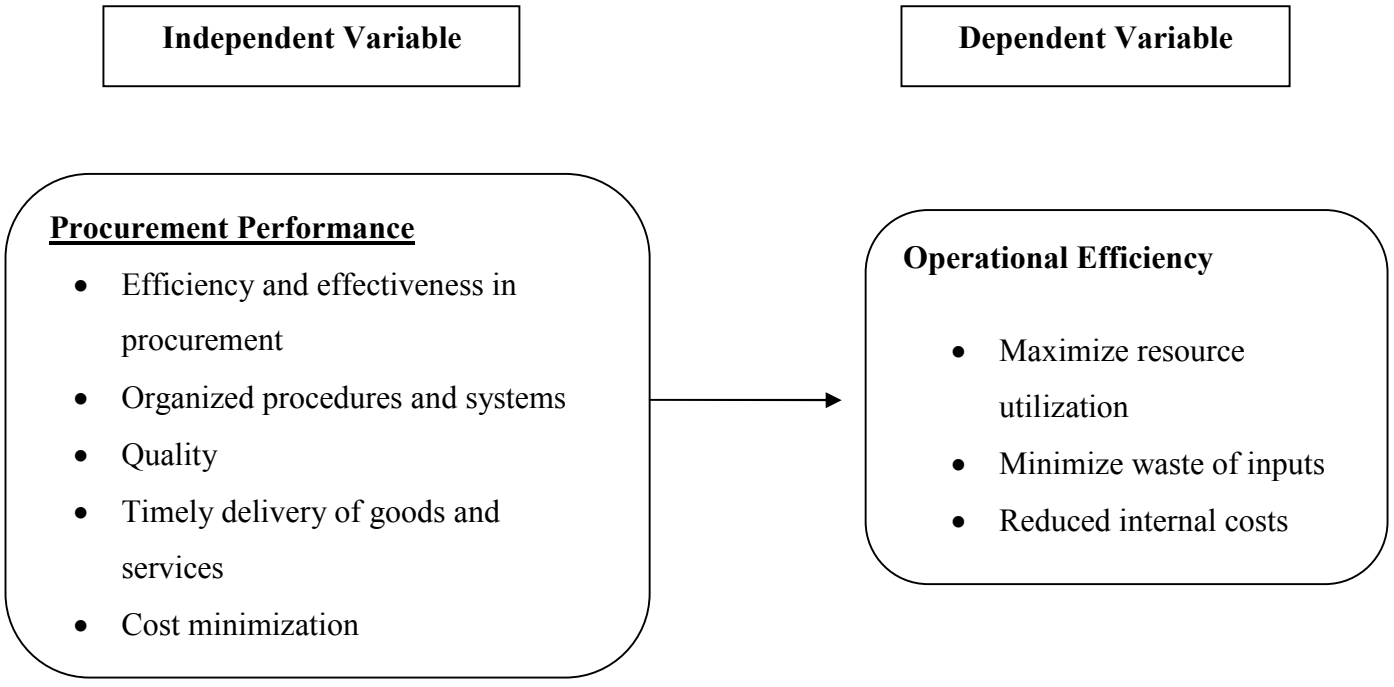
The literatures reviewed have indicated that there are a few studies that have been carried out on the assessment of procurement performance and its link with operational efficiency. This study therefore sought to fill this research gap by conducting a study on assessment of procurement performance and its link with operational efficiency in case of Ethiopian electric utility.

## 2.9 Conceptual Framework

A conceptual framework is a set of broad ideas and principles taken from relevant fields of enquiry and used to structure a subsequent presentation (Biklen 2003).

Based on the literature review, a conceptual framework for this study was developed as shown in Figure 2.1; the major objective of the study was being to assess procurement performance and its link with operational efficiency.

**Figure 2.1 Conceptual Framework**




**Source: Nasra Billow Hussein**

The conceptual framework above illustrates the relationship between the independent variables on one hand and the dependent variable on the other. As reviewed in literature part some of measurements for procurement performance are efficiency and effectiveness in procurement, Procedures, quality, Cost, time. In this study these variables are independent variables which influence the dependent variables which are operational efficiency measured by reduced internal cost, minimized waste of input and Maximized resource utilization.

# CHAPTER THREE

# RESEARCH METHODOLOGY

## 3.1 Introduction

The Purpose of this study is to assess procurement performance and its link with operational efficiency. This chapter explains the research design and methodology of the study and provides a broad view of the description and selection of the target population, sampling technique, sampling size and procedure for data collection and data analysis. The procedures the study adopted to attain acceptable validity of the research is also explained.

## 3.2 Research Design

The general objective of this research is to assess procurement performance and its link with operational efficiency in Ethiopian Electric utility. Therefore, to meet this objective properly explanatory research method was used throughout this research. The reason for using explanatory research is that according to the Kothari (2004, p.19) explanatory research method is very important to explain the cause and effect relationships of phenomenon as cited in Worku.G (2014). Explanatory research emphasizes detailed contextual analysis of a limited number of events or conditions and their relationships. Yin (1993, p.23) has also defined explanatory research method as "an empirical inquiry that investigates a contemporary phenomenon within its real-life context; when the boundaries between phenomenon and context are not clearly evident; and in which multiple sources of evidence are used".

Hence explanatory research method is appropriate method to investigate the impact of procurement performance on operational efficiency in Ethiopian Electric utility.

## 3.3 Target Population

Target population for in statistics is the specific population about which information is desired. According to Ngechu (2004), a population is a well-defined or set of people, services, elements, and events, group of things or households that are being investigated. The target population of the study was the staff working at the Ethiopian Electric Utility of head office. According to data available from human resource data base of EEU the population of the study was 250 respondents comprising Procurement, Logistics and warehouse , Property and General Service, Finance and control, Legal, HR and Administration, ICT, Environmental, health, safety and Quality, Audit, Retail Business(Urban), Vigilance, Wire and Retail(Rural) and Corporate Planning.

**Table 3.1: Target Population**

| **Respondents** | **Total Population** | **Percentage of total population** |
|---|---|---|
| Procurement, Logistics and warehouse | 14 | 5.6 |
| Property and General Service | 10 | 4 |
| Finance and Control | 35 | 14 |
| Legal | 7 | 2.8 |
| HR and Administration | 38 | 15.2 |
| ICT | 41 | 16.4 |
| Environmental, Health, safety and quality | 17 | 6.8 |
| Retail Business(Urban) | 12 | 4.8 |
| Audit | 11 | 4.4 |
| Corporate planning | 6 | 2.4 |
| Vigilance | 10 | 4 |
| Wire and Retail(Rural) | 8 | 3.2 |
| Wire and Retail(Urban) | 41 | 16.4 |
| **Total** | **250** | **100** |

Source: Ethiopian Electric utility Human resource Data Base (2016)

## 3.4 Sample and Sampling technique

A sample is a smaller group obtained from the accessible population to represent the whole population while sampling is the process of selecting the individuals for the study from the population (Mugenda and Mugenda, 2003). In this study, the researcher used Stratified proportionate random sampling technique to select the sample. According to Cooper and Schindler (2008), stratified proportionate random sampling technique produce estimates of overall population parameters with greater precision and ensures a more representative sample is derived from a relatively homogeneous population. Stratification aims to reduce standard error by providing some control over variance. From each stratum the study used simple random sampling to select 50 respondents. According to Cooper and Schindler (2008), random sampling frequently minimizes the sampling error in the population. This in turn increases the precision of any estimation methods used. Mugenda and Mugenda (2003) indicated a sample size of 10% or 20% will be sufficient for a study. The study took 20% of the population to select a sample size of 50 of the study population.

**Table 3.2: Sample Size**

| **Respondents** | **Total Population** | **Sample size** | **Percentage** |
|---|---|---|---|
| Procurement, Logistics and warehouse | 14 | 3 | 20% |
| Proper and General Service | 10 | 2 | 20% |
| Finance and control | 35 | 7 | 20% |
| Legal | 7 | 1 | 20% |
| HR and Administration | 38 | 8 | 20% |
| ICT | 41 | 8 | 20% |
| Environmental, Health, safety and quality | 17 | 4 | 20% |
| Retail Business(Urban) | 12 | 3 | 20% |
| Audit | 11 | 2 | 20% |
| Corporate Planning | 6 | 1 | 20% |
| Vigilance | 10 | 2 | 20% |
| Wire and Retail(Rural) | 8 | 1 | 20% |
| Wire and Retail(Urban) | 41 | 8 | 20% |
| **Total** | **250** | **50** | **20%** |

**Source: Study (2016)**

## 3.5. Data collection Techniques

Both primary and secondary data was collected in the study. To collect primary data, the researcher employed the questionnaire method of data collection where structured questionnaire was administrated to members of Procurement and Logistics, Warehouse, Finance and control, EHS and Quality, Audit and Corporate Planning. The questioner was measured by five-point Likert scale anchored by 1=Strongly Disagree, 2=Disagree, 3=moderately agree, 4= Agree and 5= strongly agree. The Likert measures the level of agreement or disagreement. The Likert scale has scales that assist in converting the qualitative responses into quantitative values (Mugenda & Mugenda, 2003). The researcher sought to use this approach because it was easier to analyze since they were in an immediate usable form. They were also economical to use in terms of time and cost.

The questionnaires used were closed ended questions. Section I of the questionnaire sought the general information of the respondents; Section II of the questionnaire sought answers of the first research objective about the factors affecting procurement performance. Section III of the questionnaire sought to answer research objective about the factors affecting operational efficiency under the Ethiopian electric utility. Section IV sought answers to how procurement performance linked with operational efficiency in Ethiopian Electric utility.
Secondary data was obtained from text books and relevant academy journals which relate to the research topic. This supplement the primary data received from questionnaires.

## 3.6 Validity and Reliability

Reliability and validity address issues about the quality of the data and appropriation of the methods used in carrying out the research.

### 3.6.1 Validity

Validity refers to the extent to which an instrument measures what is supposed to measure. Data need not only to be reliable but also true and accurate. If a measurement is valid, it is also reliable (Joppe 2000). The content of validity of the data collection instrument was determined through discussing the research instrument with the researcher experts in the

field of study especially the researcher's supervisor. The valuable comments, corrections, suggestions given by the research experts assisted the validation of the instrument.

### 3.6.2 Reliability

Reliability refers to the consistence, stability, or dependability of the data. A reliable measurement is one that if repeated a second time gives the same results as it did the first time. If the results are different, then the measurement is unreliable (Mugenda & Mugenda 2008). To measure the reliability of the data collection instruments, an internal consistency technique using Cronbach's alpha was used (Mugenda 2008). Cronbach's alpha is a coefficient of reliability that gives an unbiased estimate of data generalization (Zinbarg 2005). An alpha coefficient of 0.75 or higher indicated that the gathered data are reliable as they have a relatively high internal consistency and can be generalized to reflect opinions of all respondents in the target population (Zinbarg2005). As shown in table 3.1 the overall Cronbach's alphas coefficients for expected scale item are **0.846**. Therefore, the expected scales used in this study demonstrate high reliability. The following Table shows the SPSS result on the Cronbach Alpha.

**Table 3.3 Reliability statistics of the instrument**

| Cronbach's Alpha | No of items |
|---|---|
| 0.846 | 26 |

## 3.7 Methods of Data Analysis

The data analysis of this study was used by quantitative methods. Computer data analyses software such as the use of Statistical Package for Social Sciences (SPSS) version 20 was the main tools employed to analyses the data in order to help interpret results. The justification for the choices of these programs was that, these techniques facilitated word processing and data analysis very easy and accurate pictorial presentations. In such a case the first, second and third research objective was answered using descriptive statistics tools from data collected from section II,III and IV of the questionnaire and the result of

processed data was then interpreted using frequency, percentages, means and standard deviation. The findings were then presented using tables and figures. This was enhanced by an explanation and interpretation of the data. In order to answer third research objective correlation was used to identify relationship between independent and dependent variables.

## 3.8 Research Ethics

Ethics as applied to research generally refer to considerations to protect and respect the rights of participants and other parties associated with the activity (Reynolds, 1982). Similarly, special attention will be given for ethical issues of this research starting from problem identification up to interpretation stage using the ethical guide lines specified by Cresswell (2003 pp.93-97). Respondents will be informed also clearly about the purpose of the study, the right to participate voluntarily, the right to ask questions including personal address of the researcher, the right to get the copy of the study, and the right to have their privacy respected; the right not to respond to question that they didn't want to respond too. On top of these, every necessary care will be taken not to put participants at risk of social, psychological, physical and economic harm.

# CHAPTE FOUR

# DATA ANALYSIS, RESULTS AND DISCUSSION

## 4.1 Introduction

This chapter covers data presentation and analysis. The main objective of the study was to assess procurement performance and its link with operational efficiency in Ethiopian Electric utility. In order to simplify the discussions, the researcher provided tables and figures that summarize the collective reactions and views of the respondents.

## 4.2 Response Rate

The sample size of this study was 50 respondents. Those out of 50 questionnaires filled and returned were 42 respondents making a response rate of 84 %. This reasonable response rate was made a reality after the researcher made personal calls and visits to remind the respondent to fill-in and return the questionnaires. The high response rate of 84 % facilitated gathering sufficient data that could be generalized to assess procurement performance and its link with operational efficiency in Ethiopian Electric Utility. As cited in Worku thesis this was in line with Orodho (2009) that a response rate above 50% contributes towards gathering of sufficient data that could be generalized to represent the opinions of respondents about the study problem in the target population. This means that the response rate for this study was excellent and therefore enough for data analysis and interpretation. This response rate is presented on table 4.1 below.

**Table 4.1 Response Rate**

| Response | Frequency | Percentage |
|---|---|---|
| Responded | 42 | 84 |
| Not responded | 8 | 16 |
| Total | 50 | 100 |

**Source: Analysis of Survey data 2016, using SPSS20.s**

## 4.3 Background Information

The study sought to establish the demographic information in order to determine whether it had influence on the study in Ethiopian Electric utility. The demographic information of the respondents included levels of education, position held, number of years worked in the organization. This information is necessary because the respondents' competence of answering the questions ably will be dependent on their level of education, position held and also the period in which they will have worked in the organization.

### 4.3.1 Respondents' sex

The study also sought to determine the respondents' background information in terms of gender. This was necessary to determine the number of men and women employees in the organization and establish any gender disparities in the organization's workforce.

**Table 4.2 Gender of Respondents**

| Gender of the respondents | Frequency | Percent | Cumulative Percent |
|---|---|---|---|
| Male | 31 | 73.8 | 73.8 |
| Female | 11 | 26.2 | 100 |
| Total | 42 | 100 | |

**Source: Analysis of Survey data 2016, using SPSS20.s**

Table 4.2 shows that majority of the respondents were male comprising 73.8 while females were 26.2 percent implying that more males than females volunteered to participate in the study.

### 4.3.2 Respondent's Age

The study further established respondent's age distribution categorized in a certain range. This was to determine how age relates to procurement performance and operational efficiency based on experience. From the findings shown in Table 4.3, most (69 %) of the respondents' were within the age bracket of 26-35 years, 14 % were aged between 36-45 years, and 11.9% were less than 26 year while the rest (4.8 %) were aged between above 45

years. This implies that most of the employees are energetic such that they are experienced enough to give appropriate answers concerning the study.

**Table 4.3 Respondent's Age**

| Age of the respondents | Frequency | Percent | Cumulative Percent |
|---|---|---|---|
| <26 | 5 | 11.9 | 11.9 |
| 26-35 | 29 | 69 | 81 |
| 36-45 | 6 | 14.3 | 95.2 |
| >45 | 2 | 4.8 | 100.0 |

**Source: Analysis of Survey data 2016, using SPSS20.s**

### 4.3.3 Highest level of education attained

It was important to establish the education level held by the study respondents in order to discover if they were equipped with relevant knowledge and skills on procurement performance and operational efficiency.

**Table 4.4 Educational Levels of respondents**

| Academic qualification of the respondents | Frequency | Percent | Cumulative Percent |
|---|---|---|---|
| Diploma and Below | 6 | 14.3 | 14.3 |
| First Degree | 28 | 66.7 | 81 |
| MA/MSC and above | 8 | 19 | 100 |
| Total | 42 | 100 | |

**Source: Analysis of Survey data 2016, using SPSS20.s**

From the findings majority, 66.7% of the respondents indicated that they had BA Degree level of education, 14.3% of the respondents had diploma and below level of education such as TVET while 19% of the respondents had attained MA/MSc degree level of education. These findings implied that most of the respondents were qualified to understand the nature of the study problem. This concurs with Joppe (2000) that during research process,

respondents with technical knowledge on the study problem assist in gathering reliable and accurate data on the problem under investigation. This demonstrated that most of the organization employees were qualified professionals with technical knowledge and skills on the study problem and thus provided the study with reliable information on assessment of procurement performance and its link with operational efficiency.

### 4.3.4 Current position held

The researcher also wanted to establish the positions held by the respondents in the organization. The competence of a respondent is assumed to have a direct relationship with ones current occupation position which would have been attained based on their level of education and competence on their job. The results are presented in table 4.5

**Table 4.5 Position held**

| Employee Job Title | Frequency | Percent | Cumulative Percent |
|---|---|---|---|
| Manager | 1 | 2.4 | 2.4 |
| Team leader | 8 | 19 | 21.4 |
| senior officer | 16 | 38.1 | 59.5 |
| Junior Officer | 13 | 31 | 90.5 |
| Other | 4 | 9.5 | 100 |
| Total | 42 | 100 | |

**Source:** Analysis of Survey data 2016, using SPSS20.

From the findings most of the respondents indicated that they were managers, team leader, senior officers, junior officers and other in the Ethiopian Electric utility. They are thus deemed to be very aware with the procurement performance and operational efficiency in the Ethiopian Electric utility and would therefore give the correct information on the impact of procurement performance on operational efficiency.

### 4.3.5 Working Experience of the Respondents

The study determined the working experience held by the respondents in order to ascertain the extent to which their responses could be relied upon to make conclusions on the study problem using their working experience. It was divided into four categories. From the findings in table 4.6, (38.1%) indicated to have a working experience of 4-6 years, 28.6 had a working experience of 7-9 years, and 14.3% had a working experience of less than 4 years, 11.9 % had a working experience of 10-12 years and7.1% had a working experience of greater than 12 years. These findings were in line with Braxton (2008) as cited in Worku G. (2014) that respondents with a high working experience assist in providing reliable data on the study problem since they have technical experience on the problem being investigated by the study. This indicates that the respondents had worked in the tertiary training institutions for a long time and thus understood technical issues.

**Table 4.6 Working Experience of Respondents**

| Years of service in ERCA | | Frequency | Percent | Cumulative Percent |
|---|---|---|---|---|
| | Less than 4 years | 6 | 14.3 | 14.3 |
| | 4 - 6 Years | 16 | 38.1 | 52.4 |
| | 7- 9 Years | 12 | 28.6 | 81 |
| | 10-12 Years | 5 | 11.9 | 92.9 |
| | >12 Years | 3 | 7.1 | 100 |
| | Total | 42 | 100 | |

**Source:** Analysis of Survey data 2016, using SPSS20.

## 4.4 Factors Affecting Procurement Performance

The researcher sought to identify factors that affect procurement performance in Ethiopian Electric utility. To achieve this objectives respondent were asked using a likert scale where 1=Strongly Disagree, 2=Disagree, 3=moderately agree, 4= Agree and 5= strongly agree.

### 4.4.1 Procurement procedure

The study sought to know the extent to which the given activities related to procurement procedure affect organizational procurement performance.

#### 4.4.1.1 Organized procurement procedures on Procurement performance

The extent to which the respondents agreed with the given statement concerning procurement procedure affecting procurement performance in the Ethiopian Electric utility was investigated. Data in Table 4.6 was analyzed using a likert scale where 1=Strongly Disagree, 2=Disagree, 3=moderately agree, 4= Agree and 5= strongly agree. Data was presented in frequency, percentage, mean and standard deviation.

**Table 4.7 Procurement procedure affecting procurement performances**

| No. | VARIABLES | Frequency and Percentage | | | | | Mean | Std. Deviation |
|---|---|---|---|---|---|---|---|---|
| | | 5 | 4 | 3 | 2 | 1 | | |
| 1 | My organization apply appropriate procurement methods | 17 (40.5%) | 14 (33.3%) | 4 (9.5%) | 5 (11.9) | 2 (4.8) | 3.93 | 1.197 |
| 2 | Procurement staff are qualified and experienced to handle procurement process | 5 (11.9) | 26 (61.9%) | 1 (2.4%) | 9 (21.4%) | 1 (2.4%) | 3.60 | 1.037 |
| | My Organization Prepares annual procurement plan. | 11 (26.2%) | 19 (45.2%) | 5 (11.9%) | 6 (14.3%) | 1 (2.4%) | 3.79 | 1.071 |
| 4 | There is effective monitoring and auditing | 1 (2.4%) | 4 (9.5) | 1 (2.4%) | 24 (57.1%) | 12 (28.6) | 2.00 | .963 |
| 5 | Deployment of procurement staff based on their skill, | 2 (4.8) | 11 (26.2%) | 4 (9.5) | 16 (38.1%) | 9 (21.4%) | 2.55 | 1.234 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Capabilities. | | | | | | | |

**Source:** Analysis of Survey data 2016, using SPSS20.

According to the study majority of the respondents strongly agreed or agreed that their organization apply appropriate procurement methods by 73.8 %. The mean score of 3.93 implies that the organization apply appropriate procurement methods in executing their procurement activities. At the same time respondents are asked the extent to which they agree with the statement procurement staff are qualified and experienced to handle procurement process. Surprisingly the same numbers of respondents [73.8 %] have strongly agreed or agreed that procurement staff are qualified and experienced to handle procurement process and it's important as shown by the mean of 3.6.

To easily identify areas where procurement function is performing well and where there is a need for improvement; procurement plan has a vital role. To this effect, respondent were asked the importance of preparation of annual procurement plan to procurement performance. In this regard, 71.4 % of respondents (the mean value of 3.79) under the study agreed and emphasized its importance.

Furthermore, the respondent view also sought to disclose whether there is effective monitoring and auditing in their organization. The researcher highlighted that 57.1 % and 28.6 % of the respondents disagreed and strongly disagreed by the statement that there is effective monitoring and auditing in their organization respectively. This is issue is also validated by mean score of 2.

Finally, respondent were also asked whether organization deploys procurement staff based on their skills, competence and abilities and its affect on procurement performance. Surprisingly, 59.5% of respondents are disagreed by the statement that the institution deploys procurement staff based on skills, competence and abilities. This is issue is also validated by mean score of 2.55.

Further, there was a higher dispersion on the responses on whether the organization apply appropriate procurement methods, procurement staff are qualified and experienced to handle procurement process ,annual procurement is prepared and deployment of procurement staff based on their skill, capabilities as shown by standard deviation value 1.197, 1.037, 1.071 and 1.234 respectively. The study interpreted this dispersion to mean greater variation on organization apply appropriate procurement methods, procurement staff are qualified and experienced to handle procurement process ,annual procurement is prepared and deployment of procurement staff based on their skill, capabilities within the organization.

### 4.4.2 Timely Delivery of Goods and Service

The study sought to know the extent to which the given activities related to timely delivery of goods and service affect organizational procurement performance.

#### 4.4.2.1 Timely delivery of goods and service on Procurement Performance

The extent to which the respondents agreed with the given statement concerning timely delivery of goods and services affecting procurement performance in the Ethiopian Electric utility was investigated. Data in Table 4.8 was analyzed using a likert scale where 1=Strongly Disagree, 2=Disagree, 3=moderately agree, 4= Agree and 5= strongly agree. Data was presented in frequency, percentage, mean and standard deviation.

**Table 4.8 Timely delivery of items and services affecting procurement performances**

| No. | VARIABLES | Frequency and Percentage | | | | | Mean | Std. Deviation |
|---|---|---|---|---|---|---|---|---|
| | | 5 | 4 | 3 | 2 | 1 | | |
| 1 | The Lead times expected are effectively met. | 2 (4.8%) | 5 (11.9%) | 33 (78.9%) | 18 (42.9) | 2 (4.8%) | 2.17 | .581 |
| 2 | The Organization has put in mechanism to ensure timely | 3 (7.1%) | 6 (14.3%) | 27 (64.3%) | 7 (16.7%) | 6 (14.3%) | 2.14 | .751 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | delivery of requisition | | | | | | | |
| 3 | Delivery time of the procured items before the agreement or delay of delivery may leads the procuring entities to incur additional cost. | 4 (9.5%) | 32 (76.2%) | 3 (7.1%) | 3 (7.1%) | … | 3.88 | .670 |
| 4 | Impressed timely delivery. | … | 3 (7.1%) | 3 (7.1%) | 24 57.1%) | 12 (28.6%) | 1.93 | .808 |

***Source: Analysis of Survey data 2016, using SPSS20.***

The study sought to establish the degree to which respondents agreed to various statements regarding timely delivery of goods and service in their organization influence procurement performance. According to the study majority of the respondents agreed by the statement that the delivery time of the procured items before the agreement or delay of delivery may leads the procuring entities to incur additional cost by 85.7% . This shows that in Ethiopian Electric utility procurement performance is affected by early or late delivery of items procured which incurs additional cost as validated by a mean score of 3.88.

This finding indicated that although the respondents agree by the statement that the delivery time of the procured items before the agreement or delay of delivery may leads the procuring entities to incur additional cost, there were still statements that are disagreed by respondents: lead times expected are effectively met, organization has put in mechanism to ensure timely delivery of requisition and impressed delivery by mean score of 2.17, 2.14 and 1.93 respectively. According to the findings of the study, it is revealed that majority of the respondents agreed that timely delivery of goods and service affect procurement performance of Ethiopian Electric utility. The findings of the study are tabulated in the above table 4.8.

### 4.4.3 Quality

The researcher also sought to find out the extent quality of goods and services affects procurement performance.

#### 4.4.3.1 Quality Of goods and service on procurement performance

In this section the researcher presents various aspects touching on quality of goods and services and how it influences procurement performance at EEU. The findings are based on a 5-point likert scale and are depicted in Table 4.9. The finding revealed that majority of the respondents disagreed by all statements that the organization has a quality and competence inspection team that monitors quality, organizations has reduced quality complaint , quality of goods and service procured by procurement department is based on requirement of each departments , organization ensures consistent product quality, and supplier evaluation is periodically undertaken to ensure good quality of the goods and services(approximately 93 %) as shown by mean score of 1.76, 1.86, 1.81, 1.81 and 1.76 respectively. The results are tabulated in table 4.9.

**Table 4.9: The effect of Quality on procurement performance**

| No. | VARIABLES | Frequency and Percentage | | | | | Mean | Std. Deviation |
|---|---|---|---|---|---|---|---|---|
| | | 5 | 4 | 3 | 2 | 1 | | |
| 1 | The organization has a quality and competence inspection | … | -- | 3 (7.1%) | 26 (61%) | 13 (31%) | 1.76 | .576 |
| 2 | Organizations has reduced quality complaint | … | | 4 (9.5%) | 28 (66.7%) | 10 (23.8%) | 1.86 | .566 |
| 3 | Quality of goods and service procured by procurement department is based on requirement of department. | … | | 3 (7.1%) | 28 (66.7%) | 11 (26.2) | 1.81 | .552 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 4 | My organization ensures consistent product quality. | … | | 3 (7.1%) | 28 (66.7%) | 11 (26.2%) | 1.81 | .552 |
| 5 | Supplier evaluation is periodically undertaken to ensure good quality of the goods and services. | … | 1 (2.4%) | 2 (4.8%) | 26 (61.9%) | 13 (31%) | 1.79 | .645 |

***Source: Analysis of Survey data 2016, using SPSS20.***

### 4.4.3 Costs

The study sought to know the extent to which the given statements related to cost of goods and service affect organizational procurement performance.

#### 4.4.3.1 Cost of goods and service on procurement performance

The study further investigated the extent cost affect procurement performance .Table 4.10 shows the respondent's level of agreement with statements related to costs and how it affects procurement performance. From the findings majority of the respondents are disagreed by the statement whether price paid for goods and service in their organization are too low (71.4 %) and cost of items purchased is fair (78.6 %) by a mean score of 2.29 and 2.19 respectively.

**Table 4.10 Cost of items and services affecting Procurement Performance**

| No. | VARIABLES | Frequency and Percentage | | | | | Mean | Std. Deviation |
|---|---|---|---|---|---|---|---|---|
| | | 5 | 4 | 3 | 2 | 1 | | |
| 1 | Prices of procurement of goods and services are too low | 1 (2.4%) | 3 (7.1%) | 8 (19%) | 25 (59.5 %) | 5 (11.9%) | 2.29 | .864 |
| 2 | Cost of items purchased is fair. | … | 1 (2.4%) | 8 (19%) | 31 (73.8%) | 2 (4.8%) | 2.19 | .552 |

***Source: Analysis of Survey data 2016, using SPSS20.***

## 4.5 Factors affecting Operational efficiency

The researcher sought to identify factors that affect operational efficiency in Ethiopian Electric utility. To achieve this objectives respondent were asked using a likert scale where 1=Strongly Disagree, 2=Disagree, 3=moderately agree, 4= Agree and 5= strongly agree as shown in table.

4.5.1 Maximize resource utilization, Minimization of waste of inputs and Minimization of internal cost

**Table 4.11 Maximization of resource utilization, Minimization of waste of inputs and internal cost affecting operational efficiency**

| VARIABLES | Frequency and Percentage | | | | | Mean | Std. Deviation |
|---|---|---|---|---|---|---|---|
| | 5 | 4 | 3 | 2 | 1 | | |
| **Maximize Resource utilization** | | | | | | | |
| My organization maximize utilization of their resources efficiently | … | 2 (4.8%) | 6 (14.3%) | 24 (57.1%) | 10 (23.8) | 2.00 | .765 |
| My organization efficiently utilizes their people to add value to their operations. | … | 3 (7.1%) | 5 (11.9%) | 27 (64.3%) | 7 (16.7%) | 2.10 | .759 |
| My organization efficiently utilizes their technologies to add value their operations. | … | 2 (4.8%) | 5 (11.9%) | 31 (73.8%) | 4 (9.5%) | 2.12 | .633 |
| My organization efficiently utilizes their fund to add value their operations. | … | 4 (9.5%) | 7 (16.7%) | 21 ( 50%) | 10 (23.8%) | 2.12 | .889 |
| **Minimization of waste** | | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| My organization delivery quality service to their customers by minimizing waste of inputs | --- | 2 (4.8%) | 5 (11.9%) | 21 (50%) | 14 (33.3%) | 1.88 | .803 |
| **Minimize internal cost** | | | | | | | |
| My organization delivers services to its customers in the most cost-effective manner. | … | 2 (4.8%) | 4 (6.5%) | 31 (73.8%) | 5 (11.9%) | 2.07 | .640 |

***Source: Analysis of Survey data 2016, using SPSS20.***

The study sought to determine extent to which how the following statements influence operational efficiency in Ethiopian Electric utility, respondents are disagreed by the statement whether their organization maximize utilization of their resources efficiently (80.9%), organization efficiently utilizes their people to add value to their operations(81%), organization efficiently utilizes their technologies to add value to their operations (83.3) and efficiently utilizes their fund to add value to their operations. (73.8%) as shown by mean score of 2, 2.10, 2.12 and 2.12 respectively as shown in table 4.11.

The views of the respondents were also sought whether their organization minimizes waste and redundancy and delivery services to its customers in the most cost-effective manner. Surprisingly the respondents are disagreed by the statement as shown by mean score of 1.88 and 2.07(approximately 83 % and 85 %) respectively.

## 4.6 Analysis on impact of procurement performance on operational efficiency

The study sought to know the extent to which the given statements related to procurement performance impact operational efficiency in Ethiopian electric utility. According to the findings majority of the respondents agreed that procurement performance in their

organization has an impact on their operational efficiency by mean score of 4.26 (approximately 95% of the respondents) as shown in table 4.12.

**Table 4.12: The extent to which procurement performance in the organization impact operational efficiency**

| VARIABLES | Frequency and Percentage | | | | | | |
|---|---|---|---|---|---|---|---|
| | 5 | 4 | 3 | 2 | 1 | Mean | Std. Deviation |
| Procurement performance in my organization have an impact on operational efficiency | 13 (31) | 27 (64.3) | 2 (4.8) | -- | --- | 4.26 | 0.544 |

***Source: Analysis of Survey data 2016, using SPSS20.***

### 4.6.1 The ways Procurement performance Impact operational efficiency

The extent to which the respondents agreed with the given statement concerning the way procurement performance impact operational efficiency in Ethiopian Electric utility was investigated. Data in Table 4.13 was analyzed using a likert scale where 1=Strongly Disagree, 2=Disagree, 3=moderately agree, 4= Agree and 5= strongly agree.

**Table 4.13: The way Procurement performance impact operational efficiency**

| VARIABLES | Frequency and Percentage | | | | | | |
|---|---|---|---|---|---|---|---|
| | 5 | 4 | 3 | 2 | 1 | Mean | Std. Deviation |
| Reduction in costs of services and products related to procurement | 12 (28.6%) | 21 (50%) | 8 (19%) | 1 (2.4%) | …. | 4.05 | .764 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Better utilization of funds | 6 (14.3%) | 19 (45.2%) | 9 (21.4%) | 6 (14.3%) | 2 (4.8%) | 3.50 | 1.065 |
| Improvement in quality of products | 8 (19%0 | 24 (57.1%) | 8 (19%) | 2 (4.8%) | … | 3.90 | .759 |

***Source: Analysis of Survey data 2016, using SPSS20.***

From the findings majority of the respondents are agreed that reduction in costs related of services and products related to procurement, better utilization of funds and improvement in quality of products impacted operational efficiency by a mean score of 4.05, 3.50 and 3.90 respectively.

## 4.7 Relationship between procurement performance and operational efficiency

This section presents a discussion of the results of the analysis between procurement performance and operational efficiency. Correlation analysis was used to measure the strength of the relationship between the independent variables i.e. the relationship between procurement procedure, time, quantity, and cost.

### 4.7.1.1 Non-parametric correlation

A Spearman correlation is used when one or both of the variables are not assumed to be normally distributed. The values of the variables were converted in ranks and then correlated. The study correlated procurement procedure, quality, time and costs.

The Spearman correlation coefficient, *rs*, can take a range of values from +1 to -1. A value of 0 indicates that there is no association between the two variables. A value greater than 0 indicates a positive association, that is, as the value of one variable increases so does the value of the other variable. A value less than 0 indicates a negative association, that is, as the value of one variable increases the value of the other variable decreases.

Table 4.14 Correlation

| | | | Operation Efficiency | Procurement procedure | Time | Quality | Cost |
|---|---|---|---|---|---|---|---|
| Spearman's rho | Operation Efficiency | Correlation Coefficient | 1 | .614** | .721** | .418** | .675** |
| | | Sig. (1-tailed) | . | 0 | 0 | 0.003 | 0 |
| | | N | 42 | 42 | 42 | 42 | 42 |
| | Procurement procedure | Correlation Coefficient | .614** | 1 | .746** | .420** | .371** |
| | | Sig. (1-tailed) | 0 | . | 0 | 0.003 | 0.008 |
| | | N | 42 | 42 | 42 | 42 | 42 |
| | Time | Correlation Coefficient | .721** | .746** | 1 | .447** | .642** |
| | | Sig. (1-tailed) | 0 | 0 | . | 0.001 | 0 |
| | | N | 42 | 42 | 42 | 42 | 42 |
| | Quality | Correlation Coefficient | .418** | .420** | .447** | 1 | 0.254 |
| | | Sig. (1-tailed) | 0.003 | 0.003 | 0.001 | . | 0.052 |
| | | N | 42 | 42 | 42 | 42 | 42 |
| | Cost | Correlation Coefficient | .675** | .371** | .642** | 0.254 | 1 |
| | | Sig. (1-tailed) | 0 | 0.008 | 0 | 0.052 | . |
| | | N | 42 | 42 | 42 | 42 | 42 |

**. Correlation is significant at the 0.01 level (1-tailed).

The results suggest that the relationship between procurement procedure and time (rho = 0.746, p = 0.000) is statistically significant. Procurement procedure and quality had rho of 0.420 and P value of 0.003 therefore denoting statically significance. Similarly, the procurement procedure and cost posted a rho of 0.371 with a p value of 0.008 therefore providing a statistical significance.

Time and quality had a rho of 0.447 and p value of 0.001 further pointing to statistical significance. On the same note, time and cost had a rho 0.642 and p value of 0.000. This therefore is statistically significant. Finally, the quality and cost stood at a correlation of rho=0.254 and p= 0.052 revealing statistical insignificant. The matrix also indicated high correlation between dependent variable and independent variables that is procurement procedure, time, quality and cost.

# CHAPTER FIVE

# SUMMARY, CONCLUSSION AND RECCOMENDATION

## 5.1 Introduction

This chapter gives the summary of the study findings from chapter four and it also gives conclusions that were drawn by the researcher according to the findings of the study and the recommendations for improvement arising from the study. The researcher also recommends the study for further studies.

## 5.2 Summary of the finding

The study was conducted to assess procurement performance and its link with operational efficiency in Ethiopian Electric utility. The specific objectives of the study included identifying factors that affect procurement performance, identifying factors that affect operational efficiency, to determine relationship between procurement performance and operational efficiency. The researcher used descriptive statistics were frequencies and percentage of response was obtained.

The measure of dispersion such as a mean and standard deviation were also used to indicate how response varies from the mean. Correlation was also used to identify relationship between procurement performance and operational efficiency.

On the extent of procurement procedure affecting procurement performance most respondents are agreed with statement that the organization comply with procurement procedure. This was due to the finding that the organization applies appropriate procurement methods; the procurement staff are qualified and experienced to handle procurement process and the organization prepare annual procurement plan as shown by a mean score of 3.93, 3.60 and 3.79.

However, the respondents are disagreed by the statement that there is effective monitoring and auditing and procurement staff is deployed based on their skills and capabilities as indicated by the mean score of 2 and 2.55 respectively. This implies that inadequate attention is given for these aspects therefore insignificant influence on procurement performance.

Under timely delivery of goods and services the finding has also indicated that average number of respondents disagreed by the statement that the lead times expected are effectively met, the organization has put in mechanism to ensure timely delivery of requisition and impressed by timely delivery of goods and services as shown by mean value of 2.17, 2.14 and 1.93 respectively.

The study also found that majority of the respondents disagreed by the statement that organization have quality and competent quality team, quality of goods and services procured by procurement department is based on requirement of departments, organization ensure consistent product quality and supplier evaluation is periodically undertaken to ensure good quality of the goods and services as shown by means score of 1.76, 1.86, 1.81 and 1.79.the study also indicated that the price of procurement of goods and service is not low and price of items is not fair as shown by mean score of 2.29 and 2.19.

The study further found that factors that affect operational efficiency in Ethiopian Electric utility is done poorly as it is seen from maximization of resource utilization, minimization of waste and minimization of internal costs.

Concerning the way procurement performance impact operational efficiency, the finding showed there is reduction in cost of services and product related to procurement, better utilization of funds and improvement in quality of products impacted operational efficiency to great extent as shown by a mean score of 4.05, 3.50 and 3.90.

## 5.3 Conclusion

In view of the findings emanating from this study it can be concluded that procurements performance had a link with operational efficiency in Ethiopian Electric utility. This is because operational efficiency had a positive relationship with all independent variable and stastically significant relationship.

## 5.4 Recommendation

As a result of these study findings, the researcher put forward the following recommendation.

First, the study recommends that good procurement procedure require follow up evaluation of suppliers, sometimes even of the individual purchases in order to ensure whether they are buying the best value in terms of the best quality, prices and services. In addition to this the organization should also work on having reliable supplier whose delivery schedules are realistic and within the organizations requirements. This will minimize emergency purchases that are normally expensive and therefore negatively impact operational efficiency of the organization.

Second, the study recommends that delays in the procurement process can be reduced by giving procurement planning the needed attention by management of the organization. Procurement practitioners must take cognizance of the amount of time and resources required so they can begin early enough and allow sufficient time to complete the procurement process. Poor planning results in emergency procurement or unplanned buying and use of uneconomical method of procurement. Therefore, the concerned bodies should do more effort for enhancing and establishing systems that public procurement is conducted only in planned way. This helps public bodies to use the most competitive method of procurement and reduces the total cost of the entire procurement. It also benefit the public bodies in order to get low price due to high competition and finally for quality goods and service procurement.

Thirdly, the study recommends that the company should enhance its employee's competence as a way of achieving service delivery as a means of improving procurement performance. This can be achieved by giving training for procurement units, Audit and other stakeholders about procurement process to enforce accountability and transparency.

Fourth, the organization should also evaluate the entire procurement process in order to identify service delivery point of breakdown with a view to re-engineer the process in order to achieve required level of efficiency and effectiveness.

Finally, in procurement measurement quality of procured goods is usually a key indicator of performance; therefore, organization should consider these measures like timely delivery of orders and cost.

## 5.5 Recommendation for future research

This study looked at four independent variables (procurement procedure, time, quality and cost) which according the study contributes to 79.82% of the variations in operational efficiency at the Ethiopian Electric utility. The researcher recommends further research to investigate the other factors that affect procurement performance. The study was only based on Ethiopian Electric utility; thus the study recommends that a further study should be carried out to cover a wider scope to enhance generalization.

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**Appendix I**

**Addis Ababa University**

**School of Commerce**

**MA Program in Logistics and supply chain Management**

**Questionnaire to be filled by Respondents**

**Dear respondent,**

This questionnaire is designed by a graduate student from Addis Ababa University to conduct a study in partial fulfillment of a master's degree program in Logistics and supply chain Management. As part of the requirement for the award of the degree, I am expected to undertake a research study on impact of procurement performance on operational efficiency in Ethiopian Electric utility. I'm therefore, seeking your assistance to fill the questionnaires attached. The attached questionnaire will take about twenty minutes to complete. Kindly answer all the questions.

The outcome of this study will enhance knowledge on impact of procurement performance on operational efficiency. Participation in this study is voluntary, and all who participate will remain anonymous. Your name is not needed. All information offered will be treated confidentially, and the results will be presented in such a way that no individuals may be recognized.

Thank you in advance for the available information you are sharing and the precious time you are going to spend for this purpose

If you have any enquiry please don't hesitate to contact the researcher on:

Email –belaytariku6@gmail.com

Phone :09 13 94 47 96 (Belay Tariku)

**SECTION A: General Information about the respondent**

**Instruction:** Please indicate your response by putting (√) mark in the appropriate box provided.

1. Sex ☐ Female ☐ Male
2. Age: ☐ 25 or below ☐ 26-35 ☐ 36- 45 ☐ 46 or above
3. Highest Educational Level :
   ☐ Diploma and below ☐ MA/MCS and above
   ☐ First Degree
4. Your current position?
   ☐ Manager ☐ Senior Officer
   ☐ Team leader ☐ Junior officer
   Others, please specify _____
5. Indicate the number of years you have worked in this corporation.
   ☐ 0-3 years ☐ 4 – 6 years ☐ 7- 9 years ☐ 10-12 years ☐ Over 12 Years

**SECTION B: Procurement Performance**

**Instruction**: Kindly indicate the degree to which you agree with the following statements concerning the Factors that affect procurement performance in your organization.

Rate using a scale of 1 to 5 where 1 is Strongly disagree, 2 is Disagree, 3 is Moderately, 4 is Agree and 5 is Strongly agree.

| S.N | Statement | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|---|
| **1** | **Organized Procurement procedures** | | | | | |
| 1.1 | My organization apply appropriate procurement methods | | | | | |
| 1.2 | Procurement staff are qualified and experienced to handle procurement process | | | | | |
| 1.3 | My Organization Prepares annual procurement plan. | | | | | |
| 1.4 | There is effective monitoring and auditing | | | | | |
| 1.5 | Deployment of procurement staff based on their skill, Capabilities. | | | | | |
| **2** | **Timely delivery of goods and service** | 1 | 2 | 3 | 4 | 5 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 2.1 | The Lead times expected are effectively met. | | | | | |
| 2.2 | The Organization has put in mechanism to ensure timely delivery of requisition | | | | | |
| 2.3 | Delivery time of the procured items before the agreement or delay of delivery may leads the procuring entities to incur additional cost. | | | | | |
| 2.4 | Impressed timely delivery. | | | | | |
| **3** | **Quality** | | | | | |
| 3.1 | The organization has a quality and competence inspection | | | | | |
| 3.2 | Organizations has reduced quality complaint | | | | | |
| 3.3 | Quality of goods and service procured by procurement department is based on requirement of department. | | | | | |
| 3.4 | My organization ensures consistent product quality. | | | | | |
| 3.5 | Supplier evaluation is periodically undertaken to ensure good quality of the goods and services. | | | | | |
| **4** | **Cost** | | | | | |
| 4.1 | Prices of procurement of goods and services are too low. | | | | | |
| 4.2 | Cost of items purchased is fair. | | | | | |

**SECTION C: Operational efficiency**

**Instruction**: Kindly indicate the extent to which you agree with the following statements concerning the operational efficiency in your organization. Rate using a scale of 1 to 5 where 1 is Strongly disagree, 2 is Disagree, 3 is Moderately, 4 is Agree and 5 is Strongly agree.

| S.n | Statement | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|---|
| **1** | **Maximize resource utilization** | | | | | |
| 1.1 | My organization maximize utilization of their resources efficiently | | | | | |
| 1.2 | My organization efficiently utilizes their people to add value to their operations. | | | | | |
| 1.3 | My organization efficiently utilizes their technologies to add value their operations. | | | | | |
| 1.4 | My organization efficiently utilizes their fund to add value their operations. | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **2** | **Minimization of waste** | | | | | |
| 2.1 | My organization delivery quality service to their customers by minimizing waste of inputs | | | | | |
| 2.2 | My organization minimizes redundancy and waste | | | | | |
| **3** | **Reduced internal costs** | | | | | |
| 3.1 | My organization delivers services to its customers in the most cost-effective manner. | | | | | |

**SECTION D: Impact of Procurement performance on Operational efficiency**

**Instruction:** Kindly indicate the extent to which you agree with the following statements concerning the impact of procurement performance on operational efficiency in your organization. Rate using a scale of 1 to 5 where 1 is Strongly disagree, 2 is Disagree, 3 is Moderately, 4 is Agree and 5 is Strongly agree.

| ***S.n*** | **Statement** | **1** | **2** | **3** | **4** | **5** |
|---|---|---|---|---|---|---|
| **1** | Procurement performance in my organization have an impact on operational efficiency | | | | | |
| **2** | **Impact of procurement performance on operational efficiency of the organization** | | | | | |
| 2.1 | Reduction in costs of services and products related to procurement | | | | | |
| 2.2 | Better utilization of funds | | | | | |
| 2.3 | Improvement in quality of products | | | | | |