



**ST. MARY'S UNIVERSITY
SCHOOL OF GRADUATE STUDIES**

**Factors Affecting Effectiveness of Engineering and
Telecommunication Procurement Process: The Case of Engineering
Corporation of Oromia**

BY

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This is to certify that the thesis prepared by Sagni Senbaba Deressa entitled “Factors Affecting Effectiveness of Engineering and Telecommunication Procurement Process: The Case of Engineering Corporation of Oromia”, which is submitted in fulfillment of the requirements for the Degree of Executive Masters in Project Management, complies with the regulations of the University and meets the accepted standards with respect to originality and quality.

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DECLARATION

I hereby declare that the study which is being presented in this thesis entitled “**Factors Affecting Effectiveness of Engineering and Telecommunication Procurement Process: The Case of Engineering Corporation of Oromia**”. It is conducted by Sagni Senbaba for the partial fulfillment of the requirements for the award of master’s degree in Project Management. Declare that this thesis is my original work and has not been presented for a degree in any other university and that all sources of materials used for the thesis have been duly acknowledged. I further confirm that the thesis has not been submitted either in part or in full to any other higher learning institution for the purpose of earning any degree.

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Acronyms and Abbreviation

ECO	Engineering Corporation of Oromia
SPSS	Statistical Package for the Social Sciences
ICT	Information Communication Technology
PM	Project Management
ACAN	Advance Contract Award Notice
5R'S	Refuse, Reduce, Reuse, Repurpose, Recycle
CPAR	Country Procurement Assessment Report
LPO	Local Purchase Order
PE	Procuring Entities
GN	Government Notice
PPRA	Public Procurement Regulation Authority
PPA	Public Procurement Authority
HR	Human Resource
CM	Chain Management
E&T	Engineering and Telecommunication
CRM	Customer Relationship Management

Abstract

Engineering Corporation of Oromia is a one leading and committed to provide professional service in study, design and contract administration and construction supervision of project to the highest standard of quality, within the agreed timeframe and at reasonable costs through long-term partnership to the satisfaction of its clients and is employs as well as tot benefit of the public and the environment at large. The purpose of this study is to examine and identify Factors Affecting Effectiveness of Engineering and Telecommunication Procurement Process: The Case of Engineering Corporation of Oromia. This Study targeted to examine the effectiveness of procurement process as applied at Engineering Corporation of Oromia, to identify the problems facing the procurement process and procurement department at Engineering Corporation of Oromia and to find out the best method of procurement process at Engineering Corporation of Oromia. Effective and efficiency procurement process have positive results to operational impacts which include improved prospects of achieving corporation objectives, the performance of procurement process in Oromia Engineering Corporation the depends on the players in the field. Data collected was organized, processed and analyzed using Statistical Package for Social Science (SPSS) Version 24. Data was analyzed qualitatively using descriptive statistics such as mean and standard deviation and also by use of inferential statistics such as Pearson correlation and regression analysis. The study targeted 45 respondents, 42 respondents filled in and returned the questionnaires. This represented overall successful rate of 93.3%. The unsuccessful response rate is only (6.3%) consisted of those questionnaires that were either not filled, poorly and partially filled. In relation to procurement planning the study recommends that thorough needs assessment should be undertaken, market capability analysis should be carried out, user departments should clearly specify when they require to utilize required goods and services.

Keywords: Factor Affect, Procurement Process, procurement planning, Effective and efficiency procurement process.

CHAPTER ONE

INTRODUCTION

1.1. Background of the Study

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 ongoing 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).

The procurement function has undergone significant changes in many countries, moving from a reactive activity to a strategic one, in order to keep pace with the expansion of procurement activities and enhance procurement performance (Macbeth & Ferguson, 1994; Dimitriadis & Maroudas, 2007). This has led to reforms aimed at establishing a strong and well-functioning procurement system that is governed by a clear legal framework for transparency and effectiveness (Hunja, 2003).

Procurement has direct and indirect costs that clearly affect the organization effectiveness. The organizational structure, division of work and operation; are components that modify the effectiveness of procurement function.

Procurement of engineering equipment excellence is increasingly becoming an important factor in delivering efficient operations within successful corporation. During a downturn, when companies must consider every avenue for cutting costs in order to simply survive, the procurement department plays an increasingly important role in achieving this strategic goal (Schiele & McCue, 2006).

According to Thai (2001), the basic principles of good procurement practice include accountability, where effective mechanisms must be in place in order to enable procuring entities spend the limited resources carefully, knowing clearly that they are accountable to members of the public; competitive supply, which requires the procurement be carried out by competition unless there are convincing reasons for single sourcing; and consistency, which emphasizes the equal treatment of all bidders irrespective of race, nationality or political affiliation.

The process should also uphold integrity by ensuring that there are no malpractices; informed decision-making, which requires public bodies to base decisions on accurate information and ensure that requirements are being met. More still, the Procurement practice should be responsive to aspirations, expectations and needs of the target society. Finally, there is need for transparency to enhance openness and clarity on procurement policy and its delivery (World Bank, 2003).

According to Kiragu (2012), procurements should be based on value for money (defined as the optimum combination of whole life costs and fulfillment of customer's requirements) rather than initial purchase price. Effective and efficient procurement process and collaborative relationships are essential to the achievement of organizational goals, cost reduction and supply chain performance.

Procurement Ethics prohibits professional from having financial interest when performing their duties relating to suppliers of goods and services. Apart from financial interest, professionals must avoid any acts which may cause their impartiality be questioned. This may include dealing with procurement activities involving their former employers, friends, relatives and potential employers. Professionals must refrain from accepting and soliciting gifts from suppliers or their employees. The supplier here includes the current and potential ones. It should be noted that gifts affect professionals' impartiality. However, gifts of promotional items such as pens, calendars and diaries may be accepted.

Professionals must bear in mind that if they are required to refrain from accepting and soliciting gifts, then they must repel bribes and corruption. In their daily activities, professional obtain data and information from various sources including their organizations. Some of the data and information are classified. Disclosure of information without proper authority is unethical. Professionals must therefore ensure that they perform their duties free from impropriety. This is possible. Given by Ahmed S. K.

These procedures should cover all aspects of the procurement cycle, including the selection of the supplier, contract negotiations, order placement and payment and should ensure appropriate service delivery. The Engineering is considered as one of the most important industries throughout the world. The industry, in particular, plays a vital role in the economy of the developed and under developed countries.

Engineering and Telecommunication Equipment procurement is the process whereby corporation acquire goods, services and works from third parties. It includes much that supports the work of

corporation and ranges from routine items (e.g., stationery, temporary office staff, furniture or printed forms), to complex spend areas (e.g., construction, Private Finance Initiative projects, aircraft carriers or support to major change initiatives, internet service, online project following, networking and file sharing and all other ICT equipment). It also includes a growing spend where the private and third sectors provide key services directly to citizens in areas such as welfare-to-work, further education, social care and health. Such services may also be provided by the corporation directly.

Measuring procurement effectiveness has always been an interesting topic for corporations. The pressure of reporting the effects of the procurement function to the management is high and, in many cases, related to the personal performance targets of procurement staff. It is not that easy to determine the numerical estimation of cost savings produced. That's why it is crucial to consider all the other factors that might influence the effectiveness of procurement. These factors may include issues such as a new service model, better payment terms or a de-creased number of suppliers.

1.2. Statement of the study

Highlighted in the introduction Engineering Corporation of Oromia is a one leading and committed to provide professional service in study, design and contract administration and construction supervision of project to the highest standard of quality, within the agreed timeframe and at reasonable costs through long-term partnership to the satisfaction of its clients and is employs as well as tot benefit of the public and the environment at large.

Effective and efficiency procurement process have positive results to operational impacts which include improved prospects of achieving corporation objectives, the performance of procurement process in Engineering Corporation of Oromia the depends on the players in the field. Corporation use enacted laws and regulations for achieving corporation 's goals. It has been noted that some of the corporation goals are not met because of inadequate implantation of procurement process. The Oromia Engineering Corporation procurement process requires effective implementation of imposed procedures in order to get qualified suppliers and eventually quality products and services. However, the current situation has some deficiencies.

Though there are outlined laws, regulations, rule and procedures for Oromia Engineering Corporation procurement process ; there are some problems such as inability for suppliers to take

advantage of other investment opportunities since they wait for a long time for the approval and award of tender, suppliers failing to meet the criteria needed, and biasness of the people in the tender board which leads to selection of unqualified and inexperienced bidders which results in poor performance in procurement activities of the corporation.

The factor affecting of a project management on a particular part of the project life cycle, like risk management, planning, etc., but rarely on procurement management. This has inspired me to carry out preliminary research on identifying the most critical success factors that need to be managed carefully during Engineering and telecommunication network equipment procurement in Engineering Corporation of Oromia from his experience in the field of construction industry, the researcher observed that there are some problems arise in practicing procurement and tendering processes. These problems were reflected in terms of drawbacks or wrong decisions taking.

Currently, there are weak oversight institutions, lack of transparency, proper knowledge and training, poor linkages between procurements and expenditures, delays and inefficiencies, timely deliveries, quality of good, poor records management, bureaucracy, rampant corruption, Political interests. The aim was to make the procurement process more transparent, ensure accountability and reduce wastage of public resources among others. Bottom-up approach to the development of institutional mechanisms for holding to account the domestic implementation of external regulatory decision-making is also missing hence the need to investigate on the factors that influencing the Procurement processes in the Engineering Corporation of Oromia and provide suggestions to improve the Procurement process.

1.3. Research questions

In order to address the problem, this study tries to answer the following research questions.

- 1.3.1. What is the current engineering and telecommunication procurement practice in the Engineering Corporation of Oromia?
- 1.3.2. What are the factor influencing that engineering and telecommunication procurement process?
- 1.3.3. What are the challenge of existing procurement process in Engineering Corporation of Oromia?

1.4. Statement of Hypothesis

Hypothesis 1

1Ho1 Time delivery of the product from the supplier may not be affected by the procurement process.

1Ha1: Time delivery of the product from the supplier may be affected by the procurement process

Hypothesis 2

1Ho2: Failure to deliver the specification of the product may not be affected by the procurement process.

1Ha2: Failure to deliver the specification of the product may be affected by the procurement process.

Hypothesis 3

1Ho3: Policies and rules of procuring items may not affect the procurement process.

1Ha3 Policies and rules of procuring items may affect the procurement process

1.5. Objective

The study has addressed the following general and specific objectives;

1.5.1 General Objective

The overall objective of this study is to examine and identify Factors Affecting Effectiveness of Engineering and Telecommunication Procurement Process: The Case of Engineering Corporation of Oromia.

1.5.2. Specific Objective

- ✓ To examine the effectiveness of procurement process as applied at Engineering Corporation of Oromia
- ✓ Which are the best factors influencing engineering and telecommunication procurement process at Engineering Corporation of Oromia
- ✓ To identify the factors affecting during procurement of Engineering and telecommunication
- ✓ Validate whether the identified factors are truly critical for procurement process
- ✓ To identify the problems facing the procurement process and procurement at Engineering Corporation of Oromia.

1.6. Significance of the study

Generally, the importance of any study is either for acquisition or addition of new knowledge or sometimes can be a problem solving. This study therefore has the following importance.

- To the researcher as it is the partial fulfillment for the award of Master's Degree in Project Management
- This study is important to the University as it may be a point of reference to others Students who will conduct the research on a related topic.
- The recommendations and conclusions drawn from this research may be to examine and identify Factors Affecting Effectiveness of Engineering and Telecommunication Procurement Process the Case of Engineering Corporation of Oromia if the conclusions and recommendations drawn could be taken into considerations.

The study were foster creation of new knowledge and awareness in the area of procurement management in Engineering corporation. The study findings may also help policymakers Engineering Corporation of Oromia by availing them with information that they may use to procurement methods and procedures for better enhanced operational efficiency.

The study will provide value addition to Engineering Corporation of Oromia Engineering and Telecommunication Equipment procurement process by way of improving performance, gap identification as well as proposals to mitigate the gaps.

The researcher anticipates that the findings and policy recommendations generated from the study may be of invaluable input to the stakeholders of corporation in general both in Ethiopia and elsewhere; and also, to other organizations

Recommendation of this study will guide the Engineering Corporation in policy formulation, the findings may be of great use to the academia, especially those who may wish to carry out further research on procurement. Findings are anticipated by the researcher to add more knowledge on the existing body of knowledge in the subject area. The study will stimulate further research in the area.

1.7. Scope of the Study

The study only covered Factors Affecting Effectiveness of Engineering and Telecommunication Procurement Process the Case of Engineering Corporation of Oromia. The study findings may also help policymakers in Engineering Corporation of Oromia by availing them with information that

they may use to procurement methods and procedures for better enhanced operational efficiency. The study will provide value addition to the Engineering Corporation of Oromia by way of improving procurement effectiveness, gap identification as well as proposals to mitigate the gaps. To find out the best method of procurement process, to identify the factors affecting effectiveness and find out how the corporation policies of procurement can be improved to facilitate the procurement function. The outcomes of the study were limited only on the data gathered from the books and journal and from the primary data gathered from the results of questionnaire survey and interview conducted by the researcher.

1.8. Limitation of the Study

Among the limitations are;

(i) Sample Size

The study was also restricted to the Engineering Corporation of Oromia. therefore, the results cannot be subjected to generalization for other organization and industry.

(ii) Data Accessibility

Sometimes it is very dangerous those interviewees /respondents are not willing to disclose their information.

1.9. Organization of the Study

This Paper Study has been organized in five chapters, in which chapter one deals with the introduction part that is background of the study, background of the organization, statement of the problem, research questions, objectives of the study, significance of the study, scope of the study, limitation of the study where as chapter two includes related literature review and Chapter three deals with research methodology. Finally, chapter four deals with result and discussion, and chapter five contain summary, conclusion of findings, of Factors affecting of Effective Engineering and Telecommunicating Procurement Proces

CHAPTER TWO

LITERATURE REVIEW

Introduction

This chapter presents a review of previous studies related to the present study. The chapter constitutes examination of studies related to factors affect effectiveness of procurement process in organization. The literature review deals with the theoretical basis of the study, empirical studies, conceptual definitions and conceptual framework. It concentrates more on what same different authors have said about Factors Affecting Effectiveness of Engineering and Telecommunication Procurement Process in the corporation. this is a theoretical pan, which focuses on how authors explain on various issues, terms and key element on effective and effectiveness procurement process of the Engineering Corporation of Oromia.

2.1. Theoretical Literature

2.1.1. An overview of procurement, procurement process and procurement performance and importance of good procurement process.

The term procurement is usually confused with purchasing. Procurement is modern, complex and has a wider term than purchasing. According to Lyson and Farrington (2006), procurement generally includes activities prior to the act of purchase, such as: identification and definition of a business needs; surveying the market to identify potential suppliers and gather intelligence. They argued that traditional definitions of purchasing are outdated and insufficient when it comes to what organizational buyers actually do. They imply that purchasing is reactive, transactional, and tactical whilst procurement is proactive, relational, and strategic and has integrated role of the function in modern organizations. Hence its adoption in many organization charts and job titles. In the nutshell they defined procurement as ‘a functional area of business or a player in the supply chain responsible for acquisition of inputs or supplies to support an organization corporate strategy and competitive advantage.

Bailey et al, (2008) define procurement as that function dealing with buying materials of the right quality, at the right price, time and the right source of supply. Bally (1999) argues that, the

Procurement process is composed of several elements, namely: deciding what to purchase, deciding who to purchase from, negotiating an exchange rate and exchanging resources for goods or services. Morris (2003) define procurement as the complete action or process of acquiring or obtaining personnel material, services or property from outside a military service by means authorized in pertinent directives.

This is procurement is more specifically the action or process of acquiring or obtaining materials, property or services at the operational level. Pienaar (2005) argued that; “Every business enterprise purchases its materials, services and assets such as Machinery and equipment, Motor vehicles, Furniture and Fittings from other Firms. These materials, services and assets are used in the production, marketing, logistics and other operations of the enterprises”. The process of purchasing these items is known as procurement. According to Farmer and Weele (1995), “Procurement is a broader term, which includes all activities required in order to obtain the product from the supplier and get it to the place where it actually used. It encompasses the purchasing function, stores, traffic and transportation, incoming inspection, and quality control and assurance”.

The process of procurement must ensure that, materials to be procured should be based on five R’S (5R’S) which in general states that purchasing responsibility to buy material of the right quality, in the right quantity, at the right time, at a right price, from the right source with delivery at the right place. In the context of procurement, the public has its own direction of meaning especially on for the ownership. According to Paul et al, (2008) argue that countries vary in their preferences for public ownership of national infrastructure and services.

The internal regulatory mechanisms of government-accounting, procurement and personnel have long received sustained attention as the centerpiece of reforms to promote accountability (World Bank, 2000). Accountability of public officials is critical in deterring corrupt practices and it creates an enabling environment for vibrant private sector activity (Kabaj, 2013).

Problems of accountability arise when government ignore or transgress social ethics and constitutional and legal provisions in conducting public affairs, administrative systems are fragmented, tasks to be performed are so complex or unspecified that it is difficult to identity who is responsible for what, activities are underfunded so that implementation is very difficult or impossible (Therkildsen, 2001). Perceptions which appear anecdotal, view politicians as only being engaged in discussions on the conditions of contract, contract awards and purchasing

initiation, while concerned about image; together with public accountability being viewed as a hindrance, present a negative and very narrow perspective, yet there does not actually appear to have been a balance of empirical research into the actual roles and potential roles of politicians in public procurement strategy and management. Indeed, such perceptions of politicians' engagement with public procurement may undermine the very democratic process so fundamental to public procurement and highlight the need for a wider understanding of how public procurement fits within democratic governance (Soudry, 2007).

The strategic leverage (up-stream activities) is develop/challenge specifications, develop sourcing strategy, and analyze future needs/influence delivery schedule whereas traditional procurement is about negotiating contracts, obtaining quotes and placing order, and monitoring vendor performance. For example, successful specification by eliminating components from the product design is of considerably more value than for example negotiating contracts.

Cousins et al (2006) provide an empirical test on the configuration of procurement functions focusing on its performance outcomes and aiming to recommend potential strategies to be adopted for improving the procurement function. The four categories are 'Strategic', 'Capable', 'Celebrity' and 'Undeveloped'. Four criteria decide the contribution of procurement; 'strategic planning', 'purchasing skills', 'internal integration', and 'purchasing status'. The 'strategic' status performs high on all four criteria, the 'capable' has a medium to high status on all four categories, while 'undeveloped' only performs high on procurement skills.

The result of the study, they claim, does to a large extent support the initial work by Reck & Long (1988); however, with the exception of what Cousins et al call "celebrity" purchasers. This classification has a high level of status in the eyes of top management, but contains lower knowledge and skill levels than any other cluster; there is low involvement in strategic planning and low-to-moderate integration with the rest of the business. Cousins et al speculate that such situation can be caused by an "enigmatic" leader; that is, one that is able to sell the procurement function to top management but, nonetheless, and "emperor without clothes" (2006:788). Procurement functions *should* behave. Without ever being explicitly stated in these bald terms, the current conventional wisdom – particularly the influence of the 'evolutionary' or 'developmental' models – leads to the belief that clerical and administrative activities such as order-raising and

progressing, invoice payments, record filing, cost and quality control through negotiation and so on, are ‘primitive’ or ‘undeveloped’ activities, whilst more ‘sophisticated’ or ‘developed’ activities should be actively pursued in order to move the function from stage to stage, up an evolutionary development path leading to improved performance and enhanced intraorganizational status. These ideas are so widespread that it is reasonable to describe them as a generalized anti-administrative or anti tactical procurement activity bias” (Ramsay & Croom 2008:202).

Procurement process: means the successive stages in the procurement cycle, including planning, choice of procedures, measures to solicit offers from tenderers, examination and evaluation of those offers, award of contract and contract management;

Procurement Performance: The accomplishment of a given task measured against preset known standards of accuracy, completeness, cost, and speed.

Competitive selection: means the method of procurement whereby limited number of consultants or providers of services are invited by the procuring and disposing entity to compete with each other in submitting either on the basis of quality alone or on the basis of a combination of quality and cost.

Competitive tendering or tendering: means the method of procurement or disposal of public assets whereby suppliers, and/or contractors are invited by the Procuring and disposing entity to compete with each other in submitting priced tenders for goods and works.

Independent Department: means a government department which holds vote of account in the government budget.

Advance Contract Award Notice (ACAN): An ACAN is a public notice published on the Tenders minisite for a minimum of 15 calendar days, indicating to the supplier community that a department or agency intends to award a contract for goods, services or construction to a pre-qualified supplier believed to be the only one capable of performing the work, that way enabling other suppliers during the publishing period to signal their interest in bidding by submitting a statement of capabilities. If no other supplier submits a statement of capabilities that meets the requirements set out in the ACAN, the contracting officer may then proceed with awarding the contract to the pre-qualified supplier. If one or more suppliers meet the requirements, the contracting officer will then use the competitive process.

Pre-qualification: means a formal procedure whereby suppliers, contractors or consultants are invited to submit details of their resources, and capabilities and are screened prior to invitation to invitation to tender on the basis of meeting the minimum criteria on experience, resources, capacity and financial standing.

Post-qualification: means a formal procedure applied after tenders have been evaluated prior to award of contract, to determine whether or not the lowest evaluated tender has the experience, capability and resources to carry out the contract effectively;

Procurement contract: means any license, permit, or other concession or authority issued by a public body or entered into between a public body and a supplier, contractor or construction or other related works or for the supply of any goods or services.

Supplier: means a company, corporation, organization, partnership or individual person supplying goods or providing services, hiring equipment or providing transport services and who is, according to the contract, a potential party or the party to a procurement contract with the Procuring and disposing entity.

Tender: means an offer, proposal or quotation made by a supplier, contractor or consultant in response to a request by a procuring and disposing entity;

Critical Success of Strategic Sourcing: The purchasing function instils greater responsibilities to the purchaser and as well as the purchasing department, as it involves full compositions of studying ways to reduce cost by thoroughly understanding the buyer's market, establishing interdepartmental strategic liaison when making purchasing decisions, and contemplation of inventory carry costs and storage requirements aftermath of the purchases.

Poor Procurement: The attribution from haphazard performance by the purchasing department can adversely snowball to long-term issues that will gravely dampen the performance of the operating company. The chain impact does not only amount to loss of money and profitability, but the negative publicity would inevitably tarnishes the reputation of the company as mentioned in the earlier case. The recovery process is not guaranteed immediately and it usually requires huge amount of spending, efforts and time period before regaining the confidence of the stakeholders and the general public.

Importance of good procurement process

Procurement function play an essential role in the achievement of organizations objectives with regards to operation, planning and spend. Musanzikwa (2013) recommends that expenditure on procurement should be managed effectively by spending officers to realize it optimum value since it absolves a larger portion of the total expenditure. Importance of good procurement process are,

- I. Facilitates optimal utilized of scarce resources
- ii. Enables the institution to acquire goods and services of the right quality as and when required
- iii. Facilitates establishments and operation of best practices
- iv. Minimize or eliminate stakeholders' complaints
- v. Improves the image of the institution
- vi. Enables competitive and wise procurement
- vii. Minimize the risk of buying of inferior goods and associated costs

In order to undertake such as task they should establish performance indicators and benchmarks. It is however worth mentioning that Public Procurement Regulatory Authority (PPRA) have developed some indicators and compliance indicators (Procurement Journal Vol. III No. 9).

2.2. Empirical Literature

In this field of the study, the researcher aimed to find out from the different researches or study that has been already undertaken or written in relation to the field and come out with the ideas of what have been said about the topic. For the interest of this study, various studies have been taken from different authors, scholars, institutions and organization and come out with the ideas and even recommendation for the further studies.

From the assessment done in The Country Procurement Assessment Report (CPAR) on the procurement system undertaken by the Public Procurement Regulation Authority - Final Report done in September 2007, . Among other things that have been revealed out in the assessment are discussed here under the following aspect.

Budget Law and Financial Procedures Support Timely Procurement, Contract Execution and Payment: After the approval of the budget, funds are committed to cover the portion of the

contract to be performed within the budget period. Funds are normally released from the Exchequer on a monthly basis, however for the priority sectors this can also be on a quarterly or half-yearly basis. Standards for processing invoices are provided by the Public Finance Act and Regulations, and invoices are processed along with the required Local Purchase Order.

The assessment is also revealed that there were some contracts which were not approved budget allocations. About 10% of the contracts assessed were not in the approved budget, 9% no data to reveal if the contracts were in the approved budget or not while 1% of the contracts were procured under PPPs arrangement such as collection of tax/revenue in local Government authorities. According to Section 45 of the Public procurement Act 2004 and Regulations 47 and 25 of GN No. 97 and 98 respectively, requires Procuring Entities to prepare procurement plan in order to avoid emergency procurement wherever possible and to aggregate its requirements in order to obtain the value for money and reduce procurement costs.

Payment Schedule: The assessment has revealed that out of the assessed tender documents, 40% does not have schedule of payment clauses. It was also found that Local Purchase Order (LPO) developed by LGAs don't have clauses specifying payment schedule which contributed to the increase in the percentage of contracts without payment schedule. From the above findings, it's observed that STD is modified to delete payment schedule provisions in order to suit the requirement of some PEs due to uncertainty of cash flow. Furthermore, it was noted that assessed had late payment exceeding contractual payment schedule. This does not reflect the real picture as only 15 contracts out of total contracts (388) assessed has revealed that. The interviews with the stakeholders have commented that in case of any delays they are not claiming interest as they are afraid of being victimized by the PEs.

Procurement Actions not initiated Without Budget Appropriations: According to the Public Finance Act, availability of funds is required for initiation of procurement. Likewise, the Regulations 62 of GN 97 requires that funds are "voted or committed" before procurement can commence. The assessment has revealed that; 80% of the contracts were in the approved budget, 10% were not, 9% no data were available to reveal while 1% of contracts were Public Private Partnership (collection of taxes).

Cost of Tender Process: The assessment has revealed that the cost for the preparation of a solicitation document by the PEs ranges from Tshs 3,000 (lowest) to Tshs 150,000 (highest). From the sample cases, the average is 48,000 Tshs In some cases the documents were sold up to Tshs.

200,000 regardless of the volume/bulkiness of the document. The reasons given by the PES was that they charge higher cost in order to cover the procurement administration costs which for some institutions are not budgeted for. Regulation 82(3) of GN97 requires the solicitation documents to be sold at a price to cover only the costs related to printing, copying and distribution of the document without including any element of profit. Furthermore, PPRA has issued guideline on how to reduce tender administration costs.

Another area of concern is the costs associated with the tendering process which include cost for tender advertisements, cost for evaluation committees and cost for the tender boards meetings. Assessment also revealed that the highest administrative costs reached Tshs. 9,870,000 while the lowest was Tshs. 210,000 per contract. For some contract the percentage of tendering administrative cost accounted for 9% of the contract price. Enforcement of Sec 45 of the Act and monitoring to ensure that the Pes prepares annual Procurement Plan which entail to aggregate requirements in turn will reduce tender administrative costs.

Adequacy of Organization, Funding, staffing, and Level of Independence and Authority to Exercise the Duties: The PPRA is staffed to the appropriate level but unable to perform all of its designated functions due to the Government need to appreciate the benefit of a good procurement system in reducing spending and therefore avail adequate funds for PPRA to set and monitor the system.

Systems for Collecting and Monitoring National Procurement Statistics: There is a systematic gathering of procurement information. The system has been tested in five pilots PEs and it is being rolled out in other procuring entities effective from July 2007.

Strategy and Training to Provide Training, Advice and Assistance to Develop the Capacity: PPRA is offering training on PPA 2004 and its regulations in five different modules to PEs. Currently PPRA is in the process of employing a consultant to disseminate PPA 2004 MDAs & LGAs. PEs and general Public are offered advisory services in the following areas: Use of standard documents, use of guidelines, interpretation of PPA 2004 and its regulations.

Quality Control Standards and Staff Performance Evaluation for Capacity Development: Currently, the procurement system does not have any quality assurance or staff performance evaluation systems. The Third Schedule of the Regulations provides standard for processing time, but these standards are not linked up with a quality control or performance measurement system.

In the study undertaken by Patrick Kakwezi and Sonny Nyeko on the Procurement Processes and key successful factors: Efficiency and Effectiveness of the Procurement Function in Uganda, the authors had come out with some result and recommendation for the study. The findings of the study suggested that financial and non-financial measures are equally important in indicating the performance of the procurement function. This position was held by many authors as was earlier seen in the literature (Lardenoije, Van Raaij, & Van Weele, 2005) and also was the opinion of the respondents in this study. Interestingly, however, not every set indicator is important in the procurement process.

Accordingly, the respondents' suggestions, *quality of goods and services* is delivered through the procurement process is the most important set target of the procurement function and *safety of employees* the least important of the non-financial measures. This suggests that quality goods and services create a safe working environment and understanding of safety to employees. Through this study, quality has been identified as a generic measure for purchasing performance. Based on the options that were provided by the respondents, quality was the most preferred measure of procurement performance followed by purchasing efficiency and purchasing effectiveness that, when pursued, ensure consistent quality of goods and services, competitive costs, flexibility on the terms of purchase and in meeting changing needs and demand, dependability on the source of supply, and reduces cycle time, and quality alone cannot bring these along (Knudsen, 1999 and Kumar, Ozdamar, & Peng, 2005).

The public sector the major “push” is on reducing costs, this focus has consequences on performance. Experience shows that when organizations focus on reducing costs, the quality of goods and services procured suffers, and when organizations focus on quality, costs come down. More over a case study undertaken at Boliden AB by Magnus Bloomberg on Developing a Strategic Procurement Process to make it easier to standardize the procurement process and introduce new lead- buyers, Boliden has decided to create procurement manual.

The primary purpose of the Manual is to provide an over view of Bolidens procurement operations. Procurement processes and procurement information systems. As such, this Manual provides an awareness of mandatory requirements, policy considerations, guidelines, procedures and best practices. The Manual contains job description for all roles involved in procurement, instruction on how to handle communications, purchasing ethics and policies and detailed description of the

procurement process and its sub processes. In the process of creating this manual, five main processes are identified: Governness and administration, strategic sourcing, contracting, operative procurement and supplier management. The final conclusion of the study is that in order to be able to control and measure procurement process in order to improve it, it has to be properly mapped. Another empirical study that has been undertaken in this study was one taken in Kosovo under the title. Procurement Phases in the process of Procurement in Kosovo by Drita Kaçandolli Vol. 1/2010:

Under this study the formal procedures of tendering and procurement procedures were explained in details. Different methods of awarding public procurement contracts derive from the theory and practice of many countries. Local and International newspapers and advertising through electronic web pages.

2.3. Research Gap

There is limited research in the area of procurement policies and in particular with respect to its identifying major affecting procurement process. Chalton (2014) conducted a research on the challenges of implementing procurement policies in state corporations in Kenya, Nyaboke, et al. (2013), conducted research on the effects of public procurement policies on organizational performance which was focus on the water sector, while, Obiero (2008) did a study on the challenges in the implementation of the good Procurement process & Disposal Act 2005. No study has been done on how duration taken to award tender, quality of procured goods and services, timely delivery of orders, customer satisfaction, dependability, flexibility and quality of employees should all be included and influence tendering in construction corporation. In addition, little has been done on influence of ethical practices in tendering process, training of employees in tendering process. There is lack of sufficient information on these variables locally to enable the government fulfill its commitment.

Therefore, the purpose of this study was to identify factors affecting effectiveness of engineering and telecommunication procurement process and its effectiveness of the procurement process. Indeed, the measures will enhance procurement efficiency and procurement effectiveness of the purchasing function as different models have shown how procurement process has a link to improved performance (Uganda Department of Trade and Industry, 2008).

2.4. Conceptual Framework

A conceptual framework can be seen as an attempt to define the nature of research. A conceptual framework considers the theoretical and conceptual issues surrounding research work and form a coherent and consistent foundation that will underpin the development and identification of existing variables (Atkinson, 2006). This study seeks to establish the relationship between factors affecting effectiveness of E and T procurement process and Effectiveness of E and T Procurement process in the Engineering Corporation of Oromia. The independent variables in this study is Effective E and T Procurement process which impacts on the dependent variable which is procurement performance.

2.4.1 Measurement of Variable

The basic tenet of Engineering and Telecommuting procurement process is to acquire the right item at the right time, and at the right price, to support government actions but although the formulae is simple, it involves questions of accountability, integrity and value with effects far beyond the actual buyer\seller transactions at its center.

The measurement for the study involves the dependent variables and independent variable. The dependent variables are compliance to procedures, benefits and of tendering and quotation methods and procurement process. Therefore, they will be measured against independent variables. Compliance to procedures will be measured against effectiveness of procedures, cost saving, reduction of lead time. The benefits of tendering and quotation methods will be measured against speed of processing, accuracy of documentation, quality of criteria used, acquisition of needed supplies; and procurement process will be measured against information coordination, proper decision making, financial management, professionalism, procurement planning and supplier relationship management flow.

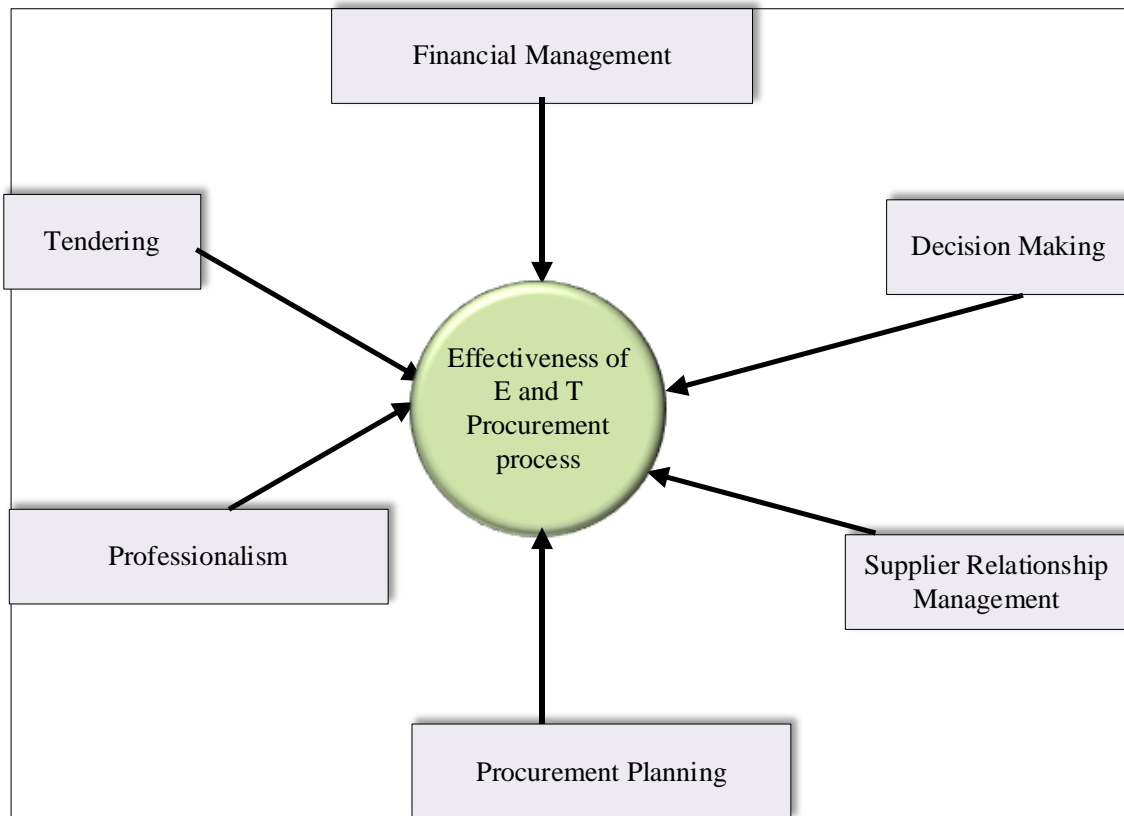


Figure 2.1 Conceptual frame work-Relation between variables.

Source: Own Survey,2021

CHAPTER THREE

RESEARCH METHODOLOGY

3.1. Area of the Study

Oromia Engineering Corporation headquarters' office is located in Addis Abeba in front of Drivers and Mechanics Training Center. Engineering Corporation of Oromia is a one leading and committed to provide professional service in study, design and contract administration and construction supervision of project to the highest standard of quality, within the agreed timeframe and at reasonable costs through long-term partnership to the satisfaction of its clients and is employs as well as tot benefit of the public and the environment at large and which was established 1998 To ensure the factors affecting effectiveness of engineering and telecommunication procurement process the structure composed of different department form the corporation. Which are Human Resource Management Directorate, Finance and Procurement Administration Directorate, Research, training and Laboratory Service, Technical Division, Planning, Project Management and ICT Service Directorate

3.2. Research Approach and Design

Is a systematic way of dealing with a research problem. Solution for the research problem will be found through methodology, methods and techniques which will help the researcher to answer the research questions which address the research problem. Primary data from the field and secondary data from various documents will be collected and analyzed in order to identify factors affecting effectiveness of procurement process in ECO. According to (Churchill et al 1984), there are two paradigms of doing research namely positivism and phenomenological approach. The research used phenomenological approach for qualitative research paradigm is a way of examining social phenomenon from which particular understandings of these phenomenon can be gained and explanations attempted (Sounders et al, 2009). Therefore, for this study, a regulatory perspective paradigm will be followed as a research philosophy. This is a perspective that seeks to explain the way in which organizational affairs are regulated and offered suggestions as to how they may be improved within the framework of the way things are done at present (Sounders et al, 2009

The study was use graphs which generate numerical data as a means of data analysis collected using questionnaires. Krauss (2005) reveals that many qualitative researchers operate under different epistemological assumptions from quantitative researchers. For instance, according to him, many qualitative researchers believe that the best way to understand any phenomenon is to view it in its context.

To ensure validity of measures, data were gathered from the respondents. Questionnaires and interviews will be applied to clear any ambiguity that would have arisen. The unity was ensured adequate representation. On other hand, reliability is concerned with consistency and research, and whether another research can use the research design and obtain the similar findings. In this study questions were asked to different respondents thus data can be compared to get concrete information. Also, the data collection instruments were pre - tested.

3.3. Sampling Techniques

The non- probabilistic sampling techniques were adopted because the purposive sampling was applying, that enabled the researcher to select respondents with necessary and relevant information. The technique is less costly and it is quick to select a sample. The decision as to what sampling method to be used depends on the aim of study, the expected degree of accuracy of the study results and the sampling cost. In this non-probabilistic sampling, the purposive sampling was applying because it helps to access respondents who are knowledgeable about procurement activities as they are undertaken at the Engineering Corporation of Oromia.

The sampling plan describes the sampling unit, sampling frame, sampling procedures and the sample size for the study. The sampling frame describes the list of all population units from which the sample were selected (Cooper & Schindker, 2003). Samples of members of tender, procurement and evaluation committees as well as the three level of management was purposively sampled from all the players in the Engineering Corporation of Oromia. Statistically, in order for generalization to take place, a sample of at least 30 must exist (Cooper and Schindler, 2003). Moreover, larger sample minimize errors. Kothari (2004) argues that if well chosen, samples of about 10% of a population can often give good reliability. Because as the area of interest in this research was to the measurement of effectiveness of procurement process in a government corporation, the unit of the study was employees of Engineering Corporation of Oromia. All employees who are procurement officer at procurement department or any other employees

working in different departments with the procurement activities form the population of the study. The target population comprised of procurement personnel from the procurement department and other different user Therefore drawing a sample from these departments enabled and enhanced the achievement of right respondents and data for the study. the sample size of the study was selected from the Human Resource Management Directorate, Finance and Procurement Administration Directorate, Research, training and Laboratory Service, Technical Division, Planning, Project Management and ICT Service Directorate

3.4. Data Collection Techniques

In this study various methods were adopted for data collection for analyzing procurement processes on the key factor success of effective procurement process in Engineering Corporation of Oromia. Both Primary and secondary data was collected from the field, the primary data were obtained from respondents through questionnaires and interviews while secondary data was obtained from documents that contains relevant information about the study, for our case the following method was employed in data collection.

3.4.1. Primary Data Collection

The data were collected using a semi structured questionnaire which is administered to members of tender, procurement and evaluation committees as well as the three level of management (senior managers, middle level. Primary data are those data which are collected afresh and for the first time, and thus are regarded to be origin in character (Kothari,2004). In analyzing the procurement processes, primary data was collected through structured questionnaires. These interviews with individuals were unstructured personal interviews. According to White (2000), this approach is a favorable method as it provides more information that are in greater depth and enables the researcher by his/her own skills to overcome resistance if any from respondents as well as its flexibility in restructuring questions.

The structured questionnaire as the main tool assisted the researcher in answering research questions of the study. This approach has advantage of being free from the biasness of the interviewer and respondents are not easily reached can be easy to meet conveniently (Kothari, 2004). The questionnaire was designed in such way that it is easier and took minimum time for

respondents to attend the questions. The Likert Scale was adopted for analyzing procurement processes: 1) Strongly Disagree; 2) Disagree; 3) Uncertain; 4) Agree, 5) Strongly Agree.

3.4.2. Secondary Data Collection

The secondary data for this study includes documentary, multiple sources and survey data. Documentary data includes but are not limited to organization's data and other sources such as government publications, reports, website, journals and others that are already available in PEs or related authorities. In analyzing procurement processes, procurement related documents issued by PPRA on periodical basis particularly annual performance report and procurement journals were consulted.

3.5. Study Variables and Measurement Procedures

This study uses both primary and secondary data in addressing the independent and dependent variables. The main objective is to analyze procurement processes as independent variables which include procurement planning, tendering process and contract management. The data for analyzing procurement processes was collected from primary sources by undertaking survey to procurement specialists and contractors, suppliers or service providers.

The primary data was obtained using questionnaires distributed to Procurement staff and finance and resource administrator. Thus, the study used questionnaires as the instrument for data collection, so as to allow respondents to express their idea independently. Before questionnaire being administered, they was tested to the respondents to ensure its clarity (Adam and Kamuzora, 2008), removing sensitive and non-respondents questions and redrafting ambiguous questions, the study used questionnaires as the main data collection instrument, so as to allow respondents to express their idea Independently. The questionnaires addressed a variety of questions which could raise magnitude and awareness of the problem. Moreover, interview is conducted to seek their opinion on their reasons for their responses on some of the key issues related to procurement processes.

3.5.1. Validity

Statistical validity also used to measure the validity of the research though use of correct statistical procedure and instruments (Neuman, 2007). To ensure the statistical validity of the study, the

researcher has collected qualitative data using questioner and analyze the data using correct statistical instruments like descriptive statistics, regression and according to Adams et al., (2007) internal validity is used to assure the research validity. To threat the internal validity of this research, questioners are distributed within same period of time and collect within one week, and reasonable sample is taken from the population and questionnaires randomly distributed to participant.

In addition to this, the researcher received comment from the advisor and other expertise on the questionnaire and overall research methodology. Furthermore, pilot taste has been made by distribute small questionnaire. The major objective of the pilot taste was to get feedback on the questionnaire way of preparation, wording, coheresnce and any other valuable comment and to in incorporate any important comments and finalize the questionnaire.

3.5.2. Reliability

In order to ensure the reliability and validity of the data collection instrument, pre-test was carried out. Questionnaires developed were shared with my colleagues in the department of procurement and other procurement professionals. The comments and their observations were taken into consideration. This stage revealed the suitability of the methods and instruments that was employed in the study. This consequently led to early detection of errors and distortions in the questionnaire which were corrected in the process.

The test of data reliability is another important test of sound measurement. A measuring instrument is reliable if it provides consistent results, (Kothari, 2004). Moreover, reliable measuring instrument does contribute for validity. Hence, to prove reliability of the instrument, the researcher has distributed some questionnaires as a pilot test and then makes some adjustments accordingly. According to Joseph and Rosemary (2003), Cronbach's alpha reliability coefficient (α) normally ranges between 0 and 1. According to these authors, there is a greater internal consistency of the items if the Cronbach's alpha coefficient closes to 1.0.

The data used is collected from individual professionals, who provided answers to the questionaries based on their personal understanding and experience. This will likely differ from person to person. However, to test for internal consistency, Cronbach alpha was used

with IBM SPSS software. The alpha was **0.683**, which shows a good consistency in the data. Cronbach alpha lies between 0 and 1, with a value greater than 0.6 considered good.

Reliability Statistics	
Cronbach's Alpha	N of Items
.683	59

*Table 3.1. Reliability Statistics
Source: Own Survey,2021*

No	Variable Name	Cronbach's Apha	Number of Items	Cronbach's Apha Based on Standardize Items	Reliability Range
1	Procurement Planning	.679	8	.692	good
2	Professionalism	.701	7	.700	good
3	Financial Management	.681	6	.701	good
4	Tendering	.672	6	.698	good
5	Decision Making & Processing Speed	.663	6	.688	good
6	Supplier Relationship Management	.667	5	.699	good
7	Effectiveness of E & T Procurement Process of ECO	.674	5	.681	good

*Table 3.2. All variable Reliability Statistics
Source: Own Survey,2021*

3.6. Data Analysis Techniques

The data should be classified in ways that it assists the researcher in reaching pertinent conclusions and clearly reveal the findings that have led to those conclusions (Cooper and Schindler, 2003:17).

Data analysis method is normally based onto the forms of data the study aims to collect. Although this study intended to collect mostly qualitative data, it was imperative that the methods of data analysis was contained both qualitative and quantitative forms.

Qualitative data analytic methods used included explanation building, matching of data and information from the units of analysis and using comparisons as suggested by Yin (1994). This

was guided by the research questions. These techniques were used to help the researcher analyze the data obtained through the open-ended questions in large quantitative forms (Weber, 1990).

When quantitative data are presented, this should be done with charts, graphics and tables (Cooper and Schindler, 2003:664). Quantitative methods of data analysis can be of great value to the researcher who is attempting to draw meaningful results from a large body of qualitative data. The main beneficial aspect is that it provides the means to separate out the large number of confounding factors that often obscure the main qualitative findings. Quantitative analysis approaches are particularly helpful when the qualitative information has been collected in some structured way, even if the actual information has been elicited through participatory discussions and approaches (Abeyasekera, 2002). The researcher was assisted by the SPSS programme in coming up with the statistical analysis for this study.

Qualitative Analysis-Qualitative analysis was conducted for detailed analysis of results. Respondents were asked different questions from the Human Resource Management Directorate, Finance and Procurement Administration Directorate, Research, training and Laboratory Service, Technical Division, Planning, Project Management and ICT Service Directorate management in interviews. Open ended questions were asked from respondents.

Quantitative Data Analysis-The quantitative data collected through questionnaire was analyzed by conducting multiple regression using SPSS.

CHAPTER FOUR

RESULTS AND DISCUSSION

Introduction

This chapter presents the results of the study and interpretation of the findings. The chapter comprised of two sections. The first part presents the profile of respondents showing gender, age group, level of education, work experience, and position of respondents using simple description. The second part presents analysis of the study variables by using tables and consisting of percentages, and it contains the discussion of results and overall responses.

This study examined the Factors Affecting Effectiveness of Engineering and Telecommunication Procurement Process in the Case of Engineering Corporation of Oromia in the first place, the study aimed at identifying the challenges of existing procurement process and procedure in conducting tendering process in Engineering Corporation of Oromia. Secondly, the study examined the Factors Affecting Effectiveness of Engineering and Telecommunication Procurement Process in the Case of Engineering Corporation of Oromia.

4.1. Response Rate

This study used primary and secondary data. Close ended Questionnaires were used to collect data since it is straightforward and less time consuming for both the researcher and the respondents. Data collected was organized, processed and analyzed using Statistical Package for Social Science (SPSS) Version 24. Data was analyzed quantitatively using descriptive statistics such as mean and standard deviation and also by use of inferential statistics such as Pearson correlation and regression analysis.

The study targeted 45 respondents, 42 respondents filled in and returned the questionnaires. This represented overall successful rate of 93.3%. The unsuccessful response rate is only (6.3%) consisted of those questionnaires that were either not filled, poorly and partially filled.

4.2. Demographic Characteristics of Participants

The study collected information on demographic characteristics. Detailed results on each of the demographic characteristics are presented. The analysis revealed that most of the respondents were

Male. Specifically, the data showed that 26 of the respondents representing 61.9 % were male while a total of 16 representing 38.1% were female.

The results showed that, the majority of respondents were in the age bracket of 34-41 years group representing 40.5% of the respondents. This was followed by 26 – 33-year group representing 33.3% of the respondents and 8 representing 19% were 18 – 25 years. Interestingly, the number age 42 yrs. and above only 3 representing 7.1% of the respondents. Therefore, the finding verifies that the respondents are qualified to understand the questions concerning Factors Affecting Effectiveness of Engineering and Telecommunication Procurement Process in the Case of Engineering Corporation of Oromia. Generally, the finding regarding the characteristics of respondents confirms that the respondents are qualified. So, the researcher belief that the response obtained from them is reliable and trust full that enables the researcher to move towards intended research finding.

Educational level of the respondents. Analysis showed that, the majority of the respondents were on first degree program. There were 26 representing 61.9% while 10 representing 23.8% per cent were Maters Degree holders. In addition, 5 representing 11.9% per cent were diploma holders and 1 representing 2.4% Ph.D. Holder. Based on their educational status, it can be said that the respondents have the ability to understand the Engineering and Telecommunication Procurement process in the ECO.

Majority of the respondents' department falls under Finance and Procurement Administration Directorate (30.9%), and necessarily they are the focal staffs who deals day to day analysis and evaluate of procurement process and this is very useful to get an in-depth information for the research title under the study. In addition, 23.7% under Three of Technical Division and while under Planning, Project Management and ICT Service Directorate 21.4%. In addition, 16.7% under Human Resource Management Directorate and while under Research, training and Laboratory Service 7.1% This is shown in Table 4.1.4 below.

The analysis showed that, the majority of the respondents were on first 6-9 years' experience. There were 14 representing 33% 6-9 years' experience and while 8 representing 19 % and 8 19% 10.13- and 14-17-years' experience represent. In addition, 7 respondents' representing 16.7% those have 3-5 years' experience level and while 3 representing 7.1% 18 and above years' experience level and 2 respondents' representing 4.8% have 0-2 years' experience level. Based on

their experience level status, it can be said that the respondents have the ability to understand the Engineering and Telecommunication Procurement process in the ECO. This is shown in Table 4.1.6 below.

Demographic Characteristics of Participants

		Frequency	Percent	Valid Percent	Cumulative Percent
sex	Male	26	61.9	61.9	61.9
	Female	16	38.1	38.1	100.0
Age	18 – 25yrs	8	19.0	19.0	19.0
	26 – 33yrs	14	33.3	33.3	52.4
	34 – 41yrs	17	40.5	40.5	92.9
	42 yrs. and above	3	7.1	7.1	100.0
Educational	Diploma	5	11.9	11.9	11.9
	Degree	26	61.9	61.9	73.8
	Master’s Degree	10	23.8	23.8	97.6
	Ph.D.	1	2.4	2.4	100.0
	Human Resource Management Directorate	7	16.7	16.7	16.7
	Finance and Procurement Administration Directorate	13	30.9	30.9	47.6
	Planning, Project Management and ICT Service Directorate	9	21.4	21.4	69
	Technical Division	10	23.7	23.7	92.9
	Research, training and Laboratory Service	3	7.1	7.1	100
Department	Human Resource Management Directorate	1	2.4	2.4	2.4
	Human Resource Development and Personal	4	9.5	9.5	11.9
	Transport and General Service	2	4.8	4.8	16.7
	Finance Administration	5	11.9	11.9	28.6
	Procurement and Property Administration	8	19.0	19.0	47.6
	Planning and Project Management	4	9.5	9.5	57.1
	Marketing and Promotion	2	4.8	4.8	61.9
	ICT and Documentation	3	7.1	7.1	69.0

	Irrigation and Energy Works Division	4	9.5	9.5	78.6
	Water Resource and Supply Works	3	7.1	7.1	85.7
	Transport, Building and Urban Planning	3	7.1	7.1	92.9
	Research, training and Laboratory Service	3	7.1	7.1	100.0
Experience	0-2	2	4.8	4.8	4.8
	3-5	7	16.7	16.7	21.4
	6-9	14	33.3	33.3	54.8
	10-13	8	19.0	19.0	73.8
	14-17	8	19.0	19.0	92.9
	18 and above	3	7.1	7.1	100.0
	Total	42	100.0	100.0	

Table 4.1: Demographic Characteristics of Participants

Source: Own Survey,2021

4.3. Effectiveness of current Engineering and Telecommunication Procurement process

The study aimed at determining Factors Affecting Effectiveness of Engineering and Telecommunicating procurement process as conducted at Engineering Corporation of Oromia. From the 42 respondents' results show that majority of the respondents the procurement process is moderate as reported by 45.2 percent of the respondents whereas 38. percent of respondents said the process is effective. 9.5 percent of the respondents reported that there is very effective performance of the procurement process while 7.1 percent of the respondents reported that the procurement process is ineffective. Generally, it was found that the procurement process is at moderate position at Engineering Corporation of Oromia. This is shown in Table 4.2.1 below.

Procurement Process Effectiveness

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Effective	4	9.5	9.5	9.5
	Effective	16	38.1	38.1	47.6
	Moderate	19	45.2	45.2	92.9
	Ineffective	3	7.1	7.1	100.0
	Total	42	100.0	100.0	

Table 4.2: Procurement process effectiveness
Source: Own Survey,2021

4.4. Factors Affecting Effectiveness of Engineering and Telecommunication procurement process

The study adopted multiple regressions for the measurement of the variables of the study. The theory is essential in providing the relationships of the variables through relevant coefficients.

The study investigated Factors Affecting Effectiveness of Engineering and Telecommunication Procurement Process in the Case of Engineering Corporation of Oromia. This was on a five (5) point Likert scale (where 1= strongly disagree (SD), 2= Disagree(D), 3= Neutral(N), 4= Agree(A) and 5= Strongly agree(SA)).

4.4.1. Procurement planning and Effectiveness of E & T Procurement Process at the ECO

This section sought to investigate the extent at which Engineering Corporation of Oromia had adopted procurement planning practices. The practices under study were Plan based on approved budget, Poor planning leads to budget deficits, Level of Effectiveness and Efficiency of Procurement planning, need identification done on all procured goods and services, Department specifies when to utilize the goods and service, Preparation of delivery schedule is strictly done Market capability analysis is carried out, need assessment is carried out before undertaking procurement activities of Engineering Corporation of Oromia in terms of procurement planning.

Descriptive Statistics

	N	Frequency					Mean	Std. Deviation
		SD	D	N	A	SA		
Plan based on approved budget	42	-	2	14	19	7	3.7381	.79815
Poor planning leads to budget deficits	42	-	4	6	15	17	4.0714	.97262
Level of Effectiveness and Efficiency of Procurement planning	42	-	2	9	22	9	3.9048	.79048

Need identification done on all procured goods and services	42	-	1	12	12	17	4.0714	.89423
Department specifies when to utilize the goods and service	42	-	3	9	15	15	4.0000	.93704
Preparation of delivery schedule is strictly done	42	-	2	5	12	8	3.6905	1.21952
Market capability analysis is carried out	42	-	-	5	16	21	4.3810	.69677
Need assessment is carried out before undertaking procurement activities	42	-	1	10	8	23	4.2619	.91223
Valid N (listwise)	42							

Table 4.3: Descriptive Statistics on procurement planning

Source: Own Survey,2021

The findings of the study as indicated on table 4.3.1 the mean values range between 3.6905 to 4.3810. From the table majority were in agreement with the statements that the procurement plan is based on approved budgets (mean 3.7381), poor procurement planning leads to big budget deficits (mean 4.0714), Level of Effectiveness and Efficiency of Procurement planning (mean 3.9048), Need identification done on all procured goods and services(mean 4.0714), Department specifies when to utilize the goods and service (mean 4.0000), Preparation of delivery schedule is strictly done(mean 3.6905), Market capability analysis is carried out(mean 4.3810), Need assessment is carried out before undertaking procurement activities (mean 4.2619).

The respondent agreed that Plan based on approved budget done in the Engineering Corporation of Oromia to a mean 3.7381, they further agreed that need assessment is carried out before undertaking procurement activities in the Engineering Corporation of Oromia agreed to a mean of 4. 2619.The respondent also agreed that preparation of delivery schedules is strictly done to a mean of 3.6905. This is line with Kenard (2006) argument that a good procurement plan should identify the items required to be procured by defining the process of acquiring those items and by doing proper delivery schedules. Level of effectiveness and efficiency of procurement planning at the

corporation was agreed to a mean of 3.9048 and performance of corporation in terms of Department specifies when to utilize the goods and service had a mean of 4.0000. the respondents also agreed that), poor procurement planning leads to big budget deficits (mean 4.0714). This agrees with Mullins (2003) findings that there is a positive relation between procurement planning and service delivery.

4.4.2. Professionalism and Effectiveness of E & T Procurement Process at the ECO

Professionalism was measured using seven indicators that is level of professionalism of procurement staff at the Engineering Corporation of Oromia, adequate training of procurement staff has been done, impact of procurement staff experience on performance of corporation, necessity of staff capacity building, procurement staff have the necessary tools and equipment to execute their duties and effectiveness and efficiency of professionalism of procurement staff on corporation performance, Staff have knowledge on procurement rules and regulations. Table 4.3.2 indicates the results as follows

Descriptive Statistics

	N	Frequency					Mean	Std. Deviation
		SD	D	N	A	SA		
Professionalism of procurement staff at the Engineering Corporation of Oromia	423	-	1	5	18	18	3.7381	.79815
Adequate training of procurement staff is carried out	42	-	6	13	17	6	4.0714	.97262
Experience of procurement	42	-	3	12	17	10	3.9048	.79048
Staff have necessary tools and equipment's	42	-	4	12	13	13	4.0714	.89423

Staff have knowledge on procurement rules and regulations	42	-	-	7	19	16	4.0000	.93704
Effectiveness and efficiency of professionalism of procurement staff on service delivery	42	-	7	15	9	11	3.6905	1.21952
Valid N (listwise)	42							

Table 4.4: Descriptive Statistics on Professionalism

Source: Own Survey,2021

The findings of the study as indicated on table 4.3.2 the mean values range between 3.5476 to 4.2619. From the table majority were in agreement with the statements that the Engineering and Telecommunicating procurement process of professionalism of procurement staff at the Engineering Corporation of Oromia (mean 4.2619), adequate training of procurement staff has been done(mean 3.5476), impact of procurement staff experience on performance of corporation (mean 3.8095), necessity of staff capacity building (mean 4.2143) procurement staff have the necessary tools and equipment to execute their duties(mean 4.5000, Staff have knowledge on procurement rules and regulations (mean 3.8095), effectiveness and efficiency of professionalism of procurement staff on corporation procurement performance (mean 3.5714).

The respondents were asked to indicate their level of agreement on the statements on professionalism. The results indicated that procurement staff at the Engineering Corporation of Oromia displays high level of professionalism to a mean of 4.2619, and standard deviation of .76699 and no more variation between respondents. Adequate training of procurement staff has been carried out in the Engineering Corporation of Oromia was slightly agreed to a of mean 3.5476, experience of procurement staff have impact on performance of Engineering Corporation of Oromia was agreed to a of mean of 3.8095. Procurement staff have necessary tools and equipment's to execute their mandate was indicated by a mean of 4.2143), and standard deviation of .71689 which shows that most of the respondent agreed to the statement and the variation was low. The results indicated that procurement staff at the Engineering Corporation of Oromia Staff have knowledge on procurement rules and regulations by a mean of 3.8095 and furthermore the results indicated that majority of the respondents agreed that professionalism of procurement staff

is effective in enhancing efficient and effective service delivery to a mean of 3.5714. Furthermore, the respondents agreed to a large extent that professionalism influence performance of Engineering and Telecommunication procurement process at the Engineering Corporation of Oromia

4.4.3. Financial Management and Effectiveness of E&T Procurement Process at the ECO

The aspect of financial management was measured using six metrics: Timely receipts of funds affect procurement function, Budgetary allocation for various projects is done effectively, Budget approval, Mismanagement of funds, Accountability plays crucial role and Availability of adequate resources affect the performance. *Table 4.3.3 indicates* the results as follows

Descriptive Statistics								
	N	Frequency					Mean	Std. Deviation
		SD	D	N	A	SA		
Budgetary allocation for various projects is done effectively	42	-	1	7	18	16	3.7381	.79815
Budget approval	42	-	1	9	13	19	4.0714	.97262
Staff capacity building	42	-	8	12	15	7	3.9048	.79048
Mismanagement of funds	42	-	-	7	16	19	4.0714	.89423
Accountability in management of funds plays crucial role	42	-	10	12	13	7	4.0000	.93704
Availability of adequate resources affect the performance	42	-	4	10	13	15	3.6905	1.21952
Valid N (listwise)	42							

Table 4.5: Descriptive Statistics on Financial Management

Source: Own Survey,2021

The findings indicated that majority of the respondents agree that budgetary allocation is done effectively for various projects at the Engineering Corporation of Oromia to a of 4.1667, and staff capacity building is necessary to a mean 3.5000. Mismanagement of funds had impacted on the performance ECO with a mean of 4.2619 and standard deviation of .74197 which shows that most of the respondent agreed to the statement and the variation was low. Furthermore, the respondent agreed that accountability plays crucial role in the management of funds allocated to procured goods and services with a mean of 3.4048 and finally they agreed that availability of adequate resources affect the performance of corporation to a mean of 3.9286.

4.4.4. Tendering and Effectiveness of E&T Procurement Process at the ECO

The respondents were asked to give their opinions on how they agreed with the statement under tendering in the Engineering Corporation of Oromia, All the legal process of tendering duly followed, Award of tenders is transparent and fair, Access of information with regard to tenders, Supplier selection is critical in tendering process, Integrity is upholding during tendering and Tendering process at the ECO level is effective in enhancing performance. The results were as distributed in table 4.3.4 below.

Descriptive Statistics

	N	Frequency					Mean	Std. Deviation
		SD	D	N	A	SA		
All the legal process of tendering duly followed	42	-	7	15	17	3	3.7381	.79815
Award of tenders is transparent and fair	42	3	14	12	11	2	4.0714	.97262
Access of information with regard to tenders	42	-	4	9	14	15	3.9048	.79048
Supplier selection is critical in tendering process	42	1	14	10	12	5	4.0714	.89423
Integrity is upholding during tendering	42	-	8	9	9	16	4.0000	.93704

Tendering process at the ECO level is effective in enhancing performance	42	1	3	14	13	11	3.6905	1.21952
Valid N (listwise)	42							

Table 4.6: Descriptive Statistics on Tendering

The findings indicate that all the respondents agreed that all the legal process of tendering was duly followed at the corporation level and is effective to a mean 3.3810. According to the data collected Award of tenders is slightly transparent and fair to a mean 2.8810. Furthermore, the respondents were asked to indicate the extent to which they agree with the fact that access of information with regard to tenders is effective and efficient and they moderately agree to a of mean 3.9524. The respondent also agreed that supplier selection is critical in tendering process to a mean of 3.0952. They slightly agreed that integrity is upheld during tendering process to mean of 3.7857. On the other hand, the respondents strongly agreed that tendering process at the corporation level is effective on enhancing the performance of the corporation to mean of 3.7143. However, majority disagreed that the award of tenders was transparent and fair.

4.4.5. Decision Making & Processing Speed and Effectiveness of E&T Procurement Process at the ECO

The aspect of decision making and processing speed was measured using six indicators that identifies the level of the processing speed and taking decision in the procurement process. Those indicators are Delays were found in the document processing, decision making and delivery of materials, Timely processing technical and non-technical evaluation, delaying payment process, Timely Finance evaluation processing and Effectiveness and efficiency of processing speed and taking decision in the procurement process and role of procurement staff on service delivery. The results were as distributed in table 4.3.5 below.

Descriptive Statistics

	N	Frequency					Mean	Std. Deviation
		SD	D	N	A	SA		
Delays were found in the document processing	42	-	1	10	12	19	3.7381	.79815

Decision making and delivery of materials	42	1	15	12	11	3	4.0714	.97262
Timely processing technical and non-technical evaluation	42	-	4	11	23	4	3.9048	.79048
Delaying payment process	42	-	5	8	11	18	4.0714	.89423
Timely Finance evaluation processing	42	-	3	11	11	17	4.0000	.93704
Effectiveness and efficiency of processing speed and taking decision in the procurement process and role of procurement staff on service delivery	42	-	5	8	13	16	3.6905	1.21952
Valid N (listwise)	42							

Table 4.7: Descriptive Statistics on decision making and processing speed

Source: Own Survey,2021

The findings of the study as indicated on table 4.3.5 the mean values range between 3.0000 to 4.1667. From the table is not majority were in agreement with the statements of decision making and processing speed was measured using six indicators of Engineering and Telecommuting equipment procurement process in the Engineering Corporation of Oromia. Delays were found in the document processing (mean 4.1667), Decision making and delivery of materials (mean 3.0000), Timely processing technical and non-technical evaluation (mean 3.6429), Delaying payment process (mean 4.0000), Timely Finance evaluation processing (mean 4.0000) and Effectiveness and efficiency of processing speed and taking decision in the procurement process and role of procurement staff on service delivery (mean 3.9524)

-

The results indicated that procurement processing and decision making at the Engineering Corporation of Oromia displays moderate level of delays were found in the document processing to a mean of 4.1667, and is there the impact of delaying payment process to a mean of 4.0000 and standard deviation of 1.05922 which shows that most of the respondent agreed to the statement and the variation was high. The results indicated that decision making and delivery of materials

and timely processing technical and non-technical evaluation delayed and not delivered timely and affect the procurement process to a mean of 4.0000 and 3.6429.

The findings show that timely Finance evaluation processing making at the Engineering Corporation of Oromia slightly agreed to a mean 4.0000 and furthermore the results indicated that they medium extend agreed on Effectiveness and efficiency of processing speed and taking decision in the procurement process and role of procurement staff on service delivery to a mean 3.9524.

4.4.6. Supplier Relationship Management and Effectiveness of E&T Procurement Process at the ECO

Supplier Relationship Management Supplier relationship management is the practice of planning, evaluating, and managing your interactions and connections with third-party vendors. Supplier relationship management was measured using six indicators. Delays were found in the document processing, decision making and delivery of materials, Timely processing technical and non-technical evaluation, delaying payment process, Timely Finance evaluation processing and Effectiveness and efficiency of processing speed and taking decision in the procurement process and role of procurement staff on service delivery. The results were as distributed in table 4.3.6 below.

Descriptive Statistics

	N	Frequency					Mean	Std. Deviation
		SD	D	N	A	SA		
Coordination and cooperation between buyers and suppliers	42	-	4	10	10	18	3.7381	.79815
Take strategic approaches to purchasing	42	1	9	13	17	2	4.0714	.97262
Product depends upon their component	42	1	11	11	14	5	3.9048	.79048
Supply chain strategy	42	-	2	10	14	16	4.0714	.89423

RM and supplier performance management	42	-	1	8	16	17	4.0000	.93704
Detailed agreements make relationships with the supplier easier	42	-	13	11	16	1	3.6905	1.21952
Valid N (listwise)	42							

Table 4.8: Descriptive Statistics on Supplier Relationship Management

Source: Own Survey,2021

The overall mean of the need identification can be approximated to **3.5** which indicates an agreement within elements of the need assessment. The result show that Coordination and cooperation between buyers and suppliers to a mean of 4.0000 indicates that the majority of respondents agreed that goods coordination and cooperation between supplier and buyers (corporation) and at mean 3.2381 respondents agree that poor taking strategic approaches to purchasing is there. The result of the finding shows slightly use of product depending upon their component which is indicated by the mean value of 3.2619. The above table also indicated the statement and use of supply chain strategy and respondents agree 4.0476. the result show that RM and supplier performance management well done by the mean value of 3.2619 and majority of the respondents agreed that detailed agreements make relationships with the supplier easier to a mean of 3.0714.

4.4.7. Effectiveness of E&T Procurement Process at the ECO

The study sought to determine how the following statements are influence effectiveness of Engineering and Telecommunication equipment procurement process. The respondents were asked to give their opinions on how they agreed with the Effectiveness of E&T Procurement Process in the Engineering Corporation of Oromia. Timely deliveries, Minimal complaints from customers, Enhanced quality services, Wastages and damages have reduced, Cost reduction are indicators of the effective Engineering and Telecommunication procurement process. The results were as distributed in table 4.3.7 below.

Descriptive Statistics

	N	Frequency					Mean	Std. Deviation
		SD	D	N	A	SA		
Timely deliveries	42	-	1	7	15	19	3.7381	.79815
Minimal complaints from customers	42	-	-	9	17	16	4.0714	.97262
Enhanced quality services	42	-	-	7	13	22	3.9048	.79048
Wastages and damages have reduced	42	-	-	12	12	18	4.0714	.89423
Cost reduction	42	-	-	5	17	20	4.0000	.93704
Valid N (listwise)	42							

Table 4.9: Effectiveness of E&T Procurement Process at the ECO

Source: Own Survey, 2021

Majority were also in agreement with the statements that the organization offers timely deliveries of requisitions (mean 4.2381), there are minimal complaints from customers on procurement matters (mean 4.1667), organization offers enhanced quality service (mean 4.3571), wastages and damages have reduced (mean 4.1429), cost reduction (mean 4.3571).

4.4.8. Regression Analysis

4.4.8.1. Analysis of Variance (ANOVA)

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	Supplier Relationship Management, Financial Management, Procurement Planning, Professionalism, Tendering, Decision Making ^b		. Enter

a. Dependent Variable: Effectiveness of E and T Procurement Process of ECO

b. All requested variables entered.

Table 4.10: Variables Entered

Source: Own Survey,2021

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.564 ^a	.318	.201	.31842

a. Predictors: (Constant), Supplier Relationship Management, Financial Management, Procurement Planning, Professionalism, Tendering, Decision Making

Table 4.11: Model Summary

Source: Own Survey,2021

The regression analysis is helping in understand the relationship between Supplier relationship management, financial management, procurement planning, tendering, decision making and effectiveness of E & T procurement process of ECO.in this case the R shows that the variable are 56% predicting the effectiveness of E & T procurement process.

The R Square limited to the minimum value should be greater than 0.30 or 30%. In this case, it is 32% suit is indicating that it is good model and it is appropriate for further analyses. In this case it shows the regression is explained around 32% effectiveness of procurement process with help of independent variable like Supplier Relationship Management, Financial Management, Procurement Planning, Professionalism, Tendering and Decision Making. The implication of low R square 32% indicate that there is variance in the dependent that is effectiveness of procurement process that is bought by Supplier Relationship Management, Financial Management, Procurement Planning, Professionalism, Tendering and Decision Making and the rest of 68% explained by another variable.

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.656	6	.276	2.722	.028 ^b
	Residual	3.549	35	.101		
	Total	5.205	41			

a. Dependent Variable: Effectiveness of E and T Procurement Process of ECO

b. Predictors: (Constant), Supplier Relationship Management, Financial Management, Procurement Planning, Professionalism, Tendering, Decision Making

Table 4.12: Anova

Source: Own Survey,2021

The anova table 4.4.3 is shows that significance value is 0.024 which is less than 0.05 thus the model is statistically significance and explaining the variance that is brought in Effectiveness of E and T Procurement Process with the help of Supplier Relationship Management, Financial Management, Procurement Planning, Professionalism, Tendering and Decision Making at $1.656/5.205=.564$. The significance below 0.05 that is showing that the model is a good fit for explaining the relationship that is present among the variables.

4.4.9. Testing Assumption of Multiple Regression model

The researcher conducted a multiple regression analysis as shown in Table 4.4.4 so as to determine the relationship between Effective Procurement process and the six variables investigated in this study.

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Effectiveness of E and T Procurement Process of ECO	.208	42	.000	.939	42	.026

a. Lilliefors Significance Correction

Table 4.13: Tests of Normality

Source: Own Survey,2021

We have right here, out degree of freedom and statistical significance is below 0.05. so that means our test for normality and violated.

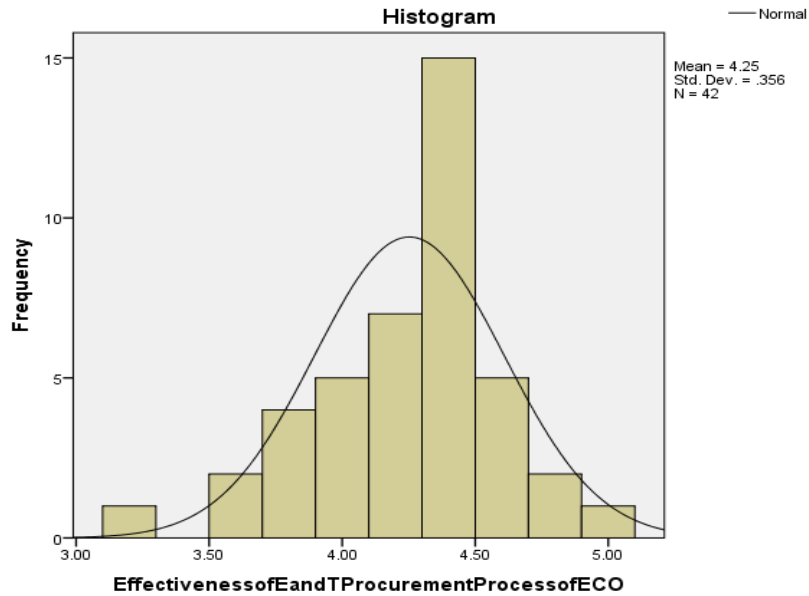


Figure 4.1: linier relationship
Source: Own Survey,2021

Above chart indicated to help us ensure that the data is normally distributed, some of the plots check for normality whereas other test the assumption that there is a linier relationship between the dependent and independent variable s

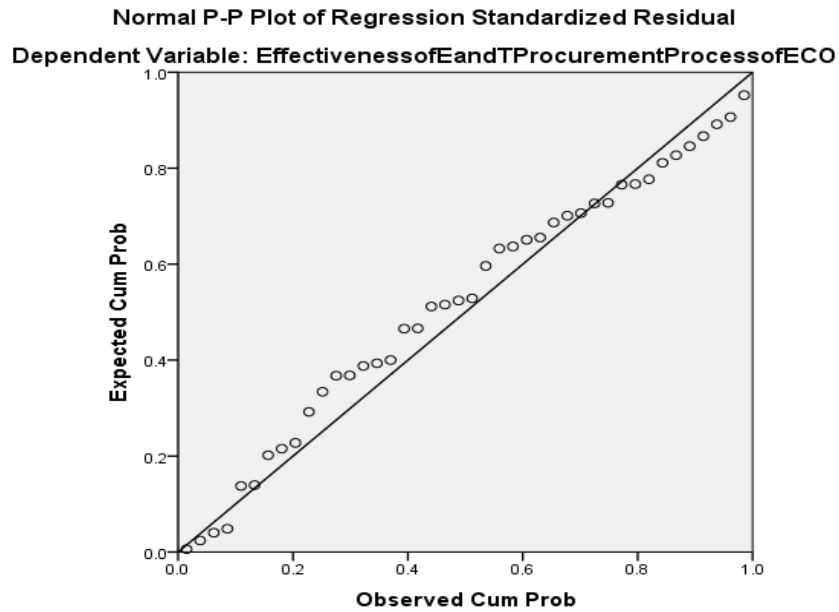


Figure 4.2: Linearity of Variable Distribution
Source: Own Survey,2021

This analysis also produces several charts and plots which help us ensure that the data is normally distributed, based on above figure 4.4.2 some of the plots check for normality whereas others test the assumption that there is a linear relationship between the dependent and independent variables. All there is a chose cluster around the line suggesting that the assumption of normality has been met.

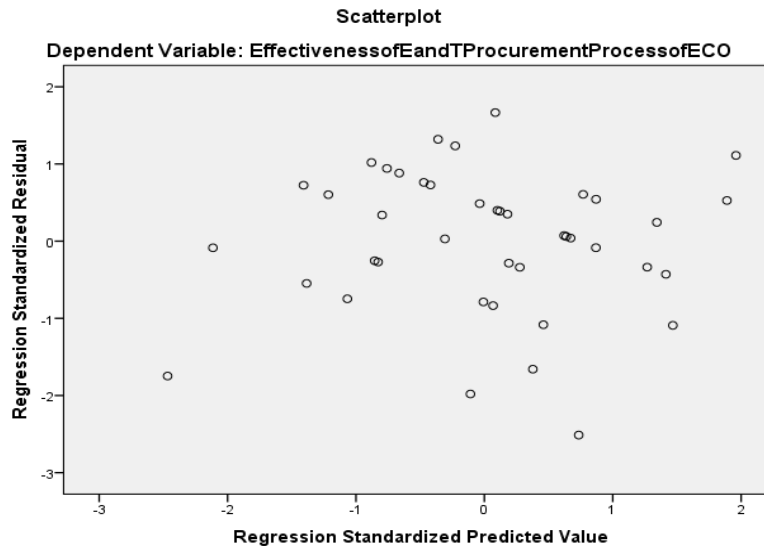


Figure 4.3: Homoscedasticity Test

Source: Own Survey, 2021

Scatter plot of the above charts shows that the assumption of homoscedasticity expected met.

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.506	1.294		3.482	.001
	Procurement Planning	.214	.147	.212	1.459	.153
	Professionalism	.112	.157	.100	.710	.482
	Financial Management	.169	.147	.378	2.520	.016
	Tendering	.229	.146	.225	.570	.125
	Decision Making	.069	.167	.065	.415	.481
	Supplier Relationship Management	.119	.148	.120	.805	.426

a. Dependent Variable: Effectiveness of E and T Procurement Process of ECO

Table 4.14: Multiple regression Coefficients

Source: Own Survey, 2021

From the coefficient findings provided, it is clear that financial management has a major effect on the effective procurement process as it gave a coefficient value of 0.169, ($t = 2.520$) and a p – value of 0.016. This implies that 1 unit increase in level of financial management results in 0.169 increases in effectiveness of procurement process of the Engineering Corporation of Oroma. This in line with Samwel (2009) conclusions that open and efficient procurement ensures equal and fair competition among suppliers resulting in effective use of limited public resources and thus contributing to the welfare of the nations.

From the coefficient findings provided, it is clear that procurement planning has a major effect on the effectiveness of procurement process as it gave a coefficient value of 0.214, ($t = 1.459$) and a p – value of 0.153. This implies that a 1 unit increase in procurement planning results in 0.214 increase in independent variable which is effectiveness of procurement process of the Engineering Corporation of Oroma. This is in line with Mullins (2003) findings that proper procurement planning positively influence performance in both public and private organizations. Kavuva and Ngugi (2014) further noted that proper procurement planning contributes to effective and efficient procurement process in the ECO. Tendering indicated a significant level of 0.125, ($t = 0.570$) and a p – value of 0.125 which implies that a 1-unit improvement in tendering process results in 0. 229 increases in performance of Engineering and Telecommunication procurement process.

Similarly, the table indicates that professionalism and Effective E and T procurement process, moderate and statistically significantly related at 0.112 ($t = 0.710$) and a p significance level of 0.482. This implies that a 1 unit increase in the level of professionalism increases Effectiveness of E and T procurement process by 0.112. This agrees with (Collins, 2009) conclusions that organization that manages procurement appropriately results in superior financial performance accrued from avoiding the cost of unethical procurement practitioners. This is also in line with This agrees with (Kiage, 2013) findings that training procurement staffs is critical as it improves procurement practitioner’s skills and knowledge thus improved procurement performance and that experience cannot also be ignored as it leads to efficiency and effectiveness of procurement performance. Decision Making and Supplier Relationship Management indicated a weak significant level of 0.069 ($t = 0.570$) and a p – value of 0.481 which implies that a 1-unit improvement in tendering increase Effectiveness of E and T procurement process by 0.069. and 1-

unit improvement in Supplier Relationship Management Increase Effectiveness of E and T procurement process by 0.119.

$$Y = 4.506 + 0.24X_1 + 0.112X_2 + 0.169X_3 + 0.229X_4 + 0.069X_5 + 0.119X_6$$

Where:

Y – Effective E and T Procurement Process of ECO

B0 - Constant

X1 - Procurement planning

X2 - Professionalism

X3 - Financial management

X4 – Tendering

X5 - Decision Making

X6 - Supplier Relationship Management.

The information showing that the Supplier Relationship Management, Financial Management, Procurement Planning, Professionalism, Tendering and Decision Making has great impact on Effectiveness of E and T Procurement Process.

4.5. Challenges of existing procurement process and procedure in conducting procurement process

This study used primary and secondary data. Close ended Questionnaires were used to collect data since it is straightforward and less time consuming for both the researcher and the respondents. Data collected was organized, processed and analyzed using Statistical Package for Social Science (SPSS) Version 21. Data was analyzed quantitatively using descriptive statistics such as mean and standard deviation.

4.5.1. Bureaucracy

Bureaucracy is one of the mentioned problems in the procurement process at the Engineering Corporation of Oromia. This was Reported by all respondents (100 percent). The result showed that 18 respondents representing 42.9% strongly agreed, 13 respondents representing 31.0% agreed that bureaucracy affects procurement performance and management performance since it creates unnecessary difficulties especially when documents need to be signed for further process. In addition, 4 respondents represent 9.5 disagree. This is shown in Table 4.2.2 below

Bureaucracy

		Frequency	Percent	Valid Percent	Cumulative Percent	Mean	Std. Deviation
Valid	Disagree	4	9.5	9.5	9.5		
	Neutral	7	16.7	16.7	26.2		
	Agree	13	31.0	31.0	57.1		
	Strongly Agree	18	42.9	42.9	100.0		
Total		42	100.0	100.0		4.0714	.99738

Table 4.15: bureaucracy

Source: Own Survey,2021

The result showed that to a mean 4.0714 the respondent agreed to Bureaucracy is one of the mentioned problems in the procurement process at the Engineering Corporation of Oromia and most Challenges of existing procurement process and procedure in conducting procurement process to a mean 4.63. This is shown in Table 4.2.2.1 below.

4.5.2. Lack of proper knowledge, skills and capacity

Adequate capacity in the form of appropriate structures with fully skilled and professional procurement personnel is a factors affection effectiveness procurement process implementation. However, in the case of Engineering Corporation of Oromia, the majority of respondents representing 38.1% Strong agree that the lack of proper knowledge, skills and capacity was found to be a problem. while some of the respondents, 15 representing 35.7 agree that the lack of proper knowledge, skills and capacity was found to be a problem, in addition 16.7 neutral and while about 9.5% disagree. Majority of the respondents was said that their lack of profession skills in tender and evaluation. For this reason, tender processing has been sometimes ineffectively implemented. This is shown in Table 4.2.3 below.

Lack of proper knowledge, skills and capacity

		Frequency	Percent	Valid Percent	Cumulative Percent	Mean	Std. Deviation
Valid	Disagree	4	9.5	9.5	9.5		
	Neutral	7	16.7	16.7	26.2		
	Agree	15	35.7	35.7	61.9		

	Strongly Agree	16	38.1	38.1	100.0		
	Total	42	100.0	100.0		4.0238	.97501

Table 4.16: Lack of proper knowledge, skills and capacity

Source: Own Survey,2021

The respondents were asked to indicate their level of agreement on the statements on proper knowledge, skills and capacity. The results indicated that procurement staff at the Engineering Corporation of Oromia displays low level of knowledge, skills and capacity according to bellow table to a mean of 4.0238, and standard deviation of 0.97501 and not adequate training of procurement staff has been carried out in the Engineering Corporation of Oromia. This is shown in Table 4.2.3.1 below.

4.5.3. Procurement Staff shortage

In the case of quotation method as applied at Engineering Corporation of Oromia, it was found that 42.9 percent of the respondent's response neutral. And while 11 respondents representing 26.2 agree and 8 respondents represent 19.0 strongly Agree said the three is Procurement Staff shortage in the corporation. While 14 respondents representing 16.7 disagree and 1 respond strongly disagree. About 4 respondents said that there is no procurement staff shortage. majority of the respondents are agreed on the procurement staff shortage. This is shown in Table 4.2.4 below.

Procurement Staff shortage

		Frequency	Percent	Valid Percent	Cumulative Percent	Mean	Std. Deviation
Valid	Strongly Disagree	1	2.4	2.4	2.4		
	Disagree	4	9.5	9.5	11.9		
	Neutral	18	42.9	42.9	54.8		
	Agree	11	26.2	26.2	81.0		
	Strongly Agree	8	19.0	19.0	100.0		
Total		42	100.0	100.0		3.5000	.99388

*Table 4.17: Procurement staff shortage
Source: Own Survey,2021*

4.5.4. Poor Specifications

Next the researcher, sought to find out the degree of Poor Specifications. From the study it was found that from 42 respondents, 17 representing 40.5 percent of the respondents Strongly agreed and from 42 respondents, 11 representing 26.2 percent of the respondents agreed that the procurement process has reduced lead time at the It was reported also there is a problem of poor specification of materials or documents in the Engineering Corporation of Oromia. Contradictions have been occurring in this process. In addition, 10 respondents neutral and while 4 respondents mean 2 disagree and 2 strongly disagree representing 4.8 presents and 4.8 present. Majority of the respondent say poor specifications were named as causing difficulties in determining right documents and materials. Moreover, it was learned that due to poor specifications, there is loss occurrence because of purchasing or supplying unrelated materials. For instance, the supply of poor-quality material or unrelated materials, cost the period of time. This is shown in Table 4.2.5 below.

Poor Specifications

		Frequency	Percent	Valid Percent	Cumulative Percent	Mean	Std. Deviation
Valid	Strongly Disagree	2	4.8	4.8	4.8		
	Disagree	2	4.8	4.8	9.5		
	Neutral	10	23.8	23.8	33.3		
	Agree	11	26.2	26.2	59.5		
	Strongly Agree	17	40.5	40.5	100.0		
Total		42	100.0	100.0		3.9286	1.13466

*Table 4.18: Poor Specifications
Source: Own Survey,2021*

The respondents were asked to indicate their level of agreement on the statements of prepared poor specification. The results indicated that procurement staff at the Engineering Corporation of

Oromia displays poor Specification according to bellow table to a mean of 3.9286, and standard deviation of 1.13466.

Poor Specification have impact on performance of procurement process at the Engineering Corporation of Oromia was agreed to a of mean of 4.60. The findings indicated that majority of the respondents agree that timely poor specification affect procurement function at the ECO to a mean of 4.60.

4.5.5. Delay in Payments

The study also determined the nature of the problem of delay was named as most paining one. Delays were found in the document processing, decision making and delivery of materials. It was learned that most of the time delays occurs only because of being busy for other activities. However, decision making was the most factor causing procurement process delays rather than other factors. Moreover, sometimes work load and inadequate personnel have been leading to the delays. From the 42 respondents, 9 (21.4%) strongly agree and 8(19.0%) agree of the respondent said delay was named as most paining one. But majority of the respondents represents 40.5 percent neutral. However, 6 (14.3%) disagree and 2(4.8%) strongly disagree of the respondents said there is no payment delay during procurement process. This is shown in Table 4.2.6 below.

Delay in Payments

		Frequency	Percent	Valid Percent	Cumulative Percent	Mean	Std. Deviation
Valid	Strongly Disagree	2	4.8	4.8	4.8		
	Disagree	6	14.3	14.3	19.0		
	Neutral	17	40.5	40.5	59.5		
	Agree	8	19.0	19.0	78.6		
	Strongly Agree	9	21.4	21.4	100.0		
Total		42	100.0	100.0		3.3810	1.12515

Table 4.19: Delay in Payments

Source: Own Survey,2021

The findings indicate that all the respondents agreed that Delays were found in the document processing, decision making and delivery of materials. It was learned that most of the time delays occurs only because of being busy for other activities to a mean 3.3810.

4.5.6. Taking Too Long to Take Decision

The majority of respondents said the Decision making has been high a problem in a procurement process effectiveness at Engineering Corporation of Oromia based on data were collected. Generally,19 respondents representing 45.2 per cent, and 16 respondent’s 38.1 percent indicated that senior officers have a tendency of making late decisions on account of having many procurement activities within a short period of time. Because they are very occupied therefore, they cannot read and make timely decisions as required. However, based on collected data 6 respondents representing 14.3 per cent, and 1 respondent’s 2.4 percent indicated although some of these senior officers can delegate such duties to their subordinates and effects of all these are not more poor performance of procurement process. This is shown in Table 4.2.7 and Figure 4.2.3 below.

Taking Too Long to Take Decision

		Frequency	Percent	Valid Percent	Cumulative Percent	Mean	Std. Deviation
	Disagree	1	2.4	2.4	2.4		
	Neutral	6	14.3	14.3	16.7		
	Agree	16	38.1	38.1	54.8		
		19	45.2	45.2	100.0		
	Total	42	100.0	100.0		4.2619	.79185

Table 4.20: Taking Too Long to Take Decision

Source: Own Survey,2021

The results indicated that taking too long to take decision at the Engineering Corporation of Oromia displays high a problem in a procurement process effectiveness according to bellow table to a mean of 4.2619, and standard deviation of 0.79815.

4.5.7. Non-compliance with policies and regulations

Compliance with Procurement policies and regulations was also found to be a problem at the Engineering Corporation of Oromia, some of the practices relating to non-compliance with rules and procedure. The results show that the procurement process is Non-compliance with policies and regulations as reported by total agreement on the point 59.6 percent of the respondents said the process affect by non-compliance with policies and regulation. The tendency not to utilize a competitive process for both quotations and bids, and incorrect utilization of the preference points system, use of unqualified suppliers, passing over of bids for incorrect reasons; utilization of the incorrect procurement process in respect of the thresholds; extensions of validity periods; and incorrect utilization of the limited bidding process were observed. However, 14 respondent’s representing 33.3 percent neutral and while total disagreement is 3 respondents’ representing 7.2. This is shown in Table 4.2.8 below.

		Frequency	Percent	Valid Percent	Cumulative Percent	Mean	Std. Deviation
Valid	Strongly Disagree	2	4.8	4.8	4.8		
	Disagree	1	2.4	2.4	7.1		
	Neutral	14	33.3	33.3	40.5		
	Agree	13	31.0	31.0	71.4		
	Strongly Agree	12	28.6	28.6	100.0		
Total		42	100.0	100.0		3.7619	1.05483s

Table 4.21: Non-compliance with policies and regulations

Source: Own Survey,2021

4.5.8. Improper planning and linking demand to the budget

According to the data collected 13 respondents representing 31.0 percent agree that there is a problem of improper planning and linking demand to budget at Engineering Corporation of Oromia and while 12 respondents' representing 28.6 are neutral however 10 respondents representing 23.8 percent disagree and 9.5 percent of respondents strongly disagree and said there is no challenging with planning and linking demand to the budget at Engineering Corporation of Oromia. This is shown in Table 4.2.9 below

Non-compliance with policies and regulations

		Frequency	Percent	Valid Percent	Cumulative Percent	Mean	Std. Deviation
Valid	Strongly Disagree	4	9.5	9.5	9.5		
	Disagree	10	23.8	23.8	33.3		
	Neutral	12	28.6	28.6	61.9		
	Agree	13	31.0	31.0	92.9		
	Strongly Agree	3	7.1	7.1	100.0		
Total		42	100.0	100.0		4.2619	.79815

Table 4.22: Improper planning and linking demand to the budget

Source: Own Survey,2021

The respondents were asked to indicate their level of agreement on the statements of Improper planning and linking demand to the budget. The results indicated that Improper planning and linking demand to the budget at the Engineering Corporation of Oromia displays moderate planning and linking demand to the budget according to bellow table to a mean of 4.2619 and standard deviation of 0.79815.

4.5.9. Unstable Working environment

The study aimed at determining the Factors Affecting effectiveness of engineering and telecommunication procurement process as Engineering Corporation of Oromia. Based on collected data 19 respondents representing 45.2 percent disagree and 12 respondent's representing 26.6 percent strongly disagree indicated although the suitable working environment extremely could not be directly affecting the job satisfaction of the employee and indirectly affect the

performance and quality of procurement process. Because recently rebranding and innovation of Working environment the corporation well finished and organized and there is no change when compared the effectiveness of procurement process beside working environment before rebranding and after. However, 3 respondents' representing 7.1 percent agree to unstable work environment has affect the performance and quality of procurement process at the Engineering Corporation of Oromia. And also 8 respondents' representing 19.0 percent are neutral This is shown in Table 4.2.10 below.

Non-compliance with policies and regulations

		Frequency	Percent	Valid Percent	Cumulative Percent	Mean	Std. Deviation
Valid	Strongly Disagree	12	28.6	28.6	12		
	Disagree	19	45.2	45.2	19		
	Neutral	8	19.0	19.0	8		
	Agree	3	7.1	7.1	3		
	Strongly Agree	42	100.0	100.0	42		
Total		12	28.6	28.6	12	2.0476	.88214

Table 4.22: Unstable Working environment

The findings indicate that all the respondents generally disagree that unstable working environment cannot affect the procurement process to a mean 2.0476 and standard deviation of 0.88214.

4.6. Discussions

These discussions of the findings which have been reported in chapter four. It tries to make linkage of different matters as presented before. But the discussion is based on the objectives of the study.

4.6.1. Effective Engineering and Telecommunication Procurement Process

The study wanted to understand the procurement process effectiveness. The purpose of the study examining the factors affecting effectiveness engineering and telecommunication of procurement

process and its effectiveness was to discover the real situation at the Engineering Corporation of Oromia, whether the procurement process is properly conducted. Several issues have been examined and their results presented in chapter four.

It was found that some of the difficulties appear in the form of decision making, compliance of procurement procedures, inadequate and untimely presentation of information and inadequate knowledge on procurement activities. All these issues have been affecting the procurement process especially during tender preparation and evaluation. There are difficulties in evaluating the submitted tender documents as per criteria. This is due to technical documents presented where by some employees lack such knowledge to determine proper and qualified documents.

4.6.2. Factors Affecting Effectiveness of Engineering and Telecommunication Procurement Process

The study aimed at determining Factors Affecting Effectiveness of Engineering and Telecommunication Procurement Process and how effective it was. the respondents weighed the performance of these methods based on the archiving quality materials or services and the management of Corporation budgets. The findings shows that financial management is very important and key to the procurement effectiveness. it is clear that financial management has a major effect on the effective procurement process as it gave a coefficient value of 0.169, ($t = 2.520$) and a p – value of 0. 016.. Together with information and personnel, decision making is the area of importance.

4.6.3. Problems facing the procurement process at Engineering Corporation of Oromia.

Some of the listed procurement difficulties involve; preparation of tender documents and evaluation, bureaucracy, there are many such as poor specifications, delays in procurement process, inadequate knowledge in procurement processing, procurement takes long time, and payments are not done at right time. The sustainability of Procurement Act No.3 2004 is at risk because there is not a clear understanding as to its full potential as a financial and budgetary control mechanism. The risk is increased due to stated problems, for instance bureaucracy has undermined the procurement process where as commitment to the managing it has been low.

The result of the interview showed that, most of the procurement request is not accompanied with specification and when it does, it is unclear and ambiguous creating problem like, less competition because potential suppliers may choose not to submit offers, a commodity that does not meet

expectations create additional costs due to subsequent changes made to the specification, poor relationships between the supplier, end user, and others involved parties on the procurement process of the organization. In order to prevent this problem, some government bodies have formed a committee comprised of professionals from the requesting department and conduct the purchase process together, but this in turn has created additional wastage of resource.

The suppliers who responded on this issue stated that they don't receive clear specifications of the required goods from government bodies and that after winning a certain bid, there is often serious dispute over the quality and delayed delivery causing them additional costs. As stated in literature review Shaw, (2010) in order to be able to purchase the right goods or services, the specifications of what the organization needs must be clear. These specifications are used to communicate to the supplier what is needed and what should be supplied. It is, therefore, important to have clear, precise and accurate specifications

The purpose of identifying and selecting an appropriate procurement method is to find the best way to obtain the result to satisfy the needs of the end user for goods, works and services by obtaining the most advantageous pricing and contractual conditions According to the survey results, there is some gap to justify when using procurement methods other than the preferred methods permitted by the government.

The survey results showed that inadequate planning and lack of linkage of demand to the budget were challenges of procurement in the selected corporation. The procurement analyst interviewed noted that a procurement that is not planned properly causes challenges in the procurement process. Most of the responses of the auditors showed that the main finding during conducting procurement audit is procuring more than what has been planned. Moreover, noncompliance with policies and regulations and unethical behavior were also challenges for sound procurement effectiveness.

CHAPTER FIVE

SUMMARY CONCLUSION AND RECOMMENDATIONS

Introduction

This last chapter of the thesis work will have four main sections. First, summary of the major findings will be presented. Then the conclusion derived from the findings will be offered followed by recommendations made based on the conclusions. And finally, recommendation for further studies will be provided.

5.1. Summary of findings

The overall objective of the study was to Factors Affecting Effectiveness of Engineering and Telecommunication Procurement Process in the Case of Engineering Corporation of Oromia. Specifically, to examine the factors affecting effectiveness of procurement process at Engineering Corporation of Oromia, to identify the best procuring method at the ECO and to identify the problem facing the procurement management unit and procurement department at Engineering Corporation of Oromia. The objective of the study was first identified Challenges of existing procurement process and procedure in conducting procurement process and second aimed at determining Factors Affecting Effectiveness of Engineering and Telecommunication Procurement Process as conducted at Engineering Corporation of Oromia. Bureaucracy is one of the mentioned problems in the procurement process at the Engineering Corporation of Oromia. This was Reported by all respondents (100 percent). The result showed that 18 respondents representing 42.9% strongly agreed, 13 respondents representing 31.0% agreed that bureaucracy affects procurement performance and management performance since it creates unnecessary difficulties especially when documents need to be signed for further process.

Adequate capacity in the form of appropriate structures with fully skilled and professional procurement personnel is factors affect effectiveness of procurement process implementation. Majority of the respondents was said that their lack of profession skills in tender and evaluation. From the study it was found that from 42 respondents, 17 representing 40.5 percent of the respondents Strong agreed and from 42 respondents, 11 representing 26.2 percent of the respondents agreed that the procurement process has reduced lead time at the It was reported also there is a problem of poor specification of materials. The study also determined the nature of the

problem of delay was named as most paining one. Delays were found in the document processing, decision making and delivery of materials. From the 42 respondents, 9 (21.4%) strongly agree and 8(19.0%) agree of the respondent said delay was named as most paining one.

Decision making has been high a problem in a procurement process effectiveness at Engineering Corporation of Oromia based on data were collected. Generally, 19 respondents representing 45.2 per cent, and 16 respondent's 38.1 percent indicated that senior officers have a tendency of making late decisions Improper planning and linking demand to budget at Engineering Corporation of Oromia, Compliance with Procurement policies and regulations was main Challenges of existing procurement process and procedure in conducting procurement process.

The second objective of the study was to determine Factors Affecting Effectiveness of Engineering and Telecommunication Procurement Process in the Case of Engineering Corporation of Oromia.

Good procurement plan should identify the items required to be procured by defining the process of acquiring those items and by doing proper delivery schedules. Level of effectiveness and efficiency of procurement planning at the corporation was agreed to a mean of 3.9048 and performance of corporation in terms of department specifies when to utilize the goods and service had a mean of 4.0000. The respondents were asked to indicate their level of agreement on the statements on professionalism. Professionalism has more impact on effectiveness of procurement process but the results indicated that procurement staff at the Engineering Corporation of Oromia displays high level of professionalism.

Relationship Management is a key on the performance ECO and standard deviation which most of the respondent agreed to the statement and the variation was low. Furthermore, the respondent agreed that accountability plays crucial role in the relationship management.

The study sought to determine how the following statements are influence effectiveness of Engineering and Telecommunication equipment procurement process. The relationship between Supplier relationship management, financial management, procurement planning, tendering, decision making and effectiveness of E & T procurement process of ECO. In this case the R shows that the variable is 56% predicting the effectiveness of E & T procurement process. The information showing that the Supplier Relationship Management, Financial Management, Procurement Planning, Professionalism, Tendering and Decision Making are Factors Affecting effectiveness of E and T Procurement Process.

5.2. Conclusion

The chapter outlined the objectives and the research questions that were proposed and answered by the evidence gathered through the data collected and analyzed. The findings significantly, sought to determine how the following statements are influence effectiveness of Engineering and Telecommunication equipment procurement process. The relationship between Supplier relationship management, financial management, procurement planning, tendering, decision making and effectiveness of E & T procurement process of ECO. Challenges of existing procurement process and procedure in conducting procurement process are identified. The performance of procurement becomes low because of unnecessary delays which then affect the implementation of other activities. Specifications were named as causing difficulties in determining right documents and materials. 38.1 percent indicated that senior officers have a tendency of making late decisions on account of having many procurement activities within a short period of time. 26.6 percent strongly disagree indicated although the suitable working environment extremely could not be directly affecting the job satisfaction of the employee and indirectly affect the performance and quality of procurement process. The study sought to determine how the following statements are influence effectiveness of Engineering and Telecommunication equipment procurement process. The respondents were asked to give their opinions on how they agreed with the Effectiveness of E&T Procurement Process in the Engineering Corporation of Oromia. The significance values for Supplier Relationship Management, Financial Management, Procurement Planning, Professionalism, Tendering and Decision Making are below 0.05. The information showing that the Supplier Relationship Management, Financial Management, Procurement Planning, Professionalism, Tendering and Decision Making has great impact on Effectiveness of E and T Procurement Process.

5.3. Recommendation

There are a number of issues that could be considered in order to enhance procurement process in Engineering Corporation of Oromia. The researcher has addressed the following recommendations in order to improve the situation: -

➤ **Proper procurement planning**

In relation to procurement planning the study recommends that thorough needs assessment should be undertaken, market capability analysis should be carried out, user departments should clearly specify when they require to utilize required goods and services, planning should take into account all purchases, Corporation should place order before exhaustion and that the accounting officer ensures funds availability before proceedings begin Having regards to staff competence the study recommends that procurement staff in the Engineering Corporation of Oromia firms needs to have adequate professional qualifications in procurement and be adequately on the procurement procedures

➤ **Transparent and accountable systems**

Without transparent and accountable systems, the vast resources channeled through procurement systems run the danger of being entangled with increased corruption and misuse of funds. To fight the scourge of maladministration, mismanagement of finances, fraud and corruption, government needs to strengthen and review existing internal control systems to detect deficiencies.

➤ **Training to procurement staffs and Tender**

The Corporation should ensure that workers especially in Tender professional are well trained by taking key persons to further training to increase their knowledge and competencies on procurement process in general. Also, Tender professional members who are selected from heads of various departments should attend short courses and seminars in order to know their responsibilities in tender process and procurement in general. Against this background, it is evident that the corporation procurement practitioners require specific knowledge about the procurement objective, policy, preference procurement policies and so forth in order to manage the procurement process effectively. Specialized training programmers are therefore required to equip actors with the skills to achieve procurement objectives. Key issues such as employment of qualified procurement practitioners, training and employment of learnership programmes, development of an effective monitoring and evaluation tool, and the creation of incentive programmes to motivate good performance should be employed. In addition, institutions of higher learning and other service providers should equip learners and practitioners with appropriate skills and knowledge through the development of a syllabus that ensures sustainable procurement in Ethiopia.

➤ **Compliance with policies and regulations**

Procurement process is guided by a number of related policies and regulations. It is very important for the procurement staffs to comply with the policies and regulations in order to enhance the whole process of procurement. Effective policy-making requires information on whether governments are doing things right and whether they achieve the results intended. Strong monitoring and evaluation systems provide the means to compile and integrate this valuable information into the policy cycle, thus providing the basis for sound governance and accountable public policies.

Supply chain Management

Building and maintaining great supplier relationships is a must if you want to stay competitive in retail. Having healthy relationships with these vendors helps ensure that your shelves are healthily stocked with great products that bring delight to corporation clients.

In this post, we'll be exploring how you can create and cultivate strong relationships with your suppliers. From finding the right vendors to crafting mutually-beneficial agreements with them, the pointers below should give you some ideas that you can apply in your supplier management processes.

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APPENDIX

SURVEY QUESTIONNAIRE

ST. MARY’S UNIVERSITY

SCHOOL OF GRADUATE STUDIES

Department of Project Management

Dear survey participant,

This survey is aimed at understanding Factors Affecting Effectiveness of Engineering and Telecommunication Procurement Process in the Case of Engineering Corporation of Oromia. In meeting this objective, you have been duly selected as a member of the sample to provide relevant and objective data needed to satisfy the quest for this knowledge. This questionnaire will take approximately 15 minutes to be completed. Your answers will be treated in strict confidence and used for academic purpose only.

Part I: Demographic Information

Please respond to the following statements by ticking \surd one answer from each question that applies to your circumstances.

(a) Sex: Male , Female

(b) Age: 18 – 25yrs , 26 – 33yrs , 34 – 41yrs , 42 yrs. and above

(c) Educational level: High School , Diploma , Degree , Master’s Degree , Ph.D.

Other, please specify.....

(d) Which division you are Working in?

Human Resource Management Directorate , Finance and Procurement Administration Directorate , Research, training and Laboratory Service , Technical Division , Planning, Project Management and ICT Service Directorate

(e) Which division you are Department in?

Human Resource Management Directorate , Human Resource Development and Personal , Transport and General Service , Finance Administration , Procurement and Property Administration , Planning and Project Management , Marketing and Promotion , ICT and Documentation , Irrigation and Energy Works Division , Water Resource and Supply Works , Transport, Building and Urban Planning Research , training and Laboratory Service

(f) Experience level 0-2 , 2-4 , 4-6 , 6-8 , 8-12 , 13 and above

Part II: General Questions

Please respond to the following items by selecting the appropriate response suitable for you.

1. Do you participate in the procurement processing?

- Yes
- No

2. Are you experiencing difficulties in ECO Procurement Processing?

- Yes
- No

If yes, what are they?

.....
.....

3. In your opinion, what is the process for Engineering and Telecommunicating procurement?

.....
.....

4. To what extent is the procurement process is cost effective.

- High
- Moderate
- Low

5. In your opinion which departments are involved in Network Equipment procurement process?

.....
.....

6. Procurement process has reduced lead time. Agree or disagree.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

7. Can you mention the budget spent approximately in the last three years on Engineering and Telecommunication Equipment?

.....

8. What do you think is the best method of procuring among the two?

- (i) Tender
- (ii) Quotation

Part III: Issue related to Study area

1) What the Level of current Procurement Process Effectiveness

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

A) Challenges of existing procurement process and procedure in conducting procurement process

Bureaucracy?

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

Lack of proper knowledge, skills and capacity

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

Procurement Staff shortage

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

Poor Specifications

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

Delay in Payments

- Strongly Disagree
- Disagree
- Neutral
- Agree

Taking Too Long to Take Decision

- Strongly Disagree
- Disagree
- Neutral
- Agree

Strongly Agree

Strongly Agree

Non-compliance with policies and regulations

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

Improper planning and linking demand to the budget

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

Unstable Working environment

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

B) Strategic and Factors Affecting effectiveness of Engineering and Telecommunication procurement process

1) Procurement planning and Effectiveness of E & T Procurement Process of ECO

2) Procurement planning and Effectiveness of E & T Procurement Process of ECO

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
	1	2	3	4	5
Plan based on approved budget					
Poor planning leads to budget deficits					
Level of Effectiveness and Efficiency of Procurement planning					
Need identification done on all procured goods and services					
Department specifies when to utilize the goods and service					

Preparation of delivery schedule is strictly done					
Market capability analysis is carried out					
Need assessment is carried out before undertaking procurement activities					

3) Professionalism and Effectiveness of E & T Procurement Process of ECO

2) Professionalism and Effectiveness of E & T Procurement Process of ECO					
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
	1	2	3	4	5
Professionalism of procurement staff at the Engineering Corporation of Oromia					
Adequate training of procurement staff is carried out					
Experience of procurement					
Staff have necessary tools and equipment's					
Staff have knowledge on procurement rules and regulations					
Effectiveness and efficiency of professionalism of procurement staff on service delivery					

3) Financial Management and Effectiveness of E&T Procurement Process of ECO

3) Financial Management and Effectiveness of E&T Procurement Process of ECO					
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
	1	2	3	4	5
Budgetary allocation for various projects is done effectively					
Budget approval					

Staff capacity building					
Mismanagement of funds					
Accountability in management of funds plays crucial role					
Availability of adequate resources affect the performance					

4) Tendering and Effectiveness of E&T Procurement Process of ECO

4) Tendering and Effectiveness of E&T Procurement Process of ECO					
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
	1	2	3	4	5
All the legal process of tendering duly followed					
Award of tenders is transparent and fair					
Access of information with regard to tenders					
Supplier selection is critical in tendering process					
Integrity is upholding during tendering					
Tendering process at the ECO level is effective in enhancing performance					

5) Decision Making & Processing Speed and Effectiveness of E&T Procurement Process of ECO

5) Decision Making & Processing Speed and Effectiveness of E&T Procurement Process of ECO					
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
	1	2	3	4	5
Delays were found in the document processing					
Decision making and delivery of materials					
Timely processing technical and non-technical evaluation					
Delaying payment process					

Timely Finance evaluation processing					
Effectiveness and efficiency of processing speed and taking decision in the procurement process and role of procurement staff on service delivery					

6) Supplier Relationship Management and Effectiveness of E&T Procurement Process of ECO

6) Supplier Relationship Management and Effectiveness of E&T Procurement Process of ECO					
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
	1	2	3	4	5
Coordination and cooperation between buyers and suppliers					
Take strategic approaches to purchasing					
Product depends upon their component					
Supply chain strategy					
RM and supplier performance management					
Detailed agreements make relationships with the supplier easier					

7) Effectiveness of E&T Procurement Process of ECO

7) Effectiveness of E&T Procurement Process of ECO					
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
	1	2	3	4	5
Timely deliveries					
Minimal complaints from customers					

Enhanced quality services					
Wastages and damages have reduced					
Cost reduction					