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Effect of Procurement Planning on Organizational Performance in the Case of Ethiopian Grade One Building Contractors (BC1)

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A thesis submitted to the School of Commerce of Addis Ababa University in partial fulfillment of the requirements for the Degree of Master of Logistics and Supply Chain Management.

DECLARATION

This research project ‘’**Effect of Procurement Planning on OrganizationalPerformance in the Case of Ethiopian Grade One Building Contractors (BC1)**’’ is my original work and has not been published or presented for a degree in any other university.

Researcher: EsayasGemechu

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Date…….....

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Signature…….....**..**

Date…….....**..**

ADDIS ABABA UNIVERSITY
SCHOOL OF COMMERCE

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ACRNOMYS

ADB: Africa Development Bank

BC: Building contractor

BC1: Grade One Building Contractor

EC: Ethiopian Calander

EOQ: Economic Order Quantity

GC: Gregorian Calendar

GIGO: Garbage-In, Garbage-Out

ISO: International Organization for Standardization

IT: Information Technology

KIWASCO: Kisumu Water and Sewerage Company Limited

KPI: Key Performance Indicator

MoUDH: Ministry of Urban Development and Housing

OLS:Ordinary Least Squares

PP: Procurement Plan

SMART: Specific, Measurable, Achievable, Relevant and Time-Bound

UN: United Nations

UNDP: United Nations Development Program

VIF: Variance Inflating factor

ABSTRACT

Procurement planning is one key functions of procurement. It has a huge potential to untapped strategic importance of procurement function to the organizational performance. At the same time, procurement planning is the most neglected area of procurement activity. The study was carried out to investigate the effect of procurement planning on the organizational performance of BC1 contractors in Ethiopia. In order to analysis the effect of planning on performance five predictor variables of procurement planning identified, these are completeness of procurement planning, time horizon for procurement planning, efficiency of procurement planning, flexibility of procurement planning and commitment of procurement planning. Both descriptive research, causal research design were used. Data were collected from respondents through questionnaire and analyzed using descriptive and inferential statistics with the help of SPSS software.In addition, close-ended questions were administered to collect data from respondents. Accordingly, questionnaires were distributed to respondents from the target population; and the responses were 83%. According to the findings, out of the five independent variables three, time horizon of procurement panning, efficiency of procurement planning and commitment of procurement panning have significant effect on the organizational performance of BC1 contractors. Moreover, more than 70% of the respondents have strongly agreed that procurement planning affects BC1 contractors organizational performance in large extent. Further, it was identified that most BC1 contractors have no organized procurement department and formally prepared procurement manual when requested for review. Hence, the study recommended that BC1 contractors should increase execution commitment of in procurement planning, develop effective procurement time horizon at least for 1 year and adopting efficient procurement planning system .

Key Words: Procurement, procurement planning, performance, organizational performance and BC1 Contractors.

CHAPTER ONE

INTRODUCTION

1.1. Background of the Study

One of the founding fathers of the United States of America, Benjamin Franklin a polymath once said ‘’If you fail to plan, you are planning to fail’’. UNDP’S handbook, on planning, monitoring and evaluating for development results (2009) stated that there is strong evidence that having a plan leads to greater effectiveness and efficiency. Not having a plan-whether for a function, project or company is in some ways similar to attempting to build a house without a blueprint. That is to say, it is very difficult to know what the house will look like, how much it will cost, how long it will take to build, what resources will be required, and whether the finished product will satisfy the owner’s needs or not. In short, planning helps to define what an organization or project aims to achieve and how it will go about it.

Planning has been considered the primary management function as it sets the stage for all aspects of management. It is the first step of every managerial activity. Plunkett and Attner (1983) reinforced the idea by stating that planning is the primary and key management function. Stoner and Freeman (1989) have given the support to the idea by stating that individuals and organizations both needs to plan. Planning is not restricted to a manager, certain functions or fields. It is a foundation to all managerial functions. Organizing, staffing, coordinating, directing and controlling should occur after planning. Rao (2000) stated that planning is foundation to all management functions. Kreitner (1992) also adds that it is difficult to organize, staff and control man, material, machine, money and market without effective planning. In order to prepare effective plan one must know the most important matters of planning.

Procurement is one the function of business. It is increasingly becoming vital to the operation of most companies. Dobler and Burt (1984) emphasized that the introduction of better machines and scientific methods made possible to increase production and reduce labor cost after 1955. Subsequently, this increase of production has increased the demand for materials and this impacted an increase in cost of material. Moreover, increasingly companies are moving towards specialization, and mainly focusing on their core activity and procuring other relevant goods and

service to their activity from other companies. In order to procure these relevant inputs from the market effectively and efficiently procurement and procurement planning is becoming more and more important. Dobler, Lee and Burt (1984) further elaborates it by saying that it seems spending money is easily, but planning enables procurement to spend the money of the company in an optimum manner.

Chepkoech (2013) also added procurement planning is seen to be important and even more so in large and complex multi-year and/or multi–million dollar requirement, where people will change overtime or requirements will evolve and risk and uncertainty increases. Gopalalkrishana (1990) strengthen these more by saying effective procurement and company performance cannot be visualized without sensible of effective planning. Procurement planning aims to motivating people and serves as an effective performance control device. Doblerand Burt (1996) agrees with Gopalakrishan by stating that procurement planning stands at the heart of procurement operation without it all of our effort would be opportunities to contribute to the company profitability.

In order to properly manage and control the performance of the business, procurement planning is becoming more and more compulsory. Basheka (2015) also supported the importance of procurement planning by stating that companies and government needs adequate procurement planning before start spending their money. Further, Onyango (2012) stated sound procurement planning leads to better valve of money, high quality goods and service delivery.

Antheneh (2015) in his assessment of procurement planning and implementation effectiveness in Ethiopia found out failing to get with plan or working with unsound plan is major problems to accomplish organizational mission and objective in due time.

Construction in Ethiopia

Construction is booming industry in Ethiopia. Ethiopian construction industry is on one the fastest growing sector in the country and in East Africa region. According to Ministry of Finance and Economic cooperation,construction industry has shown an annual growth of 12.21% on average from 2002 – 2007 EC. It has been fueled by a swell in infrastructure investment in the country. Its importance emanates largely from the direct and indirect impact on all economic activities. It contributes to the national output and stimulates the growth of other sectors through a complex system of linkages.

According to BMI research (2015) as cited in. Ethiopia has double the amount of infrastructure project investments with USD 20 billion worth of projects in pipeline, it was also reported that the construction sector had an output of USD 3.2 billion in 2016.

Asteway (2008) reported that in Ethiopia, construction constituted in Ethiopia 3.8% - 5% of the GDP between the years 2001 to 2005. Ethiopian government had allocated an average of 58.2% of its annual capital budget for public construction projects between 1996/97 and 2001/02. By this fact the Ethiopian building construction sector, which is most vibrant in the economy, relatively well developed and most of the operational inputs (consumables, tools, equipment and service) are not adequately locally available, seems that there is problem of getting right quality of material, at right time, with right price due to internal and external factors. The challenges in relation to the customs clearance, logistics and market conditions are also contributing factors to make procurement and procurement planning very puzzling. Therefore, the purpose of this study is to investigate the effect of procurement planning on performance of BC1 contractors in Ethiopia.

According to UN (1996) International Standards Industrial Classification (ISIC), Rev. 4, construction is defined generally as an economic activity directed to the creation, renovation, repair or extension of fixed assets in the form of buildings, land improvements of an engineering nature, and other such engineering constructions as roads, bridges, dams, etc. In the case of Ethiopia, the Ethiopian Building Proclamation No. 624/2009 defines construction as means a provisions of combination of goods and services carried out under or over ground for the development, extension, installation, repair, maintenance, renewal, renovation, alteration, excavation, dismantling or demolition of a fixed asset including building and engineering infrastructure.

As per Ministry of Urban Development and Housing (MoUDH) there are 5263 registered contractors in 2010 E.C in Ethiopia. The contractors are categorized under different categories and grades. These different categories of contractors are classified as the following: (a) Building (b) Road (c) Railway (d) Power (e) Water and (f) Other sub-sectors for specialized contractors. Each of the categories performs and participates in different types of construction sectors as per their speciation and capacity.

Procurement Planning is cited as one of the important management tool to mitigate the problems and improve the performance of construction sector. Onyango (2012) concluded in his study that procurement planning has a potential to contribute to the success of operation and improve performance. And also the same type of conclusion was cited in Ogwang and Waweru (2017). They identified a positive correlation between procurement planning and company performance.

1.2 Statement of the Problem

Dobler, Lee and Burt (1984) stated that procurement is gradually becoming a fundamental activity of business. It is responsible for spending more than 50% of companies' total revenue. More money is spent for the purchase of goods and service than labor cost, tax or any other cost combined. Dobler, Lee and Burt (1984) also added that ever money saved in procurement is equivalent to a money of profit. This puts procurement as key area of business that can play vital role in organization performance and profitability. Beside the profit impact of procurement, it has a multi effect on firms' performance. It helps companies to have uninterrupted flow of operation, quality assurance in each purchase, effective delivery time, identifying better sources of supply and developing good relationship with suppliers.

Moreover, Leerders, et al. (1989) stated that procurement helps companies to produce the right quality products and services. The same idea also confirmed by Basheka (2015) by stating the GIGO terminology which means if low quality product or service purchased as an input of the organization, the output of the organization goods and service will be low quality. In short it will be garbage-in, garbage-out if the procurement function is not performing properly.

Procurement planning is one key functions of procurement. It has a huge potential to untapped strategic importance of procurement to the organizational performance. Proper implementation of procurement plan will provide competitive advantage and profitability to the organization. Chepkoech (2013) and Basheka (2015) stated that procurement planning is one of the primary functions of procurement with a potential to contribute to the success of organization and improved service delivery. It also coordinates and integrates action to fulfill a need for goods, services or works in a timely manner and at a reasonable cost. It avoids last minute, emergency or ill-planned procurement. Moreover, procurement planning is necessary for better company

performance which in turn leads to better service delivery by ensuring efficient acquisition of resources for organizational performance.

Furthermore, in order to properly handle the challenges in most cases procurement function is not in proactive mode. It is usually in reactive mode. As Gopalakrishan (1990) perfectly conveyed it by stating that planning is the most neglected area of procurement activity. He further, stated that it is a major weakness of supply chain function of most developing countries. Baily, et al. (2015) also confirmed this problem by quoting from an experienced buyer who admitted "we spent our lives firefighting" The problem seems critical in the industries where material and service procurement cost is the major portion of operating expense. Antheneh (2015) furthermore, stated that spending money without plan is an indication that the organization has been going contrary to achieving value of money. Willy and Njeru (2014) in their findings they pointed out that one of the major setbacks in procurement is poor planning which includes unrealistic budget, inadequate skills of the staff and lack of adherence to procurement plans. Also Onyango (2012) said that poor procurement planning has been one of the major stumbling blocks to the economic development of Africa and it has been clear that a number of African countries have not paid adequate attention to the proper management of resources.

Brahim, *et al*. (2014) also supported this idea by saying that there is no good cooperation between procurement function, user departments, management and other departments in preparation and implementation of procurement plan in developing countries. User departments do not know what procurement planning is, how it is important to the organization, and they also think it is only the responsibility of procurement department. The same planning problem was also admitted and underlined by the director from Public Procurement & Property Administration Agency of Ethiopiaduring a panel discussion on procurement organized by Ethiopian Broadcasting Corporation in September, 2016.

Planning sited as one main factor that affects the performance of construction industry in Ethiopia. Asteway (2008) and Shambel and Patel (2018) pointed out poor estimation and financial planning are one of major challenges of the construction industry performance. Tadesse, Dakhli and Lafhaj (2016) also stated that poor planning and coordination are the main reasons for project failure in developing countries like Ethiopia.

In addition, there is a gap among literature materials as to which best method of procurement planning that can give a one window solution. The same idea is confirmed by Onyango (2012) despite its importance very limited scientific research has been done to examine the extent to which efforts in procurement planning can contribute to effective procurement and companies' performance. Ogwang and Waweru (2017) and Onyango (2012) also added that there are very few empirical studies that have attempted to address the link between procurement planning and performance.

Even if, it was difficult to get similar studies in Ethiopia, a number of studies related to procurement planning have been conducted in Africa and around the world. Kennedy and Kiarie (2015)Concludes that procurement practices influences organization performance. They added that it has a great impact on organizational performance. Onyango (2014) further concludedthat there was a significant statistical relationship betweenprocurement planning and organizational performance. Moreover, Ogwang(2017)also concluded thatprocurement requirements were of significant importance to organizational performance. All of these studies mainly have identified the existence of positive relation between procurement planning, procurement and organizational performance. Despite the number of studies have been made in Africa, the topic of procurement planning has been largely ignored in Ethiopia. This research was able to identify one study performed by Anteneh (2013) about the assessment of procurement plan implementation practice. Therefore, this study is intended to bridge this knowledge gap.

1.3Objectives of the Study

1.3.1General Objectives

The general objective of the study is to examine the effect of procurement planning on performance of BC1 contractors of Ethiopia.

1.3.2 Specific Objectives

The specific objectives of the study are:

- To examine the effect of completeness of procurement planning on performance of BC1 contractors of Ethiopia.
- To examine the effect of time horizon of procurement planning on performance of BC1 contractors of Ethiopia.

- To examine the effect of efficient of procurement planning on performance of BC1 contractors of Ethiopia.
- To examine the effect of procurement planning flexibility on performance of BC1 contractors of Ethiopia.
- To examine the effect of procurement planning commitment on company performance of BC1 contractors of Ethiopia.

1.4 Hypotheses of the Study

Hypothesis is a statement of tentative supposition or a possible solution to a problem based on experience or judgment or documentary evidence Creswell (2009). Accordingly the following are the hypothesis of the study:

H_1: Thecommitment procurement planning has significant effect on BC1company performance.

H_2: The time horizon of procurement planning has significant effect on BC1 company performance.

H_3: Theefficiency of procurement planning has significant effect on BC1 company performance.

H_4: The flexibility procurement planning has significant effect on BC1 company performance.

H_5: The completeness of procurement planning has significant effect on BC1 company performance.

1.5 Significance of the Study

It is believed that the findings of this study will provide important knowledge about the effect of procurement planning on company performance specific to the building construction sector of Ethiopia. This study will promote workable procurement planning elements like, elements of effective procurement planning and barriers of effective procurement planning in the building construction sector of Ethiopia. It is also hoped that this study may serve others involved in similar endeavor will be benefited from this study. Further, it will try to investigate the effect of completeness of planning; time horizon of planning; flexibility and commitment of planning and efficiency of planning on company performance. The findings may also provide a useful

reference document to stakeholders in BC1 contractors in their endeavor to formulate procurement plan to meet performance requirements.

Therefore, this study is expected to contribute specific to building construction sector and in general to procurement professionals by enlightening how procurement planning affects the performance of BC1 contractors and proposing recommendations which are compatible with building construction sector in order to improve the their competitiveness. Moreover, it could be saved as reference material for other researchers.

1.6 Scope of the Study

The study mainly focuses on the effect of procurement planning on company performance in the building construction sector of Ethiopia registered under Ministry of Urban Development and Construction at Federal level. The study mainly focused on five important elements of procurement planning: completeness of planning, time horizon of planning, efficiency of planning, flexibility of planning and commitment of planning. The study gives emphasis to both strategic and operational plans. Even if there are different categories and grades of contractors, the study mainly focus on grade one (BC1) building contractors. Moreover, the study is cross-sectional study focused in 2018 GC.

1.7 Limitation of the Study

The study has the following limitations: the research was limited to BC1construction companies due to lack of time and money. Secondly, the study literature review was affected by lack of adequate related literatures. Thirdly, it was challenging to collect questionnaire from construction companies due to location, time and interest on the study. The data were cross-sectional; therefore causal linkage among variables may not be firmly established. Longitudinal data would be needed in order to prove that causal relationship exists and control far time large effects. Fourthly, due to the inherit limitation of the selected research methodology. i.e. Sample method and data collection method and measure used to collect the data.

1.8 Operational Definition of Terms and Concepts

Construction: Construction is provisions of combination of goods and services carried out under or over ground for the development, extension, installation, repair, maintenance, renewal,

renovation, alteration, excavation, dismantling or demolition of a fixed asset including building and engineering infrastructure. (Ethiopian Building Proclamation No. 624/2009)

Procurement planning: It's the first function of management is to development of a series of plans that establish the framework within which future activities will be conducted. This process involves setting of specific objectives and determining operating polices which guide all activities toward the attainment of these objectives. Then, a group of detailed procedures must be developed to implement each policy. Finally, time schedules and financial budget must be determined to ensure that group of procedures can in fact be carried out (Dobler, Lee and Burt 1984).

Strategic plan: a decision about long-rage goals and the course of action to archive these goals (Plunkett and Attner, 1983)

Operating plan: a plan that focuses on the implementation or ongoing part of a manager's planning responsibilities. Plunkett and (Attner1983)

Performance measurement is the process of collecting, analyzing and/or reporting information regarding the performance of an individual, group, organization, system or component (Kulatunga and Pathirage 2017)

Key performances indictors (KPI) are a measurable value that demonstrates how effectively a company is achieving key business objectives. Organizations use KPIs to evaluate their success at reaching targets (Parmenter2007).

Efficiency: the ability of performing or functioning in the best possible manner with the least utilization of resources, waste of time and effort. In another word it is doing things right. ISO 9000:2015

Effectives: adequate to accomplish a purpose, producing the intended or expected result. In another word it is doingthe rightthing. ISO 9000:2015

1.9 Organization of the Study Report

Chapter one intends to give introductory view to the reader about the subject of the study, problem statement, research question,objectives of study, research hypothesis, conceptualframe work, significant of study, scope of study and definition of terms. The second chapter of the

study comprises the theoretical frame work, which is a compilation of other author's books, journals and articles. This section also includes a review of various empirical studies that have been made on procurement planning and BC 1 contractor's performance.Chapter three provides the research design and methodology part of the study. It maps out the study area, research design, target population, method of data collection and research instruments, reliability test, methods of data analysis and ethical consideration. Chapter four covers data collection analysis,results interpretation and discussion. It also describes the expected results and findings based on data collected. And the research questions shall be answered and Chapter fivecovers the summary of finding, conclusion, recommendation for future research.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter explores literature written by different authors which includes, overview of procurement and procurement planning, principle of planning, the five rights of procurement, elements of procurement planning, empirical literature analysis and conceptual framework.

2.2 Overview of Procurement and Procurement Planning

2.2.1 Overview of Procurement

Procurement deals with the sourcing, negotiation and strategic selection of goods and services that are usually of importance to the organization. It is a process of identifying the right need, purchasing and managing suppliers. The Ethiopian Federal Government Procurement and Property Administration Proclamation No. 649/2009 defines procurement as a process that includes hiring, leasing and outsourcing mean obtaining goods, works, consultancy or other services throughpurchasing, hiring or obtaining by any other contractual means.

Procurement is an umbrella term that includes several core business functions it should be considered a core part of any organization's corporate strategy. Schweiger (2015) also pointed out this by stating that procurement is an important and crucial function in a company. One main cause is the leverage effect of procurement on the operating result with morethan50 percent share of total revenue, the costs for purchased goods and services have a tremendous effect on the bottom line in the main industries. Aligning procurement function with corporate strategy is only one part of the ultimate goal of procurement.

Nair (1990) also presented that the process of purchasing these good and services is known as the Procure-To-Pay Cycle. The entire procurement cycle can be an involved process with numerous steps which includes: need recognition and identification; authorization and approval of Purchase request; supplier investigation and selection; negotiation and contracting; follow-up of suppliers; transportation/delivery of goods or services; receiving and inspection; invoicing and payment; recording and reporting, and supplier relation management.

2.2.2 Overview of Procurement Planning

According to Dobler and Burt (1996) the first function of management is to development of a series of plans that establish the framework within which future activities will be conducted. This process involves setting of specific objectives and determining operating polices which guide all activities toward the attainment of these objectives. Then, a group of detailed procedures must be developed to implement each policy. Finally, time schedules and financial budget must be determined to ensure that group of procedures can in fact be carried out. Every managerial job demands that planning be done before the other functions of management are executed.

Ogwang (2017)defines Procurement Planningas a process of deciding what to buy, when and from what source. During the procurement planning process the procurement method is assigned and the expectations for fulfillment of procurement requirements determined.Moreover, procurement planning is the process of identifying and consolidating requirements and determining the timeframes for their procurement with the aim of having them as and when they are required. A good procurement plan will describe the process in the identification and selection of vendors.

As stated before, planning is the primary function of managerial activity. Giving little consideration for this function will have a great impact on the accomplishment of firms' and department's objectives effectively and efficiently. Gopalakrishnan (1990) explained the linkage between procurement planning and procurement function performance by stating that the lack of proper material planning lads to fragmentation, which can cause over-ordering and under-ordering. Over ordering marked by over investment unproductive use of working capital and high carrying cost. Under-ordering is also characterized by equipment, material and service shortage vital to the operation which can cause unsafe delay and costly interruption of operation.

Planning is an appealing system when applied to procurement. Dobler, Lee and Burt (1984) statedthat procurement planning is the first function of management which is a development of series of plan that establish the framework within which future activities will be conducted. In short procurement planning is the process whereby procurement practitioners and managers sketch out in advance an arrangement which diagram a plan as to what, which, how, when and where purchases are to be conducted in a given period of time Chepkoech (2013).

2.2.3 Benefits of Procurement Planning on Performance

Planning increases the efficiency and effectiveness of organizational performance, facilitates coordination with other departments, provides opportunities for deliberate action, encourages innovation and make change. Dobler, Lee and Burt (1984) confirmed that planning can improve performance by defining what we went to do? Showing where are we in relation to our performance target? Identifying which factors will affect positively or negatively our performance and gives alternative to reach to our performance and gives alternative to reach to our performance level. Plunkett and Attner (1983)as well as Willy and Njeru (2014) pointed out the following benefits of planning: it reduces supplier dependency; enables to appoint reliable and responsive suppliers; it reinforcement transparency and accountability;enhance participation, commitment and fairly allocation of resources. Ogubala and Kiarie (2014) also added that procurement plan helps procurement entities to achieve maximum value for expenditure.However, planning has the limitation that creates rigidity,reduces creativity,requires leadership, time taking, costly, and can be difficult and complicated.

2.2.4 Nature of Planning

Procurement planning and adoption of sound procurement practices lead to consistently better value for money; higher quality project and service delivery; and reduced risks to the agency. Procurement planning involves consulting key stakeholders to define requirements, analyzing how the supply market works, assessing risks and ultimately defining the best procurement strategy to meet the agency's business needs. Stoner and Freeman (1989) stated planning is a forward looking process organized as strategic plan by top managers, as tactical plan by middle management and operational plan at lower level. Planning helps to provide efficient and effective performanceto organizations. However, planning process itself needs to be performed productively. Moreover, Rao and Narayana (2000) marked the main nature of planning as planning is continuous process of managers, plan can be centralized or decentralized, plan is flexible, plan is action oriented, plan ensure consistency and unity of action.

2.3 Five(5) Rights of Procurement

There are five (5) classical objectives of procurement: 1.Right Quality 2. Right Quantity 3.Right Time 4.Right Source 5.Right Price and 6. Right Place.

2.3.1Right Quality

According to Dobler, Lee and Burt (1984) define quality as fitness, merit, and excellence. This is the definition most people have in mind when they think of quality. The right quality is essential first step of good procurement. The right quality results from a perfect balancing of technicaland economic cost. The work required achieving low price and good service goes for nothing if the items purchased cannot perform satisfactory.

Moreover Nair (1990) added that in meeting the right quality, procurement must select items, which have sufficiently quality that fits users' requirements and specifications. The term quality as used in the field of purchasing carries quite a different meaning than the meaning that it usually associated. In common usage, right quality refers to fitness to the purposes.

2.3.2Right Quantity

Materials purchased should be of optimal quantity. As pre Dobler Lee and Burt (1984) the right quantity is the quantity that may be purchased at a time with the minimum total cost and which avoids shortage of materials. Ensuring and maintaining a regular flow of materials for carrying out operation is the vital aim of any purchase organization. Excess purchases should be avoided, it results in overstocking and capital is unnecessarily tied-up and inventory carrying cost goes up.

Economic Order Quantity (EOQ) helps in determining the right quantity of materials to be ordered. According to Gopalakrishnan (1990) EOQ is the order quantity that minimizes the total holding costs and ordering costs. In other words, it represents the optimal quantity of inventory a company should order each time in order to minimize the costs associated with ordering and holding inventory.

2.3.3 Right Price

Gopalalkrishana (1990) also added here that the primary concern of any organization to get an item at the right price. But, right price need not be the lowest price. The price paid should be reasonably low. But, at the same time quality assurance need not be sacrificed by paying low price. Determination of right price is a difficult task. It is the main object of any organization to procure the goods and services at the right price. It is that price which brings the best ultimate value of the money invested in purchasing the goods and services.

According to Dobler Lee and Burt (1984) deciding the right price of a product depends on variety of factors, viz.; quality, delivery time and ultimate life of the material, demand and

supply curve, extent of competition, government restrictions, after sales services, discount offered, and terms of purchase etc. It may be pointed out here that the determination of proper price depends not only on market knowledge but also a clear understanding of the pricing process.

Dobler Lee and Burt (1984) also specified that price analysis and cost analysis can be used to evaluate the rightness of the price paid to vendors. Price analysis defined as the examination of seller's price without examination and evaluation of the separate elements of the cost and profit making up profit. Cost Analysis defines as a review and an evaluation of seller's actual or anticipated cost data using experience, knowledge and judgment.

2.3.4 Right Supplier/Vendor

Dobler Lee and Burt (1984) stated that selecting capable suppliers is oneof the responsibilities procurement managers. If the right supplier is selected, then there is high probability of getting competitive pricing, reliable quality, on-time delivery, good technical service. Other goals of good procurement are more likely to be achieved if only a mediocre supplier were selected. The right source is fundamental component or the major procurement objectives. Basic information about the number and location of potential suppliers, the nature of products, prices charged and forecasts of the economic condition can be acquired if we are to analyze the supply market effectively rather than simply buy from traditional sources which may not be competitive.

Selamawit (2014) also stated that there are problems faced by the purchasing units securing right and permanent source of supply. The first problem is identifying potential source of supply, then selecting the right reliable supplier is also challenging. The most difficult challenge is to secure long-term relationship with the right supplier because of the dynamic nature of the business environment and continuous attempt of businesses to make better profit relationship with the right suppliers might not last long. Hence periodic revision of the status of the relationship and making the necessary amendments in agreements is required.

2.3.5 Right Time

According to Dobler Lee and Burt (1984) stated that the time at which the purchases are to be made is of vital importance. In case of items used regularly, right time means the time when the stock reaches the minimum level. The reorder level of material is fixed for each item under the principle of right time. The delivery of the procured item to the right place at the right time is an

important procurement function. Proper buying enhances production schedules without loading warehouse with excessive inventory and also minimizes the unfavorable effects of price changes.

Further Gopalakrishnan (1990) described that materials should be purchased at the right time so that it may not result in either excess investment in the stocks or may not result in shortage of stocks. Efforts must be made to replenish the materials at a point where they reach the re-order level. The right time factors are the lead time for processing the item, requirement of schedule, and budget consideration. For determining the right time, the procurement manager should have lead time information regarding each material. Lead time is the time that elapses between ordering goods, receiving them, and placing them into use at the point of order.

2.4Principles of Planning

UNDP'S handbook, on planning, monitoring and evaluating for development results (2009) stated that the purpose of planning is to ensure the effective and efficient achievement of organizational objectives. In order to achieve these objectives planning requires systematicapproach and it should spell out in clear terms.

A Planning process will be well-accomplished if some fundamental principles are followed in the process.The following are principlesof planning:

Principle of Contribution: This principle sates that the purpose of planning is to ensure the effective and efficient achievement of corporate objectives, in-fact, and the basic criteria for the formulation of plans are to achieve the ultimate objectives of the company(Koontz and O'Donnell 1968).

Principle of Sound and Consistent Premising: Premises are the assumptions regarding the environmental forces like economic and market conditions, social, political, legal and cultural aspects, competitors' actions, etc. These are prevalent during the period of the implementation of plans (Sharma 2017).Principle of Coordinated Planning: Long and short-range plans should be coordinatedwith one another to form an integrated plan. Implementation of one plan should contribute to all the other plans, this is possible only when all plans are consistent with one another and are viewed as parts of an integrated corporate plan (Rao and Naraya2000)Principle of Efficiency: Cost of planning constitutes human, physical and financial resources for their

formulation and implementation. Minimizing the cost and achieving the efficient utilization of resources shall have to be the aim of the plan(Koontz and O'Donnell 1968).

Principle of Limiting Factors: The limiting factors can be defined by like: the lack of motivated employees, shortage of trained personnel, shortage of capital funds, government policy of price regulation, etc. The company require to monitor all these factors and needing to tackle the same in an efficient way so as to make a smooth way for the achievement of its ultimate objectives (Koontz and O'Donnell 1968).Principle of Acceptance: Plans should be understood and accepted by the employees, since the successful implementation of plans requires the willingness and cooperative efforts from them. Communication also plays a crucial role in gaining the employee understanding and acceptance of the plans by removing their doubts and misunderstanding about the plans.

Principle of Timing: Number of major and minor plans of the organization should be arranged in a systematic manner. The plans should be arranged in a time hierarchy, initiation and completion of those plans should be clearly determined. Principle of Flexibility: Plans are supposed to be flexible to favor the organization to cope-up with the unexpected environments. It is always required to keep in mind that future will be different from actuality. Hence companies, therefore, require preparing contingency plans which may be put into operation in response to the situations. (Koontz and O'Donnell 1968)

Principle of Commitment: Rao and Naraya (2000) stated that a commitment is required to carry-on the plan that is established. Primacy of Planning: according to this principle, the process of planning is the primary function of all the managers. The managers are required to plan all their actions and then they should proceed with other functions. The other functions of the management should be organized in such a way that the objectives decided by planning can be achieved

2.5 Elements of Procurement planning

Elements of procurement planning includes completeness of procurement planning, time horizon of procurement planning, efficiency of procurement planning, flexibility of procurement planning and commitment of procurement planning. Cavinatoand Kauffman (2000) also sated some of the elements objectives, policies, procedure, budget and schedule.

2.5.1Completeness of Procurement Planning

The procurement planning tobe complete procurement managers need to consider types of procurementplanning, components of procurement planning, process of procurement planning and stakeholders of procurement planning.

2.5.1.1Types of Procurement Planning

Procurement plans can be categorized based on time length they are prepared, based on their uses or purposes and based on the scope or breadth of the plan. Similarly Plukeet and Atter (1983) and Rao and Naraya (2000) defined two categories as follows:

Based on use: based on use, plan can be grouped in to two as standing plans and operational plan. Standing plans are plans that can be used again and again as guidelines for example procurement objectives and policies. On the other hand single use plans that are used only for one time;these group includes plans like budget and program.

Based on Breadth: based on breadth plan can be divided in to two i.e. strategic plan and operational plan. Procurement can develop strategic plan that has direct link with the very existence of the company using such as SWOT analysis. And operation plan is a plan concerned with the day to day activity of the department.

2.5.1.2 Components of Procurement Planning

One way of looking planning completeness is, seeing the components of planning. Stoner and Freeman (1989) categorized the elements of planning as strategic plan and operational plan. Strategic plan are designed to meet the broad objectives of the organization to implement the mission and vision of the company. Mission and Vision provides the unique reasons for the firms' existence. The operational plans provide details as to how strategic plan will be accomplished. Operational plans divided in to single use and standing plans. As procurement is mostly operational function by its nature, it will be mostly involved in developing operational plans. Dobler, Lee, and Burt (1984) stated procurement plan involves setting objectives and determining operating policies which guide all the activities towards the attainment of those

objectives. They also underlined procedures must be developed to implement each polices supported by time schedule and financial budget.

To clearly understand the elements of planning lets borrow a diagram from Stoner and Freeman (1989) as shows onFigure 2.1

Procurement objectives: according to Dobler, Lee and Burt (1984) the classical definition of purchasing objectives is to buy materials and services of the right quality, in the right price, from the right source and the right time.

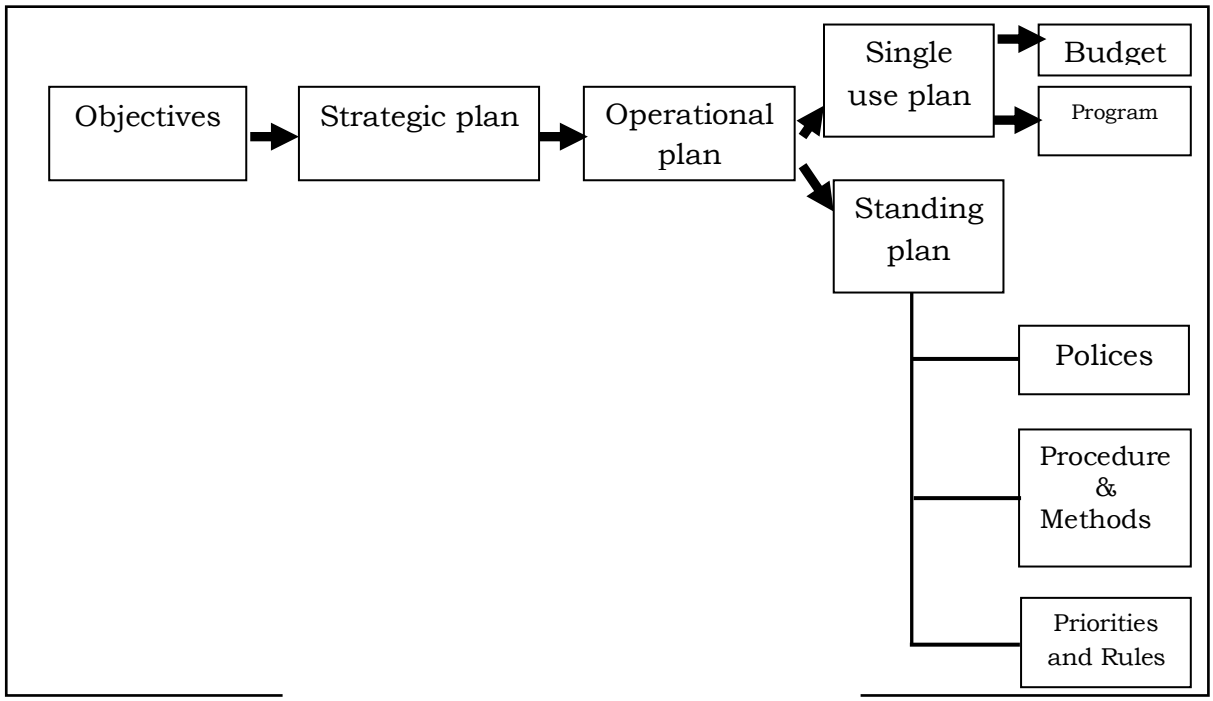
Procurement Strategy:UN procurement Practitioner's Handbook (2006) detailed objectives have been agreed, and using the current status as a basis, a strategy can be developed which outlines how the objectives are going to be achieved. This should include an implementation plan which identifies activities, timeframes and responsible officers.

Procurement Operational plan:as perDobler, Lee and Burt (1984) defined operating plan is somewhat like navigating a sailboat. To reach the desired destination, the specific course must periodically be altered to compensate for gradually changing environment.

Procurement Budget:Moreover, Dobler, Lee and Burt (1984) added that budget has long been recognized as a basic tool in managerial planning and control. Budget is a financial expression of procurement plan.

Procurement policy: It is a statement that describes in very general terms an in term an intended course of action. It is a statement that describes in very general terms an in term an intended course of action. Procurement policies can define purchasing responsibility; policies affecting external relationship; polices concerning ethical practices and buying policies (Firew1996).Procurement Procedure: further described byFirew (1996) after a policy has been formulated to guide departmental action towards a basic objective, operation procedure must be developed to implement the policy. It details the specific action to be taken.

Figure2. 1 Hierarchy of plans



Stoner and Freeman (1989)

2.4.1.3 Process of Procurement Planning

2.5.1.3Process of Procurement Planning

There is a difference between management and procurement scholars in defining the process of operational planning. They use 4-7 steps of planning. Even if the basic elements of planning process are similar, there are some differences in the process. Plunkett and Attner (1983) proposed a seven step operational planning process.On the other hand Icancevich, et al. (1994) proposed a six step operational planning process. Stoner and Freeman (1989 also delivered a four-step operational planning.

Moreover, Dobler, Lee and Burt (1984) the well-knownscholars in procurement management summarize the procurement planning in:

1. Gather and analysis relevant information from internal and external environment.

2. Develop assumption-strategies above the internal and external environment in which the plan is to be carried out.
3. Determining and develop SMART objectives.
4. Develop general guidelinesof decision (polices),procedures, schedules and budgets.
5. Implementation and coordination with plans of other departments.
6. Follow up and report.

2.5.1.4Stakeholders Involvement

Procurement managers should make sure that all important stakeholders in procurement activity invited in the procurement planning process or need to be requested to give to give their input. engineering, operation or production, logistics, finance and accounting and human resources are main stake holders of procurement department. Dobler, Lee and Burt (1984)stated that procurement is the center of a large part of a company's business activity. By its very nature, procurement has continuing relationship with all other departments.

2.5.2Time Horizon of Procurement Planning

One of the most important features of planning is Time. Plan needs to be performed for the right period of time or horizon. Plan must be for a reasonable period that is economically justifiable. As stated by Chepkoech (2013) the ultimate goal of procurement planning is to coordinate and integrate action to fulfill a need for goods and services in timely manner. Easy and accurate planning is essential to avoid last minute,emergency or ill-planned procurement.

The Ethiopian federal Government procurement and property administration proclamation No. 649/2009 urges public bodies to have and prepare an annual procurement plan. The plan requires showing their procurement for concerned budget year. Moreover, the Federal government public procurement directive issued by Ministry of finance stated that a public body has to fix time table for the main activities to be performed in the procurement process using formal formats. Procurementplanning needs to fix time for execution of procurement is harmony with the work program of the organization, the schedule has to ensure that adequate time for performing the whole procurement process.

In relation to proper planning time width Rao and Narayana (2000) pointed out that often mangers fail to understand proper way of determining the right planning period. Further, they

stated that in a dynamic environment setting right period of planning proves to be very challenging.

2.5.3Efficiency of Procurement Planning

Efficiency is doing the thing right. Efficiency is how the procurement planning is handled. In procurement, efficiency is often put to the side while the focus is on effective results for the organization.Every purchasing manager wants to achieve a high degree of buying proficiency and at the same time, utilize the department's resources as efficiently as possible.

One measurement of efficiency is the Competencies and Skills of procurement staff. As per Cavinatoand Kauffman (2000) procurement planning perspective category measured the ability to anticipate and address procurement problems, identify key result areas, and develop appropriate procurement programs. The ability to design and implement plans category measured the capacity to sell solutions of problems to managers outside of purchasing, perform appropriate cost/benefit analyses, and manage a program within a budget.Further,Ogubala and Kiarie (2014) added competence is a cluster of related abilities, commitments, knowledge, and skills that enable a person (or an organization) to act efficiently in planning.

Moreover, Dobler, Lee and Burt(1984) stated that during the past decades society has witnessed the evolution of one ofthe most important trends in history of organized society- the increasing use of computers. Use of information technology (IT) will increase efficiency of procurement planning. Moreover, use of IT helps to process enormous quantities of data and producing timely management of plans, it also helps to speed in performing mathematical computations produces a quantitative analytical capability greater than that possible in manual system.

2.5.4 Flexibility of Procurement Planning

Dobler, Lee, and Burt (1984) also stated that planning must be flexible enough to adjust to the demands of changing conditions.Withincreasingly intense competition, shrinking product cycles, accelerated technologicalbreakthroughs, and progressively greater globalization, the business arena may best bedescribed as being in a chronic state of change, with continual variation in its externalenvironment. Given such ever changing environmental conditions, a firm's ability to changedirection quickly and to reconfigure strategically is crucial to its success. Flexibility relates to a procurement plan as capacity to adjust tochange and exploit opportunities resulting from environmental changessustainable competitive advantage. Moreover, Koontz and

O'Donnell (1968) states thatto remain effective despite failure or unforeseen changes in plans, flexibility is required in the design of controls. Plan should not be made rigid.

2.5.5 Commitment of Procurement Planning

Ogubala and Kiarie (2014)states that when implementing a procurement plan, it is the procurement manager and top management's support and commitment that are undoubtedly a prerequisite for procurement planning implementation. Agreeing with Ogubala and Kiarie,Rao and Narayana (2000) added Plan is implemented by people so it is necessary to secure acceptance and commitment from them. One way to increase commitment is to solicit subordinate' participation in the planning process. Planning process should not be one way traffic; the traditional directive approaches must be substituted by participative approaches.

2.5.6Construction Company Performance

2.5.6.1Performance Measurement

In today's competitive demanding and changing business environment, to stay competent in the market it has become compulsory to evaluate business performance. Evaluation of business performance has passed through progressive developments. Traditionally firms have been evaluating theirperformance on the bases of primary goals which is considered as profit maximization and other financial indicators. Modern approaches to value- based management of the company of the company are trying to connect all activities to gather with people, learning and growth, internal business processes,customer, financial health of an organization. Zsido and Fenyves (2015) acknowledging the development of performance measurement indicated that traditional performance measurement are nowsupported and replaced by modern performance measurement.

2.5.6.2 Construction Companies Performance Measurement

Measurement of performance is important to the construction sector as an additional wayof improving and sustaining competitiveness in the long-term. Most large constructionorganizations practice performance measurement because they believe it affects their business positively in the longer-term. As defined by Kulatungaand Pathirage(2017) it is the process of quantifying the efficiencyand effectivenessof construction activities. It mainly include ''what to measure?'' which measures are used''? '' how to measure ''? and '' how to interpret results ''?

2.5.6.3 Key Performance Indictors in Construction Industry

Key Performance Indicators (KPI) are quantifiable value that demonstrates how effectively a company is achieving key business objectives. Organizations use KPIs to evaluate their success at reaching targets.For Parmenter (2007) KPIs represent a set of measures focusing on those aspects of organizational performance that are the most critical for the current and future success of the organization.

Construction and project management scholar have no agreement on key performance indicators (KPI)ofconstruction industry.Latiffi (2012) listedseven construction performance indicators:cost, time, cost predictability (design and construction), time predictability (design and construction), defects, client satisfaction with the product and service. As per Kerzner (2013) Primary KPIs are time, cost, and quality and customer satisfaction. On another hand Basheka and Tumutegyereize, (2012) also concluded that construction performance is measured on time, cost and quality parameters.Moreover, as per the Tsegay (2016) Key performance indicators that include Client Satisfaction in terms of collaboration, Timely Delivery, Healthy and Safety Awareness, Value for Money, Quality of Service, Training and Productivity.

However, most scholars agreed on 3 most important key performance indicators of construction industry i.e. time, quality and cost. So, theperformance of construction companies will be discussed on the bases of quality, cost and time. This is also supported by Tsegay (2016) the most commonly cited KPIs of construction industry are on-time completion (time), within agreed budget (cost) and non-defective workmanship as specified (quality).

Quality

Aschalew (2017) defines quality as the degree to which a product or service meets customer requirements and expectations. Quality performance is referenced to the standard of the delivered construction work and that specified in the overall company performance and contract documents. It is also the expectation is to receive what is specified, no more and no less, and often this is judged in the detail of the finishes and the workmanship applied. There is no convenient unit of measurement for quality, and it therefore involves a collection of issues.

Cost

Tsegay (2016) stated that cost performance is normally judged relative to planned budget. Completion close to budget is usually preferable; in some cases being well below budget is seen

as an advantage, although often not customers tend not to like surprises, so the final project cost should be the result of prudent cost management processes and therefore, by definition, deliver an end result close to the agreed budget. Construction cost is measured in pure financial terms, usually in local currency, and should focus on the building rather than the land (i.e. should exclude site purchase costs). Since construction often spans many years it is necessary to bring costs to a common date. The conversion to a common date is undertaken using building price indices that reflect inflationary change appropriate to the current level of construction intensity.

Time

As discussed by Aschalew (2017) there are few businesses for which the saying "time is money" is more appropriate than the construction industry. Timing is typically highly sensitive in the context of construction contracting. Owners lose opportunity and profits waiting for completion of late projects. Similarly, when projects are late to complete, contractors carry the financial burden of maintaining field and office personnel beyond dates anticipated at the time the project was priced. In today's competitive marketplace, few owners or contractors can afford the cost of late projects.

Further Tsegay (2016) stated that time performance usually means the project is completed on or before the agreed and planned time. In construction industry sometimes contractual documents refer to time being the ‘essence of the contract’, which exemplifies the criticality of timely completion due to subsequent plans that cannot be delayed. Time on construction projects can be measured in days, weeks or months. Obviously large projects take more time to construct than small projects. A high value for this KPI would mean that the construction process was fast, and vice versa.

2.6 Empirical literature

2.6.1 Studies in Ethiopia

Anteneh (2015) conducted a study on procurement planning and implementation effectiveness in Ministry of Urban Development, Housing and Construction. The study used descriptive research design.The datahad been analyzed using descriptive statistics. The selection of the respondents was done using stratified random sampling techniques. The findings of the study showed that the Ministry has a trend in the preparing procurement plan. However, having a plan by itself does

not ensure success; it largely depends on the extent of implementation. In the case organization, the procurement plan, specification and bid documents and market price assessments were found poor and incomplete. Moreover, there was a long delay in the evaluation of technical documents. Despite, the work programs of the departments had affected much by the weak performance of procurement functions and organization. As a result the research recommended that, the need for applying a collective effort on developing continuous training programs and vigorously and closely tracking the plan against the performance to make early corrective action.

2.6.2 Similar studies in other countries

Onyango (2014) conducted a study on effects of procurement planning on institutional performance: A Case study of Mombasa Law Court in Kenya. The main objective of the study was to find out the effects of procurement planning on institutional performance. The purpose of this study was to examine the effects of procurement planning on public institutions performance with focus on specific objectives, cost estimation, need assessment and quality specifications. The study showed that very limited scientific research has been done to examine the extent to which efforts in procurement planning can contribute to effective public institutions performance. Moreover the study identified that there was a significant statistical relationship between procurement planning and performance. Recommendations in the study were suggested including there is need for all users of organization department to develop the resource requirements needs for their department to allow procurement department proper budgetary allocation vote to the needs of the department to avoid wastages of resources and where over spending without planning a risk factor for procurement professionals.

Poku (2012)conducted a studyon the effect of strategic planning on the performance and operations of the agricultural development bank in Ghana.The purpose of this study was to assess the effect of strategic planning on the performance of banks in Ghana with reference to the operations of the Agricultural Development Bank (ADB). Secondary and Primary data was utilized in this study. The results of the administered questionnaires showed a fairly high level of agreement for the features of the various dimensions of an effectively managed bank. The study also showed that employees were either ignorant about program evaluation or there was a clear disregard for program evaluation at ADB. The researcher recommends that all factors of the various dimensions should be put into the right perspective so as to help the general workforce of the bank to understand the main objectives and strategic plans in place to achieve the objectives

of ADB. Lastly, it were recommended that, the bank develops quarterly meetings at the zonal level to provide employees the opportunity to be heard on matters relative to strategic planning practices at ADB.

Asakeya (2014) in his paper on the impact of procurement planning within Ghana health service: a study of ridge hospital-Accra. The objective of this study was to find out the impact of procurement planning on Ridge Hospital, Accra. The work looked at the challenges and benefits in procurement planning and management in the public procurement process, which included relevant theories on procurement types and procurement management as well as issue on value for money for public procurement. This research revealed that procurement planning exerts positive effect on public procurement and that proper planning enables the procuring entities to abide by the various time frames in the procurement process and prevent rush of procurement activities towards the end of the budget year. Also it has been found that funding for procurement is likely to be sufficient to meet all requirements when proper planning is done as well as allows the private sector to respond more effectively to requirements and specifications. However, it has also been found that there are challenges and benefits in procurement planning and that an effective planning of public procurement creates value for stakeholders while improving performance.

Willy and Njeru (2014) conducted on the effect of procurement planning on procurement performance: A case study of agricultural development corporation in Kenya. This paper presents the influence of procurement portfolio management on procurement performance, effects of logistics management on procurement performance and the impacts of adherence to procurement plans on procurement performance on public corporations. The study found out that there is a strong relationship between procurement planning and procurement performance, therefore the study concludes that the presence of a procurement portfolio, efficient logistics management and adherence to procurement plans positively affects procurement performance in institutions. The purpose of procurement planning therefore is to be able to utilize the available resources to achieve the overall procurement objectives.

Adedegiand Aladejebi (2015) studied on the effects of procurement planning on agricultural firms' performance in Ondo State, Nigeria. The research involved selected agricultural firms that major in processing and manufacturing sectors of agribusiness within two senatorial districts in

Ondo State, Nigeria. The senatorial districts were Ondo Central and Ondo North respectively. One hundred and five questionnaires were administered among the staff thirty five selected agricultural firms within the study area. The method of data analysis adopted was descriptive statistics (mean and standard deviation). The findings revealed that most of the firms used as sample have a very weak functional Enterprise Resource Planning (ERP) system used in procurement activities. The study also showed all the identified challenges had severe effect on agricultural firms' performance. The study recommended that agricultural firms should introduce the use of ERP system in managing their inventories, because it is a powerful tool for planning.

Ogwang and Waweru (2017). This study investigated the influence of procurement planning on performance of Kisumu Water and Sewerage Company in Kenya. The study further assessed the influence of transparency in procurement, and procurement requirements on performance of Kisumu water and Sewerage Company limited. The study was guided by game theory and resource-based theory. Survey research design was adopted. A structured questionnaire was used to facilitate in data collection. Descriptive and inferential statistics were used. The study found that all facets of procurement planning, that is, transparency in procurement and procurement requirements were positively correlated to organizational performance. However, the study found that transparency in procurement was the only one that had a significant influence on the performance of Kisumu water and Sewerage Company limited. It was deduced that transparency in procurement was very important towards advancing the performance of the firm. The study concluded that procurement requirements were of significant importance to the performance of KIWASCO. The tendering process for the firm is advised to be open regardless of the magnitude of the goods and/or services intended to be procured. The study recommends that KIWASCO and other firms in the water and sewerage sector should evaluate various strengths and weaknesses of the prospective suppliers and service providers.

2.7 Conclusion and knowledge gap

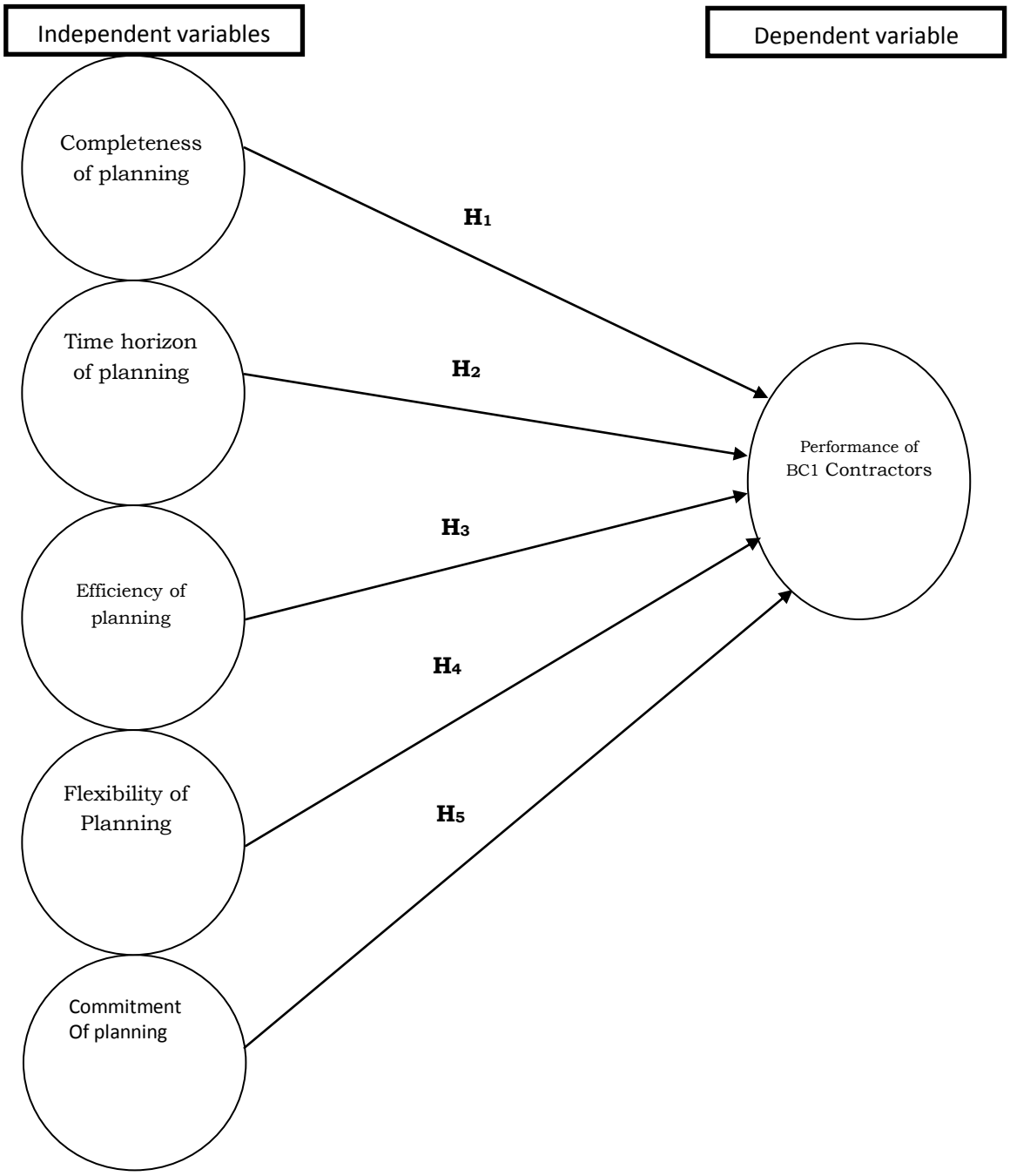
In conclusion the above scholars have concluded that procurement planninghas effect on organizational performance. In these studies some of the researchers identified proper cost estimation, effective need assessment, quality specification, transparency in procurement,transparency in procurement and procurement requirements developed as elements of procurement planning that affect performance. However, none of the studies had been

conducted on construction companies most of the studies conducted in the public sectors. The subject of procurement planning also ignored in Ethiopia. Most studies conducted based on descriptive research design where it is difficult this to investigate the cause and effect relationship between procurement planning and organizational performance. Moreover,the variables of procurement planning elements identified on the studies are not compressive.

2.8 Conceptual Framework

Conceptual framework is a scheme of concepts or variables which the study operationalizes in order to achieve the set objectives. This is illustrated in figure 1. The independent variables in this are the completeness of procurement planning, time horizon of procurement planning, efficiency of procurement planning, flexibility of procurement planning and commitment of procurement planning and how they influence the organization performance in BC1 in Ethiopia. The performance of the organizations in BC1 will therefore be a result of the changes that will take place in each of the four independent variables mentioned above.

Figure2. 2 Conceptual Framework for the study



Adopted from Dobler, Lee and Burt (1984) and Stoner and Freeman (1989)

CHAPTER THREE

RESEARCH METHODOLOGY

This chapter presents and describes the methodologiesthat have been used in the studyto collect data and investigate the research problem. The chapter includes description of study area, unit of analysis,research approach,research design, study population,sampling design,data sources and data collection procedures,measurement and instrumentation, data analysis,reliability of study,validity of study andethical consideration.

3.1Description of the Study Area

The purpose of this study is to examine the effect of procurement planning on the performance of building construction industrymore specifically BC1 contractors in Ethiopia.The main focus of the research were building construction sector. Ethiopian building construction proclamation No. 624/2009 puts building construction as the construction of a new building or modification of an existing building or altering its use. According to the Ministry of Urban Development and Housing (MoUDH) there are 10 (ten) grades of building contractors (BC) which ranges from grade 1 to 10 (BC1 - BC10). Based on the information from Construction Industry Development and Regulatory Directorate of Ministry of Urban Development and Housing the grades are assigned to a building contractor based the different criteria. These grade's criteria are: (a) number and type of registered professionals available (b) number and type owned or acquired equipment (c) evidence of minimum annual turnover (d) other relevant documents required by a regulation. This study concentrates on grade one building contractors. According to the Ministry there are 116 registered and licensed grade one building contractors (BC1). Therefore, the study mainly focuses on BC1 building construction companies in Ethiopia.

3.2 Unit of Analysis

The unit of analysis for this study is grade one building contractors (BC1) and units of observation is the BC1 procurement planning actorsidentified in the target population of the study.

3.3Research Design

According to Creswell (2009) a research design is the plan of a research study. It includes the procedures for research that span the decisions from broad assumptions to detailed methods of data collection and analysis. The study used a descriptive and causal cross-sectional survey research design method. Descriptive method is most preferred because it gives a report on things as they actually are. The study mainly aims to provide an accurate and valid representation of variables that are relevant to the research question. As clearly stated by Leary (2012) the purpose of descriptive research is to describe the characteristics or the behaviors of a given population in a systematic and accurate way. Further, descriptive analysis is used in order to analyze the study in the form of table, frequency and percentage. The studyis a cross-sectional study since the study limited to year 2018. Moreover, causal research design were used to examine the effect of procurement planning on the performance of BC1 contractors. Creswell (2009) survey is used to generalize from a sample to a population that inferences can be made about some characteristic attitude or behavior of the population.

3.4 Research Approach

The research adopted a quantitative method to analysis the effect of procurement planning of the performance of BC1 contractors. Creswell (2009) stated that a quantitative research approach is research methods dealing with numbers and anything that is measurable in a systematic way of investigation of phenomena and their relationships. It is used to answer questions on relationships within measurable variables with an intention to explain, predict and control phenomena. An entire quantitative study usually ends with confirmation or disconfirmation of the hypothesis tested.Neuman (2007) stated that the purpose of using qualitative research approach was because the study intends to have deep understanding about the effect of procurement planning on organizational performance in Ethiopia in light of the experience in BC1 contractors.

3.5 Study Population

The target population in statistics is the specific population about which information is desired. According to Walliman (2006) a population is a well-defined or set of people, services, elements, and events, group of things or households that are being investigated. According to the Ministry of Urban Development and Housingthere are 116 (one hundred sixteen) BC1 construction

companies in Ethiopia**.**Therefore, the purposes of this research, the population of study comprised the116 BC1 construction companies registered byMinistry of Urban Development and Housing.

3.6 Sampling Design and Method

Since the population of is small, less than 200the research adopted census method. A census method is method intent to count everyone in a population rather than a fraction of the population. A census is a study of every unit, everyone or everything, in a population. It is known as a complete enumeration, which means a complete count.According to Kish (2011) census method is suitable where the universe is not vast or large quantity.In order to perform the census the following taskshad performed:List of all BC1 contractors had been prepared, then, BC1 contractors physically communicated and questionerwere distributed, finally, questioners were collected from BC1 contractor.

3.7 Data Sources and Data Collection Procedures

The research performed based on both primary and secondary data. The primary data was collected using questionnaire. The major reason to use questionnaire as data collection instrument for the study is that the questionnaire can ensure uniformity of responses from respondents, gives adequate time for respondents to give their response and relatively free of bias and larges samples can be collected. Moreover, Neumann (2007) added by stating that a questionnaire is a research instrument consisting of a series of questions for the purpose of gathering information from respondents. The researchreviewedprocurement manuals, policies and strategies of the BC1companies in order to have a general understanding of the procurement planning practice of the BC1 companies.

The questionnaire was developed in English language.Closed-ended type of questions were administered in collecting the raw data.Questionnairesdistributed to the all BC1 contractor.The questionnaires had been distributed to procurement managers BC1 contractors.Procurement managers are functional managers who are responsible for planning, organizing, and directing and controlling procurement function. Planning the companies' procurement activity is one of main responsibilities procurement managers.

3.8Measurement and Instrumentation

A questionnaire designed to gather information from BC1contractor. Questions were prepared on procurement planning i.e. completeness of procurement planning, timing horizon of procurement planning,efficiency of procurement planning, flexibility and commitment of procurement planning and performance of BC1 contractors. The questionnaireswere distributed to 116 (one hundred sixteen) BC1 contractors. The questions weremeasure on a five point Likert scale for easier analysis.A five point agreement scale Likert scale survey questions was developed and utilized in measuring a respondent's opinion or attitude towards a given subject. The questionnaire wasutilizing nominal scale to collect general information like gender. Ordinal scale was used to get a response from respondents on planning practice and performance to rank respondents responses (Neuman, 2007). Moreover, Interval scale was used to collect data like age and planning horizon Interval measures everything plus it can specify the amount of distance between categories (Neuman,2007).

For Addis Ababa located contractors questionnaires weredelivered by hand and for contractors located outside Addis Ababa questionnaires delivered using emails and postal services. Once the questionnaires distributed, to follow status and get the replies from the respondents phone communication were utilizedmainly.

3.9 Data Analysis

The analysis part of the study was carried out to examine the effect of procurement planning on organizational performance of the BC1contractors in Ethiopia. After the collection of data using questionnaire, data was edited, coded and analyzed.To reach at feasible finding the analysis was conducted using quantitative data analysis techniques.To examine the relationship and association between procurement planning and organizational performance the study used mainly inferential statistics tools such as regression. According to Walliman (2006) regressionsanalysis is used to measure the effects of independent variables on dependent variable measuredon interval or ratio scales. The studyuses multiple liner regressions for the purposes of testing the developed hypothesis. Therefore, the five dependent variables were measured and examine their effect on one dependent variable. The organizational performance was estimated using ordinary Least Square (OLS).

The research also utilized descriptive statistics. Descriptive statistics are used to describe the basic features of the data in a study. It helps to understand the data we are dealing with by making numerical and/or graphical summaries.Neuman (2007) stated that descriptive statistics is general type of simple statistics used by researchers to describe basic patterns in the data. Accordingly the general profile of respondents were analyzed usingdescriptive statistics.

To properly administer and analyze data, the study used SPSS (Statistical Package for Social Science) to perform high quality data manipulation and analysis. SPSS version 20was utilized to make different kinds of statistical analysis like correlation and progression analysis. Moreover, SPSS was used to test validity, reliability and normality of the study and data analysis (Field 2009).

The study investigated the influence of various components or characteristics of procurement planning on performance of BC1 contractors. It also analyzed the general effect of procurement on organizational performance. In order to achieve these, regression analyses were conducted. Therefore, the following Multiple Liner regression modelwas estimated using OLS.

$$Y = \beta 0 + X1\beta 1 + X2\beta 2 + X3\beta 3 + X4\beta 4 + X5\beta 5 + Ɛ$$

Where:
Y represents 'BC1 Organizational Performance'
X1 represents 'Completeness of procurement planning
X2 represents 'Timing of procurement planning;
X3 represents 'Efficiency of procurement planning;
X4 represents 'Flexibility of procurement planning
X5 represents 'Commitment of procurement planning'
Ɛ represents 'Error term'
β1, β2, β3, β4, β5 represent coefficients

3.10 Description of Variables

The research conducted based on two variables, dependent and independent variables. The independentand dependentvariablesare:

- Completeness of procurement planning: In most cases procurement managers have responsibility to produce a compressive procurement plan that should navigate the whole

aspects of procurement functional areas. In producing effective procurement plan managers need to understand the types of planning available, components of planning, process of planning and stakeholders of planning. Koontz and O'Donnell (1968) underlined that it is necessary to establish premises that conditions under which planning activities will be undertaken. The plan needs to complete by considering internal and external factors, process follow, elements of planning and types of planning.

- Time Horizon of Procurement Planning:As stated by Dobler, Lee and Burt (1984) the five classical objectives of the procurement function are to buy materials of the right quality, from the right vendor, at the right price, in the right quantity and at the right time. The time at which some procurement are made frequently affects the overall performance of the company. Procurement managers must make a fundamental policy decision concerning the timing of procurement for goods and services. Basically, managers can choose one of two alternatives: (1) procurement according to current requirements or 2) Procurement according to market conditions. And also these alternatives can produce different time horizon.
- Efficiency of Procurement Planning: Planning consumes resources. Cost of planning constitutes human, physical and financial resources for their formulation and implementation. Cost of planning constitutes human, physical, financial resources, for their formulation and implementation. Efficiency also illustrated by collaborates fully with suppliers. Keeping up to date by capturing data about every bid, order and invoice. Monitor performance across your entire supplier base. Minimizing the cost and achieving the efficient utilization of resources shall have to be the aim of procurement planners. Dobler, Lee and Burt (1984) stated that every procurement manager wants to achieve high degree of buying proficiency and at the same time, utilize the department's resources as efficiently as possible. Moreover, they stated that effective use of an information technology offers procurement managers several significant advantages.
- Flexibility Procurement Planning: Procurement plans are required to be flexible to favor the procurement to cope-up with the unexpected environment. And also procurement should be prepared in a way that there is sufficient scope for changing it from time to time. Hence procurement manager required to prepare also contingency plans which may be put into operation in response to the changing environment. The same also confirmed by Rao and Narayana (2000) good planning helps organization adapt to its individual circumstances.

- Commitment Procurement Planning: Furthermore, Procurement plan to be effective procurement executives must commit to assign certain resources for the purposes of planning. Moreover, they must also commit in carrying out the procurement plan. Donnelly, Gibson and Invancevich (1992) also confirmed that the plan to be effective, it should specify the kind and amount of resources required and mangers must commit themselves on for preparation and implementation.
- Organizational performance: Organizational performance comprises the actual output or results of an organization as measured against its intended outputs (or goals and objectives). Aschalew (2017) has defined organizational performance as a vital tool that can enhance the capturing of knowledge and hence provide improved construction performance, at both corporate and project levels. Measurement is a core activity for sector that is focused on delivering results. Performance is measured primarily allow maximizing the results that are meaningful to organizations by adjusting product or service, using the capabilities and funding available. It enhances the development of a learning organization by capturing and analyzing what is happening in the firms or industry environment, especially through its customers, employees, suppliers, partners and new technologies.

3.11 Validity and Reliability of Measurement Instrument

In order to test reliability the research utilizedCronbach's alpha which is measure of internal consistency that is, how closely related a set of items are as a group. This is by far the most commonly used measure of reliability in applied settings. It is popular and easy to compute using SPSS software. It requires only one sample of data to estimate the internal consistency. This measure of reliability is described most often using Cronbach's alpha (sometimes called coefficient alpha). It was also confirmed by Kline (2011) by stating that most it is the often in the literature as test internal consistency. Cronbach's alpha reliability coefficient normally between 0 and 1; the closerCronbach's alpha coefficient of a scale should be above 0.7 (Creswell 2009). Accordingly, based on table 3.1 the alpha value of this research shows a good reliability.

Table3. 1Cronbach's Alpha

Reliability Statistics		
Cronbach's Alpha	**variables**	**Items**
.891	Completeness (8 items)	8
.765	Efficiency (5 items)	5
.863	Flexibility (3 items)	3
.367	Time (4 items)	4
.425	Commitment (4 items)	4
.900	Performance (10 items)	10

Each attribute was derived from relevant literature to ensure the validity of the questionnaire with reasonable modification. The questionnaire are partially taken from previous research work done by Poku (2012),Asakeya (2014)Chepkoech (2013) and Nshemereirwe (2015)

In addition to the above researcher applied triangulation of different bodies of literature when preparing the research framework and interpreting the findings of the study by considering the problem from different perspectives of primary data sources.

Moreover, as per the Pearson Correlation Coefficient computed and tested the questionnaire is valid(Poku ,2012)(referAppendix III).

3.12 Ethical Consideration

Ethical considerations in research are critical. Ethics are the norms or standards for conduct that distinguish between right and wrong. They help to determine the difference between acceptable and unacceptable behaviors in performing the research. Ethical clearance and permission were obtained from school of commerce, Department of Logistics and Supply Chain Management, Addis Ababa University. The researcher was request permission from the concerned parties before data collection. During the distribution of questionnaires, respondents were informed about the purpose and the benefits of the study along with the right to refuse or completely reject participation. The respondents were told their response was kept confidential and their identity shall not be exposed.Moreover, the researcher wastaken in to consideration the principles of legality, honesty, objectivity, integrity and carefulness in performing the study.

CHAPTER FOUR

DATA COLLECTION, ANALYSIS AND DISCUSSIONS

4.1 Introduction

This chapter presents analysis and findings of the study as set out in the research methodology. The collected data was analyzed in line with the objectives. The analysis results were presented in tables. In thischapter the study will comprise rate of response from the respondents; analysis of general information of the respondents using descriptive statistics and the effect of procurement planning on organizations performance of BC1 contractors were analyzed using Liner Regression mode.

4.2Rate of Response of Instrument

The data for the research was gathered using questionnaire as the research instrument. From the study population of 116 BC1 contractors 94 respondents filled-in and returned the questionnaires making a response rate of 81%. The reason for the non-response werenot able to locatecontractors correct physical address and get telephone number using list of information provided from MoUDHand some of the contractors were not willing to participate in the study.

4.2Descriptive Findings and Discussions

A descriptive statistics was used to analyze the general profile of the respondents and provide summary of frequencyof procurement planning items and BC1 Contractors organizational Performance items.Descriptive statistics which include measures of distribution, central tendencies, and dispersion were used.

4.2.1 General Profile of the Respondents

4.2.1.1 Genderof Respondents

Table 4.1 Gender of respondents

Gender	Frequency	Percent	Cumulative Percent
Male	78	83%	83%
Female	16	17%	100%
Total	94	100%	

The study sought to determine the gender distribution of the respondents in order to establish if there is gender balance in the positions indicated. The findings were as indicate in Table 4.1. According to the findings, majority (83%) of the respondents were male while the rest (17%) were female. This is essential in order to have a combine view of both male and female in the analysis.

4.2.1.2 Age of Respondents

Table 4.2 Age of Respondents

Age Group (years)	Frequency	Percent	Cumulative Percent
18-29 Years old	27	29%	29%
30-44 Years old	58	62%	90%
45-59 Years old	7	7%	98%
above 60 Years old	2	2%	100%
Total	94	100%	

The study further established respondent's age distribution categorized in a certain range. This was to determine how age relates to procurement practices based on experience. From the findings shown in Table 4.2, 29% of the respondents' were within the age group of 18-29 years, 62% were aged between 30-44 years, 7% were aged between 45-59 years and the remaining 2% were aged above 60 years.

4.2.1.3 Experienceof the Respondents in the Business

Table 4.3 Work Experience of Respondents

Experience (in years)	Frequency	Percent	Cumulative Percent
Less than 5	15	16%	16%
6 -10	49	52%	68%
11-15	22	23%	91%
above 16	8	9%	100%
Total	94	100%	

From the findings, most (52%) have work experiencebetween 6 to 10 years, 23% have11 to 15years work experience, 16% accounted for less than 5 years' work experience and while the rest (9%) have been worked in the organization for less than a year. This implies that majority of respondents have a reasonable work experience and could therefore familiar with the procurement practices. Also this implies that these are experienced employees who could have given the relevant information to the study area.

4.2.1.4 Educationalbackground of the Respondents

Table 4.4 Educational background of the Respondents

Level of education	Frequency	Percent	Cumulative Percent
Diploma	9	10%	10%
Degree	68	72%	82%
Masters	16	17%	99%
PHD	0	0%	99%
Others	1	1%	100%
Total	94	100%	

From the Table 4.4 majority (72%) of the respondents have bachelor, 17% haveMasters, 10% haveDiploma and while the remaining 1% have other educational background. The findings therefore indicate that the respondents have the understanding to give reliable and relevant information.

4.2.2 Summary of Descriptive Statistics on Procurement planning and company performance of BC1respondents

Table 4.5 description of summary statistics

List of Item	Obs	Mean	St. Deviation	Min	Max
Completeness	94	3.62	0.8454	1	5
Time horizon	94	3.15	0.2180	1	5
Efficiency	94	3.21	0.1863	1	5
Flexibility	94	4.12	0.7136	1	5
Commitment	94	4.32	0.6531	1	5
Organizational performance	94	3.00	1.1707	1	5

A five-point Likert scale was employed in order to measure the effect of procurement planning on performance of BC1 contractors. Mean was used as a measure of central tendency. According to Neuman (2007), interval measurement scale is used to analyze liker scale data. Likert scale items are created by calculating a composite score (sum or mean) from four or more type Likert-type items; therefore, the composite score for Likert scales should be analyzed at the interval measurement scale. Furthermore, for Likert scale data from 1 (Strongly Disagree) to 5 (Strongly Agree).As sited from Onsongo (2016) Scott stated that if the sample is approximately normally distributed the interpretation should be for mean up to 2.8 is "Disagree", mean between 2.9 and 3.2 is "Neutral", and mean above 3.2 is "Agree" . Therefore, the decision of the summary statistics is done based on these criteria's.

Accordingly, the first variable was completeness of the procurement planning; this particular variable had a grand mean score of 3.62 with a standard deviation of 0.8454. Based on the standard mentioned above the mean score fall under agree level which implied that respondents were agreed that the organizations had at least good procurement planning activities. Procurement planning to be complete and affect the performance of the organization, procurement planning needs to involve setting specific objectives and determining operating

policies which guide all activities toward the attainment of these objectives. Subsequently, a group of detailed procedures must be developed to implement each policy (Dobler, Lee and Burt 1984). The second variable was the time horizon of planning; the mean score of this variable was 3.15 with a standard deviation of 0.2180; the analysis shows that the means score fall under the neutral level; the findings of the means score indicated that respondents were uncertain about whether the companies are benefited from long term or short term time horizon of procurement planning. Asakeya (2014) sated that a procurement plan can be integrated into the monthly, quarterly, annually and multi-annually sector expenditure programme to enhance financial predictability and control over procurement budgets.Basheka(2015) in his findings concludes that planning is a process that consists of many steps and the bottom line is that planning is not concerned with future decisions but rather with the future impact of decisions made today. The results further revealed that the procurement planners prepared annual procurement plans and that the procurement plans were prepared and the goals set participatory.

Efficiencyof the procurement planning; this variable had a grand mean score of 3.21 which lies on the agree level. The finding shows that most of the respondents feel that the procurement planning of the organizations were efficient.Onyango (2014)regarding cost estimation in any institution it's determined by the professionalism applied by the employees undertaking the exercise. Effective and efficient procurement process can only be achieved by proper planning by competent staff else there would be flaws in the process. Competent staff would ensure that goods and services are procured as and when the need is expected. FurtherKilonzo (2012) reported that the findings majority of the respondents strongly agreed that reduction in cost of operations and adoption of information technology positively affects the efficiency in procurement process as indicated by a mean of 4.88.Furthermore, the rest two variables were flexibility and commitment; these two variables had a mean score of 4.12 and 4.32 respectively. Both variables mean score were fall under the range of agree level which implies in the organization the procurement planning are flexible as well as the stakeholders are committed to for the plan achievement.According to Dobler, Lee and Burt 1984 (1984) procurement planning must be flexible enough to adjust the demands of changing conditions to deal with uncertain future events in the environment, flexibility not captured as significant factor that affects organizational performance.Mdemu(2013)addressed that notably proper management involvement and administration include management togive the necessary approval in the

implementation of procurement plan.Moreover,according to ISO 9000:2015It's clear that without solid stake holders commitment, one will not have a successful planning and plan execution. This is not a commitment in words; it is the continuous and active demonstration to every stakeholder in the planning process andexecutionthat the need to achieve the set objectives.

Table 4.6 the extent procurement planning affect organizational performance

Effect of PP	Frequency	Percent	Cumulative Percent
No effect at all	2	2.1	2.1
Little extent	4	4.3	6.4
Moderate extent	15	16.0	22.3
Large extent	48	51.1	73.4
Very large extent	25	26.6	100.0
Total	94	100.0	

Moreover, as shown in table 4.3, majority of the respondents 51.1% indicated that procurement planning affect organization performance of BC1 to a large extent. This was followed by 26.6% of respondents who indicated that procurement planning affect organization performance to a very large extent, 16% indicated a moderate extent, 4.3% indicated little extent while the rest represented by 2.1% indicated no effect at all. This implied that fairly high level of respondents agreed that procurement planning can affect the organizational performance of BC1 contractors at least in large extent. Geofrey(2011) finds out in his study that 62% of the respondents strongly agreed that procurement planning has strong effect on organizational performance, these were followed by 38% who also agreed that procurement planning has effect on organizational performance.Onyango (2014) reported that procurement planning has effect on organizational performance in large extent. Adedegi and Aladejebi (2015) also It found out that there is positive relationship between procurement planning and organizational performance.

4.3 Resultsof Regression Analysis

4.3.1 Test of assumptions of Ordinary Least Squares (OLS)

Testing of assumptions is an important task for the research in utilizing liner multiple regressions, or indeed any statistical technique.

4.3.1.1 Multicollinearity

Table 4.7Multicollinearity test

Variable	VIF	1/VIF
Flexibility	1.66	0.603222
Completeness	1.65	0.605963
Time	1.33	0.750916
Commitment	1.29	0.772913
Efficiency	1.21	0.829753
Mean VIF	1.43	

Multicollinearity means the existence of linear relationship between independent variables. Variance-inflating factor (VIF) test was used to test the existence of multicollinearity problem. According to Williams (2015) if there is a VIF value greater than 10 it is the indication of multiciollinearity; The results of the test indicates the highest VIF is 1.43; which indicates the model performed with no major multicollinearity problem among the explanatory variables

4.3.1.2 Hetroscedasticity

Table 4.8Hetroscedasticity test

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
Ho: Constant variance
Variables: fitted values of Performance
chi2(1) = 1.58
Prob> chi2 = 0.2093

Among the assumptions of the OLS is that the variance of each disturbance term *ui*, conditional on the chosen values of the explanatory variables, is some constant number equal to $\sigma 2$ Pallant, (2005). Breusch-Pagan test was used. The interpretation is done using the p values, if the p value is less than 5 percent level of significant it is the indication of hetroscedasticity problem; however, if the p value is greater than 5 percent significance level it implies there is no a problem of hetroscedasticity. Accordingly, as shown in the table below the results of the test shows that there is no problemheteroscedasticity since the p values is significant. Consequently, it has been employed weighted least squares to estimates the reasonably accurate test statistics.

4.3.1.3 Autocorrelation Test

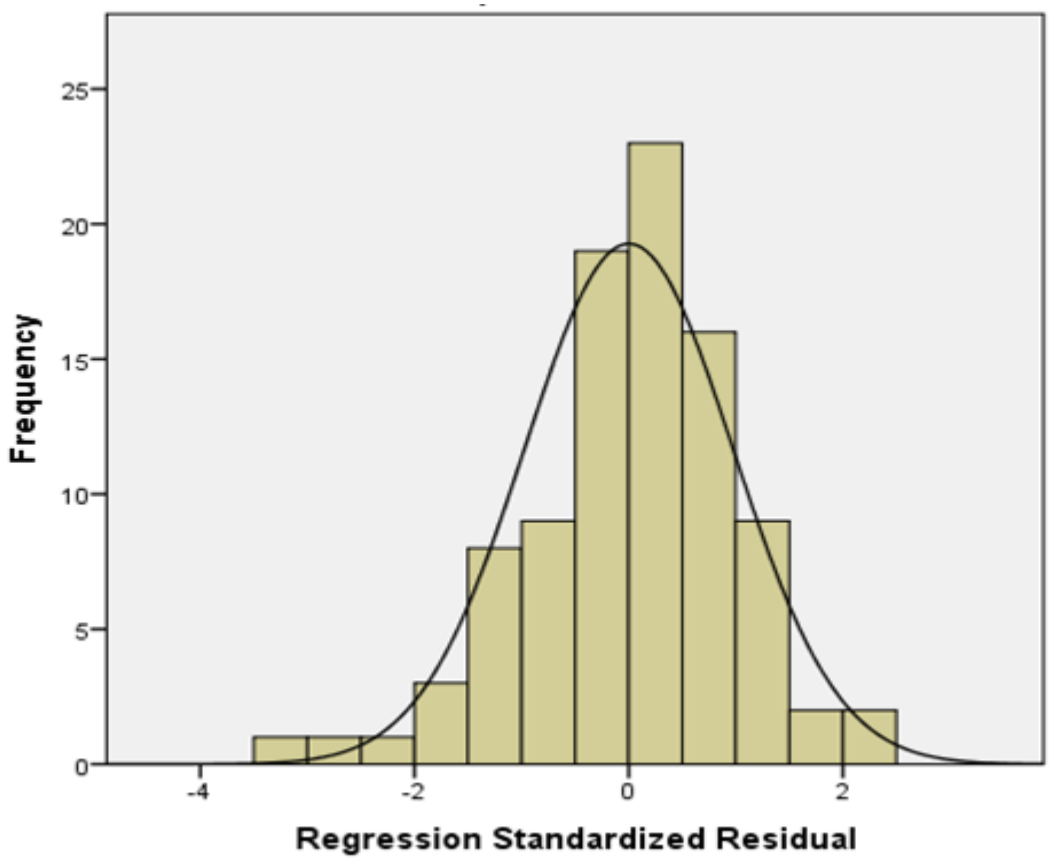
Table 4.9 Autocorrelation Test

Durbin's alternative test for autocorrelation			
lags(p)	chi2	dfProb> chi2	
1	0.151	1	0.6971
H0: no serial correlation			

The assumptions of Autocorrelation assumed that residuals should not be serial correlated between them (Field 2009). Durbin's alternative test was used to test the problem, as shown below in the table the significant value is greater than 5 percent, therefore, there is no serial correlation between residuals.

4.3.1.4 Normality

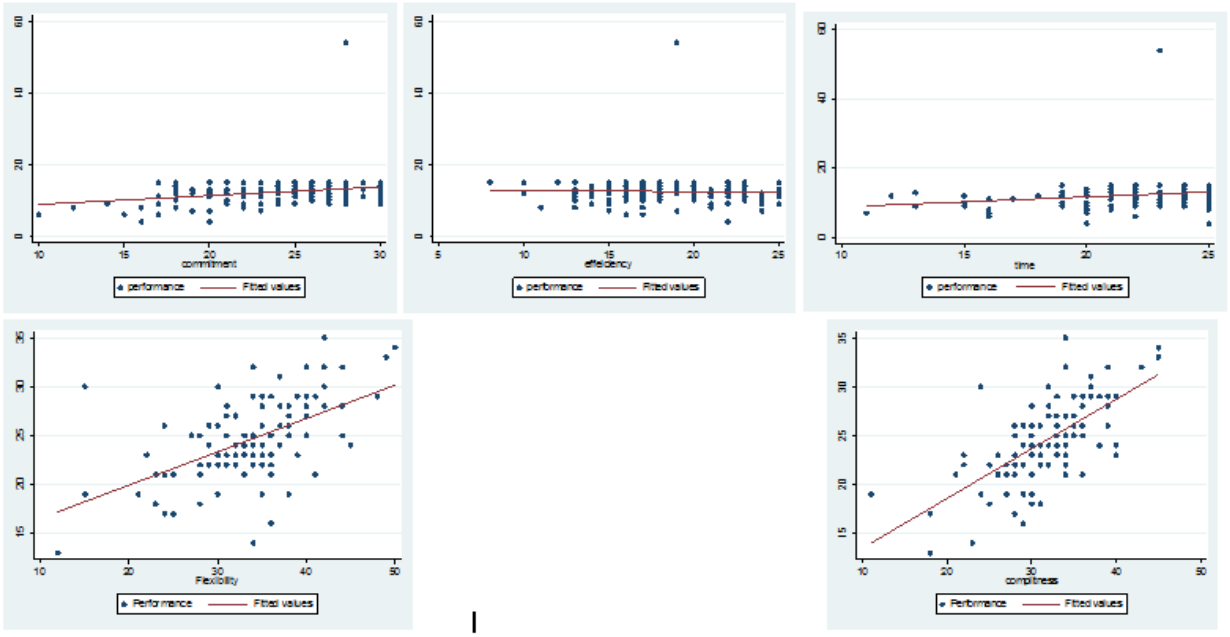
Graph 4.1: Normality Test



In order to run OLS the residuals must be normally distributed; therefore, in order to test the normality assumption histogram and normal distribution curve was used; and as shown below the residuals are normally distributed.

4.3.1.5. Linearity assumption

Graph 4.2: Linearity Test



The assumption of linearity says the dependent and each independent variable should have a linear relationship. Therefore, scatter plot technique was employed to test the linearity assumption and as shown in the graph below the assumptions are fulfilled as per the following Graph 4.2.

4.3.2Result of Regression Analysis

The study sought to establish whether there existed a relationship between procurement planning and organizational performance.

Table 4. 10 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.767a	.588	.565	.69517

a. Predictors: (Constant), commitment, completeness, flexibility, time, efficiency

The coefficient of determination (R^2) for the model is 0.588 (F= 25.163, $p < 0.001$) showing that the model explained 58.8% of the variation in the level of organizational performance BC1 contractors and the overall model is statistically significant.

Ogwang (2017) reported that the his study that the general relationship between procurement planning and performance of was positive and moderate the coefficient of determination (R2 = 0.280) indicated that 28.0% of performance of organization could be explained by the various factors studied under procurement planning. Chepkoech(2013)exhibited that the coefficient of determination (the percentage variation in the organizational performance variable being explained by the changes in the procurement planning variables) R2 equals 63%. Further, Ogwang and Waweru (2017) further reported that by the coefficient of determination (R2 = 0.280) indicated that 28.0% of organizational performance could be explained by the various factors studied under procurement planning.

Table 4.10 ANOVA Table

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	60.803	5	12.161	25.163	.000b
	Residual	42.527	88	.483		
	Total	103.330	93			

a. Dependent Variable: performance

b. Predictors: (Constant), Commitment, Completeness, Flexibility, Time, Efficiency

5% level of significance, table 4.10 shows F (5, 88) = 25.163 Hence, the regression model is statistically significant, meaning that it is a suitable prediction model for procurement planning and organization performance.

Table 4. 11 Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1.069	.463		-2.308	.023
	completeness	.011	.012	.084	.927	.357
	efficiency	.051	.016	.333	3.262	.002
	flexibility	.026	.019	.146	1.381	.171
	time	.079	.026	.298	3.017	.003
	commitment	.050	.024	.146	2.067	.042

a. Dependent Variable: performance

The results of the regression model estimation revealed that, Commitment, Efficiency and Time were found to contribute significantly and positively to BC1 organizational performance. In contrast, Flexibility and Completeness didn't show any significant association with organizational performance. Accordingly, in line with the stated hypothesis each of the findings will be discussed below.

Hypothesis 1: The procurement planning commitment has significant effect on company performance of BC1 contractors of Ethiopia.

After reviewing the results from path coefficients and t-value, it was found that commitment of procurement planning has positive and significant impact on organizational performance of BC1 contractors ($t = 2.067$, $p<0.05$). Considering path coefficient it is fair to say that commitment of procurement planning has positive significant impact on BC1 performance. Thus, whenever there is better commitment of procurement planning there would be a better organizational performance BC1 contractors.

Hypothesis 2: Procurement planning efficiency has significant effect on company performance of BC1 contractors of Ethiopia.

After reviewing the results from coefficients and significance value, it was found that efficiency of procurement planning has positive and significant effect on organizational performance ($p<0.05$)). Considering path coefficient it is fair to say that efficiency of procurement planning has positive significant impact on BC1 organizational performance Thus, a better efficiency of procurement planning increases organizational performance whereas a weak one would diminish organizational performance.

Hypothesis 3: The time horizon of procurement planning has significant effect on company performance of BC1 contractors of Ethiopia.

Time horizons of procurement planning has had positive and significant effect on BC1organizational performance; the positive coefficient of this variable indicated that, it is fair to say that time horizon of procurement planning has positive significant impact on Organizational Performance ($p<0.05$). Thus, a better time horizon of procurement planning increases Organizational Performance whereas a weak one would diminish Organizational Performance.

In contrast, in contradict of the hypothesis Flexibility and Completeness didn't show any significant association with organizational performance.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Introduction

This chapter presents summary of findings, conclusions and recommendations based on the findings.

5.2 Summary of Findings

- The first purpose of this study was to investigate and describe the effect of procurement planning practice on performance of BC1 contractors in Ethiopia and recommend appropriate recommendation which shall help to improve the organizational performance. Taking in to account these, the study was made with regard to completeness, time horizon, efficiency, flexibility and commitment of procurement planning that can affect organizational performance. Among the distributed 116 questionnaires94 of them were completed and returned successfully. The analysis result shows those variables time horizon, efficiency and commitment have positive effect on organizational performance of BC1 contractors in Ethiopia.
- Majority of the organizations does not have formally organized procurement department.
- Majority of BC1contractors have no formally written procurement manual that describes their procurement policies, strategies, objectives, procedure, priorities and budgeting procedure.
- Study also identified that three variables of procurement planning, time horizon of procurement planning; efficiency of procurement planning and efficiency of procurement planning have positive and significant effect on BC1 organizational performance.
- The study shows that as whenever the time horizon of procurement planning increases from quarterly to biannually, from biannually to annually the probability of organizational performance increases by 7.9 percent.

- The study also shows that as the efficiency of procurement planning in terms of cost and time increases by one percent the performance of the organizational also increases by 5.1 percent.
- The findings of the study further indicates that as the commitment of all stakeholders of the organization in terms of procurement planning and executionincreases by one percent the organizational performance also increases by 5 percent.
- However, the remaining two variables, completeness of procurement planning and flexibility of procurement didn't shows significant effect on organizational performance of BC1contractors.

5.3 Conclusion

Effective preparation of the procurement plan creates an opportunity for all stakeholders involved in the processes procurement plan formulation; the inputs from these stakeholders user department, operations, engineering, finance and top management. It is found out that procurement planning affect the organizational performance of BC1 contractors in large extent. The study identified that commitment of procurement planning has significant effect on BC1 organizational performance. A commitment is required from all parties to carry on the plan that is established which focused on what will cause people to become and remain committed to the implementation of procurement plan. The study also reviled that efficient procurement planning has significant effect on the performance of BC1 contractors. Planning process should not waste time and money. Every procurement manager needs to achieve higher degree of proficiency and at the same time, utilize the department's resources as efficient as possible. A sound procurement planning, refined policies, strategies, procedures, budgets objectives and priorities, and knowledge of sophisticated procurement are not enough to ensure a successful procurement. In addition, the time horizon of procurement planning has significant effect on organizational performance of BC1contractors. A successful planning process give the management team a way of ensuring business focus, alignment and synchronization across all functions of the business. This requires that procurement planning horizons must be defined according to the unique requirements of the building construction industry. Time schedule and financial budget must be determined to ensure that each group of procedures can be carried out however, the study did

not reviled that the completeness of procurement planning has no effect on organizational performance of BC1 contractors Ethiopia.

5.4 Recommendation

This study revealed that procurement planning has positive effect on the performance of the BC1 contractors of Ethiopia. Thus, based on the findings of the analysis; the researcher forwarded the following recommendation as an improvement interventions to be under taken by the contractors.

- Procurement function is the center of BC1 contractors of Ethiopia. By its nature, procurement has continuing relationships with all other departments in the firm as well as with the firm's suppliers. Procurement cut across all departmental lines. Therefore, BC1 contractors needsto prepare procurement planning with the involvement of all stake holders. Stakeholders include procurement department, operation/construction department, engineering department, finance department, and top management). Moreover, contractors should develop strong plan execution commitment from procurement department, operation/construction departments, engineering department, finance department, and top management.
- In order to develop and execute efficient planning that shall affect the organizational performance, BC1 contractors advisedto hire well educated and experienced procurement professionals. Also BC1 contractors encouraged to utilize information technology to increase the efficiency of procurement planning.
- Procurement time horizon is a time that elapsed between the formulation and the execution of a planned activity. Accordingly BC1 contractors advised to developed procurement planning with right planning time horizon in order to improve their organizational performance positively. BC1 contractors also encouragedto increase the time horizon procurement planning up to one year in order to have effect on the organizational performance.
- Even if, completeness of procurement planning has no significant effect on performance, BC1 contractors needs to consider all elements of procurement planning. In order to plan to be complete and all-inclusive, BC1 contractors also advised to develop formally

articulated procurement objective, procurement strategies, and procurement policy and procurement producer.

- Moreover, even if the flexibility of procurement planning has no significant effect on the performance of BC1 contractors of Ethiopia, procurement plans required to be constructed to adopt effectively changes in the external environment, price, market condition and risk.

5.5 Suggested Further Research

The study particularly focused on BC1 contractors of Ethiopia and therefore further research should be carried out on other categories and grades of contractors to increase the sample size. For analysis highly structured questionnaires and quantitative analysis was adopted, for future researches detailed qualitative analysis could include in order to dig out the problems better. As per the researcher, there is a need for future to examine other variable completeness of procurement planning and flexibility of procurement planning. This study looked at five independent variables (Completeness, time horizon, efficiency, flexibility and commitment of procurement planning) The researcher recommends further research to investigate the other factors of procurement planning that affect BC1 performance.

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Appendix I

S/N	Organization Name	Category	Telephone	Region	Owners Name
1	3M Engineering & Con.PLC	BC-1	0911 211050	Addis Abeba	Efrem Mehaza
2	Abebe Girmay Asfaw	BC-1	0914 301875	Tigray	Abebe Girmay Asfaw
3	Abera Lissanu Rufe	BC-1	0911 792386	Hawasa	Abera Lissanu
4	Abita Construction	BC-1	0911 160386	Ahmara	Abera Ejigu
5	Adam Construction PLC	BC-1	0911 202889	Addis Abeba	Adam Construction PLC
6	Addis Gelaw Building Contractor	BC-1	0911 203110	Addis Abeba	Addis Gelaw
7	Agegne Demissie Fetamlak	BC-1	0918 341218	Ahmara	Agegne Demissie Fetamlak
8	Alas Construction P.L.C.	BC-1	0911 517332	Addis Abeba	Alemayehu Asrat
9	Alliance Construction	BC-1	0911 208012	Addis Abeba	Negash Abateneh
10	Altabe PLC	BC-1	0911 510496	Addis Abeba	Tadese Belay
11	Amel Construction P.L.C	BC-1	0911 381610	Somali	Furah Abdikeni
12	Arcon Design Building PLC	BC-1	0911 529678	Addis Abeba	Arcon Design Building PLC
13	Aseph Engineering	BC-1	0911 204642	Addis Abeba	Aseph Engineering
14	Ashtho Engineering PLC	BC-1	0911 522912	Addis Abeba	Ashenafi Tomas
15	Asmelash & Sons Construction PLC	BC-1	0935 409707	Addis Abeba	Tadele Asmelash
16	ATEM Building Contractor PLC	BC-1	0911 200348	South	Ayalew Meshesha & Ayalnesh Badeg
17	ATS Engineering PLC	BC-1	0911 217048	Addis Abeba	Solomon Lemlem
18	Aynalem Gashaw Argie	BC-1	0911 310851	Addis Abeba	Aynalem Gashaw Argie
19	B Four Family Trading PLC	BC-1	0911 772626	Addis Abeba	Tefera Michael Wajebo
20	B.G.M. Construction	BC-1	0911 219538	Addis Abeba	Beyene Girma W/Yohannes
21	Bamacon Engineering PLC	BC-1	0911 209024	Addis Abeba	Girma Gelaw

22	Beha Construction	BC-1	0911 248000	Addis Abeba	Behailu Tefera
23	Bekele Sorsa Joli	BC-1	0911 225091	Addis Abeba	Bekele Sorsa
24	Bencon Construction	BC-1	0911 234504	Addis Abeba	Bemnet Petros
25	Berehane Adane Construction	BC-1	0911 200382	Addis Abeba	Berehane Adane
26	Bereka Construction	BC-1	0911 216141	Addis Abeba	Kedir Seid
27	Berhan Tobiaw Mareye	BC-1	0911 402558	Addis Abeba	Berhan Tobiaw Mareye
28	Birhanu Abebe Building Contractor	BC-1	0911 174850	Addis Abeba	Birhanu Abebe
29	Birhanu Ashebir Construction PLC	BC-1	0911 231102	Addis Abeba	Birhanu Ashebir Construction PLC
30	Biruk Beser Achew	BC-1	0911 514477	Addis Abeba	Biruk Beser Achew
31	Bright Construction PLC	BC-1	0911 211161	Addis Abeba	Zereatsion Girmay
32	Buelkon Construction PLC	BC-1	0929 908170	Addis Abeba	Buelkon Construction PLC
33	Capstone Engineering	BC-1	0911 512423	Addis Abeba	Henok Berhanesilasse
34	Dawit Emiru Building Contractor	BC-1	0911 512552	Addis Abeba	Dawit Emiru
35	Dawit Girmay Negash	BC-1	0911 633404	Addis Abeba	Dawit Girmay Negash
36	Dawit Wondimu Besha	BC-1	0911 212888	Addis Abeba	Dawit Wondimu Besha
37	Dawud Hamolo Building Contractor	BC-1	0911 525247	Afar	Dawud Hamolo
38	Dehayeb Engineering	BC-1	0930 001521	Tigray	Senayit Kassaye
39	Demera Engineering & Construction	BC-1	0911 204771	Addis Abeba	Girma H/Mariam
40	Desalegn Asreda Building Contractor	BC-1	0916 581400	Addis Abeba	Desalegn Asreda
41	Dini Construction	BC-1	0911 525279	Afar	Ahmed Haj
42	Dugda Construction PLC	BC-1	0930 098564	Addis Abeba	Mikiyas Getu
43	Elshine Trading PLC	BC-1	0930 013905	Addis Abeba	Elshine Trading PLC
44	Equator Engineering Construction PLC	BC-1	0911 902436	Addis Abeba	Equator Engineering Construction PLC
45	Esubalew Dessie Yirdaw	BC-1	0910 576768	Amhara	Esubalew Dessie Yirdaw
46	Etete Construction	BC-1	0911 516970	Addis Abeba	Tesfu Tadese

47	Felema Construction PLC	BC-1	0935 981681	Addis Abeba	Beherawi Ambaye
48	Flintston Engineering	BC-1	0911 145559	Addis Abeba	Flintston Engineering
49	Fufa Legissa Building Contractor	BC-1	0911 203654	Addis Abeba	Fufa Legissa Jeka
50	GAD Construction PLC	BC-1	0114 421692/0911 209878	Addis Abeba	Gezahegn Adineh
51	Gashaw Melese Building Contractor	BC-1	0911 207727	Addis Abeba	Gashaw Melese
52	Getachew Atsbeha Kidanu	BC-1	0911 236549	Addis Abeba	Getachew Atsbeha Kidanu
53	Getnet Tesfaye Building Contractor	BC-1	0911 529512	Addis Abeba	Getnet Tesfaye
54	Gift Construction PLC	BC-1	0911 219557	Addis Abeba	G/yesus egeta
55	Grace Engineering	BC-1	0116 294867	Addis Abeba	G/Michael Markos
56	Gutema Firisa Building Contractor	BC-1	0911 213975	Oromia	Gutema Firisa
57	Huda Real Estate PLC	BC-1	0113 715700/0911 202120	Addis Abeba	Huda Real Estate PLC
58	Jofor Construction & Real State	BC-1	0911 200091	Addis Abeba	Alemayehu Fantu
59	Justice Building Contractor PC	BC-1	0911 524805/011558 0453	Addis Abeba	Yosuf Mohammed
60	K.K.G Construction	BC-1	0912 114192	Addis Abeba	Kiros Kidane
61	Kasma Engineering PLC	BC-1	0930 034824	Addis Abeba	Tamrat Zerihun
62	Kassa & Sons Construction P.L.C.	BC-1	0911 203874	Addis Abeba	Getahun Kassa
63	Kassahun Million Zeleke	BC-1	0911 207757	Addis Abeba	Kassahun Million Zeleke
64	Kibco Service& Investment PLC	BC-1	0911 201255	Addis Abeba	Frehiwot Shibru
65	Kibru Fitret Melaw	BC-1	0911 201711	Addis Abeba	Kibru Fitret Melaw
66	Koracon Construction	BC-1	0911 214575	Addis Abeba	Jibril Geresu
67	Libu Kifle Burdamo	BC-1	0911 520185	Oromia	Libu Kifle Burdamo
68	Lorat Construction	BC-1	0911 204382/0911 378470	Addis Abeba	Abera Lorat
69	Loza Construction PLC	BC-1	0911 243678	Addis Abeba	Loza Construction PLC

70	LUCI ENGINEERING P.L.C.	BC-1	0929 907130	Addis Abeba	Adem Abdu Hussein
71	M C G Construction PLC	BC-1	0929 900660	Addis Abeba	M C G Construction PLC
72	Magercon PLC	BC-1	0114-391600	Addis Abeba	Mulugeta Ayele
73	Maven Construction	BC-1	0911 207691	Addis Abeba	Ayilachew Mezemr
74	Megelta Construction P.L.C.	BC-1	0911 678211	Addis Abeba	Megelta Construction P.L.C.
75	Mekasha Ambaw Building Contractor	BC-1	0915 321901	Dire Dawa	Mekasha Ambaw
76	Mela Engineering & Construction PLC	BC-1	0911 318258	Addis Abeba	Mela Engineering & Construction PLC
77	Merid Dechasa Garedew	BC-1	0911 215097	Addis Abeba	Merid Dechasa Garedew
78	Mesay Oli Atomsa	BC-1	0911 240256	Addis Abeba	Mesay Oli Atomsa
79	Mescon Construction	BC-1	0930 105752	Addis Abeba	Mesfin Tefera
80	Mohamed Yesuf Construction	BC-1	0911 222208	Addis Abeba	Mohamed Yesuf
81	Mohammed Abas Bilae	BC-1	0911 534145	Addis Abeba	Mohammed Abas Bilae
82	Mulu Hadgu Construction	BC-1	0911 513932	Addis Abeba	Mulu Hadgu
83	Mureza Leja Balcha	BC-1	0911 221185	Addis Abeba	Mureza Leja
84	Nahiet Business PLC	BC-1	0911 525786	Addis Abeba	Tewolde G/Yohanes
85	Nejib Aden Hassen Building Contractor	BC-1	0915 321936	Somali	Nejib Aden Hassen
86	Orbit Engineering & Construction P.L.C.	BC-1	0911 205031	Addis Abeba	Bekalu Minda Estifanos
87	Ovid Construction PLC	BC-1	0911 218204	Addis Abeba	Michael Kassa
88	Rediete Dagem Engineering & Construction PLC	BC-1	0911 202920	Addis Abeba	Rediete Dagem Engineering & Construction PLC
89	SA Construction PLC	BC-1	0911 410669	Addis Abeba	Afework Kitaw
90	Samuel S/Mariam Endale	BC-1	0911 211890	Addis Abeba	Samuel S/Mariam Endale
91	Serja Construction And General Trade PLC	BC-1	0930 034906	Addis Abeba	Serja Construction And General Trade PLC
92	Seyfe Wondie Adenew	BC-1	0911 203887	Addis Abeba	Seyfe Wonde
93	Solomon Tilahun Building Contractor	BC-1	0911 524465	Addis Abeba	Solomon Tilahun

94	Tamrat Temsgen H/Wolde	BC-1	0911 505119	Addis Abeba	Tamrat Temsgen H/Wolde
95	Tayam Engineering & Commerce P.L.C	BC-1	0911 217061	Addis Abeba	Tamiru Melese
96	Tesfaye Demessie Atresse	BC-1	0911 215532	Oromia	Tesfaye Demessie Atresse
97	Tesfaye Tsegaye Building Contractor	BC-1	0916 827643	Addis Abeba	Tesfaye Tsegaye
98	Tewodros Abera General Contractor	BC-1	0936 010411	Addis Abeba	Tewodros Abera
99	Tower PLC	BC-1	0911 528972	Addis Abeba	Abayneh Gesese
100	Trust Construction	BC-1	0911 414530	Addis Abeba	Girma Gidafe
101	Two Y Engineering	BC-1	0911 202629	Addis Abeba	Yehualaw Sisay
102	UMC Building Construction PLC	BC-1	0947 424045	Addis Abeba	Ibrahim Fedlu
103	Unity Engineering PLC	BC-1	0911 517438	Addis Abeba	Assefa Demise
104	Universal Construction P.L.C.	BC-1	0911 120074	Addis Abeba	Berhanu Weldamlak
105	Webcon Construction PLC	BC-1	0930 099304	Addis Abeba	Elias Tesfaw
106	Wonder Construction PLC	BC-1	0911 201232	Addis Abeba	Wondosen bekele
107	Workneh Guday Teshale	BC-1	0911 517796	Addis Abeba	Workneh Guday Teshale
108	Y.H.A. Industry & Trade PLC	BC-1	0911 200603	Addis Abeba	Ebisa Beyisa
109	Yared Esayas Micheal	BC-1	0911 208484	Addis Abeba	Yared Esayas Micheal
110	Yerer Construction PLC	BC-1	0911 203215	Addis Abeba	Eyuel Zeleke
111	Yoada Construction	BC-1	0911 238258	Addis Abeba	Kasaye H/Mariam
112	Yohannes Haile Building Contractor	BC-1	0930 003850	Addis Abeba	Yohannes Haile
113	Yonas Legesse Beyene	BC-1	0911 218229	South	Yonas Legesse Beyene
114	YOT Construction PLC	BC-1	0911 206942	Addis Abeba	Yonas Mulugeta
115	Yousef Kassaye Building Contractor	BC-1	0911 414243	Addis Abeba	Yousef Kassaye
116	Ziquala Building Contractor	BC-1	0911 201985	Addis Abeba	Abreham Demise

Addis Ababa University School of Commerce
Master of Art in Logistics and Supply Chain Management

Questionnaire to be filled by Procurement Managers and Operation Managers.

Dear Respondents,

The study is conducted in partial fulfilment of the requirement for the master's degree in Logistics and Supply ChainManagement.This questionnaire has been designed to study the effect of Procurement Planning on Organizational Performance in the case of Ethiopian grade one building contractors (BC1).

Your response will be the core input for data analysis part of the research and willenable the researcher to critically analyze the effect of procurement planning on performance.

The questionnaire consists of three sections. **Section I** deals with the general profile of respondents, **Section II** covers of procurement planning variables. It consist of five sub sections, completeness of planning, time horizon of planning, efficiency of planning, flexibility of planning and commitment of planning. **Section III** concerned with BC1 construction companies performance measurementcomponents.

The study is strictly for academic purposes and will be treated with utmost confidentiality. You are also not requested to write your name on this questionnaire.

Thank you in advance for sharing your valuable experience and time in completing the questionnaire.

Please attempt to answer all questions.

Kind regards

Esayas Gemechu
MA Candidate
Mobile Phone No. 0930-100002
Email:esayas.gemechu@yara.com

Section I: General Profile

Please tick **(√)**inside the boxes as appropriate

1.1 Gender

Male ☐ Female ☐

1.2 Age(in years)

18-2930-4☐59above 60 ☐ ☐ ☐

1.3 Experience in the business(in years)

Less than 56- 10 ☐ 11- 15 ☐above 16 ☐ ☐

1.4 Educational Background

Diploma ☐ DegreeMasters☐ ☐

PhDOthers ☐ ☐

1.5 Job Title(Position)

Procurement ManagerOperati☐anager ☐

Section II: Procurement Planning Items

Please indicate your level of agreement or disagreement with each statement by putting a tick **(√)** mark using the five point measurement scale.

Scale	**Strongly Disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
	SDA	**DA**	**N**	**A**	**SA**
	1	**2**	**3**	**4**	**5**

2.1	**From the statement: ‘’there is completeness of procurement planning in BC1 contractors’’thus, to what extent do you agree/disagree on the following factorsof planningcompleteness?**	**SDA**	**DA**	**N**	**A**	**SA**
2.1.1	Execution of developedprocurement strategies					
2.1.2	availability of general guidelines of procurement decision making					
2.1.3	setting and realizing **S**pecific, **M**easurable, **A**chievable, **R**ealistic and **T**ime-phased procurement objectives					
2.1.4	having a formal procurement procedures					
2.1.5	implementing formal procurement methods (direct, Pro-forma and bidpurchasing etc.)					
2.1.6	effectiveprocurement**priority** system					
2.1.7	realistic and controlled procurement budget					
2.1.8	linking organizational resources requirement with cash flow					
2.2	**The time horizonsof procurementplanninghaseffecton BC1organizational performance’’Could you provide your level of agreement/disagreement to the statement based on the following time horizons**	**SDA**	**DA**	**N**	**A**	**SA**
2.2.1	less than 1 month					
2.2.2	greater than 1 month to 3 months					
2.2.3	greater than 3 months to 1 year					
2.2.4	greater than 1 to 5 years					

2.3	**Please provide your level of agreement/disagreement in relation to the efficiency of procurement planning in BC1.**	**SDA**	**DA**	**N**	**A**	**SA**
2.3.1	cost of making procurement planning is high					
2.3.2	supplies required for procurement planning are readily available					
2.3.3	there are well-trained and skilled procurement human resources to prepare procurement plan					
2.3.4	information technology system (IT)utilized to formulate procurement plan.					
2.3.5	adequate time allocated for procurement planning					
2.4	**To what extent do you agree or disagree thatthe flexibility procurement planning rewards?**	**SDA**	**DA**	**N**	**A**	**SA**
2.4.1	in coping up changes in market conditions.					
2.4.2	in coping up changes in market price.					
2.4.3	in coping up supply unavailabilityand market risk.					
2.5	**To what extent do you agree or disagree that the involvement and commitmentof the following stakeholder/s in procurement planning?**	**SDA**	**DA**	**N**	**A**	**SA**
2.5.1	procurement staff and manager					
2.5.2	operation staff and manager					
2.5.3	general manager and management team					
2.5.4	all stakeholders (procurement, operations, finance, logistics, management etc.)					

Section III: BC 1 Contractors Organizational Performance Items

Please indicate your level of agreement or disagreement with each statement by putting a tick (√) mark using the five point measurement scale.

Scale	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
	SDA	D	N	A	SA
	1	2	3	4	5

3	To what extent do you agree with the following statement concerningBC1 organizational performance?	SDA	D	N	A	SA
3.1	complete projects before the agreed contract time.					
3.2	contract time extension is not common					
3.3	projects completed with agreed contractual cost					
3.4	there is efficient use of materials					
3.5	Working in loss is not common					
3.6	project cost overruns is not common					
3.7	has adequate trained and skilled human resources					
3.8	quality construction materials are ready available					
3.9	have well-developed quality management system					
3.10	mostly managed to reduce construction wastes					

In General

To what extent does procurement planning affect your organizational performance?

Please tick (√) inside the boxes most appropriate to you

No effect at all	Little extent	Moderate extent	Large extent	Very large extent
1	2	3	4	5

*** Thank you very much***

Appendix IV **Correlations Table**

Column1	Column2	Total score
Completeness of PP Strategies	Pearson Correlation	.556**
	Sig. (2-tailed)	.000
	N	94
Completeness of PP Objectives	Pearson Correlation	.484**
	Sig. (2-tailed)	.000
	N	94
Completeness of PP Procedures	Pearson Correlation	.422**
	Sig. (2-tailed)	.000
	N	94
Completeness of PP Methods	Pearson Correlation	.502**
	Sig. (2-tailed)	.000
	N	94
Completeness of PP Priority	Pearson Correlation	.469**
	Sig. (2-tailed)	.000
	N	94
Completeness of PP budget	Pearson Correlation	.572**
	Sig. (2-tailed)	.000
	N	94
Completeness of PP Cashflow	Pearson Correlation	.458**
	Sig. (2-tailed)	.000
	N	94
PP time horizon less than 1	Pearson Correlation	.219*
	Sig. (2-tailed)	.034
	N	94
PP time horizon 1 to 3 Months	Pearson Correlation	.259*
	Sig. (2-tailed)	.012
	N	94
PP time horizon greater 3months to 1 year	Pearson Correlation	.134
	Sig. (2-tailed)	.197
	N	94
PP Time horizon greater than 1 year	Pearson Correlation	.266**
	Sig. (2-tailed)	.010
	N	94
Efficiency of cost PP	Pearson Correlation	.166
	Sig. (2-tailed)	.110
	N	94
Efficiency supplies of PP	Pearson Correlation	.508**
	Sig. (2-tailed)	.000

	N	94
Efficiency HR Trained	Pearson Correlation	.639**
	Sig. (2-tailed)	.000
	N	94
Efficiency IT Utilization	Pearson Correlation	.617**
	Sig. (2-tailed)	.000
	N	94
Efficiency adequate time	Pearson Correlation	.587**
	Sig. (2-tailed)	.000
	N	94
FlexibilityMarketconditions	Pearson Correlation	.526**
	Sig. (2-tailed)	.000
	N	94
FlexibilityMarketprice	Pearson Correlation	.560**
	Sig. (2-tailed)	.000
	N	94
FlexibilityMarketrisk	Pearson Correlation	.531**
	Sig. (2-tailed)	.000
	N	94
CommitmentProcurement	Pearson Correlation	.417**
	Sig. (2-tailed)	.000
	N	94
CommitmentOperation	Pearson Correlation	.381**
	Sig. (2-tailed)	.000
	N	94
CommitmentManagement	Pearson Correlation	-.021
	Sig. (2-tailed)	.843
	N	94
Commitmentallstakeholders	Pearson Correlation	.105
	Sig. (2-tailed)	.312
	N	94
BC1 Performance complete before hand over time	Pearson Correlation	.617**
	Sig. (2-tailed)	.000
	N	94
BC1 Performance time extension is not common	Pearson Correlation	.325**
	Sig. (2-tailed)	.001
	N	94
BC1 Performance projects complted with agreed contracual cost	Pearson Correlation	.526**
	Sig. (2-tailed)	.000
	N	94

BC1 Performance there is efficient use of materials	Pearson Correlation	.625**
	Sig. (2-tailed)	.000
	N	94
BC1 Performance work in loss is not common	Pearson Correlation	.536**
	Sig. (2-tailed)	.000
	N	94
BC1 Performance project cost overruns is not common	Pearson Correlation	.483**
	Sig. (2-tailed)	.000
	N	94
BC1 Performance has adequate trained and skilled human resources	Pearson Correlation	.666**
	Sig. (2-tailed)	.000
	N	94
BC1 Performance quality construction materials are readly available	Pearson Correlation	.636**
	Sig. (2-tailed)	.000
	N	94
BC1 Performance have well developed quality management system	Pearson Correlation	.630**
	Sig. (2-tailed)	.000
	N	94
BC1 Performance reduced construction waste	Pearson Correlation	.666**
	Sig. (2-tailed)	.000
	N	94
Total	Pearson Correlation	1
	Sig. (2-tailed)	
	N	94

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

*. Correlation is significant at the 0.05 level (2-tailed).

Sources : SPSS generated result