



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

**THE EFFECT OF PROCUREMENT MANAGEMENT PRACTICE ON THE
PROJECT PERFORMANCE: THE CASE OF COMMERCIAL BANK OF
ETHIOPIA**

ADDIS ABABA

BY

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JULY, 2019

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**A THESIS PAPER SUBMITTED TO ST. MARY'S UNIVERSITY
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DECLARATION

I declare that this thesis entitled “**The Effect of Procurement Management Practice on the Project Performance: The Case of Commercial Bank of Ethiopia Addis Ababa**” is my original work. This thesis has not been presented for any other university and is not concurrently submitted in candidature of any other degree, and that all sources of material used for the thesis have been duly acknowledged.

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ENDORSEMENT

This thesis has been submitted to St. Mary's University, School of Graduate studies for examination with my approval as a university advisor.

Advisor

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LIST OF ACRONYM

CBE-	<i>Commercial Bank of Ethiopia</i>
CEO –	<i>Chief Executive Officer</i>
CIPS-	<i>Chartered Institute of Purchasing and Supply</i>
EOQ-	<i>Economic Order Quantity</i>
GPP/SPP-	<i>Green/Sustainable Public Procurement</i>
IM-	<i>Inventory Management</i>
OECS-	<i>Organization of Eastern Caribbean States</i>
OECD-	<i>Organization for Economic Cooperation and Development</i>
ROP-	<i>Re-Order Point</i>
ROC-	<i>Re-Order Cycle</i>
SPSS-	<i>Statistical Package for Social Sciences</i>

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Abstract

This project studies the effect of procurement management practice on the project performance the case of commercial bank of Ethiopia where the concept of procurement management comes a long way in the practice of project undertaking. Thus, the researcher came up with a major research gap which the effectiveness of procurement practice on the project's performance. In addition, the researcher has further assessed the effectiveness of procurement practice in terms of Inventory Management practice, Need Assessment, Supplier sourcing and Contract Management. The methodology was designed as quantitative approach since the data which was gathered through questionnaire is quantitative (numerical). Moreover, this study adopts explanatory research design. In this research design, empirical data are collected for testing the hypotheses. The researcher employs the test-retest reliability test, where the consistency of the questionnaire is evaluated over time by Cronbach's alpha (Using SPSS version 22) and the researcher used Regression Analysis to analyze data presentations. Its general objective included to find out the effect of need assessment, supplier sourcing processes, contract management and inventory management on project performance of CBE. Procurement functions such as need assessment, supplier sourcing, contract management and inventory management play a very important role in the execution of projects. The study recommends that CBE should include the four procurement functions i.e. need assessment, supplier sourcing, contract management and inventory management in their implementation of projects.

Key words, procurement management, CBE, project performance, need assessment, contract management.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Project Implementation has been given different meanings in literature. For instance, Chan (2007) defined it as the system that represents the organizational structure adopted by clients for the implementation of project processes and eventual operations of the project. Any given project performance is highly influenced by the type of project procurement method used to deliver the project. Consequently, project clients often seek to select the best method that can help to achieve better project results. Different forms of project performance exist from which clients can choose. There are terms of allocation of activities, sequencing, process and procedure and organization approach in project performance.

The methods give a strong relationship with project performance outcome specifically time, cost and quality. Yet these processes pose difficulties to clients, partly due to the complex task involved in trading –off various numerous factors that underpin the selection process. Moenaar et al., (2009) defined procurement methods as a comprehensive process by which designers, constructors, and various consultants provide services for design and construction to deliver a complete project to the client. The success or failure of project implementation depends on the interrelated and sequential effectiveness and efficiency. Poor performance of projects has been on the rise caused by the complex nature of procurement selection and their subsequent management that poses great difficulties to clients.

Procurement is becoming an issue of public attention and debate, and continues to be subjected to reforms, restructuring, rules and regulations. Procurement refers to the acquisition of goods, services and works by a procuring entity using funds. Even though several Organizations in Ethiopia are taking steps to refine their procurement systems, the process is largely still shrouded by secrecy, inefficiency, corruption and under cutting. In all such cases, huge amounts of resources are wasted. The principal reason for the enactment of the Procurement Act was to have a legal regime that weeds out inefficiencies in the procurement process, remove patterns of abuse, and the failure of the public purchaser to obtain adequate value in return for the expenditure of public funds.

The major obstacle to enact procurement has been inadequate regulatory compliance. Boström, Jönsson, Lockie, Mol and Oosterveer, (2015) confirmed that non-compliance problem affects

not only the third world countries but also countries in the European Union. Additionally, compliance in public procurement is still a major issue. The leadership and Integrity Regulation Act (2015) requires that public officers who receive “Value Gift” surrender it to a public entity. These valuable gifts shall be deemed to be public property and shall be received and disposed of in accordance with provisions of the Public Procurement and Asset Disposal Act 2005.

There are several stalled development projects and actual procurement expenditure is normally higher than budgeted. Procurement is management function that ensures identification, sourcing, access and management of the external resources that an organization needs or may need to fulfil its strategic objectives. Procurement exists to explore supply market opportunities and implement resourcing strategies that deliver the best possible supply outcome to the organization, its stake holders and customers. Procurement applies the science and art of external resource and supply management through a body of knowledge interpreted by competent practitioners and professionals (Australasia, 2014).

1.2 Statement of the Problem

The purpose of procurement management in governmental organizations is to ensure that all goods and services purchased by public institutions are done in a harmonized procedure and in a way that ensures a careful, economic and efficient use of public resources. It is also to ensure that transactions are devoid of corruption, but are done in fairly, plainly and in a transparent manner and by encouraging competition among local players. However, in a lot of government organizations, the public procurement process is sheltered with concealment, incompetence and bribery (Nyakundi, et al., 2012). Studies have shown that there are procurement operational lapses that are leading to poor service delivery and consumer dissatisfaction which have become a global challenge, (OECS), April 2013.

Procurement management in many organizations rarely seems satisfactory to the community and donors. Several studies have been conducted in the field of donor funding but focused on different aspects other than procurement management and performance of governmental organizations in project implementation. Asfaw (2009) studied the relationship that exists between organizations' performance. Kebede (2012) studied factors affecting the implementation of donor funded projects. On the other hand, Girma (2000) researched on the effect of aid on economic growth of recipient countries.

Studies on procurement management on project remains scanty hence this study seeks to access procurement management on project at CBE. The researcher wishes to investigate how

procurement management is executed at CBE. In Ethiopia, previous studies have not concentrated on the assessment of procurement management on project performance at CBE. This thesis uses CBE as a case study as Ethiopian scenario portrays lack of literature on this front. The researcher aims to contribute this to the emerging literature.

1.3 Research Objectives

1.3.1 General Objective

The general objective of this study is to assess procurement management on project performance at CBE.

1.3.2 Specific Objectives

The specific objectives of the study are as follows

- To determine the effect of need assessment on project performance at CBE.
- To examine the effect of supplier sourcing on project performance.
- To check the effect of the contract management on project performance.
- To determine the effect of inventory management on project performance.

1.4 Research Questions

1. What are the effects of need assessment on project performance at CBE?
2. What are the effects of suppliers' sourcing on procurement performance?
3. To what extent does contract management on a project affect project performance?
4. To what extent does inventory management affect project performance?

1.5 The Scope and limitation of the Study

Due to the diversity of factors affecting procurement establishment, this study focuses on assessment of procurement management on project. It is limited to one organization. The Organization under focus is Commercial Bank of Ethiopia. Thus, to meet the objective, the researcher gives emphasis to the performance of this organization on managing procurement.

1.6 Research Hypotheses

The following are the research hypotheses:

H01: Need Assessment does not have a significant effect on Project Performance of CBE.

H02: Supplier Management does not have a significant effect on Project Performance of CBE.

H03: Contract management level involvement does not have a significant effect on Project Performance of CBE.

H04: Inventory management does not have a significant effect on Project Performance of CBE

1.7 Significance of the Study

Procurement management is the fundamental aspect of managerial actions. Thus, this study will be beneficial since it gives emphasis to whether the managers implement procurement management effectively or not on project. More specifically, it will be helpful for managers to get useful information and awareness about ways of employing procurement management effectively. This in turn will make facilities used in a proper manner. In addition, it will give awareness to planners and policy makers on the effect of procurement management on project performance so that they can modify the policy. The study will also initiate other researchers for further enquiry. Furthermore, it will be used as a reference by academicians.

1.8 Definition of Terms

- **Procurement management:** is one such form of management, where goods & services are acquired from a different organization. Procurement management is known to help an organization to save much of the money spent where purchasing goods & service from outside.
- **Need Assessment:** is a systematic process for determining & addressing needs or 'gaps' between current conditions & desired conditions of 'wants'.
- **Project Performance:** projects are initiated to achieve business objectives. Project objectives are a means to that end. When measuring project is ongoing, it is necessary to focus on the project objectives & performance against schedule & budget estimates.
- **Contract management:** is an integral part of the procurement cycle, a contract management plan assists contract mangers to properly manage contracts by addressing transition.

1.9 Organization of the Study

This study consists of five distinct chapters. Chapter one deals with the back ground, statement of the problem, research objective, significance of the study and scope of the research. Chapter two focuses on relevant literature review with the topic, differences and similarities as well as arguments of different writers regarding procurement management would be dealt under this chapter. Third chapter presents methodologies used in conducting the study and description of the study area, research design, data sources, target populations, data collection instruments, data collection procedures, methods of data analysis and validity & reliability of the instrument. Chapter four includes the result and discussion & the study of data collected and analyzed using the data analysis tools. Finally, the last chapter shows the summary, conclusion and recommendation.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

The chapter provides information from publications on topics related the study. It examines what various scholars and authors have said about the concept of procurement functions. In this chapter, the concept of procurement functions including need assessment, supplier sourcing process, contract management and inventory management on project performance are covered. Theoretical review on procurement functions in organizations and the effects on project are also emphasized.

2.2 Theoretical Review

The world today of donor funding is complex in nature and is being noticed in the academic Researches and scholars' debates. It is common for scholars to focus on certain perspectives of Aid and policy framework instead of developing consistent foreign and aid theories (Van der Veen, 2011). This section deals with 4 theories, agency theory, stewardship theory, resource Dependency theory and stake holders' theory.

2.2.1 Agency Theory

The agency theory embraces facts that the parties involved in project development varying interests in approaching tendering process and valuation process. Relationship that exists within Parties may be referred to as agency. Parties have an agency relationship when they cooperate and engage in an association that allows one part (the principle), delegates decisions and work to work to/or another (an agent) to act on its behalf (Tenhiälä, Rungtusanatham and Miller, 2017).

The baseline underlying agency theory is that potential goal conflicts exist between principals and agents; each party acts in its own self-interest; there are frequent similarities between principals and agents; agents are more risk averse than the principal; and efficiency is the effectiveness criterion. Two potential problems stemming from these assumptions may arise in agency relationships: an agency problem and a risk-sharing problem (Xingxing 2012). There are Agency problems when agents' goals differ from the principals' and it is difficult or

expensive to verify whether agents have appropriately performed the delegated work, or rather moral hazard. The ethical and moral issues that arise from the manner donor underline the manner in which a project should be implemented. This problem also arises when it becomes difficult or expensive to verify that agents have the expertise to perform the delegated work (i.e. adverse selection) that they claim to have. A risk-sharing problem arises when principals and agents have different attitudes towards risk that cause disagreements about actions to be taken (Xingxing 2012).

According to the theory, party (the principle) contracts another (the agent) to perform some services on their behalf. The principle passes on decision making authority to the agent. The difference between buyers and suppliers will result in the two parties concerning themselves only with their self-interests (Xingxing 2012).

Agency theory determines how procurement managers execute procurement practices on behalf of donor funding agencies. Existence of poor principle agent relationship leads to low level of top management commitment and this also affects the relationship between institutions and the suppliers. Existence of conflict of interest amongst the agents leads to execution of procurement practices against the standard policies which leads to waste of time in tendering and cancelling of tender advertised and loss of procurement funds.

The public procurement Act requires all stakeholders to assess the processes involved in the Procurement and to know the efficiency and reliability in the procurement processes. Importantly is to recognize the flaws and challenges inherent in the system of procurement in order to correct them. These can be achieved through a formal procurement audit, among others. The agency theory model anchored on the fact that information asymmetries and pursuant of self-interests, principles lack basis to trust their appointed agents and will seek to mitigate these concerns by putting in place mechanisms to align interests of agents with principle and to reduce the scope for information asymmetries and opportunistic tendencies (Keng'ara, 2013). The study, thus Used this model to determine the effect of procurement management on effective project performance in CBE.

2.2.2 Stewardship Theory

This theory was developed by Donaldson and Davis in 1991 and 1993 respectively. The ideal Motive which directs managers to accomplish their job is the desire to perform excellently. This theory is based on the assumption that managers are stewards whose behaviors are aligned to

the objectives of the principals. It implies that managers have an intrinsic satisfaction when firm performance improves and organization success is attained. The implication of the theory is that Managers are also motivated by non-financial factors like challenging work, the opportunity to Exercise responsibility and authority as well as gaining recognition from peers and their managers.

It is critical for the organization to build a structure which allows for symphony between principles agents. Turning to the firm's leadership, the structure which allows for symphony between principles is where there is CEO duality. In such a scenario, the powers of the chairman of the board (responsible for board processes) and CEO (responsible for operational issues of the organization) are vested in one office. Donaldson and Davis indicated that such a structure allows an ambiguity in the CEO role as power and authority over lower ranking managers and other board members is then vested in one office.

The process of amalgamating the role of CEO and the board chairman drives down the cost of agency while enhancing performance (Abdula and Valentine ,2009).Apart from supporting CEO duality, proponents of stakeholders theory favors majority of insiders' directors and argue that they have superior knowledge of procurement functions in an organization thus take a shorter time to make decisions; they are more effective at evaluating the performance of top managers and utilize their expertise to ensure high quality procurement performance at all levels. According to Letting et al. (2012), the inclusion of more executive directors in the boards of companies would lead to more effective and efficient decision which include supplier sourcing. Procurement functions can enjoy the consistency in leadership style, unity of direction as well as Command.

2.2.3 Resource Dependence Theory

In resource dependency theory nations that are developed actively keep developing nations in alert position, often through economic force by instituting sanctions in a subservient position, often through proscribing free trade policies attached to loans granted by World Bank or by International Monetary Fund. The theory of dependency goes way back in 1949 where it was observed that the terms of trade for underdeveloped countries relative to the developed countries had deteriorated over time. The underdeveloped countries were able to purchase fewer and less manufactured goods from the developed countries in exchange for a given quantity of

their raw materials. In dependency theory, the degree of dependency increases as time goes on. Wealthy countries are able to use their wealth to further influence developing nations into adopting in describing poverty. Alkire and Santos (2013) indicated that the level of poverty in Sub-Saharan Africa is an evidence of the developing needs.

The evidence provided by Chen and Ravalli (2010) in describing poverty puts the global number of people living with below poverty line of \$ per day in Sub-Saharan Africa at 298 million up from 168 million policies that increase the wealth of the wealthy nations, even at their own expense. Similarly, they are able to protect themselves from being turned on by the developing nations, making their system more secure as time goes on.

2.2.4 Stakeholder Theory

The success of a firm is a complete function of successful management of the various relationships that a firm has with stakeholders considering that less can be achieved without Stakeholders, and the organization would cease to exist is that which is enriched in stakeholders' Theory. The year 2004 saw the revision of the Organization for Economic Cooperation and Development (OECD) principles which changed the principle from their narrow focus on the traditional shareholder centered corporate governance practice to a wider one which is accommodative of the various interests of different stakeholders of a firm. In their study, Grover and Malhotra (2013) extensively investigated on the application of transaction cost theory in supply chain management. In their empirical study of 1000 purchasing managers, they concluded that transaction cost theory applies to organizational supply chain management in four facets: effort, monitor, problem and advantage. Transaction cost theory is primarily concerned with the direct economic factors in organizations and hence fails to address some important aspects of the operation of organizational supply chain, including personal and human relations among other actors in the supply chain.

In a large scale, organization, project managers oversee two types of groups. One of which includes project team members permanently assigned to the project office under the project manager's authority while the other group consists of subject matter expert from the organizational technical and support department.

Project managers' responsibility include meeting project objectives for schedules, budgets and assessing alternatives, assessing risks, and deciding how to accept, avoid, remove, or mitigate them, leading the initiative to successful completion. One of the gurus of project management

coined the term ‘democracy’ to describe the use of teams in organizations. The team, as the building block of the networked enterprise, displaces the traditional bureaucratic hierarchy of successive levels of pyramided authority. In a democracy, teams’ formation leads to the lattice network of cross-functional/cross-organizational projects that integrate the activities of the work groups and reflect their empowerment, dedication, trust, loyalty and commitment.

2.3 Empirical Review

In this section, the researcher reviews literature related to the research problem. We have had studies carried out on procurement before the public procurement and Disposal Regulations that evaluated the efficiency of the procurement process in existence at the time. The major findings of the studies were that public procurement was not operating efficiently and that counties are losing a lot of money through shoddy deals. This section focuses on various procurement functions in organizations and their relationship with project performance and wrap up with organizations procurement performance in line with time and cost.

2.3.1 Need Assessment Practice and Project Performance

A procedure is a system of sequential steps or techniques for getting a task or job done (Lyons and Farrington, 2012). They are formal arrangements by means of which policies linking strategies are implemented. They further clarify that a cluster of reliable procedures, each comprised of a number of operations that together, provide information enabling staff to execute and managers to control those operations, is called a system. Therefore, procedural procurement ensures orderliness and efficiency in any procurement department (Burt et al, 2014), further adds that, procedural procurement is vital due to considerable amounts of money spent annually in the public sector. Procurement department should observe procedural transactions for the good of the population given the fact that expenditure incurred is the taxpayer’s money. This implies that public sector purchasers are accountable to the public whose money is spent, including those who tender and potential suppliers who may be disappointed. They must produce procedures and practices which will stand up either to scrutiny during government audits or to the challenge through the courts of any purchasing decision that has been made. The chief purpose of public accountability is to prevent abuses of taxpayer’s money. Planning scope refers to the period in which the budget will cover. The planning scope will be crucial in how the budget is drawn that is if they are budgeting for long term project or short term. It will assist in planning for activities and ascertain how next year

might change and steps to be taken to respond to the changes. Purchasing budgeting procedures involves various steps before the final budget is arrived at. The process usually starts at various departments depending on the department needs for the coming financial year. The budgeting process is then developed to a master's budget that is developed by the management. This process must be followed to make the employees own the purchasing budget allocation (CIPS, 2012).

Adell, Esquerro and Estevan (2009) indicated that needs assessment encourages innovation through procurement. They further found that need assessment provides transparency and clarity during procurement process and guarantee the product quality by the third party certification. They further pointed out in their report that most countries which included Spain, UK, Denmark, Portugal and Sweden that participated in procurement assessment have a Green/ Sustainable Public Procurement (GPP/SPP) strategy or action plan. A Green/ Sustainable Public Procurement (GPP/SPP) strategy or action plan minimizes the Environmental impacts. However, the level of commitment varies from one organization to another. Customer request, legal requirement, market demand, and business needs are the fundamental approaches of setting project performance process. A well-defined project can reduce the risk of changes and delay during project scope definition. A scope definition can be arrived at with effective needs identification which can alleviate the risk of inadequate design that can lead to expensive changes or even project failure (Fageha and Aibinu, 2014).

2.3.2 Supplier Sourcing Practice and Project Performance

The performance of the Procurement process within the public system may be a direct or an indirect yield of the processes depending on the objectives, goals, expectation and customer satisfaction (Sollishand Semanik 2007). The foremost thing for consideration during the procurement process is identifying the specific needs, how to pay for these needs and a review of the whole output. (Emmert and Crocker 2008).

Bid assessments can encompass many diverse factors, for example, cost, technical capability, Management aptitude, previous experience, the object of reference, environmental and quality Management systems, financial solidity and concerted skills (Lam et al, 2011, Eriksson and Laan, 2007; Malmberg, 2007). Other authorities have considered the procurement practices to be similar to the supply chain management practices which is the set of activities undertaken By an organization to promote effective management of its supply chain (Koh et al., 2007); as the

approaches applied in integration, managing and coordination of supply, demand and relationships in order to satisfy clients in effective way (Wong et al., 2015); as tangible activities/technologies that have a relevant role in the collaboration of a focal firm with its suppliers and/or clients (Vaart and Donk, 2008); and as the approach to involve suppliers in decision making, encouraging information, sharing and looking for new ways to integrate upstream activities.

During the negotiating process, parties should think carefully about the kind of commitments they should be prepared to make. One way to build trust is to create a commitment structure that can be implemented in stages. The key to negotiating a beneficial outcome is the negotiators' ability to consider all the elements of the situation carefully and to identify and think through the options. Organizations are required to seek the best value of working relationship for short term and long operations with suppliers.

2.3.3 Contract Management Practice and Project Performance

A number of Managers have considered the procurement practices to be similar to the supply Chain. Hyer (2010) explains that planning involves identifying the purpose, defining the scope Sound, determining customer requirements (user needs) and cost, assigning responsibilities and other activities According to Brown and Hyer (2010), monitoring refers to any tracking System from a simple checklist to sophisticated dashboard style approaches, for identifying Variances from the original plan.

It is argued that as part of the planning process, a project team should agree on the appropriate approach for monitoring key performance indicators (KPIs) during the life of the project. The two scholars also define project control as the set of processes, decisions, and actions involved in responding to project variances. Project control thus portends a project change management process for deciding when changes are appropriate and when to stay the course. Chandra (2008) avers that control is critical to implementation success in so far as it compels regular comparison of performance against targets, a search for the causes of deviation, a commitment to check adverse variances.

Brown and Hyer (2010) have anchored their argument for monitoring and control on the fact that there are several phenomena which influence project execution and cause actual performance to depart from planned performance. These phenomena include: Scope Creep; which describes the tendency for a project to grow beyond its initial size. It is caused by the

team members' enthusiasm; unanticipated issues discovered mid-project and redefinition or clarification of customer needs. Murphy's Law; espouses the principle that anything that can go wrong may

Go wrong. Pareto's law; postulates that 80% of project's problems and delays are caused by 20% of project activities. An effective project monitoring system should focus on activities that carry the highest risks for delay, cost over-runs, or performance challenges; and lastly, Escalation of Commitment principle which states that human beings tend to continue pursuing failing courses of action, even when all signals point to the fallacy of the strategy. Thus, a procurement project contract monitoring system can have a significant influence on people's decisions to escalate or de-escalate commitment. Most donors require that funding recipients evaluate contractor performance and document, as appropriate, whether contractors have met the terms, conditions and specifications of the contract.

Selecting a proficient and dependable contractor is one of the greatest problems consumers who wish to achieve project success face (Kumaraswamy and Anvuur, 2008). Bid assessments can encompass many diverse factors, for example, cost, technical capability, management aptitude, previous experience, the object of reference, environmental and quality management systems, financial solidity and concerted skills (Lam et al., 2001, Eriksson and Laan, 2007; Malmberg, 2007).

2.3.4 Inventory Management Practice and Project Performance

Inventory management is a complex decision making process that requires analysis of multiple criteria parameters, which in practice are usually non-deterministic in nature. Decisions are made in conditions of uncertainty. The most popular classical methods for determining inventory levels include Economic Order Quantity (EOQ) model, the Re-Order Point (ROP) models and Re-Order Cycle (ROC), Krzyzaniak, Cyplik, (2007). Safety stock aims to cover the unexpected changes in the demand, Grzybwska, (2010). Inventory Management (IM) is an inter-disciplinary concept (Larson and Halldorsson, 2014). Inventory management revolves around a cross-functional and across the boundaries of the firm (Ellram and Cooper, 2014). Halldorsson et al (2007) argues that key aspects of inventory include the design and management of the structure through inter-organizational relationships.

According to the 17th Annual State of Logistics Report Wilson (2016), business logistics cost as a percentage of US gross domestic product has grown to 9.5 percent, and of the over \$1 trillion spent on logistics, approximately 33 percent is attributed to the cost of holding

inventory. Thus, inventory management research is critical in procurement. Inventory programs can make inventory commitment more efficient and improve customer service. In a recent examination of the future of the discipline of logistics and logistics research, Davis –Sramek and Fugate (2007) uncovered that leading discipline visionaries feel that one area in which logistics researchers must focus on is coordination and collaboration, and subsequently, the inventory management literature published in logistics journals has evolved in recent years in that direction. Inventory management according to Heizer and Render (2016) indicated that businesses hold these stocks for various reasons, including protection against general shortages or potential problems with suppliers, or, because unit price rises may be imminent. Nevertheless, the literature focuses upon stock replenishment policies.

Typically, the resultant inventories enable firms to perform a service economically, without the beneficiaries suffering any untoward delays. Thus inventory planning and control bears Great significant. The order placing discipline minimizes the cost of transferring goods, besides shortening the associated lead times and that there are sufficient incentives for the parties to cooperate because the recipient pays for the upstream storage and freight in one way or another. Effective inventory management depends on understanding all the details of what is inventory management. By applying lean practices to all aspects of the inventory management cycle, businesses can reduce investment in standing inventory, plant rental, shipping costs, reverse logistics while maintaining or improving customer service levels and in-stock metrics on critical inventory (Confessore, Rismondo and Stecca, 2014).

The other sensitive area of inventory is the movement of materials as they go through the various stages of operations which is referred to as goods or work in progress inventory which involves tracking of materials as they are used to create finished goods that helps to identify the need to adjust ordering amounts before the raw materials inventory can get dangerously low or are inflated to unfavorable level (Murphy, 2007).

2.4 Research Gap

Tremendous improvement has been made in Ethiopia with regard to procuring procedures in organizations. However, there seem to appear a lack of functionality of regulatory which is yielding to poor service delivery. The literature review is evident that studies been have done On Procurement Practices and its benefits to the organization. Whereas procurement practices May cut across several sectors. It may not be the case with procurement practices in the bank sector, which focuses on organizational performance not in terms of profit made, but services

Rendered to the citizens. It is, therefore, clear that there is a need to find out the effects of procurement functions in organizational performance. Literature review which is discussed above primarily focuses on the Procurement Practices that identified a number of potential factors affecting performance. However, it has become apparent from this review that there are a number of significant gaps in the current literature in relation to the uptake and adoption of implementation on procurement practices. Ethiopia is one of the countries where procurement planning is a fundamental function that impacts on effective or ineffective service delivery. There is no part of local government service delivery that does not depend on procurement planning; and yet the area remains a neglected field of research. It is expected that compliance to law, better risk assessment and cost effective procurement (Selam, 2010) will lead to improved and effective performance of governmental organization in Ethiopia.

2.5 Factors Affect Project Performance

The construction industry is the tool through which a society achieves its goals of urban and rural development. It is one of the sectors that provide important ingredients for the development of an economy. The construction industry tends to fluctuate with the general economy, and it has a quick response to the changes in the economy (Abdullah, 2013).

The construction industry is one of the most complex, fragmented industries referred as schedule and resource driven. In construction industry timely completion of project is a major criterion of project success (Aftab,2011).

Procurement management & impacts it has on the overall success of a project. Project procurement management contains six unique processes (procurement planning, solicitation planning, proposal solicitation, source selection, contract administration & contract close out) (Flemming, 2003).

2.6 Conceptual Framework

A conceptual framework is a set of broad ideas and principles taken from relevant fields of enquiry and used to structure a subsequent presentation. Inventory activities that include stock control and disposal process are paramount to secure project performance. The research aims to study the correlations of procurement functions on the level of performance in CBE. It also aims to describe and explain the benefits that accrue.

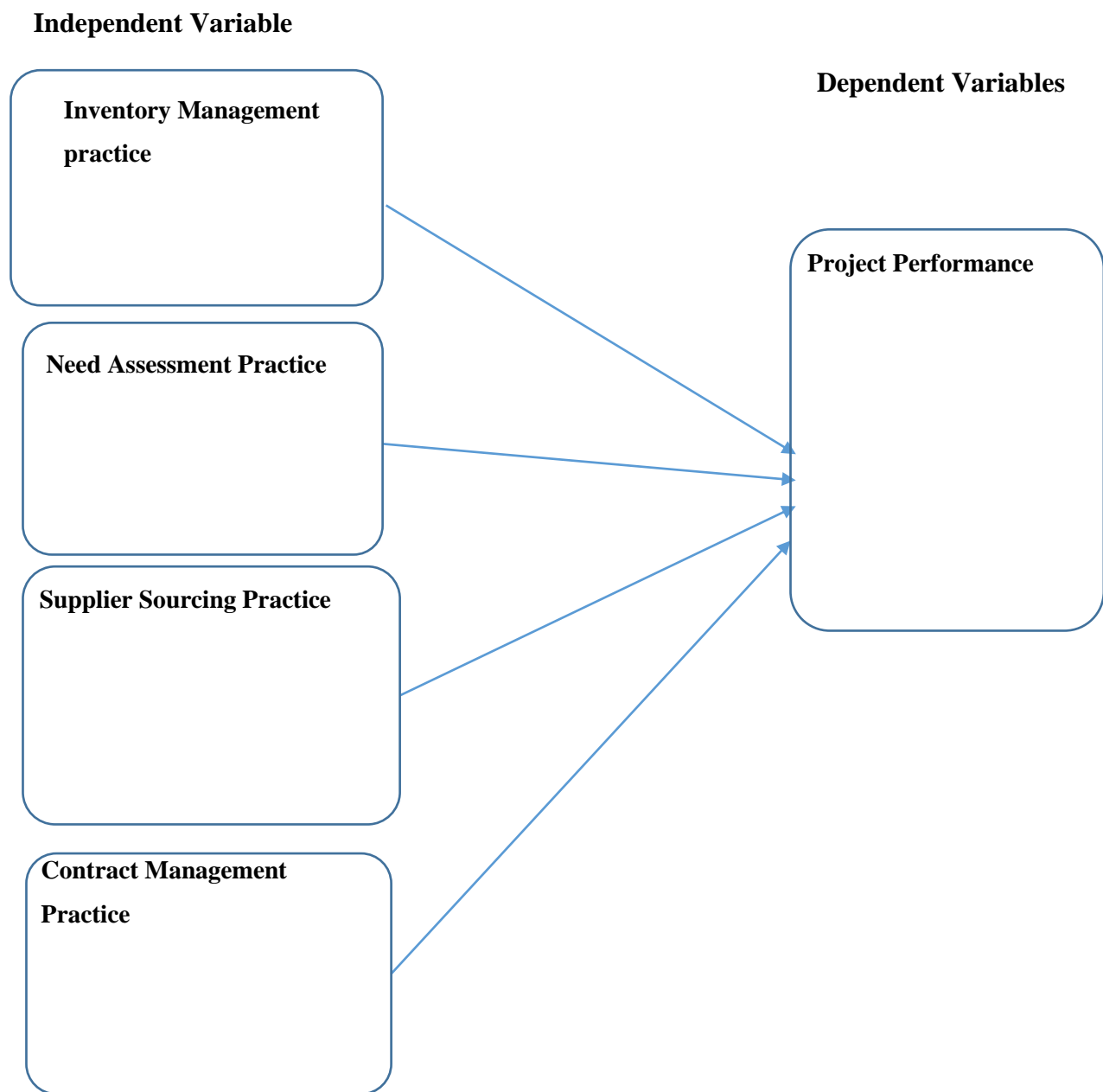


Fig 2.1: Diagrammatical representation of the variable interrelationships

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

This chapter presents the research methodology that is followed in this study. Research methodology includes the steps that are assumed by a researcher in studying the research problem as informed by logic (Garg and Kothari, 2014). The research presents the methodology that is used to carry out the survey, what informs the selection of the research design, the target population, sampling method to be used, and data collection instrument and how data is analyzed, interpreted and presented.

3.2 Research Approach and Design

The approach which will be followed by the researcher in this study is quantitative approach since the data which will be gathered through questionnaire is quantitative (numerical). Moreover; this study adopts explanatory research design. This is because explanatory research is employed to find out the relationship between dependent and independent variables. In this research design, empirical data are collected for testing the hypotheses.

3.3 Target Population

Target population is the collection of elements that possess the information sought by a researcher (Solverman, 2016). According to Taylor, Bogdan and DeVault, (2015) a population refers to the entire group of persons or elements that have at least one thing in common. Target population is defined as all members of a real or hypothetical set of people, events or objects to which a study wishes to generalize the results of a study. (Bryman and Bell, 2007). According to Amin (2005:235), a target population is the population to which the researcher ultimately wants to generalize the results. The target population for this study would be one hundred (80/100) respondents. The target population of this study includes procuremnt employees of CBE.

3.4 Sample Size and Sampling Procedure

In order to come up with the sample, the study employed simple random sampling method. This method was used because it's easy in assembling the sample, it is inclusive of the population

and lacks subjectivity selection which makes it reasonable to make a true generalization. (Mugenda and Mugenda, 2008). The perfect sample is directly related to the type of research one is conducting. This study used a random sampling technique formula to estimate sampling size, was employed in this study. Based Yamane (1967:886) formula, a sample of 80 participants is used to which a questionnaire is distributed.

3.4.1 Sampling Technique

This research used simple random sampling because of the following reason namely; the ease of assembling the sample. It consider a fair way of selecting a sample from a given population since every member will be given equal opportunity of being selected due to the representativeness of a sample obtained by simple random sampling, it will reasonably make generalizations from the results of the sample back to the population as one of the goals of research will be able to make conclusions pertaining to the population from the results obtained from a sample. The sample will be calculated using *Yamane (1967:886)*, a 95% confidence level and $P = .5$ are assumed. Which has ideal formula for populations of targeted population 100. i.e.

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

Where n- is the sample size

N- Is the population size

And e is the level of precision.

i.e.

$$n = \frac{100}{1 + 100(0.05)^2}$$

$$n = 100/1.25$$

$$n = \underline{80} \text{ (respondents).}$$

3.4.2 Instrument of Data Collection

Primary data is collected using questionnaire items which are to be administered by the researcher with the help of two research assistants. The questionnaire compromises questions which are related to the study objectives. The closed ended questions provide alternative answers from which respondents select the answer because they are easier to analyst and are economical in terms of time.

Table 3.1: Measurement of the dependent and independent variables

Type of Variable	Variable	Indicator	Measurement	Data collection tool
Dependent	Project Performance	-Percentage of Milestones -Cost Variance -Deviation of Planned Budget -Current resource allocation	Ordinal	Questionnaire
Independent	Need Assessment Practice	-Planning, Subject Analysis, -Developing high level Specification	Ordinal	Questionnaire
Independent	Supplier Sourcing Practice	-Supplier Selection, Supplier Negotiation, Supplier Performance, Single Sourcing	Ordinal	Questionnaire
Independent	Contract Management Practice	-Managerial Capacity, -Control and Command of Resources	Ordinal	Questionnaire
Independent	Inventory management Practice	-Order placement, In and out flow of goods -Committee for Disposal	Ordinal	Questionnaire

3.4.3 Data Collection Procedure

Prior to actual data collection, pilot test is done with research instruments so as to test the clarity of the questions for face validity. This is done by giving 10 respondents the questionnaire. The unclear questions are corrected. Questionnaires are then administered or dropped and then picked latter after four to five days.

3.5 Validity and Reliability of the Instruments

Reliability refers to how consistent the instrument is as far as its measurement of the variables is Concerned (Taylor, Bogdan and DeVault, 2015). The researcher employs the test-retest reliability test, where the consistency of the questionnaire is evaluated over time by Cronbach’s alpha (Using SPSS version 22). It is used to test internal consistency that reveals whether the content of the questions is reliable.

3.6 Reliability Test Results

In order to test for reliability of the research instrument, the study used Cronbach's reliability Test. This determined that indeed the questionnaire was reliable enough to collect information that could be used to make valid inferences. According to Bonnet and Wright, (2015) an alpha level of 0.6 and above is considered acceptable.

Table 3.2 Reliability Test

Indicates that this study's alpha value was 0.921 therefore reveals an excellent internal consistency.

Cronbach's Alpha	Number of Items
0.921	33

3.7 Data Processing and Analysis

To identify and eliminate errors and bias rating made by respondents there after the data is edited. Coded numbers are then assigned to each answer of survey question and out of which a coding list or frame is obtained. The coded items are then analyzed with the aid of computer software for analyzing data. Descriptive statistics such as frequency distribution, measure of central tendency that is mean, standard deviation are used.

Regression Analysis is used to analyze the data presentations that are done in pie charts, bar graphs and tables. According to Mugenda & Mugenda (2008), data analysis is the process of bringing order, structure and meaning to the mass of information collected. The information is codified and entered into a spreadsheet and analyzed using Statistical Package for Social Sciences (SPSS). SPSS Version 22 has got descriptive statistics features that assist in variable response comparison and gives a clear indication of response frequencies (Mugenda & Mugenda, 2008). The questionnaire is vetted to make sure that its contents are able to measure all variables involved in the study.

3.8 Ethical Considerations

It is important to note that the code of ethics is approached via three main themes namely ethical treatment of research participants, competence and honesty. These themes form the basis upon which the researcher conducts the research. This includes respect for persons as well as their beneficence, i.e. the process of ensuring that the well-being of participants and justice which is equity ensured by a professional researcher.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Response Rate

The study set out to investigate a total of 80 questionnaires from employees of CBE that were selected to take part in the study. From the 80 questionnaires distributed a total of 70 responses were received. The overall response rate was 87.5% this response rate was deemed substantial to draw conclusions about the entire population of CBE.

4.2 Characteristics of the respondent

To ascertain that the respondents included in the study were relevant, the study asked them for some demographic information including their gender, age bracket, highest level of education and their working experience. The analyses and implication are discussed in this section.

The study found that 50(62.5%) of the 80 respondents were female while the remaining 30 (37.5%) were male. This indicated that gender parity was achieved during the research.

Table 4.1: Characteristics of the Respondents

Age	20-25	Frequency	Percent
		25	31.25
	26-30	40	50
	31-35	15	18.75
Gender	F	50	62.5
	M	30	37.5
Education Background	Under Graduate level	41	51.25
	Post Graduate	39	48.75
Work experience	>3 years	46	57.5
	3-6 years	20	25
	7-10 years	14	17.5

From table 4.1 above, it can be seen that most of the respondents were between the ages of 26 And 30 years. This was represented by 50%. 31.25% of them were between 20 and 25 years while the remaining 18.75% were between 31 and 35 years. Therefore, the respondents' age was between 20 and 35, implying that the respondents sought after were not minors and therefore were at the right age to participate in the study and give answers to the questionnaire.

Finally, on the level of education, it was revealed that 41(51.25%) of the respondents had attained Under-graduate level while 39 (48.75%) had attained post-graduate level of education. This signifies that the respondents included in the study were knowledgeable enough to understand the questions being posed to them in the questionnaire. This also means that the researcher included the right people to partake in the study.

Results on the working experience of the respondents indicate that most of the respondents had worked in procurement department for less than 3 years as represented by 46(57.5%). Next were those who had worked between 3 and 6 years at 20(25%) and finally those who had worked between 7 and 10 years at 14 (17.5%).

This further indicates that the respondents chosen had experience regarding the topic of study and are therefore in the best position to answer the questions. This is summarized in figure 4.3

4.3 Descriptive Statistics Results

The study's main objectives were investigated and results are presented in this section. The objectives were to investigate the effect of need assessment, supplier sourcing process, contract management and inventory management on project performance CBE.

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The study's main objectives were investigated and results are presented in this section. The objectives were to investigate the effect of need assessment, supplier sourcing process, contract management and inventory management on project performance CBE.

4.3.1 Need Assessment Practices

The above table 3 presents that respondent's feedback on the effect of Need Assessment on Project Performance of CBE was indicated by the respondents on each question. It was revealed that many respondents believe that Need Assessment affects Project Performance to a large extent as indicated by a mean of 4.01. Processes such as having their annual procurement report (mean= 4.36), having a procurement database (mean= 4.19), international competitive bidding (mean= 4.16), procurement review committee (mean= 3.90), advertising (mean=

3.89), having procurement plans (mean=3.89), having a scorecard for procurement evaluation (Mean=3.87) and finally having need functions, planning and assessing the risk (mean= 3.83).

Table 4. 2: Need Assessment Practices and Project Performance

Question	To a Very Low		To Low Extent		To Moderate Extent		To large Extent		To Very Large		Mean
	f	%	f	%	f	%	f	%	f	%	
Annual Procurement Report	0	0%	0	0%	12	17.1%	21	30.0%	37	52.9%	4.36
Procurement Database	0	0%	0	0%	12	17.1%	33	47.1%	25	35.7%	4.19
International competitive bidding	0	0%	0	0%	12	17.1%	35	50%	23	32.9%	4.16
Procurement review committee	0	0%	0	0%	25	28.4%	27	38.6%	18	25.7%	3.90
Advertising	0	0%	0	0%	23	32.9%	32	45.7%	15	21.4%	3.89
Procurement Plans	0	0%	0	0%	24	34.3%	30	42.9%	16	22.9%	3.89
Scorecard for Procurement Evaluation	0	0%	2	2.9%	22	31.4%	29	41.4%	17	24.3%	3.87
Need functions, planning, assessing the risk	0	0%	2	2.9%	21	30%	34	48.6%	13	18.6%	3.83
Average											4.01

4.3.2 Supplier Sourcing Practices

The effect of supplier sourcing process on project performance of CBE was also another objective sought by the study. An average mean score of 4.03 implies that the respondents believe that supplier sourcing process affects project performance to a large extent. The majority of the respondents believe that the implementation of the purchasing manual is complete (mean= 4.44), the workers of CBE serve suppliers objectively (mean= 4.20), CBE management has fully implemented procurement policy (mean= 4.10), CBE has procurement functions in line with PPDA (2015) (mean= 4.04), that the process involved in project implementation are efficient (mean= 3.93), that organization is linked up to its suppliers and end users (mean= 3.90), that CBE employees have fully adopted acceptable tendering regulation (mean= 3.84) and finally that proposals are made and submitted to all potential suppliers (mean= 3.80). All these are indicated in table 4.3

Table 4.3: Supplier Sourcing Practices and Project Performance

Questions	Very Low		Low		Moderate		High		Very High		Mean
	f	%	f	%	f	%	f	%	f	%	
	The implementation of the purchasing manual is complete	0	0%	0	0%	7	10.0%	25	35.7%	38	
The workers of CBE serve suppliers objectively	0	0%	0	0%	13	18.6%	30	42.9%	27	38.6%	4.20
CBE management has fully implemented procurement policy	0	0%	0	0%	18	25.7%	27	38.6%	25	35.7%	4.10
CBE has procurement functions are in line with PPDA (2018)	0	0%	0	0%	19	27.1%	29	41.4%	22	31.4%	4.04
The process involved in project implementation are efficient	0	0%	0	0%	24	34.3%	27	38.6%	19	27.1%	3.93
Proposals are made and submitted to all potential suppliers	0	0%	0	0%	29	41.4%	26	37.1%	15	21.4%	3.90
CBE employees have fully adopted acceptable tendering regulation	0	0%	0	0%	29	41.4%	23	32.9%	18	25.7%	3.84
CBE is linked up to its suppliers and end users	0	0%	2	2.9%	21	30.0%	29	41.4%	18	25.7%	3.80
Average											4.03

4.3.3 Contract Management Practices

This study investigated how Contract Management affects Project Performance. Results obtained from the respondents are as described in Table 4.4.

Table 4.4: Contract Management Practices and Project Performance

Questions	Very Low		Low		Moderate		High		Very High		Mean
	f	%	f	%	f	%	f	%	f	%	
Procurement department go through process needs of organization	0	0%	0	0%	12	17.1%	31	44.3%	27	38.6%	4.21
Most projects completed in timeline	0	0%	1	1.4%	13	18.6%	31	44.3%	25	35.7%	4.14
Suppliers honor their Obligation.	0	0%	2	2.9%	20	28.6%	30	42.9%	18	25.7%	3.91
Contracts of the organization managed fairly and	0	0%	0	0%	25	35.7%	27	38.6%	18	25.7%	3.90
The organization appraises the suppliers you use in a	0	0%	7	10.0%	17	24.3%	26	37.1%	20	28.6%	3.84
Delivered goods rejected due to non-conformity to specification	0	0%	6	8.6%	34	48.6%	27	38.6%	3	4.3%	3.39
Average											3.89

On average, most respondents believed that contract management affects project performance to a large extent as indicated by a mean score of 3.89. Specifically, they believed that the following are affected to a large extent; Procurement department go through process needs of organization (mean= 4.21), Most projects completed in time (mean= 4.14), Suppliers honour their obligation (mean= 3.91), Contracts of the organization managed fairly and justly (mean= 3.90), the organization appraises the suppliers they use in a year (mean= 3.84) and finally that delivered goods are rejected due to non-conformity to specification (mean= 3.39).

4.3.4 Inventory Management Practices

Finally, the study sought to find out the effect of Inventory Management on Project

performance. Table 4.5 presents the results below.

Table 4.5: Inventory management Practices and project performance

Questions	Very Low		Low		Moderate		High		Very high		Mean
	f	%	f	%	f	%	f	%	f	%	
	Procuring of goods and services add to cost reduction to the organization	0	0%	0	0%	0	0%	36	51.4%	34	
Able to deliver quality service to end users of the project	0	0%	1	1.4%	3	4.3%	50	71.4%	16	22.9%	4.16
Organization level of reduction in inventory costs	0	0%	0	0%	22	31.4%	23	32.9%	25	35.7%	4.04
Rate your Organization level of stores management practice	0	0%	2	2.9%	16	22.9%	30	42.9%	22	31.4%	4.03
Inventory purchases often fail to meet the demand and supply principle	0	0%	0	0%	20	28.6%	32	45.7%	18	25.7%	3.97
Average											4.14

An average score of 4.14 also implies that respondents believe the effect of inventory management on project performance is to a large extent. They agreed that procuring of goods and services add to cost reduction to the organization (mean= 4.49), NGO's are able to deliver quality service to end users of the project (mean= 4.16), organization level of reduction in inventory costs (mean= 4.04), organization level of stores management practice (mean= 4.03) and that inventory purchases often meet the demand and supply principle (mean= 3.97).

4.4 Regression Analysis Results

Regression analysis results were discussed under this section.

- **Model Summary**

The model summary Table 4.8 indicates an R-Square of 0.395. This implies that 39.5% of the independent variable, which were inventory management, supplier sourcing process, need assessment, contract management explained project performance. R-Square indicates the percentage of the independent variables that explains the dependent variable as illustrated.

Table 4.6: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.628 ^a	.394	.387	.16244
a. Predictors: (Constant), Inventory Management, Supplier Sourcing Process, Need Assessment, Contract Management				

- **Regression Coefficients**

Table 4.7: Coefficient Table

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.510	1.408		1.073	.287
	Need Assessment	.057	.022	.032	2.590	.031
	Supplier Sourcing Process	.023	.010	.015	2.300	.027
	Contract Management	.032	.011	.017	2.909	.021
	Inventory Management	.029	.013	.284	2.231	.042
a. Dependent Variable: Project Performance						
Critical t value = 1.66724						

From the coefficient table 4.7, the following regression equation was obtained.

$$Y = 1.510 + 0.057 X_1 + 0.023 X_2 + 0.032 X_3 + 0.029 X_4$$

Where

Y= Project Performance

X1 = Need Assessment Practices

X2 = Supplier Sourcing Practices

X3 = Contract Management Practices

X4 = Inventory Management Practices

The coefficients were interpreted as follows;

β_1 - 0.057 implies that holding Supplier Sourcing , Contract Management and Inventory Management constant, a unit increase in Need Assessment will increase Project performance by 5.7%.

β_2 - 0.023 implies that holding Need Assessment, Contract Management and Inventory Management constant, a unit increase in Supplier Sourcing will decrease Project performance by 2.3%.

β_3 - 0.032 implies that holding Need Assessment, Supplier Sourcing and Inventory Management constant, a unit increase in Contract Management will increase Project performance by 3.2%.

β_4 - 0.029 implies that holding Need Assessment, Supplier Sourcing and Contract Management constant, a unit increase in Inventory Management will increase Project performance by 2.9%.

Diagnostic Test Results

RESET/ANOVA Test Results

The study employed ANOVA test to test the significance of the regression line and whether any variables were omitted.

Table 4.8: ANOVA Test Results

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.431	4	.108	4.303	.004 ^b
	Residual	1.636	65	.0251		
	Total	2.067	69			
a. Dependent Variable: Project Performance						
b. Predictors: (Constant), Inventory Management, Supplier Sourcing Process, Need Assessment, Contract Management						
Critical F= 2.51304						

This test indicates a statistically significant F calculated value of 4.303 which is greater than the critical F value 2.51304 (obtained from statistical tables), implying that the regression equation generated by the study predicts the dependent variable significantly well. Alternatively, this can be indicated by a p value of $p = 0.004 < 0.05$. This further implies that the regression equation adopted by the study was a line of good fit, thus can be used to effectively predict project performance based on the functions of supply chain performance indicated by the study.

- **Heteroscedasticity Test Results**

The Breusch-Pagan Test for heteroscedasticity was also used to check that there is a constant variance in the fitted variables. Table 4.9 indicates the result below.

Table 4.9: Breusch-Pagan test statistics and sig-values

	LM	Sig
BP	0.796	.939

Step 1: Null hypothesis: heteroscedasticity not present

Alternative Hypothesis: heteroscedasticity is present

Step2: Select $\alpha=0.05$

Step 3: Rejection criteria: Reject the null hypothesis if significant value less than 0.05. Fail to reject (accept) the null hypothesis if the significant value is greater than 0.05. Conclusion: Significant value (P value) found= 0.939. This significant value is greater than 0.05. Hence fail to reject null hypothesis. This implies that heteroscedasticity is not present.

- **Variance Inflation Factor Results**

VIF tests revealed that the variance inflation factor of Need Assessment was 2.890, Supplier Sourcing 3.061, Contract Management 2.092 and Inventory Management had 3.703. From these findings, the study concluded that there were low levels of multi collinearity since all the values were less than 5 (Cohen, Cohen, West and Aiken, 2013).

Table 4.10: VIF test results

Variable	VIF
Need Assessment	2.890
Supplier Sourcing	3.061
Contract Management	2.092
Inventory Management	3.703

4.4.2 Hypothesis Testing

This section presents the results of the hypothesis testing that was carried out by the study.

- **Employee Commitment to Need Assessment does not have a Significant Effect**

On Project Performance of CBE

The first hypothesis was that Employee Commitment to Need Assessment does not have a Significant Effect on Project Performance of CBE. The alpha value used was 0.05. From table 8, a calculated t value was revealed as 2.590. Comparing it to critical t value obtained from statistical tables ($t_{69, 0.05} = 1.66724$), then it was concluded that since calculated t value was greater than critical t value, the study rejected the null hypothesis, implying that Employee Commitment to Need Assessment has a Significant Effect on Project Performance of CBE.

- **Supplier Management does not have a significant effect on Project Performance of CBE**

The second hypothesis was that Supplier Management does not have a significant effect on Project Performance of CBE. Similarly, the alpha value used was 0.05. Calculated t value obtained from table 8 was 2.300. Comparing it to critical t value obtained from statistical tables ($t_{69, 0.05} = 1.66724$), the study rejected the null hypothesis since calculated t value was greater than critical t value. This implied that Supplier Management has a significant effect on Project Performance of CBE.

- **Contract management level involvement does not have a significant effect on Project Performance of CBE**

The third hypothesis was that Contract management level involvement does not have a significant effect on Project Performance of CBE. The study tested this at 0.05 level of significance and revealed a calculated t value of 2.909 (See Table 8). This was compared to a critical value of ($t_{69, 0.05} = 1.66724$). It was concluded that the null hypothesis was to be

rejected because the calculated value of t was greater than the critical value of t.

This implies that Contract management level involvement has a significant effect on Project Performance of CBE.

- **Inventory management does not have a significant effect on Project Performance of CBE**

The study conducted a test to investigate the claim that Inventory management does Not have a significant effect on Project Performance of CBE. Similarly, an alpha level of 0.05 was used. From table 8, a critical t value of 2.231 was reported, which was compared to a critical t value obtained from statistical tables ($t_{69, 0.05} = 1.66724$), the study rejected the null hypothesis because calculated value of t was greater than the critical value of t. This implied that Inventory management has a significant effect on Project Performance of CBE.

4.4.2 Discussion of the Results

Finally, it is very important at the very outset of the project to carefully consider all factors when selecting the most appropriate procurement approach for a construction project. This is because each system has its own feature and peculiarity that will have effect on the cost, time and quality of the project i.e. the project performance. In summary all the four independent variables of procurement procedures in the conceptual framework had a positive effect on the performance of projects.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

This study was set out to investigate the effect of procurement functions on project performance in CBE. Its general objective included to find out the effect of need assessment, supplier sourcing processes, contract management and inventory management on project performance of CBE. The study employed explanatory research design and used questionnaires as its main data collection tool. A total of 80 employees were sampled using simple random sampling from a total of 100. Of these, 80 questionnaires were submitted back for analysis, representing a response rate of 87.5%.

Respondents indicated that need assessment affects Project Performance to a large extent as indicated by a mean of 4.01. The majority of them indicated that processes such as having their annual procurement report (mean= 4.36), having a procurement database (mean= 4.19), international competitive bidding (mean= 4.16), procurement review committee (mean= 3.90), advertising (mean= 3.89), having procurement plans (mean=3.89), having a scorecard for procurement evaluation (mean=3.87) and finally having need functions, planning and assessing the risk (mean= 3.83) affect procurement performance to a large extent. Through regression analysis, the study found a coefficient for Need Assessment to be 0.057, which implied that holding Supplier Sourcing, Contract Management and Inventory Management constant, a unit increase in Need Assessment will increase Project performance by 5.7%. Moreover, hypothesis tests also revealed that employee Commitment to Need Assessment has a Significant Effect on Project Performance of CBE.

Regarding the effect of supplier management on project performance, the study found an average mean score of 4.03, which implied that the respondents indicated that supplier sourcing process affects project performance to a large extent. The majority of the respondents indicated that the implementation of the purchasing manual is complete (mean= 4.44), the workers of CBE serve suppliers objectively (mean= 4.20), CBE management has fully implemented procurement policy (mean= 4.10), CBE has procurement functions in line with PPDA (2015) (mean= 4.04), that the process involved in project implementation are efficient (mean= 3.93), that CBE is linked up to its suppliers and end users (mean= 3.90), that CBE

employees have fully adopted acceptable tendering regulation (mean= 3.84) and finally that proposals are made and submitted to all potential suppliers (mean= 3.80).

Regression analysis also revealed a coefficient for Supplier Sourcing as 0.023, implying that holding need assessment, contract management and inventory management constant, a unit increase in supplier sourcing will decrease Project performance by 2.3%.

Finally, hypothesis tests confirm that this effect is significant by concluding that Supplier Management has a significant effect on Project Performance of CBE. It is important to note that Vaart and Donk (2008) also found that supplier management is a key procurement function in as far as ensuring project success is concerned. They asserted that it is important to involve suppliers in decision making, encouraging information, sharing and looking for new ways to integrate upstream activities.

The study also investigated how contract management as a procurement function affects project management. On average, most respondents believed that contract management affects project performance to a large extent as indicated by a mean score of 3.89. Specifically, they believed that the following are affected to a large extent; Procurement department go through process needs of organization (mean= 4.21), Most projects completed in time (mean= 4.14), Suppliers honor their obligation (mean= 3.91), Contracts of the organization managed fairly and justly (mean= 3.90), the organization appraises the suppliers you use in a year (mean= 3.84) and finally that delivered goods are rejected due to non-conformity to specification (mean= 3.39).

A coefficient for Contract Management of 0.032 implied that holding need assessment, supplier sourcing and inventory management constant; a unit increase in Contract Management will increase project performance by 3.2%. Hypothesis tests confirmed that Contract management level involvement has a significant effect on Project Performance of CBE. These results are comparable to Brown and Hyer (2010) who anchored their argument for monitoring and control on the fact that there are several phenomena which influence project execution and cause actual performance to depart from planned performance.

As such, it can easily be concluded that indeed, project performance is dependent on effective contract management.

Results indicated that the majority of the respondents pointed out an average score of 4.14, which also implied that the effect of inventory management on project performance is

to a large extent. They agreed that procuring of goods and services add to cost reduction to the organization (mean= 4.49), CBE is able to deliver quality service to end users of the project (mean= 4.16), organization level of reduction in inventory costs (mean= 4.04), organization level of stores management practice (mean= 4.03) and that inventory purchases often meet the demand and supply principle (mean= 3.97). Regression coefficient for Inventory Management was revealed as 0.029 implying that holding need assessment, supplier sourcing and contract management constant, a unit increase in Inventory Management will increase Project performance by 2.9%. Hypothesis tests also confirmed that indeed Inventory management has a significant effect on Project Performance of CBE.

Based on the results therefore, the study concluded that indeed, procurement functions have a role to play in as far as the performance of projects in CBE is concerned. Procurement functions such as need assessment, supplier sourcing, contract management and inventory management play a very important role in the execution of projects. The study also concludes that an increase in each of the aforementioned procurement functions increase the performance of a project implemented in CBE. This is because regression analysis results revealed a statistically significant increase of 5.7%, 3.2%, 2.9% and 2.3% for need assessment, contract management, inventory management and finally supplier sourcing respectively. Hypothesis tests also confirmed these effects

5.2 Recommendations

Based on the conclusions therefore, the study recommends that CBE should include the four procurement functions i.e. need assessment, supplier sourcing, contract management and inventory management in their implementation of projects. Through need assessment processes such as need functions, planning, risk assessment, advertising, competitive international bidding, having a procurement review committee, creating a Scorecard for Procurement Evaluation, having a procurement database and generating Annual Procurement Reports, CBE will go a long way in ensuring that project performance improves.

Supplier sourcing is also another critical function that helps to improve project performance. It is important for CBE to have procurement functions in line with PPDA (2015), have employees that are fully adopted acceptable tendering regulation, implement procurement policies, complete the implementation of purchasing manuals, serve suppliers effectively, submit proposals to potential suppliers and finally ensure that the organization is linked up to its suppliers and end users.

Contract management, on the other hand, will improve project performance if CBE ensures that delivered are goods which were not rejected due to non-conformity to specification, the organization appraises the suppliers yearly, suppliers honor their obligation, the procurement department goes through process needs of organization, contracts of the organization managed fairly and justly and that most projects completed in timeline.

Through inventory management, CBE can improve project performance if they ensure that inventory purchases never fail to meet the demand and supply principle, if store management is practiced, inventory costs are reduced, quality services are delivered to end users and that procuring of goods and services reduces cost to the organization.

Lastly, Further research work on more delay and related cases are suggested and arranging forums of discussion among parties in procurement management department is crucially important to save extra money and upgrade professional commitments of those involved in the project.

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APPENDIX

QUESTIONNAIRE

Introduction

Dear respondent, this questionnaire has been designed for the purpose of collecting data on the effect of procurement management on project performance in CBE. The items in the questionnaire are intended to assess the constraints to need assessment process, to evaluate suppliers' contract administration and to investigate inventory management functions that enable accountability, fairness, timeliness, quality and acceptability in project performance of CBE.

Your responses will be kept confidential. Please respond to the questions honestly by ticking the most appropriate response.

SECTION A:

GENERAL QUESTIONS

Please tick appropriately in the boxes using a tick (√) or cross mark (x).

1. Gender: Male []

Female []

2. Age Bracket in years: 20-25 []

26-30 []

31-35 []

36-40 []

41 -50 []

51 and Above []

3. Highest level of education

a) Undergraduate Level []

b) Post-Graduate Level []

d) Any other (Specify).....

4. How long have you worked for the organization?

a) Less than 3 years

b) 3 –6 years

c) 7–10 years

d) More than 10 years

5. How many employees are employed by your organization?

- a) Less than 50 []
- b) 50 -100 []
- c) 100 –200[]
- d) More than 200[]

SECTION B: PROCUREMENT FUNCTIONS

a. Need Assessment Questions

Among the Need Assessment procurement practices listed below, which ones have been adopted by your organization? Indicate based on the scale below;

- 1-Very Low Extent,
- 2-low extent
- 3-moderate extent
- 4-great extent,
- 5-very great extent

	Questions	1	2	3	4	5
6	Need functions, planning, assessing the risk					
7	Advertising					
8	International competitive bidding					
9	Procurement review committee					
10	Score card for Procurement Evaluation					
11	Procurement Database					
12	Procurement Plans					
13	Annual Procurement Report					

b) Supplier sourcing function

Indicate based on the scale below;

- 1-Very Low Extent,
- 2-low extent,
- 3-moderate extent,
- 4-great extent,
- 5-very great extent

	Questions	1	2	3	4	5
14	The organization has procurement functions in 2011 E.C					
15	The employees have fully adopted acceptable tendering regulation					
16	Organization's management has fully implemented procurement policy					
17	The implementation of the purchasing manual is complete					
18	To what extent do you think is the project implementation efficient?					
19	The workers of the organization serve suppliers' objectively					
20	Proposals are made and submitted to all potential suppliers					
21	The organization is linked up to its suppliers and end users					

c) Contract Management

Indicate based on the scale below;

1-Very Low Extent,

2-low extent,

3-moderate extent,

4-great extent,

5-very great extent

	Questions	1	2	3	4	5
22	Delivered goods are rejected due to non conformity to specification					
23	The organization appraises the suppliers you use in a year					
24	Suppliers fail to honor their obligation.					
25	Procurement department goes through process needs of the organization					
26	Contracts of the organization are managed fairly and justly					
27	Most projects are completed in timeline					

d) Inventory Management

Answer the following questions by choosing the suitable rating scale from the ratings provided.

1-Very Low Extent,

2-low extent,

3-moderate extent,

4-large extent,

5-very great extent

	Questions	1	2	3	4	5
28	Inventory purchases often fail to meet the demand and supply principle					
29	Rate your Organization level of stores' management practice					
30	Organization level of reduction in inventory costs					
31	Able to deliver quality service to end users of the project					
32	Procuring of goods and services add to cost reduction to the organization					

SECTION C: PROCUREMENT PERFORMANCE

Questions

Answer the following questions by choosing the suitable rating scale from the ratings provided.

1-Very Low

2-low

3-moderate

4-great

5-very great

	Questions	1	2	3	4	5
33	To what extent does CBE minimize procurement expenditure?					
34	What is the level of cost reduction control?					
35	How would you rate usability of goods procured?					
36	How is the quality of procured goods?					
37	How can you rate funds' utilization in your organization in the past five years?					
38	To what extent does your organization reduce cost through procurement functions?					

Thank you for taking your time to fill this questionnaire