
# Assessment of IT Project Management Practice in Commercial Bank of Ethiopia

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**Project Management Graduate Program**

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**A Project Work submitted to Addis Ababa University School of Commerce Department of Project Management in partial fulfillment of Master of Arts degree in Project Management**

**ADDIS ABABA**

**September, 2019**

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**By: Merima Nasser**

**Approval by Board of Examiners**

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# APPROVAL

The undersigned certify that they have read and hereby recommend to Addis Ababa University School of Commerce to accept the Project work submitted by **Merima Nasser** and entitled "**Assessment of IT Project Management Practice in Commercial Bank of Ethiopia**" in partial fulfillment of the requirements for the award of a Master's Degree in Project Management .

**Submitted By:**

Candidate Full Name:

**Merima Nasser** _____ _____
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**Approved By:**

This Project work has been submitted for examination with my approval.

**Name of Advisor:**

**Abraraw C. (PhD.)** _____ _____
Signature Date

# DECLARATIONS

I hereby declare that this project is my original work, I have carried out the present project work independently with the guidance and support of the research advisor Abraraw C. (PhD) and the project work has not been submitted partially or in full by any other person for an award of degree in any other university/institution.

_____

**Merima Nasser**

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# *ABSTRACT*

*It is assumed that there are certain generally accepted project management practices which enhance the effectiveness of managing projects which are expected to be distinctive irrespective of the type of organization or project. Hence, the main purpose of this study is to assess IT Project Management Practices in Commercial Bank of Ethiopia using the ten project management knowledge areas defined by PMBOK. Primary data collection was done by semi structured interview and close ended questionnaire from employees involved in project work selected in census survey and as to secondary data CBE's policies and procedures were reviewed. Accordingly, descriptive research design and quantitative approach were employed in this study. Number, percentages and mean were used to analyse the data obtained. The findings of the study showed that, in the challenges of the projects are both internal and external. Of the internal challenges, the projects time, cost and quality gap ranks the first; and from the external challenges of the project environment took the first place. On the other hand the study show that factors defined from PMBOK are practice by most of the e-PMO employees/respondents except that in time and human resource management which in turn displays there is a gap in practicing Project management. Nevertheless, with the dynamic environment and the IT project nature, CBE still need to implement the ten project management knowledge areas defined by PMBOK as a guideline.*



*Key words: Project management, Project management knowledge areas,*

# LIST OF ACRONYMS/ABBREVIATIONS

**CBE** - Commercial Bank of Ethiopia

**e-PMO** - enterprise Project Management Office

**IT** – Information Technology

**PMBOK -** Project Management Body of Knowledge

**PMI -** Project Management Institution

**WBS** – Work Breakdown Structure

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# CHAPTER ONE
# INTRODUCTION

## 1.1 Background of the Study

Projects play a major role in the economic development of a country. They are the building blocks for generating additional capital and for ensuring a flow of goods and services. Various organizations have used project management techniques as a means of bridging the gap between failure and success in the implementation of projects. Regardless of this increasing awareness of project management by organizations, projects still fail. Project management is being regarded as mandatory for the survival and success of projects. It is mandatory not only for project based organizations but also for any firm in order to survive in rapidly changing technological and market environment.

Currently, most firms are realizing that project management and productivity are related and businesses should be managed as a series of projects (Kerzner, 2009). Now a days Non-Project driven organizations have also embarked in project management since projects have become a common phenomenon for many businesses according to (Kerzner, 2009) and (Wysocki, 2014).

A project is successful when the objectives of the project have been achieved to the full satisfaction of users, all closeout activities have been completed and all designated interest, including the project's sponsor and/or initiator officially accepts the project results or products and closes the project (Wideman. R. M., 2002).

## 1.2 Background of the Organization

Since its establishment in 1942, Commercial Bank of Ethiopia (CBE, 2017) has been going under different reforms. The bank has gone through a major expansion both in its size and operation in recent years. This is in line with its vision of becoming "a world class bank by 2025." Towards this end, the bank has devised various strategies and is undertaking various initiatives. Although there are a multitude of initiatives undertaken by CBE, most of the initiatives are related with adoption of various information technology tools to improve its service delivery and automate internal operations. The initiatives are each being undertaken

as individual projects with their own project teams and overseeing the implementation of these projects is the bank's e-PMO'.

Commercial Bank of Ethiopia (CBE., 2018) is a pioneer to introduce technology to the Ethiopian banking industry. In general, CBE is the leading bank in Ethiopia and serves as the major source of finance to the national development effect.

The need for employment of information technology to facilitate the banking operation and assist in decision-making process was recognized by the CBE quite early. Accordingly, the attempt to take initiatives consistent with the development in information technology and local conditions were taken for implementing application and communication architectures.

In this regards, CBE developed the first Information Technology (IT) short and long-term roadmap document in 2006. The IT Short-term strategies that focused to pave the way to the long-term IT Strategy of the Bank were fully implemented. Therefore, Information system strategic roadmap is designed to deliver the required IT support and realization of the CBE's vision 'to be world class commercial bank' through time with a clearly defined roadmap subject for periodic revision.

According to the annual performance report of CBE, IT infrastructure project implementation, Internet Banking, Card Banking System Implantation, Competency Gap Analysis, Performance Management System (PMS) are some of the projects which are registered under success and started operation.

Hence, the purpose of this study is to assess the effectiveness of projects by groping how managers and their teams are undertaking the project knowledge areas such as project scope management, project time management, project cost management, project quality management, project risk management, project integration management, project human resource management, project communication management, project Procurement management and project stakeholder management; which are discussed later in this paper. Furthermore, the study is an attempt to contribute to fill the gap in current literature and forward possible recommendations to enhance the practice of e-PMOs.

## 1.3 Statement of the problem

The objectives of a project, if properly defined, are the primary aspects that determine its success. Project management is a discipline that requires skills and knowledge to achieve project goals through various project activities. It involves planning, organizing, leading and controlling functions which are performed by the project manager (PMI., 2013)

In order to achieve its vision of becoming a world class bank, Commercial Bank of Ethiopia is undertaking various projects to enhance its service delivery and equip its operations in state of the art technology. Therefore, the success of such projects becomes vital for the achievement of the bank's vision. In line with this, the bank has re-established an enterprise Program Management Office following the launching of the new organizational structure to oversee the successful undertaking of its projects. In order to oversee the implementation of the projects and provide assistance an enterprise Program Management Office was established by the bank. According to (Wysocki, 2014) the responsibility of supporting these projects and project teams that undertake specific projects are mandated to Project Management Offices.

A project, to effectively meet its intended goals, needs to have a certain practices. (Wideman. R. M., 2002) defines a practice as "a way of doing things". It is assumed that there are certain generally accepted project management practices which enhance the practice of managing projects which are expected to be distinctive irrespective of the type of organization or project. A best practice is defined as "A strategy, approach, method, tool or technique that is particularly effective in helping an organization to achieve its objectives for managing a project" (Best practices in risk management, 2001) .

According to (Wideman ., 1998)"Project Management Body of Knowledge (PMBOK) published by the Project Management Institute (PMI) represents the knowledge and practice that is generally accepted and unique or nearly unique to the field of project management". There are ten project management knowledge areas covered by the PMBOK guide. (PMI., 2013)

Projects are said to be successful if the iron triangle criteria are met: delivered on time, within budget and meeting the predetermined quality measures. If the project takes longer time it requires additional resources, and budgets and this increases labor, material, machinery and equipment cost. This affects the budget of other projects and in general, it affects the economy of the country.

During interview with the project office managements, some problems were identified. There has been a delay in the project which is associated with time management, and there is luck of experience project teams in the project work associated with human resource management and some communication problems with other departments. These problems are believed to be due to lack of following some project management practices like time, quality, communication and etc.

In light of the above facts, conducting an academic research that focuses specifically on IT projects of CBE. Therefore, this study tries to attempt to fill the gap by assessing the project management practice of the using the ten project management knowledge areas defined by PMBOK.

## 1.4 Research Questions

This study aimed to fill the gap by answering the following research questions:

- What is the current practice of CBE in managing projects according to project management knowledge areas?
- Which project management practices should be improved in the CBE IT project according to project management knowledge areas?

## 1.5 Research Objective

The study has the following general and specific objectives.

### 1.5.1 General Objective

- The main objective of the study is to assess the project management practices of IT projects in CBE.

### 1.5.2 Specific Objectives

- To identify the current project management practice of CBE IT projects in terms of ten PMBOKs areas.
- To assess if project management knowledge areas were practiced in CBE IT project.
- To identify the gap in which the project management practices need to be improved in CBE.

## 1.6 Significance of the Study

Results of this study can be valuable for Commercial Bank of Ethiopia and other organizations, with similar project overseeing offices, in fine-tuning their practices to enhance the value they get from the PMO. This study can be helpful for the project to demonstrate the contribution of effective project management processes and techniques so as to improve the practice of upcoming project to be done in CBE. That is to attain the goals of the project within planned time, under the given budget and at agreed or targeted quality required of products efficiently and effectively.

This study will also be an input to identify in which of the life cycle of the project that the project needs improvement. Moreover, the study will also help to understand the role of practicing project management process/ knowledge area and applying it for further development. In addition, this paper work will serve as a future reference for researchers on the subject matter. I have has also use the research project as an opportunity to see how the theoretical knowledge acquired during the duration of the course is being implemented in reality.

## 1.7 Limitations of the Study

This is a research project so that like any other project endeavor could not be without shortcomings. Hence I faced some limitations in the course of the research project. The first drawback was time constraint since the time given for the research project is quite short. The second was data collection which was a bit difficult as the project members were located different of the city even if they are under PMO. In addition, some project management practice concepts were not covered; for instance, project activities maturity

level models, the five project management process groups and their processes which have significant value for project performance improvement.

## 1.8 Scope of the study

The study focused on specific IT projects and IT project management professionals in CBE with their project teams. But there are other projects such as construction projects implemented and under construction in CBE. Therefore, the study focused only on IT Projects undertaken by CBE. The study includes all project teams since IT projects are managed centrally under PMO which is located in Addis Ababa city. This study is only concentrated on assessing project management practices, through the generally accepted project management knowledge areas defined by PMBOK, which will enhance the management of projects and using questionnaires and semi-structured interview.

## 1.9 Organization of the Study

This project work has five chapters. The first chapter includes introductory part with background of the study, statement of the problem, research objective, research questions, significance of the study, limitation of the study, and scope of the study. Chapter two is composed of the review of various books and journal articles to base the study on existing literature. This chapter discusses relevant issues to build understanding of the subject matter. Chapter three contains the details of the research methodology to gather and analyse data from which findings are drawn. Chapter four contains the analysis of the data gathered by means of data collection methods and instruments indicated in the methodology part. The last chapter discusses about summary of findings, conclusion and recommendation.

# CHAPTER TWO

# REVIEW OF RELATED LITERATURE

## 2.1 Introduction

This literature review part is to provide a summary of various literatures on the research problem areas. The available literature is aimed to review the major concept and research problem related with this research topic. Its intent is to answer the research questions and contribute to the emergent knowledge base of Project management practice in the Project office. The literature review is more concentrating on the Project management practice.

## 2.2 Definitions of Project

A variant of definitions have been given to Projects by different authors. The definition given by PMI for a Project is a temporary endeavour undertaken to create a unique product, service, or result (PMI., 2013). A more elaborate definition states a project is a sequence of unique, complex, and connected activities that have one goal or purpose and that must be completed by a specific time, within budget, and according to specification (Wysocki, 2014). Likewise, (Kerzner, 2009) stated that a project can be considered to be any series of activities and tasks that have a specific objective to be completed within certain specifications, have defined start and end dates, have funding limits (if applicable), consume human and non-human resources, are multifunctional (i.e. cut across several functional lines). Project has also been defined as a unique set of coordinated activities, with definite starting and finishing points, undertaken by an individual or organization to meet specific performance objectives within defined schedule, cost and performance parameters' (Hindi, 2013).

A project has been defined as “a complex, non-routine, one-time effort limited by time, budget, resources, and performance specifications design to meet customer needs” (Gray. & Larson., 2008). According to (Wysocki, 2014) a project is defined as a sequence of unique, complex, and connected activities that have one goal or purpose and that must be completed by a specific time, within budget, and according to specification.

Another author define as' A project consists of a well-defined collection of small jobs (tasks) and ordinarily culminates in the creation of an end product or products (deliverables). (Gary, 2002).

As (Lewis J.P, 2000) stated that Quality expert Dr. J. M. Juran defines a project as a problem scheduled for solution. This definition forces us to recognize that projects are aimed at solving problems and that failure to define the problem properly is what sometimes gets us into trouble. Interestingly, when you tell project team members that you want to begin planning a project by writing a problem statement, they tend to say, "We don't need to do that. We all know what the problem is." (John, 2004)

Projects are temporary in nature and have definitive start dates and definitive end dates. The project is completed when its goals and objectives are accomplished to the satisfaction of the stakeholders. (CGIAR, 2017)

Like any other organizational activity projects utilize resources. Projects consume human and nonhuman resources (i.e., money, people, and equipment) (Kerzner, 2009). But these resources are limited for projects. Projects have resource limits, such as a limited amount of people, money, or machines that are dedicated to the project (Wysocki, 2014)

Moreover, a project comprises a number of activities that must be completed in some specified order, or sequence (Wysocki, 2014). The sequence of the activities is based on technical requirements, not on management prerogatives. To determine the sequence, it is helpful to think in terms of inputs and outputs. The output of one activity or set of activities becomes the input to another activity or set of activities.

## 2.3 Project Management

Project management is a process that includes initiating a new project, planning, putting the project plan into action, and measuring progress and performance. It involves identifying the project requirements, establishing project objectives, balancing constraints, and taking the needs and expectations of the key stakeholders into consideration.

Planning is one of the most important functions you'll perform during the course of a project. It sets the standard for the remainder of the project's life and is used to track future

project performance. Before we begin the planning process, let's look at some of the ways the work of project management is organized. (CGIAR, 2017)

Project management brings together a set of tools and techniques performed by people to describe, organize, and monitor the work of project activities. Project managers are the people responsible for managing the project processes and applying the tools and techniques used to carry out the project activities. All projects are composed of processes, even if they employ a haphazard approach. There are many advantages to organizing projects and teams around the project management processes endorsed by PMI. We'll be examining those processes and their advantages in depth throughout the remainder of this book.

According to the PMBOK® Guide, project management involves applying knowledge, skills, tools, and techniques during the course of the project to accomplish the project's objective. It is the responsibility of the project manager to ensure that project management techniques are applied and followed.

As stated earlier Project management is a set of tools, techniques, and knowledge that helps to achieve the three main constraints which is scope, cost and time. According to the Project Management Institute, project management is the application of knowledge, skills, tools, and techniques to project activities to meet the project requirements (PMI., 2013). Likewise the Association for Project Management also defined project management as the application of processes, methods, knowledge, skills and experience to achieve the project objectives (APM., 2006). These two definitions are oriented towards application of various means to achieve project objectives.

On the other hand, project management has been defined from management functions perspective by (Kerzner, 2009). (Kerzner, 2009) stated that, project management is the planning, organizing, directing, and controlling of company resources for a relatively short-term objective that has been established to complete specific goals and objectives.

Project Management is accomplished through the appropriate application and integration of Project Management processes, which are categorized into five Process Groups (PMI., 2013). These five Process Groups are: Initiating, Planning, Executing, Monitoring and Controlling, and Closing

Project Management is the application of knowledge, skill, tools and techniques to project activities in order to meet or exceed stakeholder needs and expectations from project. Meeting and exceeding stakeholder needs and expectations invariably involves balancing competing demands among scope, time, cost and quality; stakeholders with differing needs and expectations and identified needs and unidentified expectation (Duncan, 1996), (Wideman. R. M., 2002)

## 2.4 Project Management Processes

A project has a set of objectives, a start and end, and a budget. The purpose of project management is to achieve the project objectives on time and within budget. In reality, project management is an on-going task of balancing the scope against time, cost, quality, and any other constraints placed on the project. A guide to the PMBOK provides best-practice approach to tackling project management challenges across the industry at all professional levels. The five PMBOK process groups outline the necessary competencies that must be achieved in order to secure the most effective use of project resources. The project management processes, according to PMBOK, can be organized into five groups (PMI., 2013).

### 2.4.1 Initiating Process Group

This process is officially committing to start a project. The anointed project manager unearths the real objectives of the project, identifies the potential project stakeholders, and works with the customer and other stakeholders to come up with an approach to achieve those objectives. This process involves setting clear phases for the work to be completed, initializing teams and having the budget in place before work. (PMI., 2013)

### 2.4.2 Planning Process Group

This is working out the details of how you are going to solve the problem. During the planning phase, you identify all the work that must be done, who does it, when they do it, how long it takes, and how much it costs. This process group also addresses a more narrow clarification of all project goals and expectations and puts in place the project infrastructure necessary to achieve those goals according to the timeline and budgetary constraints. (PMI., 2013)

### 2.4.3 Executing Process Group

This process group involves managing teams effectively while coordinating time line expectations and reaching benchmark goals. Project managers utilizing this set of skills will demonstrate a high degree of organization and communication skills while addressing team concerns. (PMI., 2013)

### 2.4.4 Monitoring and Controlling Process Group

This process group focuses on monitoring and measuring project performance to see whether the project is on track with its plan. Processing change orders, addressing on-going budget considerations, and mitigating unforeseen circumstances that may affect a team's ability to meet initial project expectations are all part of the core skills and competencies involved in this process group. (PMI., 2013)

### 2.4.5 Closing Process Group

This process group includes officially accepting the project as complete, documenting the final performance and lessons learned, closing any contracts, and releasing the resources to work on other endeavours. It addresses the culmination of strong project management skills demonstrated throughout the other interrelated processes that guided the project. (PMI., 2013)

Good closure brings great reviews and can increase future word of mouth referrals.

Some additional characteristics of the project processes are:

- Process groups are linked by the results they produce; the result or outcome of one becomes an input to another.
- Process groups are not discrete, one-time events; they are overlapping activities which occur at varying levels throughout each phase of the project.
- The process group interactions also cross phases such that closing one phase provides an input to initiating the next which means that in actual projects there will be many overlaps.

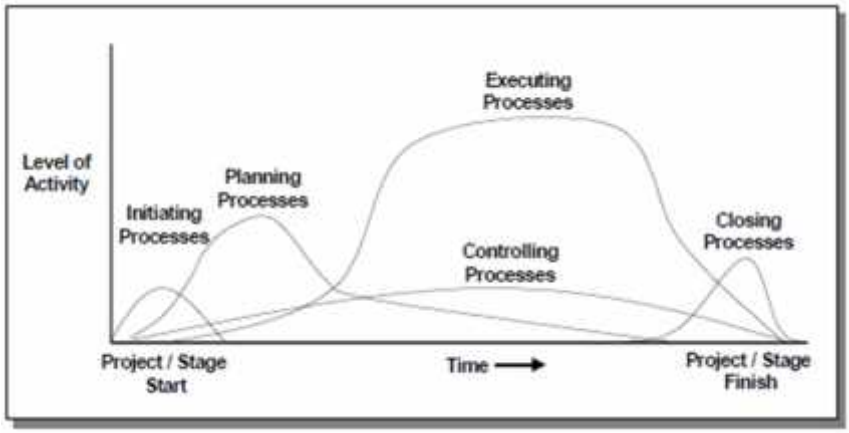



**Figure2.1 Processes Interaction**
**Source: Duncan, 1996:148**

## 2.5 Effectiveness of Project and Project Management

Project management effectiveness is a measure of the quality of attainment in meeting objectives. It is the extent to which the goals of a project are attained, or the degree to which a system can be expected to achieve a set of specific requirements (Wideman. R. M., 2002).

It is important to note that the impression of success can change with time. That certain objectives, e.g. that the "traditional measures" of being on time and within budget were not met, does not necessarily mean that the product of the project was a failure. Conversely, just because the management of the project was viewed as a great success does not mean that the resulting product will necessarily be viewed as a success if the expected benefits are not realized. There are many examples of such situations in the project management literature. (Wideman., 2009)

According to Wideman, Project Success is a multi-dimensional construct that inevitably means different things to different people. As a matter of good practice, Success is best expressed at the beginning of a project in terms of key and measurable criteria, referred to as metrics, upon which the relative success or failure of the project may be judged. For example, those results that:

- Meet the key objectives of the project such as the business objectives of the sponsoring organization in the realization of benefits for the owner or user, and
- Elicit satisfaction with the project management process, i.e. that the deliverable is complete, up to standard, is on time and within budget, and

- Reflect general acceptance and satisfaction with the project's deliverable on the part of the project’s customers-at-large and/or the majority of the project's community at some time in the future.

Although also known as Key Performance Indicators, we like to refer to these criteria as Key Success Indicators (KSIs). KSIs should clearly relate to the project's key objectives and help in evaluating customer satisfaction and overall, the success of the project. KSIs are usually expressed as "SMART" statements, i.e. Specific, Measurable, Attainable/ Achievable, Realistic and Time bound. (Wideman., 2009)

Note that KSIs are not the same as Critical Success Factors (CSFs). CSFs are those measurable factors that when present in the project's environment are most conducive to the achievement of a successful project. Examples include: Project objectives aligned with corporate mission; Top management support; A culture of open communication, and so on. The difference between KSIs and CSFs is that KSIs are dynamic and within the control of the project's management while CSFs are static and generally outside the direct control of the project's management. (Wideman., 2009)

Project Management Success is closely linked to opportunity and risk. Projects by their nature are risky endeavours and some project hazards cannot be entirely avoided or mitigated even when identified. Since project success may be impacted by risk events, it follows that both opportunity and risk are necessarily shared amongst the participants. (Wideman., 2009)

There are common dimensions of projects acknowledged by different scholars; time, budget and specifications of projects. However, time, budget and specifications are not sufficient to measure project management success as dimensions. Thus, the quality of the project management process and the satisfaction of the project stakeholder’s expectations also need to be considered (Nicholas, 2012)& (Schwalbe S. , 2004).
Therefore, extending the traditional triangle to include the quality of the management process, the integration, the scope, the communication, the procurement, the risk and

stakeholder management process will be able to provide a more complete view of project management success. That is why this study benchmarks the project management knowledge areas defined by PMBOK as a means for an effective project management.

Effectiveness is defined as being " a measure of the quality of attainment in meeting objectives; to be distinguished from efficiency which is measured by the volume of output achieved for the input used " (Wideman, 2001). Hence, effective project management is very important in such unpredictable business environment.

## 2.6 Project Management Practices

Project management processes and techniques are used to coordinate resources to achieve predictable results. Best practice is based on experience and is used to describe the process of developing and following a standard way of doing things. In project management, best practice is a general term that includes: guidelines and international standards. Both standards and guidelines are looking to improve project management (Liviu, Emil, & Ioana, 2010).

Project management does not depend on a particular methodology. It can be said that no specific practices depend on project management. Many companies have their own methodology, its own project management practices (Selma, Jonas, & Gislaine, 2014). Therefore, it is necessary and important to identify which project management practices are described in the literature, and reflecting how project managers use different management techniques, and experiences using "real world" in the field of IT project management, which can be considered as best practices in managing IT projects. The most useful project management (PM) practices is to improve project management performance. By identifying the perceived most useful tools and techniques, as having the most potential for increased contribution to project management performance, practitioners and organizations can select their priorities when improving PM practices. (Gabriela, Stephen, & Madalena, 2013).

**The advantage of using Best practices in project management** (Liviu, Emil, & Ioana, 2010)

- Transfer of Knowledge transfer refers to sharing or disseminating of knowledge and providing inputs to problem solving. In organizational theory, knowledge transfer is

the practical problem of transferring knowledge from one part of the organization to another.

- Better Communication is an essential process in the world of project management and behind every successful project manager is a strong communication plan.
- Time and Cost saving- Cost-reduction techniques for projects are part of long-term strategies and are frequently similar to techniques used to reduce general operational costs. A project manager can lower controllable expenses by approaching cost savings as a core element at the project's start effectively implementing it into the project team's culture.
- Better process quality- A quality management process is introduced in a project towards quality planning, quality assurance and quality control. In a project, quality characteristics are defined by the stakeholders. Some of the most common quality characteristics are performance, functionality, suitability, reliability, consistency and more.
- Better team work- teamwork in the workplace is an important factor for project success. Teamwork is important because it creates human synergy. It amplifies the results of each member of your team such that the overall result is greater than the individual contributions made by each member.
- Better position on market- Market Positioning refers to the ability to influence consumer perception. Competitive advantages allow a company to achieve regarding a brand or product relative to competitors. The objective of market positioning is to establish the image or identity of a brand.
- Internal approach of labor- internal labor markets are those where workers are hired into entry level jobs and higher levels are filled from within.
- Better monitoring and controlling- Monitoring and Controlling Project Work involves tracking the actual project performance with the planned project management activities.
- A more efficient and objective audit- The main objectives of the audit were to review the effectiveness and efficiency of project management practices as well as assess governance, risk management and compliance processes linked to managing project.

Though there are different indicated project management practices defined by different scholars, this paper will be benchmarking the ten project management areas defined by PMBOK. According to (Wideman ., 1998), “Project Management Body of Knowledge (PMBOK) published by the Project Management Institute (PMI) represents the knowledge and practice that is generally accepted and unique or nearly unique to the field of project management”. The PMBOK identifies nine project management knowledge areas which describe knowledge and practice in terms of its specific processes (Duncan, 1996).
This paper however will use all the ten project management knowledge areas defined on PMBOK guide listed and described below.

### 2.6.1 Project Scope Management

It is the criteria (measure) for project success (time, cost and deliverables) must be determined and agreed upon with all stakeholders at the beginning of the project. It ensures the inclusion of all the work required to complete the project successfully.

According to PMBOK the major project scope management processes includes initiation to begin the next phase of the project. Then, scope management plan so as to know how the scope will be defined, validated and controlled including how to prevent scope creep, how to handle change requests, escalation path for disagreement on scope elements between stakeholders, process for creating scope statement, WBS, how the deliverables will be accepted. According to (Schwalbe, 2009), this process is the first step in project scope management in which the project's size, complexity, importance, and other factors will affect how much effort is spent on scope planning and the main output is a project scope management plan and the tools and techniques are template forms, standards as well as expert judgment. The third process would be collecting requirements and comprises a condition that must be met by a deliverable to satisfy a contract standard including documented needs, wants, expectation of the stakeholders using stakeholder requirements, project requirements, quality requirements with interview, focus groups, observation, questionnaire, document analysis, etc. The next process to have is scope definition which helps to define project and product scope, outlines what will be and what will not be included in the deliverables, including details of risks, constraints and assumptions. Project scope statement includes objectives, scope, requirements, boundaries, deliverables, cost

estimation, specifications, etc. The other main process is having a WBS to break down the major project deliverables into smaller, more manageable components. WBS can provide alternatives if the budget and schedule could not meet managements' expectations. After having the WBS we need to verify scope to formalizing acceptance of deliverables from stakeholders/customers near the end of project/ phase deliverables. Finally, there need to be a scope change control for controlling and assessing changes to project scope. It measures the work product against the scope baseline to ensure the project stays on track proactively so as to prevent unnecessary changes to the project.

### 2.6.2 Project Time Management

It is an integrated project schedule (plan) which identifies activity sequences, activity duration and resource requirements. The processes required to ensure the timely completion of the project by identifying and documenting the specific activities (work to be done) to produce the project deliverables (outcomes).

Project Time management includes the following activities. (Duncan, 1996)

- Activity Definition - identifying the specific activities that must be performed to produce the various project deliverables. It further decomposes work packages into activities for more detailed and accurate estimations.
- Activity Sequencing - identifying and documenting interactivity dependencies.
- Activity Duration Estimating - estimating the number of work periods which will be needed to complete individual activities.
- Schedule Development - analyzing activity sequences, activity duration and resource requirements to create the project schedule. The schedule baseline is the approved and signed version of project schedule that is incorporated into the project management plan.
- Schedule Control - controlling changes to the project schedule by measuring results, making adjustments.

### 2.6.3 Project Cost Management

The process required to ensure the project is completed within the approved budget. Here, costs for the project have to be calculated by developing an estimate of the costs for the resources needed to complete project activities and resources have to be planned, by determining what resources (people, equipment and materials) and what quantities of each are needed to perform project activities.

The major processes under project cost management stated in PMBOK are, resource planning, cost estimating, determine budget and cost control. In resource planning, we need to know what resources (people, equipment and materials) and what quantities of each should be used to perform project activities. After determining resources, the second process would be estimating the cost by developing an approximation (estimate) of the costs of the resources needed to complete project activities, which includes indirect cost and contingency reserves. Then allocating the overall cost estimate to individual work items, and determine when to spend the money would be the next process. Finally, there has to be change control to the project budget by checking against the project funding requirements.

### 2.6.4 Project Quality Management

The process ensures if the project will satisfy the needs for which it was undertaken. In this process, quality standards for the project deliverables (outputs) must be identified. There are three sub-processes which need to be included in the process. The first is quality planning which helps in identifying which quality standards are relevant to the project and determining how to satisfy them. Then, quality assurance comes so as to evaluate the overall project performance on a regular basis to provide confidence that the project will satisfy the relevant quality standards. Finally, quality control which helps in monitoring specific project results to determine if they comply with relevant quality standards and identifying ways to eliminate causes of unsatisfactory performance.

### 2.6.5 Project Human Resource Management

According to human resource management expert, (Ivancevic, 2010) Human resource management is defined as the process of linking the human resource function with the strategic objectives of the organization in order to improve performance. Human resource Management is required to make the most effective use of people involved with the project.

The major sub processes under project human resource management identified are organizational planning which helps in identifying, documenting and assigning project roles, responsibilities and reporting relationships. Networking is useful in understanding skills of individuals and political and interpersonal factors within the organization. Then it is staff acquisition supports in getting the human resources needed assigned to and working on the project. The third is team development so as to develop individual and group skills to enhance project team performance. The final sub process is manage project team which helps to track team members performance by offering feedback, support, manage conflicts, resolve issues so as to increase creativity and better decision making.

### 2.6.6 Project Communications Management

The process is required to ensure the timely and appropriate generation, collection, dissemination, storage, and ultimate disposition of project knowledge.

A communications' plan must be developed which identifies the information and communication needs of the role-players.

According to PMI in PMBOK guide, there are four major processes under this knowledge area. The first is communications planning which helps in determining the information and communications needs of the stakeholders who needs what information, when will they need it and how will it be given to them. Then it is information distribution which supports to make all needed information available to project stakeholders in a timely manner. The third is performance reporting which helps in collecting and disseminating performance information which includes status reporting, progress measurement and forecasting. Finally, administrative closure comes so as to generate, gather and disseminate information to formalize phase or project completion and to ensure optimal information flow for effective stakeholder expectation management.

### 2.6.7 Project Risk Management

(Kerzner, 2009) states that risk management is the act or practice of dealing with risk. It includes planning of risk, identifying risks, analyzing risks, developing risk response strategies and monitoring and controlling risks to determine how they have changed. Risk management is one aspect of sound project management and seeks to increase the probability of project success. It is concerned with identifying, analyzing, and responding to

project risk. Early warning signs of problems (risks) in the project must be responded in good time.

The sub processes in project risk management are risk identification which helps to determine which risks are likely to affect the project and documenting the characteristics of each. Then it is risk quantification which supports in evaluating risks and risk interactions to assess the range of possible project outcomes. The third is risk response development for defining enhancement steps for opportunities and responses to threats. The last process would be risk response control which aids in responding to changes in risk over the course of the project and check if assumptions are still valid, procedures are being followed and any deviance. It also includes identifying new risks and evaluate effectiveness of risk response plan.

### 2.6.8 Project Procurement Management

According to the PMBOK, this process is required to acquire the goods and services from outside the performing organization and includes the below major processes. Procurement Statement of Work (SOW) is a legal document subject to legal reviews and legal advice should be sought throughout the whole procurement process.

The first process is procurement planning that helps in determining what to procure, when to procure and whether to obtain products/services outside of the organization. The next process is solicitation planning; it helps to document product requirements, identifying potential sources and pre-meeting with them. Then it is solicitation which helps in obtaining quotations, bids, offers, or proposals as appropriate. The third process is source selection and conduct procurement that supports to choose from among potential sellers and award the contract. Then it is control/administer procurements which aids in managing the relationship, monitor contract performance, make changes and corrections. Finally it is contract close-out for completing and settling the contract, including resolution of any open items.

### 2.6.9 Project Integration Management

According to project management body of knowledge guide, the processes required to identify, combine, unify and coordinate various activities and manage interdependencies to ensure various elements of the project are properly coordinated.

The major processes under project integration management are; develop project charter, project plan development, project plan execution and overall change control. The first process helps formally authorize the project and allow the project management to apply organizational resources. Project plan development aids in taking the results of other/subsidiary planning processes and putting them into a consistent, coherent document. Project plan execution helps to carry out the project plan by performing the activities included therein and implementing the approved process improvement plans and changes. Finally, overall change control supports in coordinating changes across the entire project.

### 2.6.10 Project Stakeholder Management

(Duncan, 1996) defines project stakeholders as“ individuals and organizations who are actively involved in the project, or whose interests may be positively or negatively affected as a result of project execution or successful project completion”.

The process includes;

- Identify stakeholders- documenting stakeholders’ importance/influence and their interest Levels.
- Plan stakeholder management- contains desired engagement levels, scope and impact to stakeholders, interrelationships, communication requirements and forms, how to update the plan.
- Manage stakeholders Engagement- Effective communication between project stakeholders so as to meet their expectations and address issues. It includes building trust and resolve conflicts, negotiation and communication skills.
- Control stakeholders’ engagement- monitoring overall stakeholder relationships and adjusting strategies and determining frequency of project progress review with customer.

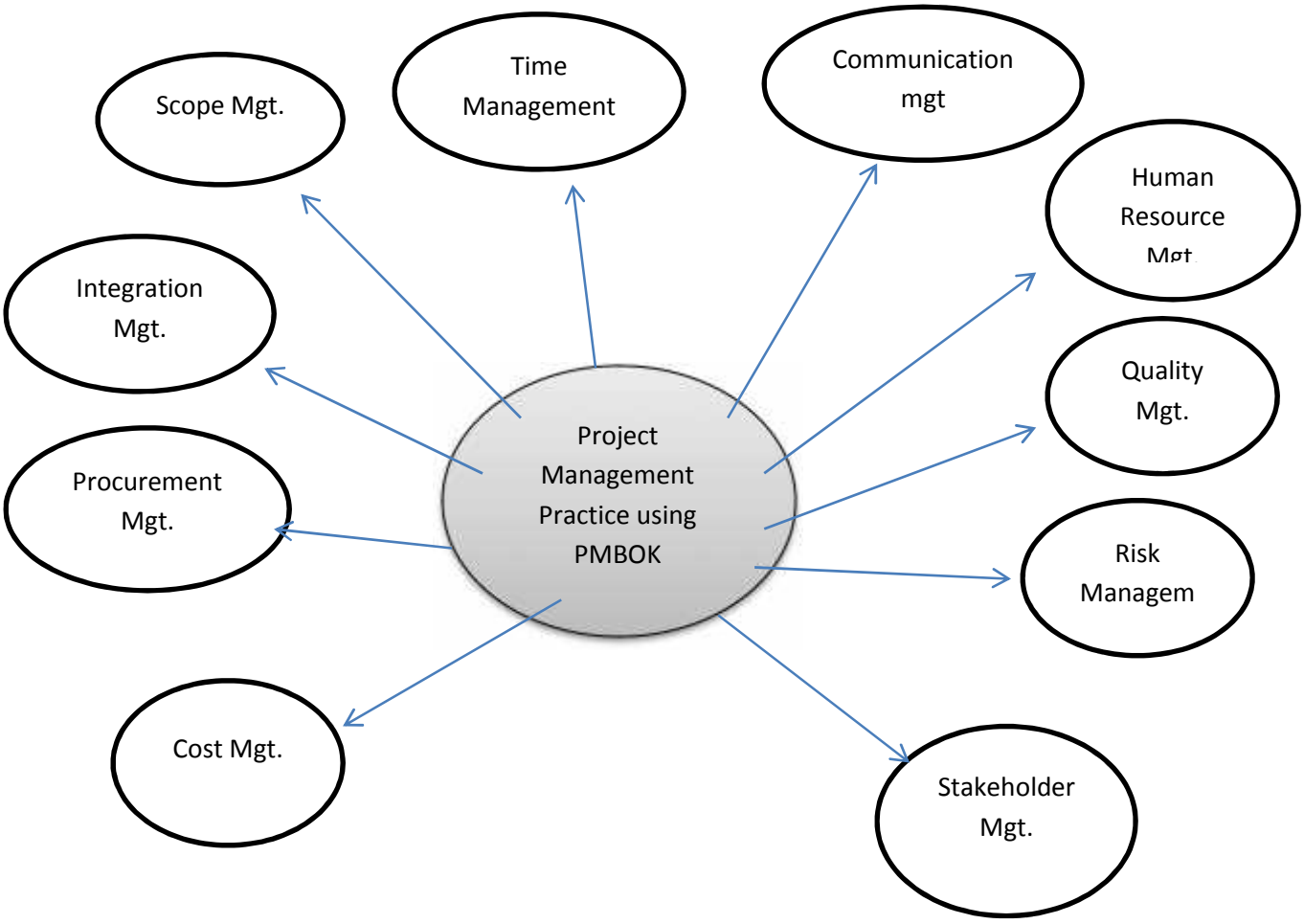
## 2.7 Empirical Review

- Ebise (2007) conducted an assessment on the project management practice of Oromia integrated urban land information system coordination project office. The study tried to assess the project management practice of an organization implementing large government projects in one of the regions of the country. Descriptive research design was used in the study and the assessment methodology was adopted from the study conducted to assess the project management maturity of organizations in USA and modified to be used for the study. The researcher developed a questionnaire based on the practice of five project management process groups. The study found out that project management is in its lower level of maturity that implies substantial opportunity exists for improvements.
- Yonatan (2016), conducted a study that assess the human resource Management practices in Productive Safety Net Program (PSNP) at federal. The study uses a Descriptive research design and for data collection semi-structured interview was used. The study concludes that the program is effectively practicing HRM in HR recruitment and selection and developing Human resources aspects and on the other side it was not effective on installing convenient benefit and reward schemes, and recruiting new staffs on time for human resources needs of the program.
- Temesgen (2013) conducted an assessment on Project management capability at Mesfin industrial PLC using a project management maturity model. The maturity model is comprised of key project management processes and best practices. The research work was built on both qualitative and quantitative research strategy. While the qualitative approach of the study was aimed for a more extensive understanding of organization's project management practices, the quantitative approach was based on theoretical consideration and existing knowledge. The finding of the assessment was that the overall project management capability of the organization was at its lower level. Project management processes were defined but not consistently applied to all projects

## 2.8 Conceptual Framework for accessing Project Management Practices

The proposed framework for this research is illustrated in the Figure. It shows assessing project management practices with the ten project management knowledge areas based on reviewed literature.

Figure 2.2 Conceptual framework for accessing project management practices



# CHAPTER THREE

# RESEARCH METHODOLOGY

## 3.1 Research Design

The objective of this research is to examine project management practice of IT projects of CBE. To this end, this study is conducted with descriptive research design of quantitative and qualitative method. The study is more of quantitative; it also uses qualitative methods in order to triangulate the responses obtained from the close ended questionnaires.

## 3.2 Research Approach

To this end, this chapter aims to describe the research approach and methodology used to address the research problems. In this paper, quantitative and qualitative approach are selected which is concerned with making inference based on perspective.

## 3.3 Sources of Data

The study selected respondents on census survey and engaged both primary and secondary sources of data so as to get sufficient data. Primary data sources were collected from employees involved in projects work include Project Coordinators, Project Managers, Project Members, Support Staffs, and others (Technical Experts). Secondary data on the other hand is used from CBE's policies and procedures.

## 3.4 Population of the Study

According to Hair et al. (2010), target population is said to be a specified group of people or object for which questions can be asked or observed made to develop required data structures and information. Therefore, for this paper, the target population includes employees involved in project works.

For the purpose of this study, the census survey is used for the project employees as they are not many in number, including all the Project coordinator, project manager, project members and support staffs. According to (Parker, 2011) in a census survey every participant has an opportunity to participate which reduces the concern on accuracy. Therefore, the study conducted all the respondents from the employees involved in project

office. That means the study conducted all the 78 respondents from the employees involved in project office.

## 3.5 Methods and Instrument of Data Collection

The project work used both primary and secondary data sources. Questionnaire and interview were used as a primary source of data collection tools. These data collection instruments are designed focusing on the effectiveness of project management practices, benchmarking the ten knowledge areas defined by PMBOK and based on the related review of literature. Questionnaires were distributed to Project Coordinator, Project Manager, Project Members, Support Staffs of the Projects and others Technical Experts. Semi-structured interview was conducted with the Project Director and Leaders of the Projects who serve as Project Managers.

## 3.6 Method of Data Analysis and Presentation

The collected data through questionnaires is analysed quantitatively using SPSS Version 24 software and the semi-structured interview is analysed qualitatively using sentences and phrases by bringing the common ideas and concepts of the responses together into common understanding. The questionnaire were developed in five scales ranging from five to one; where 5 represents Strongly agree, 4 agree, 3 Neutral, 2 disagree, and 1 strongly disagrees. The analysed data is presented and interpreted using Table, Graph, Percentage and Numbers.

## 3.7 Validity and Reliability

(Uma & Bougie, 2016), validity is a test of how well an instrument is developed to measures the particular concept it is intended to measure. Validity is concerned with whether we measure the right concept and reliability with stability and consistency of measurement.

(Bhattacherjee, 2012), reliability is the test of how consistently or dependably a measuring instrument measures. (Field, 2013), stated the importance of reliability checking in such a way that validity is a necessary but not sufficient condition of a measure rather it requires

considering reliability. According to him to be valid the instrument must first be reliable. In conducting the reliability test the researcher use Cronbach's alpha to check reliability, of the questionnaire using SPSS statistics software 24. According to (Uma & Bougie, 2016) reliabilities less than 0.60 are considered to be poor, those in the 0.70 range, acceptable, and those over 0.80 good

**Table 3.1: Reliability Result of the Constructs**

| No. | Variables | Cronbach's Alpha | No. of Items |
|---|---|---|---|
| 1 | Project Scope Management Practice | 0.820 | 5 |
| 2 | Project Time Management Practice | 0.880 | 5 |
| 3 | Project Quality Management Practice | 0.880 | 4 |
| 4 | Project Cost Management Practice | 0.921 | 5 |
| 5 | Project Risk Management Practice | 0.867 | 5 |
| 6 | Project Integration Management Practice | 0.864 | 4 |
| 7 | Project Stakeholders Management Practice | 0.807 | 5 |
| 8 | Project Human Resource Management Practice | 0.914 | 5 |
| 9 | Project Communication Management Practice | 0.882 | 5 |
| 10 | Project Procurement Management Practice | 0.906 | 7 |

*Source: (Survey result and own computation2019)*

## 3.8 Ethical Considerations

According to (Saunders, Lewis, & Thornhil, 2009) there are key ethical issues that arise across the stages and duration of a research project. They stated that the issues related to privacy and consent of participants, maintenance of the confidentiality of data and their anonymity. The researcher has obtained the consent of selected respondents orally before delivering questionnaires. Since the researcher uses questionnaires to gather data from respondents, their privacy is not compromised and confidentiality of the data they provided is protected and only used for the purpose of the research project only. Furthermore, the researcher recused herself from any interference when respondents fill the questionnaires except for the purpose of clarifying questions.

# CHAPTER FOUR

# DATA PRESENTATION, ANALYSIS AND INTERPRETATION

## 4.1 Introduction

This chapter deals with the presentation, analysis and interpretation of the data which was collected from respondents. To analyze the collected data from the questionnaires distributed in line with the overall objective of the research, statistical procedures were carried out using SPSS Q24.0 software. The questionnaire were developed in five scales ranging from five to one; where 5 represents Strongly agree, 4 agree, 3 Neutral, 2 disagree, and 1 strongly disagrees. While Qualitative analysis is done for the semi-structured interviews conducted.

## 4.2 Response Rate

Among the total of 78 questionnaires distributed to the project office 63 questionnaires were appropriately filled and returned which gives 80% return rate which is assumed to be suitable for further analysis. An interview was also held with a Project Coordinator and 4 Project Managers as a source of primary data.

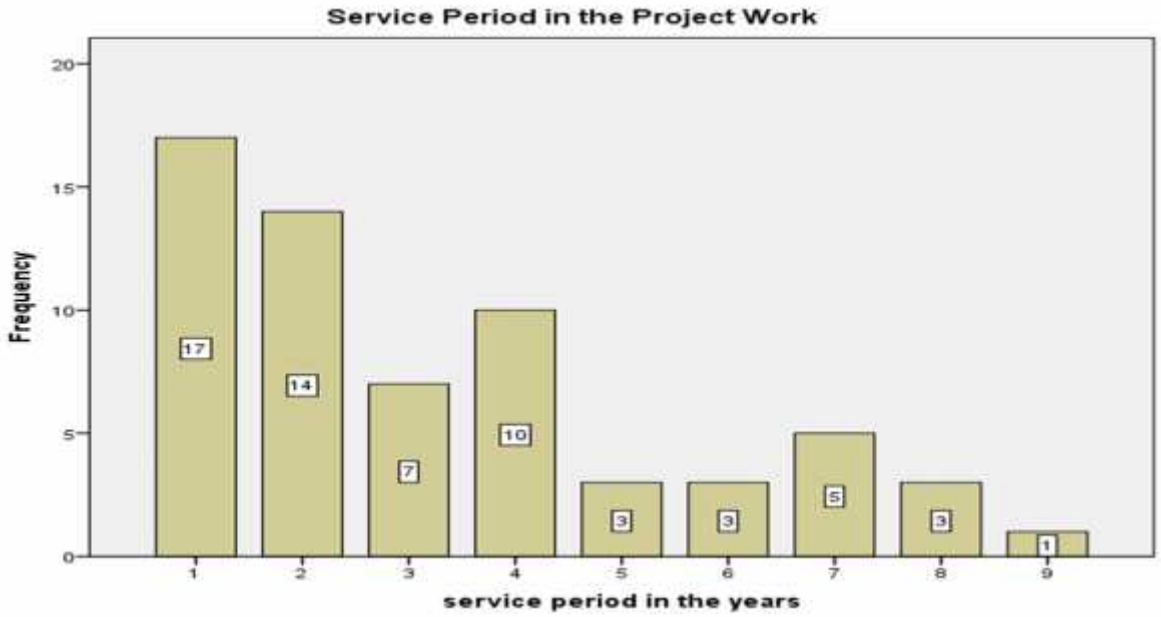
**Table 4.1: Respondents' Demographics**

| No. | Description | | Respondent | | Total | |
|---|---|---|---|---|---|---|
| | | | Frequency | % | N | % |
| 1 | Sex | M | 47 | 74.6 | 63 | 100 |
| | | F | 16 | 25.4 | | |
| 2 | Age | Below 30 | 26 | 41.3 | 63 | 100 |
| | | 31-40 | 29 | 44.4 | | |
| | | 41-50 | 9 | 14.3 | | |
| 3 | Educational Level | MA/MSc | 21 | 33.3 | 63 | 100 |
| | | BA/BSc | 42 | 66.7 | | |
| 4 | Position in the organization | Project Coordinator | 2 | 3.2 | 63 | 100 |
| | | Project manager | 6 | 9.5 | | |
| | | Project Member | 36 | 57.1 | | |
| | | Support Staff | 9 | 14.3 | | |
| | | other | 10 | 15.9 | | |

***Source: (Survey result and own computation2019)***

Out of sixty three participants 16 female and the remaining forty seven are male respondents. Among the respondents, 2 are the Project Coordinator, 6 the Project Managers, 36 project members and the remaining 9 are support staff. There are 36 respondents who are MSc/MA holders and 42 BA/BSc holders. As to the educational background of the respondents, which is analyzed qualitatively, various fields of studies were identified i.e. Business Adm.& information system, Computer Engineering, Computer science, Information System, International Business Management, Public administration & development management, Management, IT Engineering, accounting, Information Technology etc. there is only two respondents with project management educational background which shows that most of the respondents have no background in a project management.

**Figure 4.1 Respondents' service period in the project work**




*Source: (Survey result and own computation2019)*

As shown on figure 4.1, almost half of the respondent (i.e.31 respondents, and there are 7 participants with 3 years of service period and the other 25 have 4 and more years of experience in the project work. This result implies, since most of the respondents have not been involved in the projects, they don't have much project work experience.

## 4.3 Assessing the general questions raised about the project

**Table 4.2: General background about the project**

| No | Description | | | Respondent | | Total | |
|---|---|---|---|---|---|---|---|
| | | | | Frequency | % | N | % |
| 1 | Is there separate project management division in CBE? | | Yes | 63 | 100 | 63 | 100 |
| | | | No | | | | |
| 2 | Major Challenges of the Project | Internal | Lack of clarity in the scope of the project | 18 | 28.6 | 63 | 100 |
| | | | Time, cost and quality | 26 | 41.3 | | |
| | | | Resources | 11 | 17.5 | | |
| | | | Policies and procedures | 8 | 12.7 | | |
| | | External | Organizational culture | 20 | 31.7 | 63 | 100 |
| | | | Government | 7 | 11.1 | | |
| | | | Environment | 36 | 57.1 | | |
| 3 | Project Management training access in the organization? | Yes | Monthly | 2 | 3.2 | 63 | 100 |
| | | | Quarterly | 12 | 19 | | |
| | | | Semi-annually | 3 | 4.8 | | |
| | | | Yearly | 11 | 17.5 | | |
| | | | Once | 17 | 27 | | |
| | | No | | 18 | 28.6 | | |
| 4 | Trainings related to Project Management provided by the bank | | Yes | 24 | 38.1 | 63 | 100 |
| | | | No | 39 | 61.9 | | |
| 5 | Involvement in Project management or project teams prior to current assignment | | Yes | 25 | 39.7 | 63 | 100 |
| | | | No | 38 | 60.3 | | |
| 6 | What is the status of your project in terms of success | | Very successful | 10 | 15.9 | 63 | 100 |
| | | | Successful | 36 | 57.1 | | |
| | | | fairly Successful | 17 | 27 | | |
| | | | Not Successful | 0 | | | |

*Source: (Survey result and own computation2019)*

On table 4.2, which shows the general background of the project, all of the participants responded that there is separate project management department in the organization. Regarding the challenges of the project, 26 of the respondents mention that there are internal challenges of Time, cost and quality while 36 of them responded the challenge was primarily external that is the environment. This shows that the projects face both internal

and external challenges. Moreover, 38(60.3%) respondents are not involved in Project management or project teams prior to current assignment. This shows that more than half of the project team does not have much experience.

Concerning the training access in the project, 18 the respondents do not know there is a training access in the organization and 39 respondents replay that the training given by the bank is not related to Project Management. With respect to the status of the project success, while 10 rated it as a very successful project, the remaining 36 and 17 rated it as a project that was successful and fairly successful respectively.

## 4.4 Assessing the Project practice using the Project Management Knowledge areas

Assessments of each of the project management knowledge areas in the project office is obtained by taking mean scores of the questions and responses of respondents under each knowledge areas and results are discussed in the following sections. Mean Values have been interpreted by adopting the criteria suggested by (Scott., 1999). He suggested that for Likert type scale ranging from 1 (Strongly Disagree/ highly dissatisfied) to 5 (Strongly Agree/Highly Satisfied), interpretation should be like; mean up to 2.8 is considered as Disagree, from 2.9 to 3.2 means neutral or neither disagree nor agree and mean above 3.2 is considered as an agree.

**Table 4.3: Project Scope Management Practice**

| Factors | Strongly Agree | | *Agree* | | *Neutral* | | *Disagree* | | *Strongly Disagree* | | Total | | mean | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | N | % | N | % | N | % | | |
| Plan scope management was defined(As a basis for future project decisions.) | 8 | 12.7 | 37 | 58.7 | 14 | 22.2 | 4 | 6.3 | 0 | 0 | 63 | 100 | 3.78 | .75 |
| Requirements were clearly defined from the | 7 | 11.1 | 37 | 58.7 | 15 | 23.8 | 3 | 4.8 | 1 | 1.6 | 63 | 100 | 3.73 | .79 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| beginning | | | | | | | | | | | | | | |
| WBS was created (WBS (Work Breakdown Structure is a key project deliverable that organizes the team's work into manageable sections) | 6 | 9.5 | 31 | 49.9 | 22 | 34.9 | 3 | 4.8 | 1 | 1.6 | 63 | 100 | 3.60 | .79 |
| Scope was verified (formalizing acceptance of the project scope) | 5 | 7.9 | 40 | 63.5 | 14 | 22.2 | 4 | 6.3 | 0 | 0 | 63 | 100 | 3.73 | .70 |
| Changes to the project scope was controlled | 3 | 4.8 | 30 | 47.6 | 20 | 31.7 | 7 | 11.1 | 3 | 4.8 | 63 | 100 | 3.36 | .92 |
| Average | | | | | | | | | | | | | 3.64 | .79 |

*Source: (Survey result and own computation2019)*

Table 4.3 depicted that factors of Project scope management mean score range between 3.36 up to 3.78 with the standard deviation (SD) 0.70 up to 0.92 which shows that the listed factors are practiced.

Based on the table shown above 45 respondents strongly agreed and agreed that plan scope management was well defined on the projects and 14 respondents were uncertain whether plan scope management was defined or not. Whereas the remaining 4 respondents disagreed that the plan scope management was clearly defined. This implies that plan scope management was defined for the project**.**

The same table shows the responses of the respondents to inquiries if requirements were defined and out of the 63 respondents, 44 agreed that the requirements were defined and 15 were not sure if requirements were defined, however the majority of the respondents agreed and strongly agreed that the requirements were defined, with response rate of 58.7% and11.1% respectively. This shows the project requirements were defined consistently.

The other question put forward to the respondents was if WBS was created and 37 respondents agreed that it was created, 22 respondents put themselves on neutral, and the

remaining 4 disagreed that it was created. Based on this result, a conclusion reached that WBS was not created as good as it was supposed to be since 22 have no idea about it and 4 disagreed. Respondents were asked if scope was verified as it is shown table and 45 agreed that it was verified, 14 were uncertain about it, 4 disagreed that scope was verified. Hence, this result shows that greater part of the respondents agreed scope was verified.

In response to the question that was intended to know if changes to the project scope were controlled, 34 of respondents agreed and 20 were uncertain, whereas 7 disagreed and 3 strongly disagreed. Therefore, it can be analyzed based on the response of the majority that changes to the project scope were controlled.

Hence, based on the above elaboration and the average mean of the factors under project scope management, which is 3.64, it was shown that the practice of project scope management was carefully done on the project. This statement is also supported by the interview that held with project managers that the project requirements(scope), constraints and specific schedule dates clearly identified and communicated to all stakeholders as early as possible.

**Table 4.4: Project Time Management Practice**

| Factors | Strongly Agree | | *Agree* | | *Neutral* | | *Disagree* | | *Strongly* | | Total | | mean | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | N | % | N | % | N | % | | |
| Time/schedule management plan was developed | 0 | 0 | 4 | 6.3 | 16 | 25.4 | 36 | 57.7 | 7 | 11.7 | 63 | 100 | 2.27 | 0.75 |
| Activities were defined | 0 | 0 | 2 | 3.2 | 14 | 22.2 | 42 | 66.7 | 5 | 7.9 | 63 | 100 | 2.21 | 0.62 |
| Activities were sequenced | 1 | 1.6 | 24 | 38.1 | 19 | 30.2 | 12 | 19 | 7 | 11.1 | 63 | 100 | 3.00 | 1.04 |
| Duration of activities were estimated | 0 | 0 | 4 | 6.3 | 17 | 27 | 36 | 57.1 | 6 | 9.5 | 63 | 100 | 2.30 | 0.73 |
| Changes to the project schedule was controlled | 0 | 0 | 2 | 3.2 | 15 | 23.8 | 42 | 66.7 | 4 | 6.3 | 63 | 100 | 2.24 | 0.62 |
| Average | | | | | | | | | | | | | 2.24 | 0.75 |

*Source: (Survey result and own computation2019)*

Table 4.4 depicted that factors of Project Time management mean score range between 2.21 up to 3.00 with the standard deviation (SD) 0.62 up to 1.04 which shows that the listed factors are not practiced and the individual responses did deviate much form the mean.

On table 4.4, the mean of each factors and the average mean of the factors under project time management has been indicated, it can be understandable that time/ schedule plan was not developed and activities were not defined as it should be. Since the activity definitions were not sequenced, the duration of the activities was not estimated and changes to the project schedule were not controlled as they should have been, majority of the respondents agree that project time management was not done cautiously. In addition, the above result backed by the Project coordinator and Managers replied in the interview that projects take longer time than planned.

**Table 4.5: Project Quality Management Practice**

| Factors | Strongly Agree | | *Agree* | | *Neutral* | | *Disagree* | | *Strongly Disagree* | | Total | | mean | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | N | % | N | % | N | % | | |
| Quality standards of the project were identified | 3 | 4.8 | 35 | 55.6 | 18 | 28.6 | 6 | 9.5 | 1 | 1.6 | 63 | 100 | 3.52 | .80 |
| Quality standards of the project were reviewed | 2 | 3.2 | 34 | 54 | 19 | 30.2 | 7 | 11.1 | 1 | 1.6 | 63 | 100 | 3.46 | .79 |
| Project performance were evaluated on regular basis | 6 | 9.5 | 29 | 46 | 16 | 25.4 | 11 | 17.5 | 1 | 1.6 | 63 | 100 | 3.44 | .95 |
| Results were monitored to check if they comply with the quality standards identified | 4 | 6.3 | 35 | 55.6 | 14 | 22.2 | 9 | 14.3 | 1 | 1.6 | 63 | 100 | 3.50 | .88 |
| Average | | | | | | | | | | | | | 3.48 | .85 |

*Source: (Survey result and own computation2019)*

Table 4.5 depicted that factors of Project Quality management mean score range between 3.44 up to 3.52 with the standard deviation (SD) 0.79 up to .88 which shows that the listed factors are practiced and the individual responses did not deviate much form the mean.

The Table 4.5 shows the results obtained in response to the questions asked regarding the practice of project quality management in the project office. The mean of each factors shows that quality standards were defined and reviewed as they should have been. Moreover, performances of the project were evaluated on regular basis as the mean shows 3.44 and is above average. The project results were monitored to verify their compliance with the identified standards to the expected level. Hence, the average mean of the factors, which is 3.48, showed that despite 9 respondents disagree with it. Therefore as a standard for project management, practice of project quality was identified and project quality management was practiced. This supported by the Project coordinators and managers that there is a close follow up of monitoring and controlling of projects.

**Table 4.6: Project Cost Management Practice**

| Factors | Strongly Agree | | Agree | | Neutral | | Disagree | | Strongly Disagree | | Total | | mean | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | N | % | N | % | N | % | | |
| The quantity of the necessary resources were determined | 5 | 7.9 | 32 | 50.8 | 19 | 30.2 | 7 | 11.1 | 0 | 0 | 63 | 100 | 3.56 | .80 |
| Cost plan was well-defined | 7 | 11.1 | 31 | 49.2 | 17 | 27. | 7 | 11.1 | 1 | 1.6 | 63 | 100 | 3.57 | .89 |
| The project cost was estimated | 7 | 11.1 | 38 | 60.3 | 12 | 19. | 6 | 9.5 | 0 | 0 | 63 | 100 | 3.73 | .79 |
| The required budget was determined | 7 | 11.1 | 33 | 52.4 | 17 | 27. | 5 | 7.9 | 1 | 1.6 | 63 | 100 | 3.63 | .85 |
| Changes to the project budget was controlled | 6 | 9.5 | 31 | 49.2 | 15 | 23.8 | 9 | 14.3 | 2 | 3.2 | 63 | 100 | 3.48 | .96 |
| Average | | | | | | | | | | | | | 3.56 | .86 |

*Source: (Survey result and own computation2019)*

Table 4.6 shown that factors of Project Cost management mean score range between 3.48 up to 3.73 with the standard deviation (SD) 0.79 up to .96 which shows that the listed factors are practiced.

Table 4.6 depicted that the majority of the respondents agree that the factors of the cost management were practiced in the project. However, 7 of the respondents disagree and 19 have no idea the quantity of the necessary resources were determined. Similarly, the other factor of project cost management is changes to the project budget, which was not controlled as per the 11 respondents and 15 did not know whether the budget is controlled. On the other hand, most of the respondents are agree that the required budget estimated and determined and the main objective of cost management is to complete the project within the approved budget, but the interview result shows that the final cost of the projects exceed the initial budget.

**Table 4.7: Project Risk Management Practice**

| Factors | Strongly Agree | | *Agree* | | *Neutral* | | *Disagree* | | *Strongly Disagree* | | Total | | mean | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | N | % | N | % | N | % | | |
| Risk management plan was developed | 2 | 3.2 | 33 | 52.4 | 19 | 30.2 | 9 | 14.3 | 0 | 0 | 63 | 100 | 3.44 | .78 |
| Risks were identified and registered | 1 | 1.6 | 33 | 52.4 | 22 | 34.9 | 7 | 11.1 | 0 | 0 | 63 | 100 | 3.44 | .71 |
| Risks were prioritized and their implication on the project was estimated | 4 | 6.3 | 25 | 39.7 | 28 | 44.4 | 5 | 7.9 | 1 | 1.6 | 63 | 100 | 3.41 | .79 |
| Risk response plan was developed | 2 | 3.2 | 31 | 49.2 | 23 | 36.5 | 7 | 11.1 | 0 | 0 | 63 | 100 | 3.44 | .73 |
| The identified risks were monitored and controlled | 2 | 3.2 | 21 | 33.3 | 30 | 47.6 | 10 | 15.9 | 0 | 0 | 63 | 100 | 3.24 | .75 |
| Average | | | | | | | | | | | | | 3.39 | .75 |

*Source: (Survey result and own computation2019)*

Table 4.7 shown that factors of Project Risk management mean score range between 3.24 up to 3.44 with the standard deviation (SD) 0.71 up to .79 which shows that the listed factors are practiced and the individual responses did not deviate from the mean.

According to Table 4.7 which is intended to show the practice of project risk management in the project office, it can be clearly seen that the mean of each factors and average mean of the factors become above standard. This implies that, the project office has a practice of project risk management according to the respondents. As the project coordinator and manager replied in the interview that early warning signs of problems are responded in time when it occurred.

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**Table 4.8: Project Integration Management Practice**

| Factors | Strongly Agree | | *Agree* | | *Neutral* | | *Disagree* | | *Strongly Disagree* | | Total | | mean | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | N | % | N | % | N | % | | |
| Project plan was developed by taking the results of other planning processes and putting them into consistent document | 6 | 9.5 | 39 | 61.9 | 14 | 22.2 | 4 | 6.3 | 0 | 0 | 63 | 100 | 3.74 | .72 |
| Project work was managed | 5 | 7.9 | 47 | 74.6 | 7 | 11.1 | 4 | 6.3 | 0 | 0 | 63 | 100 | 3.84 | .65 |
| Project work was monitored and controlled | 5 | 7.9 | 43 | 68.3 | 9 | 14.3 | 5 | 7.9 | 1 | 1.6 | 63 | 100 | 3.73 | .79 |
| There was effective coordination of project activities | 6 | 9.5 | 34 | 54 | 19 | 30.2 | 3 | 4.8 | 1 | 1.6 | 63 | 100 | 3.65 | .78 |
| Average | | | | | | | | | | | | | 3.74 | .74 |

*Source: (Survey result and own computation2019)*

Table 4.8 shown that factors of Project Integration management mean score range between 3.65 up to 3.84 with the standard deviation (SD) 0.65 up to .78 which shows that the listed factors are practiced and the individual responses did not deviate much from the mean.

Table 4.8 illustrates that most of the respondents agreed and on almost all of the factors of project integration management practice in the project which has a mean value of 3.74 which is above standard. However, 14(22.2%) respondents put themselves in a neutral positon and 4 respondents disagreed that project plan was developed by taking the results of other planning processes. 7 and 9 respondents have no idea about whether project work was managed, monitored and controlled and 4 and 6 respondents are disagreed with it. In terms of coordination of project activities 19(30.2%) respondents are neutral and 4 respondents are disagree with it.

**Table 4.9: Project Stakeholders Management Practice**

| Factors | Strongly Agree | | *Agree* | | *Neutral* | | *Disagree* | | *Strongly Disagree* | | Total | | mean | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | N | % | N | % | N | % | | |
| Project stakeholders were identified | 14 | 22.2 | 38 | 60.3 | 8 | 12.7 | 3 | 4.8 | 0 | 0 | 63 | 100 | 4.00 | .74 |
| Stakeholder management plan was defined | 9 | 14.3 | 34 | 54 | 14 | 22.2 | 6 | 9.5 | 0 | 0 | 63 | 100 | 3.43 | .82 |
| There was effective communication between project stakeholders | 7 | 11.1 | 36 | 57.1 | 15 | 23.8 | 4 | 6.3 | 1 | 1.6 | 63 | 100 | 3.69 | .82 |
| Stakeholders engagement was controlled | 3 | 4.8 | 33 | 52.4 | 21 | 33.3 | 5 | 7.9 | 1 | 1.6 | 63 | 100 | 3.50 | .78 |
| Project progress was reviewed frequently with the customer | 4 | 6.3 | 39 | 61.9 | 13 | 20.6 | 5 | 7.9 | 2 | 3.2 | 63 | 100 | 3.6 | .85 |
| Average | | | | | | | | | | | | | 3.64 | 0.80 |

*Source: (Survey result and own computation2019)*

Table 4.9 shown that factors of Project Stakeholder management mean score range between 3.43 up to 4.00 with the standard deviation (SD) 0.74 up to 0.85 which shows that the listed factors are practiced.

As the above table shows, all the factors under stakeholders' management have a mean value from 3.43 to 4.00. This result shows the project office has a good practice regarding the project stakeholder management. The document reviews as well as the interview conducted indicate similar results regarding the practice and confirmed that all the stakeholders were identified and communication between them was effective, and all the stakeholders were engaged as there was a monthly meeting between stakeholders to assure clear communication and mutual understanding.

.**Table 4.10 Project Human Resource Management Practice**

| Factors | Strongly Agree | | *Agree* | | *Neutral* | | *Disagree* | | *Strongly Disagree* | | Total | | mean | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | N | % | N | % | N | % | | |
| Project roles, responsibilities and required skill were identified | 1 | 1.6 | 14 | 22.2 | 16 | 25.4 | 27 | 42.9 | 5 | 7.9 | 63 | 100 | 2.67 | .97 |
| Organizational chart and position descriptions were clear | 3 | 4.8 | 29 | 46.0 | 15 | 23.8 | 16 | 25.4 | 0 | 0 | 63 | 100 | 3.30 | .90 |
| Availability and assigning human resource | 1 | 1.6 | 6 | 9.5 | 10 | 15.9 | 36 | 57.1 | 10 | 15.9 | 63 | 100 | 2.24 | .89 |
| Project team was developed | 1 | 1.6 | 6 | 9.5 | 3 | 4.8 | 46 | 73 | 7 | 11.1 | 63 | 100 | 2.17 | .81 |
| Project team was managed and controlled | 1 | 1.6 | 5 | 7.9 | 13 | 20.6 | 35 | 55.6 | 9 | 14.3 | 63 | 100 | 2.27 | .87 |
| Average | | | | | | | | | | | | | 2.53 | 0.89 |

*Source: (Survey result and own computation2019)*

Table 4.10 depicted that factors of Project Human Resource management mean score range between 2.17 up to 3.30 with the standard deviation (SD) 0.81 up to 0.97 which shows that not all the listed factors are practiced except organizational chart and position descriptions were clear which has the mean score 3.3 above the standard.

Table 4.10 which is focused on the project human resource management shows an average mean of the factors 2.53 which indicates the project office was not in a good position except that Organizational chart and position descriptions were clear according to most respondents. As the result indicated roles, responsibilities and required skill were not identified. There is also a gap in getting the needed human resource assignment to work on the project and developing, managing and controlling of project teams.

**Table 4.11: Project Communication Management Practice**

| Factors | Strongly Agree | | *Agree* | | *Neutral* | | *Disagree* | | *Strongly Disagree* | | Total | | mean | S.D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | N | % | N | % | N | % | | |
| The information and communication needed for the project were determined | 5 | 7.9 | 41 | 65.1 | 16 | 25.4 | 1 | 1.6 | 0 | 0 | 63 | 100 | 3.79 | .59 |
| Making needed information available to project stakeholders | 3 | 4.8 | 38 | 60.3 | 19 | 30.2 | 3 | 4.8 | 0 | 0 | 63 | 100 | 3.65 | .65 |
| Collecting and disseminating performance information | 2 | 3.2 | 42 | 66.7 | 16 | 25.4 | 3 | 4.8 | 0 | 0 | 63 | 100 | 3.68 | .62 |
| Generating, gathering, and disseminating information to formalize phase or project completion | 1 | 3.2 | 41 | 65.1 | 15 | 23.8 | 5 | 7.9 | 0 | 0 | 63 | 100 | 3.63 | .68 |
| Control communication | 5 | 7.9 | 32 | 50.8 | 21 | 33.3 | 5 | 7.9 | 0 | 0 | 63 | 100 | 3.59 | .75 |
| Average | | | | | | | | | | | | | 3.67 | .66 |

Table 4.11 shown that factors of Project Communication management mean score range between 3.59 up to 3.79 with the standard deviation (SD) 0.59 up to 0.75 which shows that the listed factors are practiced.

Most of the respondents as shown on Table 4.11, put themselves on agree and strongly agree scale of response for the questions raised on the factors of the project communication management. This was also supported by the interview held with the project coordinator explained that the communication was focused on reporting results of activities rather than only having two way communications.

**Table 4.12: Project Procurement Management Practice**

| Factors | Strongly Agree | | *Agree* | | *Neutral* | | *Disagree* | | *Strongly Disagree* | | Total | | mean | S.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | N | % | N | % | N | % | | |
| Resources needed for the project were Determined | 8 | 12.7 | 36 | 57.1 | 14 | 22.2 | 4 | 6.3 | 1 | 1.6 | 63 | 100 | 3.73 | .82 |
| Requirements of the project materials was documented | 8 | 12.7 | 36 | 57.1 | 12 | 19 | 7 | 11.1 | 0 | 0 | 63 | 100 | 3.71 | .83 |
| Potential sources were identified | 8 | 12.7 | 40 | 63.5 | 9 | 14.3 | 6 | 9.5 | 0 | 0 | 63 | 100 | 3.79 | .78 |
| Appropriate quotations, bid, offers or proposal were obtained | 14 | 22.2 | 30 | 47.6 | 16 | 25.4 | 2 | 3.2 | 1 | 1.6 | 63 | 100 | 3.86 | .85 |
| Choosing from among potential sellers | 11 | 17.5 | 37 | 58.7 | 11 | 17.5 | 3 | 4.8 | 1 | 1.6 | 63 | 100 | 3.86 | .82 |
| The relationship with the seller was managed | 10 | 15.9 | 32 | 50.8 | 17 | 27 | 3 | 4.8 | 1 | 1.6 | 63 | 100 | 3.75 | .84 |
| Contract was completed and settled properly | 8 | 12.7 | 35 | 55.6 | 13 | 20.6 | 6 | 9.5 | 1 | 1.6 | 63 | 100 | 3.68 | .87 |
| Average | | | | | | | | | | | | | 3.76 | .83 |

*Source: (Survey result and own computation2019)*

Table 4.12 shown that factors of Project Procurement management mean score range between 3.68 up to 3.86 with the standard deviation (SD) 0.78 up to 0.87 which shows that the listed factors are practiced.

As can be seen in the above table, almost all of the factors under project procurement management practice show a positive response from the respondents with average mean value of 3.76. This result implies that attention was given to project procurement management during the implementation of the project. However some respondents are disagreed that not all the mentioned factors are practiced in project procurements managements.

# CHAPTER FIVE

# SUMMERY, CONCLUSIONS AND RECOMMENDATION

This chapter outlines the summaries of the findings, conclusions derived from the analysis and the recommendations that can help to improve the practice of CBE's IT Project Management.

## 5.1 SUMMERY OF FINDINGS

Based on the analysis, the below outlined findings were recognized:-

- Concerning the challenges of the project, it can be generalized that the challenges of the project are both internal and external. Of the internal challenges, the projects time, cost and quality gap ranks the first; and from the external challenges of the project environment took the first place.
- In response to training access in the organization, the trainings provided by the bank are not related to Project Management and not all respondents know that there is a training access even though the schedule for the training was not regular. Likewise, the analysis of respondents' service period implies, most of the respondents have not been involved in the projects which shows they don't have much project work experience.
- The findings of the analysis for the project scope management shows that WBS was not created as good as it was supposed to be and there is still a gap since not all respondents agree with that WBS created.
- The findings of the analysis for the project time management show that activity definition, activity sequencing, activity duration estimation, schedule development and schedule control are not done as it should be.
- The response of the respondents on the intent to know if there was a project human resource management, it has been clearly seen that except the organizational chart and position descriptions all the other factors have a gap. As the result indicated roles, responsibilities and required skill were not identified. There is also a gap in getting the needed human resource assignment to work on the project and developing, managing and controlling of project teams.

- Through the analysis made on project quality, cost, risk, integration, stakeholders, communication, and procurement management, the mean value of the response of respondents are above the standard average which shows the project office has a good practice regarding the project management. However some respondents are still disagreed that not all the mentioned factors are practiced in project managements.

## 5.2 CONCLUSIONS

Although CBE has a separate division for practicing project management, the findings of the analysis shows that the project office has a poor practice for project scope, time and human resource management. Their mean score shows that below the standard which needs to be given a great attention to improve management of the projects.

The other project management knowledge areas have found to be with in and above the standard according to the analysis result. However, it does not mean that they don't need improvement on the areas and some respondents are still disagreed that not all the mentioned factors in the project knowledge areas are practiced in project management office. It also has been understood that, the practice of project management knowledge areas in line with project process groups would have helped the project to be more effective.

## 5.3 RECOMMENDATION

The major objective of the study was to assess the project management practices of IT projects in CBE based on the ten projects management areas and in order to improve the practice of project management knowledge and to minimize the problem of the gap between the actual theory and implementation of the project, the following possible recommendations are provided.

- The trainings provided by the bank should be related to Project Management in order to develop the team performance since professional development and training courses can fast track the development of the competencies required to deliver successful projects. Trainings should be given in a regular basis and in a continuous monitoring of performance in related with the trainings.

- A project, by definition, has an official end date. In order to meet this date, every project needs a schedule. And every project manager needs to manage their own time and the team's time to ensure that the schedule is met. The first thing CBE should do is Plan schedule management. Before any other steps completed, it should be planned and manage the schedule. Once time management plan sated, the steps should be followed. Those are Define activities, Sequence activities, Estimate resources, Estimate durations, Develop the project schedule and Control the schedule. In additions, progress should to be reviewed and updated on a regular basis so it can be compared with actual work completed against the plan. This allows seeing that if there are areas falling behind schedule. One method for doing this is completing progress reviews with the team and holding frequent status report meetings.
- Any project has a challenge it can be internal or external or both. In order to have smooth flow of the project activities, the teams and the stakeholders who are part of the projects, first should define and prepare project scope management, which incorporates definition of plan scope management, requirement and scope definition, creating WBS and methods to control changes to the project scope. Therefore, Once PMO have its time management plan, it should start identifying and defining all of its project activities. Often WBS is used to help define activities and tasks within a project and major milestones should also be determined.
- Since the human resource system is an important part of the project, it should be given more attention by the bank. Human Resources in Project Management should focus on Project Team recruitment, organization and management until the end of a given project. Its role should starts from defining core competencies which are going to be needed, to team building and motivation. Since the link between Human Resource Management and Project Management is strategic. Both of them are useful for CBE competitiveness. Human Resources are the key of every work done within a project as they represent people. Project Management is measured by the different project success that can represent benefit, innovation or any improvement. It appears that project success require success in team project management, which is the HR function. Therefore, CBE should take the main processes into account: selecting, training and managing.

- All the project practices which seem to be implemented in the project need to follow the formal procedures of project management to have the best result..
- Project management practice of CBE can be rated as good according to the response obtained. But still the CBE's e-PMO success would have been the best if there was an extensive practice of all the project knowledge areas by participating and including all employees of e-PMO. In general, with the dynamic environment and the IT project nature, CBE still need to implement the ten project management knowledge areas defined by PMBOK as a guideline.

## 5.4 IMPLICATION FOR FUTURE STUDIES

This study focused only on knowledge areas of project management so that the researcher recommends for further research to include other processes and practices of project management. And also a wider research can be conducted in detail by including various project based organizations to compare their project management practice and contribute for the performance improvement of PMO.

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# APPENDIX A:

## Questionnaires and Interview


**Addis Ababa University**
**School of Commerce**
**Master of Project Management**

**Dear Respected project managers and team members:**

This questionnaire is conducted to collect data for a research on: Assessing Effectiveness of Project Management Practices in case of CBE IT Projects. The information is going to be used as a primary data for this research believing that your frank and genuine responses will contribute vastly to the quality of the findings of this study. The researcher would like to ask you to kindly complete this questionnaire, as truthfully as possible as the responses you provide will be kept confidential and will be used only for the study under consideration.

Thank you in advance for taking part in this endeavor.

Kind Regards
Meriem Nasser
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# General Direction

- ✓ Your name(optional|) _____
- ✓ Put“X” mark or circle your choice;
- ✓ If you cannot get any satisfying choice among the given alternatives, you can write your answer, in the space provided for the option;
- ✓ For the open ended items, give brief answer in the space provided.

**Part I: Demographic characteristics and general background of the respondents**

1. Sex:

   Male [ ] -1 Female [ ] -2

2. 2. Age:

   Below 30 [ ]-1 31-40 [ ] -2 41-50 [ ]-3 above 50 [ ]-4

3. 3. Educational Level

   PHD [ ] -1 MA/MSc [ ] -2 BA/BSc [ ] -3

   If other, please specify_____-4

4. Field of Specialization (The field you have studied)_____
5. Position in the organization:

   Project Coordinator [ ]-1 Project manager [ ]-2

   Project Member [ ]-3 Support Staff [ ]-4 or other_____-5

6. Service period in the project work (in year)_____

**Part II. General Issues**

1. Is there separate project management division in CBE?(GI1)

   Yes [ ] -1 No [ ]-2

2. Major Challenges of the Project(GI2)

   **Internal**

   Lack of clarity in the scope of the project [ ]-1

   Time, cost and quality [ ]-2

   Resources [ ]-3

   Policies and procedures [ ]-4

**External**

Organizational culture [ ]-1

Government [ ]-2

Environment [ ]-3

3. Is there a project management training access in the organization? (GI3)

   Yes [ ] -1 No [ ]-2

4. If your answer on Question number (3) is yes, how often? (GI4)

Monthly [ ]-1 Quarterly [ ]-2 Semi-annually [ ]-3 Yearly [ ]-4 Once [ ]-5

5. Have you taken trainings related to Project Management provided by the bank? (GI5)

   a. Yes -1 b. No -2
   If yes, please specify the type of training you received -3

_____

_____

6. Have you ever been involved in project management or project teams prior to your current assignment (it can also be in another organization)? (GI6)

   a. Yes b. No
   If yes, please specify the type of company and project you were involved with _____

   _____

   _____

7. What is the status of your project in terms of success(GI7)

   Very successful [ ]-1 Successful [ ] -2 fairly Successful [ ]-3 Not Successful [ ]-4

**Part III: Questions related to the ten Knowledge Areas of Project Management according to PMBOK**

Based on your experience in the IT projects, please feedback to what extent do you think the following factors listed under each project management knowledge areas are important to the effectiveness of the project.

***(5=Strongly Agree, 4= Agree, 3= Neutral, 2= Disagree, 1= Strongly Disagree)***

| No. | ***I. Project Scope Management*** | 5 | 4 | 3 | 2 | 1 |
|---|---|---|---|---|---|---|
| 1 | Plan scope management was defined (As a basis for future project decisions.) (Scope1) | | | | | |
| 2 | Requirements were clearly defined from the beginning (Scope2) | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 | WBS was created (WBS (Work Breakdown Structure is a key project deliverable that organizes the team's work into manageable sections) (Scope3) | | | | | |
| 4 | Scope was verified (formalizing acceptance of the project scope) (Scope4) | | | | | |
| 5 | Changes to the project scope was controlled(Scope5) | | | | | |
| | ***II. Project Time Management***-(Time) | | | | | |
| 1 | Time/schedule management plan was developed(Time1) | | | | | |
| 2 | Activities were defined(Time2) | | | | | |
| 3 | Activities were sequenced(Time3) | | | | | |
| 4 | Duration of activities were estimated(Time4) | | | | | |
| 5 | Changes to the project schedule was controlled(Time5) | | | | | |
| | ***III. Project Quality Management*-(Quality)** | | | | | |
| 1 | Quality standards of the project were identified **(Quality-1)** | | | | | |
| 2 | Quality standards of the project were reviewed**(Quality-2)** | | | | | |
| 3 | Project performance were evaluated on regular basis **(Quality3)** | | | | | |
| 4 | Results were monitored to check if they comply with the quality standards identified **(Quality-4)** | | | | | |
| | ***IV. Project Cost Management* (Cost)** | | | | | |
| 1 | The quantity of the necessary resources were determined (Cost-**1)** | | | | | |
| 2 | Cost plan was well-defined **(Cost-2)** | | | | | |
| 3 | The project cost was estimated **(Cost-3)** | | | | | |
| 4 | The required budget was determined **(Cost-4)** | | | | | |
| 5 | Changes to the project budget was controlled**(Cost-5)** | | | | | |
| | ***V. Project Risk Management (Risk)*** | | | | | |
| 1 | Risk management plan was developed-***(Risk-1)*** | | | | | |
| 2 | Risks were identified and registered***(Risk-2)*** | | | | | |
| 3 | Risks were prioritized and their implication on the project was estimated***(Risk-3)*** | | | | | |
| 4 | Risk response plan was developed***(Risk-4)*** | | | | | |
| 5 | The identified risks were monitored and controlled***(Risk-5)*** | | | | | |
| | ***VI. Project Integration Management*** (Integration) | | | | | |
| 1 | Project plan was developed by taking the results of other planning processes and putting them into consistent document. (Integration-1) | | | | | |
| 2 | Project work was managed(Integration-2) | | | | | |
| 3 | Project work was monitored and controlled(Integration-3) | | | | | |
| 4 | There was effective coordination of project activities (Integration- | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | 4) | | | | | |
| | ***VII. Project Stakeholder Management (***Stakeholder) | | | | | |
| 1 | Project stakeholders were identified (Stakeholder -1) | | | | | |
| 2 | Stakeholder management plan was defined (Stakeholder -2) | | | | | |
| 3 | There was effective communication between project stakeholders(Stakeholder -3) | | | | | |
| 4 | Stakeholders engagement was controlled(Stakeholder -4) | | | | | |
| 5 | Project progress was reviewed frequently with the customer(Stakeholder -5) | | | | | |
| | ***VIII. Project Human Resource Management*** (Human Resource) | | | | | |
| 1 | Project roles, responsibilities and required skill were identified(Human Resource-1) | | | | | |
| 2 | Organizational chart and position descriptions were clear(Human Resource-2) | | | | | |
| 3 | Availability and assigning human resource(Human Resource-3) | | | | | |
| 4 | Project team was developed(Human Resource-4) | | | | | |
| 5 | Project team was managed and controlled(Human Resource5) | | | | | |
| | ***IX. Project Communication Management*** (Communication) | | | | | |
| 1 | The information and communication needed for the project were determined(Communication-1) | | | | | |
| 2 | Making needed information available to project stakeholders(Communication-2) | | | | | |
| 3 | Collecting and disseminating performance information(Communication-3) | | | | | |
| 4 | Generating, gathering, and disseminating information to formalize phase or project completion(Communication-4) | | | | | |
| 5 | Control communication(Communication-5) | | | | | |
| | ***X. Project Procurement Management Factors*** (Procurement) | | | | | |
| 1 | Resources needed for the project were Determined(Procurement-1) | | | | | |
| 2 | Requirements of the project materials was documented (Procurement-2) | | | | | |
| 3 | Potential sources were identified(Procurement-3) | | | | | |
| 4 | Appropriate quotations, bid, offers or proposal were obtained (Procurement-4) | | | | | |
| 5 | Choosing from among potential sellers(Procurement-5) | | | | | |
| 6 | The relationship with the seller was managed(Procurement-6) | | | | | |
| 7 | Contract was completed and settled properly(Procurement-7) | | | | | |

If you have opinion for other factors, please describe;

- _____
- _____
- _____
- 

********** *I really thank you for your time* **********


**Addis Ababa University**
**College of Business and Economics**
**School of Commerce**
**Master of Project Management Program**

**Dear Respected project managers and team members:**

This interview is conducted to collect data for a research on: Assessing Effectiveness of Project Management Practices in case of CBE IT Projects. The information is going to be used as a primary data for this research. Therefore, your response and participation in the interview will be extremely valuable for the study. Please note that confidentiality of your response is secured and used only for the purpose of this study.

If you need to know the final results of the study, you may contact me via E- mail.

Thank you in advance for your voluntary contribution.

Kind Regards
Meriem Nasser
Mobile: +251911610475
Email:MerimaNasser@cbe.mail.com

1. Were the project requirements (scope), constraints and specific schedule dates clearly identified and communicated to all stakeholders?
2. Do roles and responsibilities, clearly communicated to all team and stakeholders?
3. Did the project take longer than planned?

   If yes, what kind of related costs does the project incur?

   _____

   _____

   If no, how did you manage

   it?_____

   _____
4. Did the final cost of the project exceed the initial budget?
5. If your answer for question number (2) is no, how did you manage it?

   _____

   _____
6. Was there a project scope change during the execution phase?
7. Were the time schedule, budget and quality of the deliverables monitored closely throughout the project's life-cycle? And how?

   _____

   _____

   _____
8. Did you notice early warning signs of problems that occurred in the project, and did you responded in time?
9. Did the final deliverables of the project satisfy the needs or requirements of all stakeholders?

# APPENDIX B:
# Reliability Test Tables

**Reliability test table for the overall questions based on the ten project management knowledge areas**

## Reliability

## Scale: Project Scope Management

### Case Processing Summary

| | | N | % |
|---|---|---|---|
| Cases | Valid | 63 | 100.0 |
| | Excluded[a] | 0 | .0 |
| | Total | 63 | 100.0 |

### Reliability Statistics

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|---|---|---|
| .788 | .796 | 6 |

## Reliability

## Scale: Project Time Management

### Case Processing Summary

| | | N | % |
|---|---|---|---|
| Cases | Valid | 63 | 100.0 |
| | Excluded[a] | 0 | .0 |
| | Total | 63 | 100.0 |

**Reliability Statistics**

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|---|---|---|
| .820 | .826 | 5 |

## Reliability

## Scale: Project Quality Management

**Case Processing Summary**

| | | N | % |
|---|---|---|---|
| Cases | Valid | 63 | 100.0 |
| | Excluded[a] | 0 | .0 |
| | Total | 63 | 100.0 |

**Reliability Statistics**

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|---|---|---|
| .880 | .885 | 5 |

## Reliability

## Scale: Project Risk Management

### Case Processing Summary

| | | N | % |
|---|---|---|---|
| Cases | Valid | 63 | 100.0 |
| | Excluded[a] | 0 | .0 |
| | Total | 63 | 100.0 |

### Reliability Statistics

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|---|---|---|
| .880 | .884 | 4 |

## Reliability

## Scale: Cost Management

### Case Processing Summary

| | | N | % |
|---|---|---|---|
| Cases | Valid | 63 | 100.0 |
| | Excluded[a] | 0 | .0 |
| | Total | 63 | 100.0 |

**Reliability Statistics**

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|---|---|---|
| .921 | .925 | 5 |

## Reliability

## Scale: Project Risk Management

**Case Processing Summary**

| | | N | % |
|---|---|---|---|
| Cases | Valid | 63 | 100.0 |
| | Excluded[a] | 0 | .0 |
| | Total | 63 | 100.0 |

**Reliability Statistics**

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|---|---|---|
| .867 | .867 | 5 |

## Reliability

## Scale: Project Integration Management

### Case Processing Summary

| | | N | % |
|---|---|---|---|
| Cases | Valid | 63 | 100.0 |
| | Excluded[a] | 0 | .0 |
| | Total | 63 | 100.0 |

### Reliability Statistics

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|---|---|---|
| .864 | .866 | 4 |

## Reliability

## Scale: Project stakeholder Management

### Case Processing Summary

| | | N | % |
|---|---|---|---|
| Cases | Valid | 63 | 100.0 |
| | Excluded[a] | 0 | .0 |
| | Total | 63 | 100.0 |

**Reliability Statistics**

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|---|---|---|
| .807 | .810 | 5 |

## Reliability

## Scale: Project Human Resource Management

**Case Processing Summary**

| | | N | % |
|---|---|---|---|
| Cases | Valid | 63 | 100.0 |
| | Excluded[a] | 0 | .0 |
| | Total | 63 | 100.0 |

**Reliability Statistics**

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|---|---|---|
| .914 | .914 | 5 |

## Reliability

## Scale: Project Communication Management

### Case Processing Summary

| | | N | % |
|---|---|---|---|
| Cases | Valid | 62 | 98.4 |
| | Excluded[a] | 0 | 0 |
| | Total | 63 | 100.0 |

### Reliability Statistics

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|---|---|---|
| .882 | .884 | 5 |

## Reliability

## Scale: Project Procurement Management

### Case Processing Summary

| | | N | % |
|---|---|---|---|
| Cases | Valid | 63 | 100.0 |
| | Excluded[a] | 0 | .0 |
| | Total | 63 | 100.0 |

**Reliability Statistics**

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|---|---|---|
| .906 | .906 | 7 |

## Scale: ALL VARIABLES

**Case Processing Summary**

| | | N | % |
|---|---|---|---|
| Cases | Valid | 63 | 100.0 |
| | Excluded[a] | 0 | .0 |
| | Total | 63 | 100.0 |

**Reliability Statistics**

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|---|---|---|
| .938 | .939 | 50 |

**Item Statistics**

| | Mean | Std. Deviation | N |
|---|---|---|---|
| Plan scope management was defined (As a basis for future project decisions.) | 3.7778 | .75015 | 63 |
| Requirements were clearly defined from the beginning | 3.7302 | .78712 | 63 |
| WBS was created (WBS (Work Breakdown Structure is a key project deliverable that organizes the team's work into manageable sections) | 3.6032 | .79392 | 63 |
| Scope was verified (formalizing acceptance of the project scope) | 3.7302 | .70038 | 63 |
| Changes to the project scope was controlled | 3.3651 | .92111 | 63 |
| Time/schedule management plan was developed | 2.2698 | .74501 | 63 |
| Activities were defined | 2.2063 | .62627 | 63 |
| Activities were sequenced | 3.0000 | 1.04727 | 63 |
| Duration of activities were estimated | 2.3016 | .73254 | 63 |

| | | | |
|---|---|---|---|
| Changes to the project schedule was controlled | 2.2381 | .61472 | 63 |
| Quality standards of the project were identified | 3.5238 | .80035 | 63 |
| Quality standards of the project were reviewed | 3.4603 | .79971 | 63 |
| Project performance were evaluated on regular basis | 3.4444 | .94660 | 63 |
| Results were monitored to check if they comply with the quality standards identified | 3.5079 | .87755 | 63 |
| The quantity of the necessary resources were determined | 3.5556 | .79874 | 63 |
| Cost plan was well-defined | 3.5714 | .89288 | 63 |
| The project cost was estimated | 3.7302 | .78712 | 63 |
| The required budget was determined | 3.6349 | .84818 | 63 |
| Changes to the project budget was controlled | 3.4762 | .96482 | 63 |
| Risk management plan was developed | 3.4444 | .77829 | 63 |
| Risks were identified and registered | 3.4444 | .71341 | 63 |
| Risks were prioritized and their implication on the project was estimated | 3.4127 | .79585 | 63 |
| Risk response plan was developed | 3.4444 | .73568 | 63 |
| The identified risks were monitored and controlled | 3.2381 | .75593 | 63 |
| Project plan was developed by taking the results of other planning processes and putting them into consistent document. | 3.7460 | .71771 | 63 |
| Project work was managed | 3.8413 | .65270 | 63 |
| Project work was monitored and controlled | 3.7302 | .78712 | 63 |
| There was effective coordination of project activities | 3.6508 | .78614 | 63 |
| Project stakeholders were identified | 4.0000 | .74053 | 63 |
| Stakeholder management plan was defined | 3.7302 | .82709 | 63 |
| There was effective communication between project stakeholders | 3.6984 | .81587 | 63 |
| Stakeholders engagement was controlled | 3.5079 | .78026 | 63 |
| Project progress was reviewed frequently with the customer | 3.6032 | .85269 | 63 |
| Project roles, responsibilities and required skill were identified | 2.6667 | .96720 | 63 |
| Organizational chart and position descriptions were clear | 3.3016 | .90936 | 63 |
| Availability and assigning human resource | 2.2381 | .89288 | 63 |
| Project team was developed | 2.1746 | .81398 | 63 |
| Project team was managed and controlled | 2.2698 | .86521 | 63 |
| The information and communication needed for the project were determined | 3.79 | .59 | 63 |
| Making needed information available to project stakeholders | 3.65 | .65 | 63 |
| Collecting and disseminating performance information | 3.68 | .62 | 63 |

| | | | |
|---|---|---|---|
| Generating, gathering, and disseminating information to formalize phase or project completion | 3.63 | .68 | 63 |
| Control communication | 3.59 | .75 | 63 |
| Resources needed for the project were Determined | 3.7302 | .82709 | 63 |
| Requirements of the project materials was documented | 3.7143 | .83141 | 63 |
| Potential sources were identified | 3.7937 | .78614 | 63 |
| Appropriate quotations, bid, offers or proposal were obtained | 3.8571 | .85868 | 63 |
| Choosing from among potential sellers | 3.8571 | .82025 | 63 |
| The relationship with the seller was managed | 3.7460 | .84182 | 63 |
| Contract was completed and settled properly | 3.6825 | .87668 | 63 |

**Summary Item Statistics**

| | Mean | Minimum | Maximum | Range | Maximum / Minimum | Variance | N of Items |
|---|---|---|---|---|---|---|---|
| Item Means | 3.268 | 2.063 | 4.000 | 1.937 | 1.938 | .363 | 50 |

**Scale Statistics**

| Mean | Variance | Std. Deviation | N of Items |
|---|---|---|---|
| 163.3810 | 408.465 | 20.21053 | 50 |