

# ST, MARY'S UNIVERSITY SCHOOL OF GRADUATE STUDIES

# ASSESSEMENT OF PROJECT MANAGEMENT PRACTICES: THE CASE OF SELECTED LOCAL PRIVATE CONTRACTORS IN ADDIS ABABA

 $\mathbf{BY}$ 

**SAMUEL GIRMA** 

**July.2024** 

ADDIS ABABA, ETHIOPIA

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A THESIS SUBMITED TO ST.MARY'S UNIVERSITY, SCHOOL OF GRADUATE STUDIES IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTERS OF PROJECT MANAGEMENT

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# **ACRONOMYS / ABREVIATION**

ISO -INTERNATIONAL STANDARD ORGANIZATION

MOWUO -MINSTRY OF WORKS AND URBAN DEVELOPMENT

PM - PROJECT MANAGEMENT

**PMBOK** -PROJECT MANAGEMENT BODY OF KNOWLEDGE

PMI -PROJECT MANAGEMENT INSTITUTE

PMKAs -PROJECT MANAGEMENT KNOWLEDGE AREAS

SPSS - STATISTICAL PACKAGE FOR SOCIAL SIENCES

#### Abstract

Project management practices are essential for the successful completion of any construction project. However, due to the dynamic nature of the construction industry, it is crucial for contractors to continuously improve and update their skills and knowledge in project management. Therefore, this study aimed to assess the current management practices of selected local private contractors in Addis Ababa and explore how they can improve their project skills in 10 key knowledge areas defined by the project management institutes (PMI) by addressing six project management knowledge areas such as project integration management, scope, time, quality, cost, and stakeholder management. The research methodology involved a combination of quantitative and qualitative data collection methods, and it adopted a descriptive research design. The primary data was collected through surveys, observation, interviews, and questionnaires. And as secondary data, related books, articles, journals, and publications from the project office were reviewed. Percentages and mean values were used to analyse the collected data and case studies of three selected private construction companies involved in various construction projects. The findings of the research showed that among project management knowledge area assessments, almost all of them have a low level of mean value, except project quality management. The project quality management knowledge area practices were better in the organization; the other objective was the assessment of project management challenges. Lack of suitable project management methodology and lack of project management practices are the major challenges that the organization faced during the assessment. Thus, the research recommended that contractor's project managers, and stakeholders seek to improve project management knowledge and practices in the construction industry.

Key words: project management, project management practices, project management Knowledge areas, Construction companies, construction project

# **CHAPTER ONE**

#### INTRODUCTION

# 1.1 Background of the study

The construction industry is one of the major industries contributing significantly to socioeconomic development growth (Choge & Muturi, 2014). The industry is complex in nature because it contains a large number of project parties, such as clients, consultants, contractors, stakeholders, shareholders, and regulators. The complexity and fragmented nature of the industry and its highly casual employment of labor make it sensitive to poor contract performance.

Shaban (2008) stated that the construction industry performance problems in developing economies can be classified into three layers: problems of shortages or inadequacies in industry infrastructure (mainly supply of resources), problems caused by clients and consultants, and problems caused by contractor incompetence or inadequacies

The industry in Ethiopia, as in most developing countries, has made a significant contribution to the growth of the economy through infrastructure development and job creation. Public construction projects are part of the country's development initiative; they share a considerable amount of the country's scarce financial resources. In Ethiopia in general and in the Addis Ababa Administration in particular, the construction industry is the highest recipient of government budgets in terms of government development programs. Consequently, public construction projects consume an average annual rate of nearly 60% of the government's capital budget, as reported by the Ministry of Works and Urban Development (MoWUD, 2006).

Many public building construction projects in Ethiopia suffer delays; only 8.25% of projects were finished on the original targeted completion date, and the remaining 91.75% delayed 352% of their contractual time (Werkuand Jha, 2016). The time overrun in construction projects has become one of the most common problems in the industry, causing a multitude of negative effects on the projects and their stakeholders. The consequences of these delays include cost overruns, loss of profits, increased overheads, stress, disputes between parties, litigation, and loss of opportunities. Therefore, this aspect has been constantly investigated by researchers across the world with great enthusiasm in order to identify the root causes of the delay and come up with corrective measures.

There are several stakeholders responsible for the causes of the above-mentioned problems, and mainly the project management practices of local contractors have a significant influence on the construction industry.

So this study focused on the effectiveness of construction firms as an organization and the impact of their performance on construction projects, performed by using different project management frameworks like PMBOK and PMI standards. (PMI, 2017) Although the study assessed the practices, challenges, and benefits of project management practices among the selected local private contractors in Addis Ababa, the capital city of Ethiopia,

#### 1.2 Statement of the Problem

Successful construction industry plays an important role of a country's economic development. For the past few years, the construction industries have developed in size, complexity and high demand by client, causing construction project more difficult for the project objective to be achieved.

A construction project is commonly acknowledged as successful, when it is completed on schedule, within budget and within the agreed quality, in compliance to the specifications and to stakeholders" satisfaction. Functionality, profitability to contractors, absence of claims and court proceeding and "fitness for purpose" for occupiers have also been used as measures of project success (Assaf& Al-Hejji, 2006).

Different studies are conducted by different scholars regarding project management practices. The studies by Zewdu and Aregaw (2015) show that the Ethiopian construction industry is experiencing tremendous growth with a 5.6% contribution to the country's gross domestic product (GDP) and is placed 6th in infrastructure stock contribution in Africa. Extensive delays (61–80%), quality problems, low safety records, lost productivity, acceleration, increased costs (21–40%), and contract termination are the characteristics of the Ethiopian construction industry.

Whereas Tadesse et al. (2016) reported that the performance of Ethiopian construction firms in projects is unsatisfactory and needs improvement from a variety of management perspectives. Besides the above instances, there was numerous infrastructure development projects initially contracted to domestic contractors and shifted to foreign companies due to

the extensive delays, cost overruns, quality, and safety problems that were directly related to the technical and managerial capabilities of the firms or their organizational effectiveness in general.

Therefore, it is necessary to examine and show how Ethiopian local private contractors are currently organized and structured, identify the associated root problems, and rate their level of effectiveness regarding project management practices and processes.

This research focuses to assess and find a practice of selected local private contractors in Addis Ababa. Using these six project management knowledge areas:- project integration management, project scope management, project cost management, project quality management, project time management, and project stake holder management which are discussed later in this work, So the study believes the importance of assessing the organization by using the above mentioned knowledge areas able to fill the gaps and would give a better and clear image about how organizations utilized project management methodologies and the challenges the Organization faced when practicing it and the benefit that is gained by using project management knowledge areas.

# 1.3 Research question

One of the critical challenges of local private contractors in Addis Ababa is a deficiency in applying proper project management practices and completing the project within the specified time, cost, scope, quality, inadequate stakeholder involvement, and also a lack of customer satisfaction. Now the basic questions are:

- 1. How knowledgeable are local contractors in Addis Ababa managing the project management knowledge areas, such as integration, scope, time, quality, cost, and stakeholder management?
- 2. What are the common challenges faced by selected local private contractors when implementing project management knowledge areas in Addis Ababa?
- 3. What project management practices do we learn from managing selected local private contractors in Addis Ababa?

# 1.4 Research objective

#### 1.4.1 General objective

The General objective of this study is to assess the project management practices on selected local private contractors in Addis Ababa.

#### 1.4.2 Specific objectives

The specific objectives of the study are:-.

- 1. To assess the project integration, cost, time, quality, scope management, and stake holder management practices of selected local private contractors in Addis Ababa
- 2. To identify the current challenges of project management practices on selected local private contractors in Addis Ababa.
- 3. To examine the project management practice that we learn in managing selected local private contractors in Addis Ababa.

# 1.5 Significance of the study

This study provides some insights about project management practices, opportunities and challenges on project management practices on selected local private construction companies in Addis Ababa.

The paper can be used as a feedback for the local private contractors and all stakeholders (construction company owners, project managers, site engineer's and all construction workers) regarding the perceptions of their projects, and also become a good indicator to identify the existing problems and knowledge gaps as well as taking actions to fill the gaps and also an input to identify which project management processes and practices needs improvement.

Moreover, the study also helps to understand the role of exercising project management knowledge area and applying for further successful development

# 1.6 Scope of the study

The scope of the study was bounded geographically in Addis Ababa by selecting local private contractors, and the conceptual scope of the study aimed to describe project management practices and processes with a specific focus on six project management knowledge areas: project integration management, project scope management, project cost management, project quality management, project time management, and project stakeholder management.

Also, the study covered the performance of project management practices of local private construction companies during the years 2014–2023.

# 1.7 Limitation of the study

The limitations of the study were that some companies and their staff were not willing to give information and had a lack of interest in participating, filling out the questionnaires, and not giving appropriate responses to interviews; it also found secondary data access was not an easy task; and there were time constraints for data collection and analysis.

# 1.8. Operational definition of key terms of the research

- Construction Company or contractors: a business enterprise concerned with the construction of buildings, bridges, and roads etc.
- Project: any temporary endeavor which create a new business or service.
- Project management: the application of processes, methods, skills, knowledge
  and experience to achieve specific project objectives according to the project
  acceptance criteria within agreed parameters.
- Project Management Knowledge Areas: is key aspects of project management that should be overseen by project managers so they can plan, schedule, track and deliver projects successfully with the help of the project team and project stakeholders.

# 1.9 .Organization of the study

This research contains five chapters organized as follows: Chapter one incorporates an introduction consisting of the background, the statement of the problem and research question, the objective of the study, the significance of the study, and the scope and limitations of the study. Chapter two consists of an extensive but selected review of related literature on the subject. Chapter three contains the research methodology used in conducting the study. Chapter four contains the analysis of the data, and chapter five discusses the summary, conclusion, and recommendation.

# **CHAPTER TWO**

#### REVIEW OF RELATED LITERATURE

#### Introduction

The chapter presents a theoretical literature, empirical review which is a summary of previous related studies and various literatures on the research problem areas. The available literature is aimed to review empirical evidences to answer the research questions and identify the gap of project management practice.

#### 2.1. Review of Theoretical literature

The purpose of this section is to discuss the project, project management, and concepts of project management (PM), and Practices of project management.

# 2.1.1Project and project Management

PMI (2000) defines a project as "a temporary endeavor undertaken to produce a unique product, service, or result." A project is a "temporary endeavor..." refers that project needs to be done within a restricted time. Moreover, once it involves the main constraints of the project, we discover time along with cost and scope, which requires careful attention throughout the total project life cycle, throughout the planning phase, executing and monitoring and control before closing the project

Project management has been developed and practiced for as long as humanity has settled on the face of earth. It has been essentially involved in almost all the organizations including product or service development, technology advancement or construction of mega structures (Seymour & Hussein, 2014).

(Kerzner, (2006), defined PM as "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. There are many definitions to project management, but the ,(PWG.Morris, 2006)defined PM as "the application of knowledge, skills, tools and techniques to project activities in order to meet or exceed stakeholder's needs and expectations from a project"

(Kerzner, (2017) Methodology of Project Management Maintaining an appropriate project management methodology is critical to the organization's success. While organizations use repeatable processes on projects, adopting and adhering to an appropriate project

methodology is critical. A repeatable process that can be used on every project is more likely to lead to project management excellence or maturity.

According to PMI BOK (2017), the project management metrics of time, cost, scope, and quality have traditionally been the most important factors in defining project success. Practitioners and scholars have recently determined that project success should also be measured with regard to project objectives. Project stakeholders may have different ideas about what constitutes a successful project completion and which factors are most important. It is critical to clearly document the project objectives and to choose measurable objectives.

#### 2.1.2 Project management processes Group

A process is a set of procedures and activities related to each other which are performed to achieve construction projects, and each process includes the use of a variety of inputs, tools, and methods (PMBOK, 2017, P:554). These processes overlap with each other and can be repeated at each phase of the project. Processes in PMBOK® which are divided into two main types: according to project management processes and according to project management knowledge areas.

According to Project Management Processes of project management can be classified into phases that are divided into five operational groups, and they can also be called "project management life cycle" (Mahmood, 2017, 89). They are (PMBOK, 2017, P: 554): -

2.1.2.1.Initiation Processes Group (Launching): such a process is done to determine a new project or phase in a certain project, reasons beyond establishing the project to be launched are studied and analyzed in this phase, in other words knowing the estimated cost and economic feasibility of the project. That is documented in a record called "project charter", which is tantamount to actual consent to provide resources that may be needed for the project (Al-Saman, 2007), it may also be called terms of reference at this stage the project is defined and authorized. Now the project requirements are set and improved, the objectives are established in terms of time, cost and quality, the stakeholders concerned are defined and the project manager is appointed. He will have complete responsibility for the project. Generally, these processes are external to monitoring and control, and are carried out by the organizational structure (PMBOK,2017)

**2.1.2.2** *Planning Processes Group*: also called the project planning phase which includes defining project scope and time plan that should be followed to execute a project, and identifying all resources that may be needed for the plan, determining the estimated budget or

material cost to be monitored, as well as the requirements of quality and specifications that should be met by the project.

**2.1.2.3.** Execution Processes Group: it is also called the project execution phase, which is the process of achieving a project through the team, providing necessary resources and cooperation between parties according to a predetermined plan and quality required. They allow completing the work defined during the planning phase. At this stage most of the available budget for the project is used and if they require changes the cost could be higher than similar requests made during the planning phase. (PMBOK, 2017)

2.1.2.4 Monitoring and Controlling Processes Group: it is also the process of following-up and monitoring, which include comparing the actual achievement and the project's progress with the plan, predicting deviations, analyzing their causes, and addressing them before occurrence. The researcher considers that processes of execution, control, and monitoring are simultaneous phases since they are two sides of the same coin. They measure project performance regularly to identify variances from the project plan. The main functions of these processes are related to the detection and evaluation of the project, the dissemination of the results through reports, the integrated change management as a result of new requests coming from the sponsor. The main functions are also related to bring the project in line with the planning and ultimately make the acceptance of the deliverables in function of the acceptance criteria established during the planning phase. (PMBOK, 2017)

#### 2.1.2.5 Closing Processes Group:

Closing Processes Group: it is also called the project closing phase in which all activities and processes of the project are closed, the project is initially closed, and the guarantee's duration is closed, the project is finally closed and delivered to the owner, and it becomes under his responsibility, in addition to reviewing all that has been accomplished, recording all lessons learned from project implementation, and preserving project records in the archives are implemented once it has been approved the final deliverables of the project or after the project was terminated. It is the stage in which, in addition to the action of closing contracts with suppliers, all data produced have to be collected and catalogued. It is the process group in which all the knowledge and the experience acquired during the evolution of the project is capital. (PMI, 2017)

# 2.1.3 Project Management Body of Knowledge Areas

Project Management Knowledge Areas (PMKAs) are the knowledge areas within project management philosophy, or the Project Management Body of Knowledge, identified by the PMBOK® Guide, an authoritative publication by Project Management Institute, USA. There are ten PMKAs so far identified by the Guide. This guide and the knowledge areas are guiding the project managers around the world since years. As per PMBOK (Project Management Institute, 2013), the PMKAs are:-

# 2.1.3.1. Project Integration Management (PIM)

Project Integration Management According to PMBOK(R) and ISO this knowledge area ensures that the various elements of the project are properly coordinated, through project plan development, project plan execution and integrated change control major processes. "it can be defined as interrelated and integrated processes which begin with describing a project in the project charter and ends with closing it (Wysocki, 2014)

While project integration management is defined by Richman as the process of managing all project activities, maintaining all activities to go collectively, and consolidating them as well as their integration (Richman, 2011).

Manawi has mentioned several activities of project integration management which include: developing project charter and plan, managing project execution, controlling project work, and closing project (Al-Manawi, 2014)". It can be stated that project integration management is the comprehensive management of all project activities in parallel to ensure project success and achieving quality in project outputs for an organization's objectives. In other words, project integration management describes the necessary processes to ensure that project elements are directed properly, and its primary focus is to develop and execute a coherent, comprehensive, and well-designed plan as well as to control change which occurs during the project life cycle.

#### 2.1.3.2. Project Scope management (PSM)

Project Scope Management: European Institute of Sectorial and Institutional Identification defines project scope management as "ascertaining that a project includes processes which help in its success and ensures its quality (Project Scope Management Manual)". It is also defined as the processes required to define all works, processes, and needs of a project, and determining all irrelevant parts (Heldman, 2018).

Project scope management involves several activities such as defining the requirements and scope, creating a work breakdown structure, and validating and controlling the scope. One of the causes of project failure is undefined processes, tasks, and needs which are required to achieve them. Therefore, to ensure project success, requirements should be defined in a greatly accurate manner through continuous communication with the stakeholders of the project (Wysocki, 2014).

#### 2.1.3.3. Project Time management (PTM)

Richman defines it as "using time in an effective and efficient manner to achieve project activities, and ensure that project delivery is not delayed (Richman, 2011).

Project Time Management This knowledge area ensures timely completion of the project. The processes are:

- Plan Schedule Management establishes the strategy (policies, procedures and documentation) for planning, managing, executing and controlling the project. It provides guidance and direction on how the project schedule will be managed throughout the project.
- Define Activities involves identifying and documenting the specific activities that must be performed to produce the deliverables and sub deliverables identified in the Work Breakdown Structure (WBS). Implicit in this process is the need to define the activities such that the project objectives will be met.
- Sequence Activities involves identifying and documenting interactivity logical relationships. Activities must be sequenced accurately to support later Project Management Body of Knowledge in the Context of PMI and ISO development of a realistic and achievable schedule. Manual and automated techniques, individually or in combination, are used to perform these process activities.
- Estimate Activity Resources to estimate the type and quantities of resources (material, human resources, equipment ...) to complete the activities and it to allow more accurate cost and duration estimates.
- Estimate Activity Durations is the process of taking information on project scope and resources and then developing durations for input to schedules, which usually originate from the person or group on the project team who is most familiar with the nature of a specific activity. The estimate should be made, or at least approved, by the person or group on the project team who is most familiar with the nature of a specific activity.

- Develop Schedule as a process means determining start and finish dates for project activities and for the project. The schedule development process must often be iterated prior to determination of the project schedule.
- Control Schedule is usually concerned with: influencing the factors that create schedule changes to ensure that changes are agreed upon; determining that the schedule has changed; and managing the actual changes when and as they occur. It must be integrated with the other existing control processes (PMBOK, 2017)

#### 2.1.3.4 Project Cost Management (PCOM)

Project cost management: "it is defined as a set of processes required to plan and estimate costs, budgeting, project funding, financial resourcing, and manage and control the project costs to ensure completing the project as planned (Al-Manawi, 2014)." Thus, the knowledge areas of project cost management "includes project cost and budget, costing of the costs, as well as funding sources, are determined to ensure project accomplishment and flow of funds according to the approved budget (Heldman, 2009).

According to (PMBOK, 2017) Project Cost Management This knowledge area ensures that the project is completed within the approved budget. It is primarily concerned with the cost of the resources needed to complete project activities. This knowledge area ensures the costs completion of the project.

#### 2.1.3.5. Project Quality Management (PQM)

Project Quality Management: "it is the process in which quality is assured and controlled in all activities and inputs of project, using quality assurance and quality control techniques, where project quality is assessed and reviewed in a continuous and regular manner (Westland, 2007)". Project quality management is also defined by Project Management Institute (PMI) as "the process of applying quality management systems through policies and procedures with continuous improvement activities carried out throughout the project life cycle to ensure high-quality outputs that satisfy all stakeholders (PMBOK®, 2017)." Therefore, project quality management is the process in which quality is assured and monitored using quality assurance and quality control techniques, and project quality is assessed and reviewed in a consistent and regular manner (Westland, 2007)".

#### 2.1.3.6. Project Human Resources Management (PHRM)

Project Resources Management: "it refers to a process through which on-site processes are provided and supported with resources needed to deliver works at the right time, as well as to reach a realistic cost within the estimated budget. In addition, it is the responsibility of a project manager to select highly competent persons to ensure implementing project activities quite competently, and obtain results as planned (Wysocki, 2014).

Project Human Resource Management ensures that people involved in the project are used in the most effective way. Organizational planning involves identifying, documenting, and assigning project roles, responsibilities, and reporting relationships, which may be assigned to individuals or to groups. On most projects, the majority of organizational planning is done as part of the earliest project phases, but the results of this process should be reviewed throughout the project to ensure continued applicability

#### 2.1.3.7, Project Communication Management (PcmM)

(PMI ,(2017)Project Communication Management can be defined as "a process of planning, collecting, distributing, managing, and controlling project information to ensure delivering them to stakeholders at right time (Al-Manawi, 2014)". It can also be defined as "a process which strikes to ascertain that all necessary information is delivered to decision-makers at the proper time to avoid any risks to project, as well as to store data and information of project in the archive for use (Heldman, 2018)." "Project communication Management includes planning communications, distributing and delivering information, managing relationships with stakeholders, and performance reporting (PMBOK®, 2017)." In other words, such an area involves processes and activities necessary to ensure that information is perfectly transferred at the right time, in addition to communication planning, information distributing, performance reporting, and stakeholders managing (Nassar, 2005)."

#### 2.1.3.8 Project Risk Management (PRM)

Project Risk Management: it is an integrated administrative function of project management that includes processes dealing with the diagnosis, analysis and response to risks, as well as monitor, develop, and improve such response continuously (Al-Miqdhad, 2011). "Project risk management is defined as "the process which deals with developing plans and scenarios to confront the uncertainty of the changing environment that we live in to ensure that project activity carried out within the expected time and cost (Meredith, 2011)." "Projects can face risks in administrative, external, technical, and organizational aspects, and therefore they

need quantitative and qualitative assessment to ensure understanding and dealing with them properly (Al-Ameri, 2007)." Olian has "cited several strategies to control risks during project execution which embodied in proactive risk, prevention, mitigation and transformation strategy (Olayan, 2005)." "Therefore, risk management is a systematic practice to identify and reduce threats in the project and its environment. Risk planning begins during the work development phase, and it continues during definition and planning (Verzuh, 2015)."

#### 2.1.3.9 Project Procurement Management

Project Procurement Management: it is defined by Project Management Body of Knowledge as the process of obtaining supplies of goods and services in order to accomplish a project within proper time and quality (PMBOK, 2017)." "Project procurement management involves implementing a series of sub processes associated with project procurement planning, procedures, control, and closure (Al-Manawi, 2014)." Furthermore, the procurement process includes selecting procurement sources, contacting suppliers, conducting procurement procedures, and auditing purchase orders. "Procurement management's success requires accomplishing a variety of factors, prominent among which are good relations with suppliers, capability to purchase in large quantities confront emergencies that may occur, multiple sources of supply, availability of negotiating team capable of obtaining the best purchase conditions, capability to meet project needs at the minimum level of materials (Abdul Aziz, 2008)." "Therefore, project procurement management describes the process and methods required to bring and manage goods and resources, and procurement management includes elements such as purchase planning, contracts, and selection of resources according to the required specifications (Brewer, & Dittman, 2018). –

#### 2.1.3.10. Project Stake Holder Management (PSHM)

Project Stakeholder Management: involves processes required to identify people, groups, or organizations that affect or be affected by the project, to analyze stakeholders' expectations and their impact on a project, and to develop proper management strategies to get stakeholders engaged effectively in the decisions and implementation of the project. Moreover, project stakeholder management focuses on constant communication with stakeholders to understand their needs, expectations, addressing issues as they arise, management of conflicting interests, and promoting appropriate participation of stakeholders in project activities and decisions (Bhuiyan, 2015)

Project stakeholder management area encompasses all the processes which is used by a project manager for recognizing and satisfying the areas who are affected by the project. The affected party can either be internal or external in nature. There are four processes in stakeholder management. Identify stakeholder, Plan stakeholder engagement, Manage stakeholder engagement and Monitor stakeholder engagement (PMI,2013).

# **2.1.4 Project Management Practices**

Project management practices are gaining increasing visibility and importance to organizations (Badewi, 2016; Kwak & Anbari, 2009; Zhai, Xin, & Cheng, 2009); however, project management remains a highly problematical endeavor (Mir & Pinnington, 2014).)

Project management practices, when applied properly, lead to an increase in the probability of project success (Thomas & Mullaly, 2008). However, each organization must assess the applicability of each practice because their use may not have the same effect for different organizations. Project management, therefore, can be implemented by means of tools and techniques, which should be tailored to the organization's context. Tailoring delineates how to adapt processes, tools, and techniques of the organization to every type of project, in order to meet each one's needs (PMI, 2017). As Crawford, Hobbs, and Turner (2005) stated about the project management approach: "there was greater success when procedures were tailored to project type than when a common approach was used" (p. 13).

The implementation of tailored project management tools and techniques in organizations is identified by Fernandes, Ward, and Arau'jo (2014) as one of the 15 key project management improvement initiatives to improve project management practice in organizations. There are various standards and methodologies, mentioned before, documenting project management practices, which may give guidance to develop tailored project management processes. Project Management Practices Several companies in different industries have begun to understand the benefits they can get when applying the practices of project management. Increasingly, the field of project management has promoted itself as a universal and politically neutral toolkit of techniques appropriate for any type of activity in any sector, enabling the tight control of discontinuous work processes, with particular potential for the control of expert labour. (Hodgson, 2002, p. 804)

Hillson (2003) stated that in order to deliver effective and consistently successful project results, organizations are required to continuously improve implemented project management practices. Moreover, Besner & Hobbs (2006) state that organizations have important assets in

form of project management practices which help in aligning strategic objectives of organization. These project management practices helps in creating value for the organization by creating and increasing success rate (ibid). Additionally, Organizational maturity models play an important role in assessing and defining the organizational best practices and capabilities of an implemented framework against certain defined criteria in an organization (Demir and Kocabaş, 2010). Another important aspect of maturity assessment is to compare and benchmark project capability within and outside organizations (Mittermaier & Steyn, 2009 cited in Demir and Kocabaş, 2010) in order to develop a sequential path for progressive development (Crawford, 2007).

#### 2.1.4.1. Challenges of Project Management Practices

The 21<sup>st</sup> century project environment is characterized and driven by increase complexity, uncertainty, and multiple stakeholders competing for the project goals and objectives. The project management practices which are ostensibly influence by the theoretical approaches and models developed by different academics, practitioners and professional institutions are challenged. A significant issue observed from project management in the 21<sup>st</sup> century is that the nature of project has transform because of the large scale, uncertainty, and huge cost, several stakeholders' involvement in project and increase interests in project benefits (Fortune et al., 2011; Cicmil & Hodgson, 2006).

The unique nature of project in the 21<sup>st</sup> century presents several problems for project management. For example, there are increase pressures on project managers to win new project contracts, manage multiple projects concurrently, coordinate project staff and communicate project goals to different stakeholders. Drawing from systemic theoretical perspective, project failures are likely to result from strategic misrepresentation, engaging in destructive behavior with project clients, operating in self-preserving manners regarding project planning and scheduling (Pinto, 2014), and lack of compliance with established project management standards.

#### Some of the challenges associated with project management practice:

- ➤ Human resources: The human resource need of project management is the biggest challenge of project management practice in the 21<sup>st</sup> century (Mir & Pinnington, 2014). It is the human resource that plan and execute the project, and ensuring that project teams are competent enough to successfully manage the project to exceed stakeholders' expectation is crucial. Every project has different human resources needs with different skills. Most time it is difficult to get the right employees on the project and this staffing problem may therefore have several implications on the success of the project (Thomas & Mullaly, 2007; Verzuh, 2008). It is can be seen that project management practice face challenges in light of this research.
- ➤ Costing and estimating the resources: Project management practice depends a lot on forecasting in planning for the projects and the organization (Verzuh. 2008). So, what happen when things deviate from the initial planning as arranged or intended? This could pose serious threat to the success of the project and that of the organization. It therefore important that costing of the projects are as accurate as possible before the project commence. A lot of project failures known in literature are mostly due to wrong estimate or costing problem.
- Authority: While it may be correct that organization charts define authority within the company, but quite often they represent the ongoing operation of the business (Verzuh, 2008). When projects therefore cut across boundary it may no longer be clear who is responsible for taking decisions (Cobb, 2012). Thus, this can lead to political maneuvering within the organization and create further problems for the organizations (Verzuh, 2008).
- ➤ Control: This is another area that may obviously impact on the project success. The organizations need to put control measure in place to ensure successful implementation and execution of the project.

#### 2.1.4.2. Benefits of Project Management Practices (PMI, 2007)

Project Management Practices can have numerous benefits for organizations including improving efficiency and productivity ensuring that projects are completed in a timely manner and within budget by implementing project management practices, teams are better able to plan and prioritize tasks, track progress identify potential risks and obstacles, and make informed decisions to keep projects on track. Additionally, Project Management Practices help enhance communication with in teams and with stakeholders, fostering

collaboration and ensuring that everyone is working toward a common goal.by adhering to project management principles, organizations can minimize disruptions, streamline processes, and achieve Successful project outcomes, leading to improved overall performance and a competitive edge on the market place.

# 2.1.5 Construction industry

According to Isa, Jimoh and Achuenu (2013), the construction industry in both developed and developing countries is the sector of the economy that transforms various resources into constructed facilities.

Shaban (2008) stated that the construction industry performance problems in developing economies can be classified in three layers: problems of shortages or inadequacies in industry infrastructure (mainly supply of resources), problems caused by clients and consultants and problems caused by contractor incompetence/inadequacies.

The construction industry in Ethiopia, as in most developing countries, has made a significant contribution to the growth of the economy through infrastructure development and job creation. Public construction projects are parts of the country's development initiative; they share considerable amount of the country's scarce financial resources. In Ethiopia in general and in Addis Ababa Administration in particular the construction industry is the highest recipient of government budget in terms of government development programs. Consequently, public construction projects consume an average annual rate of nearly 60% of the government's capital budget as reported by Ministry of Works and Urban Development (MoWUD, 2006).

Many public building construction projects in Ethiopia suffer delay, only 8.25% projects were finished on the original targeted completion date and the remaining 91.75% delayed 352% of its contractual time (Werkuand Jha, 2016). The time overrun in construction projects has become one of the most common problems in the industry that cause multitude of negative effects on the projects and its stakeholders. The consequences of these delays include; cost overruns, loss of profits, increased overheads, stress, and dispute between parties, litigation and loss of opportunities. Therefore, this aspect has been constantly investigated by researchers across the world with a great enthusiasm in order to identify the root causes of the delay to come up with corrective measures. Building construction projects are exposed to many problems during construction phase that lead to the unnecessary delay and to meet the deadline of the project. It is common to people blame one party (the

contractor, the consultant or the client), commonly the contractor, without giving due consideration to the stakeholders involved in the particular project. Therefore, to ensure that public building construction projects can run smoothly without any delay, knowledge and understanding of the problems encountered during the construction process to each stakeholder should be conducted thoroughly.

# 2.1.3 Project management in construction industry

In construction, the term project management is frequently used to refer to site or construction management rather than taking a holistic view of the project from the conceptual stage (preparation of the client brief) to its ultimate completion and maintenance (facilities management).

(Douglas c.bower, 2007) Construction project management does not differ much from project management in general; Walker defined it as "The planning, Co-ordination and control of a project from conception to completion on behalf of a client requiring the identification of the client's objectives in terms of utility, function, quality, time and cost, and the establishment of relationships between resources, integrating, monitoring and controlling the contributors to the project and their output, and evaluating and selecting alternatives in pursuit of the clients satisfaction with the project outcome.

Construction project management was defined by Farrell (2008) as a process of planning, coordination, and monitoring from the initiation period to closing out of the project. On the behalf of the client requiring the identification of the clients objective in terms of cost, quality utility, time, function, and the relationship between resources, controlling, integrating, and controlling the contributions to the project and their output and evaluation and selecting alternatives pursuit of the client's satisfaction with project output.

Walker (1984) provides a comprehensive definition for construction project management: "Construction Project Management is the planning, control and coordination of a project from conception to completion (including commissioning) on behalf of a client. It is concerned with the identification of the client's objectives in terms of utility, function, quality, time and cost, and the establishment of relationships between resources. The integration, monitoring and control of the contributions to the project and their output, and the evaluation and selection of alternatives in pursuit of the client's satisfaction with the project outcome are fundamental aspects of Project Management"

According to Kerzner (2003), construction management services are aligned with the activities and tasks associated with building design, construction documentation, construction procurement, and construction. The scope and approach to construction management is largely determined by the contractual arrangement established between the firm providing construction management services and the client. According to PMI(2004),managing project includes:-Identifying requirements,Establishing clear and achievable objectives,Balancing the competing demands for quality, scope, time and cost,and Adapting the specifications, plans, and approach to the different concerns and expectations of the various stakeholders.

(Ayodele et al, 2015) Construction project management is the planning, control, and coordination of a project from conception to completion (including commissioning) on behalf of a client. It is concerned with the identification of the client's objectives in terms of utility, function, integration, monitoring, and control of the contributions to the project and their output, and the evaluation and selection of alternatives in pursuit of the client's satisfaction with the project's outcome are fundamental aspects of project management. The success or failure of any construction project begins from the planning stage. While project management can be observed to be a growing discipline in Nigeria, periodic assessments of how projects are managed must be carried out from time to time. One way to assess how projects are managed is to assess the use of project management tools/ techniques in the execution of construction projects

The construction industry has been characterized as dynamic in nature as a result the increasing uncertainties in technology, budgets, and development processes. In recent time, building projects are becoming much more complex and require a careful integrated process management tools and techniques.

# 2.2. Review of Empirical Literature

In this section of the study different relevant reviewed literatures are discussed .these reviewed literatures are related to the topic. The titles with their objectives and major findings are discussed below to have an insight into these studies.

The study conducted by 1.Anabela Tereso , Pedro Ribeiro , Gabriela Fernandes , Isabel Loureiro , and Mafalda Ferreira (2019) entitled "The Project Management Practices in Private Organizations "Project Management Journal Vol. 50(1) 6–22 \*2019 Project Management Institute, Inc. The main objective of this study was to assess the current project management practice in 30 metal working companies in Portugal revealed that the

management practices were valued by the practitioners for all Knowledge Areas, with Project Scope Management and Project Procurement Management being considered the most important, and Project Risk Management and Project Integration Management the least important. This study was conducted through questionnaires. The study also revealed that the majority of the projects considered did not achieve the desired results. Considering the importance of the practices, those related to planning of activities, human resources, costs, and communications were considered the most important. This article attempts to answer raised research questions regarding project management practices in private organizations?" a survey with 79 tools and techniques, selected from previous studies, was released. From the 159 obtained responses, the 79 tools and techniques were ranked in descending order according to the percentage of use. The top 20 list of the most useful tools and techniques comprises very well-known and widely used tools from all phases of the project life cycle, with an emphasis on the planning phase. Integration, scope, and schedule were the most represented Knowledge Areas on the list. The researchers also found that the top five tools and techniques were: kick-off meeting, activity list, progress meetings, Gantt chart, and baseline plan

Musa Mohammed, (2014) aims at identifying the impact of project management methodology on the effectiveness of construction projects in Sudan; the study has used interviews with project management experts. The result showed that the use of project tools, methods and management have an impact on the effectiveness of the project and might be crucial such as ethical practice, administrative and environmental factors.

Yimam, (2011) examined the awareness of project management in the construction industry of developing countries, where the researcher has identified two main gaps in the current awareness model, and he proposed the PM model to address the gaps and adapt them to the context of developing countries. By using such a model, the contractors' awareness was assessed in Ethiopia, and the results showed a low level of PM perception (informal practices of basic processes). Furthermore, the study found that awareness of contractors who are accredited to ISO about project management is higher than those who are not.

Another study on title "The practice of project management in Ethiopian real estate industry and its contribution to project success: The case of selected company in Addis Ababa". Conducted by befekadu (2017). The major aim of this study was to examine the application of project management practice by depending on the various problems. To this end, the study

used a descriptive research design including both qualitative and quantitative methods. Data was collected using questionnaire and interview from real estate companies, owners and consultants. Based on the response, IBM SPSS Statistics 20 was used to analyze the data. The major finding involves that project integration, scope, time, HR, procurement, and claim management are well managed in the Industry as well as Project initiation process groups and project closing process group are practiced well and consistently. However, from the knowledge areas project cost management, project quality management, project communication management, project stakeholder management and project risk management are poorly practiced in the real estate industry in Ethiopia. Therefore, it was recommended by the researcher to improve project management practice within the industry in Ethiopia (Befkadu , 2017)

# 2.4 Conceptual Framework (Model of the study)

A conceptual framework is a written or visual presentation that explains either graphically or in narrative form, the main things to be studied, the key factors, concepts or variables and the presumed relationship among them. The conceptual framework is the blue print of the research work that guides the researcher to conceptually understand the research and outline and operationalize the dependent and the interpretation of the result been easy and meaningfull. The proposed framework for this research is illustrated in figure below. It shows assessing project management practices with the six-project management knowledge areas.

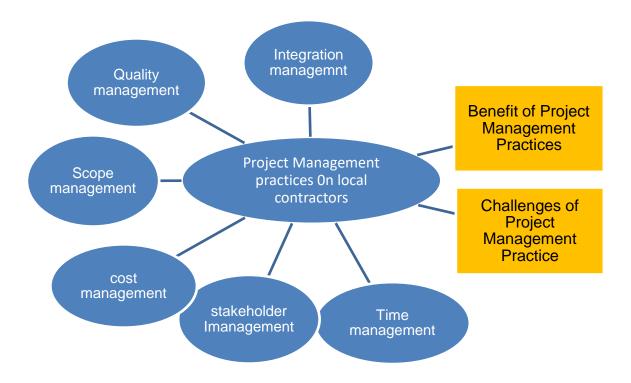


Figure 2.1 Model of the study

# **CHAPTER THREE**

# RESEARCH METHODOLOGY

#### Introduction

This chapter briefly presents the methodology applied in the course of the study. Design of the research, research approach, sources of data, data collection technique, population of the study, sampling technique, sample size, method of analysis and ethical considerations are highlighted.

#### 3.1 .Research Design and Approach

#### 3.1.1 Research Design

The choice of research design primarily depends on the objectives of the study that are going to be attained. This research is a descriptive approach focuses on the need for organizations to examine the real- life realization of their strategies.

A research design is major plan to conduct a research while considering different factors including research topic, the target audience, time and resources, access and availability of people and information (Greener, 2008). Designing the research in the earlier phases of the project is highly important which provides information about the sources and the information that is related to the research problem. It helps to identify and select approach for gathering and analyzing the data from population.

Research design also includes time and cost that is related to conducting a particular research (Kothari, 2004). According to Kothari (2004), the research design needs to include a definition of the main research problem, procedures and techniques to collect data, sampling size and type; and the methods that are used for data analysis and processing of information. The research design for this specific study is divided below into different sub sections where different types of research associated to this particular study are discussed depending upon audience, type of data and approach to conduct the research.

#### 3.1.2 Research approach

This method employs both qualitative and quantitative methods of data collection. The initial method of data collection is quantitative data and would be used to further establish the information gathered from the qualitative data. For the qualitative data personal observation and interviews have been employed alongside reports submitted form construction

companies. For the quantitative report questionnaires distributed for respondents to help triangulate the information.

There are different types of research available where different variables are compared and analyzed, solution finding can be related to a particular society or generalized with the formulation of a theory (Kothari, 2004). This thesis is descriptive research and used both qualitative and quantitative data can be categorized into following mentioned types of research.

Qualitative research is primarily concerned with the qualitative phenomenon that is particularly related to finding the motives and desires through interviews or story completion test (Kothari, 2004). This research work is primarily based on the interviews conducted with the project management at three different construction companies to collect the data about their motives and desires. This data is further analyzed to find the project management gaps at different project sites in implementing project strategies.

Quantitative research is primarily based on the measurement of quantity of data collected irrespective of the quality, and generally applicable to where opinion or results can be expressed in terms of quantity (Kothari, 2004). The questionnaire was sent to several team members working on each project to gather quantitative data regarding organizational project management maturity and to increase reliability of empirical data. The purpose of the questionnaires was to assess the level of organizational project management practices on a scale from 1 to 5. Being 1 the lowest level of maturity and 5 the highest.

#### 3.2. Population, sample size and sampling procedure

Population: a complete set of elements (persons or objects) that possess some common characteristics defined by the sampling criteria established by the researcher. Composed of two groups target population and accessible population.

The target population (universe): the entire group of people or objects to which we intend to generalize the study findings. This research is a case study of Addis Ababa local private construction companies, and the target population will be three selected private local contractors (MESAY OLI GENERAL CONTRACTOR, BAHET CONSTRUCTION AND ENGINEERING PLC, and MAMARU ENGINEERING), which are currently working in Addis Ababa city. The respondents are 61from engineering department. ( project managers, site engineers, office engineers, electrical engineers, sanitary engineers, quantity surveyors, and Forman's), 3 company owners and 6 from procurement and contract administration

which are a total of 70 respondents respectively, from the company side, and 11 personnel outside the company (consultants, supervisors, and clients, and a total of 81 respondents in general.

For this thesis project, the study used a sampling technique known widely as purposeful sampling. Purposive sampling represents a group of different non-probability sampling techniques. Also known as judgmental, selective, or subjective sampling, purposive sampling relies on the judgment of the researcher when it comes to selecting the units (e.g., people, cases or organizations, events, or pieces of data) that are to be studied. Usually, the sample being investigated is quite small, especially when compared with the probability sampling technique.

Purposive sampling is used to pick the sample from a widely used sampling method which allows a researcher to get information from a sample of the population that one thinks knows most about the subject matter. In this type of sampling, the choice of the sample items depends exclusively on the judgment of the investigator. Purposive sampling techniques include hand picking of the subject cases that the researcher thinks that possesses rich information to accomplish the researchers' objective (Lewis & Sheepard 2006).

Sampling design:- sampling design is a process of making definite plan to acquire a sample from a given larger population. As elaborated by Kothari (2004) it is a technique which is used by the researchers to analyses the trend in larger population by selecting items for the sample. The size of the sample depends on the number of items included in the sample, which affects the accuracy of results as well. Kothari (2004) describes that size of sample is one of the major problems for the researchers and it should be optimum to produce efficient and reliable results for the researcher. While selecting the sample size, the cost of collecting the data and the cost of incorrect influence resulting from the collected data should be considered. In this study, a sample size of 81people from different project at different location these people were selected particularly based upon their roles and involvement during the project execution. Furthermore, for quantitative data collection a questionnaire was sent to team members of each project as well. The final research will be based on the results from a total of 70 people from the Construction Company and 11people from the concerned stakeholder.

#### 3.3 Data sources and Data collection method

The data was divided into primary data and secondary data. According to Kothari (2004), primary data is collected for the first time and it is considered as original and unique whereas secondary data is data that is already available has been previously gathered and analyzed by someone else. In order to collect primary data, different interviews were carried out with company owners, project managers; site engineers, office engineers, and Forman's from Construction Company and questionnaires was distributed among project team members of the projects. The interview questions and the questionnaire were created by using the Project Management BOOK it provides with the necessary information of 6 out of 10 the project management knowledge areas in order to find the gaps between project management practices in different projects. In order to collect secondary data, different books, articles, reports and theses were selected, read through and analyzed so that the final chosen data was reliable, suitable and adequate.

#### 3.3.1. Questionnaire

Questionnaires are a significant instrument for data collection since they enable a large number of people to collect data. A permission agreement is provided to preserve the anonymity of the respondents. Both open and closed questions were raised and designed based on research objectives and research questions. The questionnaire was structured using a symmetric Likert scale. The response was placed

1=strongly disagree 2=Disagree 3=Neutral 4=Agree 5 = strongly agree

The questionnaires were developed based on PMBOK knowledge areas to address the research objectives, having 41 questions in six categories and being designed in three main parts in order of sequence as follows:

- (a) The first part was related to respondent information.
- (b) The second part dealt with the project management knowledge area.
- (c) The last part dealt with the challenges of the project.

#### 3.3.2 Interview

An interview is an excellent technique for collecting data; because it assures that the respondent answers questions that permit further examination of tough themes and allow more detailed study. The interview takes place in a halved format. The stage for the interview consists of many pre-set questions. All concerned parties who had concerns about the project participated according to their relevance.

# 3.4 Methods of Data Analysis

Data analysis the analysis of data was divided into three parts. The first part consisted of processing, analysing and selecting the useful and relevant information for the research that was obtained from the interviews. The analysis of the interviews not only includes the spoken information obtained from the interviewees but their body language, silent answers and gestures. The second part consisted of processing, analysing and selecting the useful and relevant information for the research that was obtained from the questionnaires. , the data obtained from the interviews and questionnaires was analysed and compared with the theoretical framework and literature review. . The analysis was anchored to the statement of the problem, research objective and research questions. Thus, the quantitative and qualitative data was collected, coded, analysed, interpreted and presented. The data from the closed ended questions were coded and entered to SPSS version 26.00 for analysis and summarize the data descriptively using tables, percentages and frequency. While the open ended questions of the questionnaire and interview were categorized by the researcher's hand in a generalizable format. Finally, all the aggregated data were further discussed and then findings were presented to the reader in a readable format. After which conclusion was made and recommendations were delivered.

# 3.5 Validity and Reliability

To ensure the quality of research and make it credible for the scientific community, the researcher gave due care to both validity and reliability issues of the data, the research process in general as well as the research output. The researcher used different source of data form literature, interview, site observation and document review to triangulate the data. The need for triangulation arises from the ethical need to confirm the validity of the processes involved. According to Zikmund (2003), pre-testing is essential to ensure that the questionnaire is reliable and that measurements are error-free, resulting in consistent results. The questions are credible if the Cronbach's coefficient alpha for each variable is at least 0.6.

If the result is near to 1, the internal consistency and reliability of the questions will be ranked higher. A scale's or object's reliability might vary from 0 to 1. The Cronbach's alpha model has been employed in this study. By using 29 items from 14 samples.

Table 3.1.scale reliability result

Variables	Cronbach Alpha	N <u>O</u> -of In
	coefficient	the scale
Project integration management	.798	4
Project scope management	.830	5
Project quality management	.846	5
Project cost manage	.700	5
Project time management	.82	5
Project stakeholder management	.76	5
Over all	0.960	29

# Source own survey, 2024

# 3.6 Ethical Consideration

The researcher ensures the quality and reliability of this study. The respondents give approval for the participation in the questionnaire with full awareness of what it is. The confidentiality and secrecy of the voluntary interviewees and organization were carefully respected. The identification of each interviewee in this research was concealed. The interviewees were also informed their rights to decline answering any questions they wish and also guaranteed. This independent and impartial study considered not to cause harm to respondents in what so ever way. Accordingly, the researcher optimally considers all the ethical perspectives.

# CHAPTER FOUR RESULTS AND DISCUSSIONS

# Introduction

This chapter discusses the interpretation and presentation of the findings obtained from the field. Descriptive statistics was used in this study. The data which were collected using quantitative method is tabulated and analyzed using mean, minimum, maximum, standard deviation analysis statistical tools. The findings are also presented using tables and figures. In addition, the survey results are discussed in line with empirical literature related to the study.

# **4.1 Questionnaire Response Rate**

Table 4.1 Questionnaire Response Rate of the Study

Questionnaire	Frequency	Percentage
Distributed	87	100
Responded	81	92.4

Source: own survey, 2024

The survey was conducted between February and March, 2024. Questioners were distributed to 87 purposively selected employees. However, in order to reduce the possible errors in the data administration, immediately after the collection of data the researcher has cleanses the outlier, missing values and discrepancies. Based on this from the total 87 respondents, 81 questionnaires were completely filled, returned and used for analysis in this study that a response rate of 92.4 percent. In making conclusions, Mugenda and Mugenda (2008) indicated representativeness of the response rate to undergo the data analysis part; a response rate of 50% is satisfactory; a 60% is good, 70% and above is excellent. Based on the assertion of those scholars the response rate of this study was 92.4% which considered being excellent.

# 4.2 Demographic analysis

Table 4. 2 demographic analyses

Demogra	phic characteristics	Frequency	Percent
Gender	Men	69	85.2
	Women	12	14.8
	Total	81	100.0
ED	high school	0	0.0
	college diploma	9	11.1
	BA degree	55	67.9
	Masters and above	17	21.0
	above		
	Total	81	100.0
Age	18-30	9	11.1
	31-40	35	43.2
	41-50	32	39.5
	Above51	5	6.2
	Total	81	100.0

Source: own survey, 2024

# **Gender of the respondents**

As it is displayed in the table above majority of the respondents is male which accounts 85.2% of the total respondents. The remaining 14.8 percent of the respondents are females. It implies the construction projects are more dominantly worked by males while few numbers of females are participating on it.

# **Education status**

It is well recognized that an employee's educational background directly correlates with their performance. To complete projects on time, especially in the construction industry, an employee's capacity for time management is crucial. For instance, Drs. Victor and Belinda indicated in 2020 that there is a statistically significant and high correlation between education level and employee performance. It is displayed that 67.9% of the participants have bachelor degree followed by 21% of the respondents who are graduated second degree and above. The remaining 11.1% of the respondents are indicating that they have Collage diploma. It implies that the construction projects are organized by an educated staff members but need more attention for the enhancement.

# Age of respondents

The table shows that 43.2% of the participants are aged in the category of 31-40 followed by the respondents who are aged in the category of 41-50. The remaining 11.1% and 6.2% of the respondents are aged in the age category of 18-30 and above 50. The information implies that projects in the case are organized by employees who are under productive age and eager to learn new fashions.

# **Training Access**

The organization has a regular training program facilitated by the training department, and when the respondents were asked to describe the training access and how many times they participated in training, they replied accordingly. 36 (44.44) of the respondents had access once a year, 25 (30.86) got training twice a year, and 20 (24.69) had no training at all.

Table 4.3 Training accesses

Training schedule	Frequency	percent
Once in a year	36	44.44
Twice a year	25	30.86
No at all	20	24.69
Total	81	100

Source, field survey 2024

# 4.3. Descriptive Statistical analysis

The term descriptive statics refers to the analysis, summary, and presentation of findings related to a data set derived from a sample or entire population. Descriptive statistics comprises three main categories frequency distribution, measure of central tendency, and measure of variability. Although descriptive statistics may provide information regarding a data set, they do not allow for conclusions to be made based on the data analysis but rather describe the data being analyzed.

In addition, the main purpose of descriptive analysis or statics before inferential is that, to check some characteristics of the data such as outliers and possible errors prior to analysis. In study, each latent variables or dimensions are measured by different observable variables or items using 5 point Likert scale questions, thus it better to have the sum of each dimension. Meaning as the respondents were asked to indicate their level of agreement on each of the selected items. In this regard, if we have several Likert-scored items that make up a scale, it is recommended by scholars to calculate the mean score on the scale, rather than concentrating on the individual items for the reasons that the as scale is more reliable than the individual items, the mean of the items were computed by summing items, and then dividing by the number of items.

Accordingly, in this study the researcher applies mean and standard deviation as the best measure of descriptive analysis based on the mean range developed by Al-sayaad et al. (2006). Therefore, the researcher used the mean range value as a rule of thumb to describe the study variables.

**Table 4.4** Mean range table (Rule of thumb)

No	Mean Range	Response option
1.	[1.00 -1.80]	Strongly Disagree
2.	[1.90 -2.60]	Disagree
3.	[2.70 -3.40]	Neutral
4.	[3.50 -4.20]	Agree
5.	[4.30 -5.00]	Strongly Agree

Source: (Al- sayaad et al. 2006)

For this analysis, the researcher used the above mean range value as the best measure of the descriptive analysis of the study for the project management practices of MESAY OLI GENERAL CONTRACTOR, BAHET CONSTRUCTION AND ENGINEERING PLC, and MAMARU ENGINEERING, which are assessed from the perspective of project management knowledge areas. The following table (4.3.1) and the rest of the table show the detailed results of each project management knowledge area frequency, percent mean, and standard deviations as follows.

# 4.3.1 Project Integration Management

In order to find out the practice of project integration management the respondent were asked to give their assessment values for organizational trends based on the Likert scale that was mentioned above

Table 4.5 Project integration management

Assessment	Mean	Std. D
Integration management is a critical component of successful project execution	3.41	1.10428
Project team effectively communicates and collaborates across different project phases	2.57	1.084
Project manager effectively coordinates resources, tasks, and timelines to ensure project integration?	2.43	1.344
Regular project status and progress reports are shared among team member's skills in project integration management	3.42	.998
Over all	2.95	0.875

Source: own survey, 2024

As it is displayed in the table above the highest mean value is recorded on item four stated as "Regular project status and progress reports are shared among team member's skills in project integration management" with mean value of 3.42 followed by the mean value of 3.41 recorded on item one stated as "Integration management is a critical component of successful project execution" both of the mean values are equivalent with response rate of "Agree" based on our criterion. It implies that respondents are confirming that the projects are well performing from the aspects of making regular project status report and projects are considering integration management as an important factor.

The lowest mean value is 2.43 which is reported on item three stated as "Project manager effectively coordinates resources, tasks, and timelines to ensure project integration" and also item two (Project team effectively communicates and collaborates across different project phases) another lowest mean value of 2.57. Both of the mean values are equivalent with the response rate of "Disagree" based on our criterion. It implies that the practices of integrating resource, tasks, and timeline is poor and needs an attention for better project performance.

# 4.3.2 Project Scope Management

In order to find out the practice of project scope management the respondent were asked to give their assessment values for organizational trends based on the Likert scale that was mentioned above

Table 4.6.Project scope management

	Mean	Std. D
Project team has a well-defined scope statement that outlines project deliverables and objectives	2.3210	1.10484
Scope changes are managed through a formal change control process to prevent scope creep	3.0123	1.12354
Stakeholders are actively involved in defining and approving project scope to ensure alignment with expectations	2.5309	1.09643
Regular scope reviews are conducted to ensure project work remains with the defined scope boundaries	3.1852	1.11928
Scope management responsibilities and accountabilities are clearly defined with in the project team	3.3827	1.17864
Over all	2.88	1.19

Source: own survey, 2024

The above table contains information about project scope management practices which is constructed from five items. From all items the lowest mean value is 2.32 which is reported on item one stated as "Project team has a well-defined scope statement that outlines project deliverables and objectives". The mean value of this item is correspondent with mean range of "Disagree" based on our criterion. It implies that the project teams has not dell defined scope statement and outlines,

The next lowest mean value is 2.53 recorded for item three (Stakeholders are actively involved in defining and approving project scope to ensure alignment with expectations). The mean value of this item is also correspondent with response rate of "Disagree". It implies that the practices of projects are poor from the aspects of inviting stakeholders to engage in defining and approving project scopes.

The remaining mean values are ranged between 2.60 and 3.40. All of the mean values are equivalent with response rate of "Neutral" based on our criterion. It implies that managing scope change in formal way and clear statement of project scopes need an enhancement.

# **4.3.3 Project Quality Management**

In order to find out the practice of project quality management the respondent were asked to give their assessment values for organizational trends based on the Likert scale that was mentioned above

**Table 4.7 Project quality management** 

	Mean	Std. D
Quality requirements are clearly defined and documented for each project deliverables	3.0741	1.27257
Quality control measures are implemented to ensure project deliverables meet specified quality standards	3.1975	1.16640
Quality assurance activities are conducted throughout the people life cycle to prevent defects and ensure quality	3.8025	.87206
The project team conducts regular quality reviews and inspections to identify and address quality issues	3.7037	.94133
Quality control measures are proactively integrated into project planning and execution processes	3.3951	1.08027
Overall	3.44	1.08

Source: own survey, 2024

As it is shown in the table above item three "Quality assurance activities are conducted throughout the people life cycle to prevent defects and ensure quality" and item four "The project team conducts regular quality reviews and inspections to identify and address quality issues" have the highest mean values of 3.8 and 3.7 accordingly. Both of the mean values are equivalent with response rate of "Agree" based on our criterion. It implies that project quality management is well performed by projects from the aspects of conducting quality assurance activities, and conducting regular quality review and inspections to address quality issues.

Item five (Quality control measures are proactively integrated into project planning and execution processes) has mean value of 3.95 which is close to 3.4. This mean value is actually correspondent with mean range of "Neutral". However the practices of using proactive measurement for quality are nearly well implemented in the projects.

# 4.3.4 Project cost management

# **Table 4.8 Project cost management**

In order to find out the practice of project cost management the respondent were asked to give their assessment values for organizational trends based on the Likert scale that was mentioned above

Table 4.8 Project cost management

	Mean	Std. D
Cost estimates are accurately calculated and	2.4321	1.09474
regularly update and reflect change in scope,		
resources and constraints		
The project team actively monitors and manages	2.5790	.97246
project costs through the project lie cycle		
Project managers implement cost control measures	2.3457	1.00200
to ensure project stays within budget		
Cost management tools and techniques effectively	3.1605	1.01805
utilized in project planning and execution		
The organization provides sufficient resources and	3.99	.859
support for effective cost management on projects		
Over all	2.90	0.99

Source: own survey, 2024

Table 4.8 displays information about project cost management practices. From all items the lowest mean value is recorded on item three stated as "Project managers implement cost control measures to ensure project stays within budget" with mean values of 2.34 which is equivalent with response rate of "Disagree" based on our criterion. It implies that project managers are not sufficiently implementing cost control measures to ensure project stays within pre-defined budget in the case area.

Item two (The project team actively monitors and manages project costs through the project lie cycle) also has a mean value of 2.57 which is also equivalent with response rate of "Disagree". It implies that project team is not committed to monitor and manage project costs. Moreover item one "Cost estimates are accurately calculated and regularly update and reflect change in scope, resources and constraints" has a mean value of 2.43 which is also equivalent with response rate of "Disagree" it implies that respondents are perceived that cost estimation is not accurately done and it is not regularly updated.

# **4.3.5 Project Time Management**

In order to find out the practice of project time management the respondent were asked to give their assessment values for organizational trends based on the Likert scale that was mentioned above

**Table4.9 Project time management** 

	Mean	Std. D
Project timelines are clearly defined and communicated to all	2.43	1.095
members		
Project schedules are regularly updated to reflect any changes	2.53	1.226
or delays		
Project managers actively monitor and track progress against	2.53	1.305
project timelines		
The project team proactively identifies and addresses potential	3.12	1.144
delays or bottle necks		
Time management processes are integrated into overall project	2.78	1.000
management practices		
Over all	2.67	1.16

Source: own survey, 2024

In the above table from five items used to measure project time management practices, item one with a statement "Project timelines are clearly defined and communicated to all members" has the lowest mean value of 2.43 followed by mean value of 2.53 recorded on item two "Project schedules are regularly updated to reflect any changes or delays" and item three "Project managers actively monitor and track progress against project timelines" accordingly. All of the mean values are equivalent with mean range of "Disagree" based on our criterion. It implies that the practices of defining project timeline clearly and communicating with members is not having sufficient attention. Moreover projects are not implementing regular update for project schedule.

The mean value on item three (The project team proactively identifies and addresses potential delays or bottle necks) and four (Time management processes are integrated into overall project management practices) are 3.12 and 2.78 accordingly. Both of the mean values are equivalent with response rate of "Neutral" based on our criterion. It implies that identifying and addressing potential delays proactively are not performed by projects in its best manner.

# **4.3.6 Stakeholders Management Practices**

The main responsibility of a stakeholder is to contribute their expertise and viewpoint to a project in order to assist the organization in achieving its strategic goals. Additionally, they can offer the resources and supplies needed. Therefore, the active involvement of stakeholders is essential for project success.

Table 4.10. Project Stakeholder management

Assessment	Mean	Std. D
Stakeholder's requirements and expectations are	3.05	.773
clearly identified and documented at the beginning of		
the project		
The project team actively involves stakeholders in	2.72	.693
decision –making processes		
Stakeholder's relationships are effectively managed to	2.93	.985
ensure project success		
The organization has formal stakeholder management	3.09	1.164
plan in place for each project		
Overall	2.94	0.90

Source: own survey, 2024

In the variable of "Stakeholders participation management" all of the items mean values are equivalent with response rate of neutral.

# 4.4. Project management challenges

In order to find out the practice of project management challenges the respondent were asked to give their assessment values for organizational trends based on the Likert scale that was mentioned above

**Table 4.11 Project management challenges** 

Project management challenges	Mean	Std. dev.
Scope creep is a common challenge in project	2.53	1.305
management and can hinder project success		
Limited resources and budget constraints often	2.345	1.00200
make it difficult to manage projects effectively		
Balancing competing stakeholder interests and	3.7037	0.94133
expectations is a common challenge in project		
management		
Quality management is a critical aspect of project	2.3210	1.10484
management and can be a major challenge for		
project management		
Effective time management is essential in project	2.43	1.344
management and can be a major challenge for		
project managers		
Quality management is a critical aspect of project	2.93	0.985
management and can be a major challenge for		
project management		
overall	2.71	0.896

The above table displays the respondent's information about challenges of project management practices. From all items the lowest mean value is recorded on item four stated as "Cost management is a critical aspect of project management and can be a major challenge for project management" with mean values of 2.32 and standard deviation of 1.104 which is equivalent with response rate of "Disagree" based on our criterion. It implies that project managers are not sufficiently implementing cost control measures to ensure project stays within pre-defined budget in the case area.

Item two (Limited resources and budget constraints often make it difficult to manage projects effectively) also has a mean value of 2.34 and standard deviation of 1.002 which is also equivalent with response rate of "Disagree". It implies that project team is not committed to monitor and manage project resources and budget. Moreover all items regarding challenges of project management practices shows that all of the items mean values are equivalent with response rate of neutral

Item two (Limited resources and budget constraints often make it difficult to manage projects effectively) also has a mean value of 2.34 and standard deviation of 1.002 which is also equivalent with response rate of "Disagree". It implies that project team is not committed to monitor and manage project resources and budget. Moreover all items regarding challenges of project management practices shows that all of the items mean values are equivalent with response rate of neutral.

# **4.5 Project Management Benefits**

Information about project management benefits was obtained through interviews with different stakeholders in the organization and outside the organization. The analysis is based on the interview that was conducted within the organization, with 4 of them from the engineering department and 3 of them from procurement and contract administration, for a total of 7; and from outside, 3 consultants and 3 client supervisors, for a total of 6 people, for a total of 13 who participated. Based on the responses that were given with regard to the interview questions that were used in the research work about the benefits of project management, the engineering department personnel strongly discussed technical issues and consideration of project management knowledge area benefits, but the client supervisors focused especially on cost and project time issues, and as a conclusion, the following findings were made: Approximately 40% reported noticeable benefits for integration, cost, time, and quality aspects of projects; 30% responded that scope, cost, and stakeholder management were provided benefits; and the rest 30% believed that all were useful and brought numerous benefits to the organization, including an improved project success rate, increased efficiency, better communication, enhanced collaboration, reduced costs, and enhanced customer satisfaction.

# 4.6 Qualitative Data Analysis

Two employees were interviewed from Mesay Oli General Contractor who is currently working as a project manager for studied projects with a minimum 10 years' experience. They mentioned that in terms of integration project management the organization has structural difficulties of managing on stakeholder engagement, lack of clear communication and alignment with key stakeholders, and lack of support for project objectives. They also claimed that scope creeps occurs when additional requirements and deliverables are added to the project without corresponding changes in resources or timeline, leading to increased risk of project delays and cost overrun.

During the interview, three participants interviewed from Bahet Construction and Engineering PLC who are working on different positions including site engineer, electrical engineer and sanitary engineer with 10 years' experience stated that, "the success of projects is being hampered by the lack of an effective approach to identifying and providing the correct training to the right personnel. Many other technical and skill gaps have been experienced by people, including a lack of knowledge regarding project planning, monitoring, evaluating, and scheduling as well as a skill gap in using advanced technology in the project. Despite the fact that knowledge and skill gaps are negatively affecting project performance, survey and interview data indicate that there is a lack of emphasis on providing workers with the training they need to enhance their skills and boost project performance as a whole.

The interviewees raised concerns about the structure of project management system in the organization which is not regularly updated and it is very difficult to find the document easily one of the site engineers said during the interview, "Contractor related factors affecting success of projects include: difficulties in financing project, rework due to errors during construction, ineffective planning, improper construction method, delay in site mobilization, and poor site management," other participant added that "Design changes by the owner or his agent during construction is one factor"

During the interview three distinct clients who were under contract with Mamaru Engineering contended that the contractor's performance was not accurate or timely, that there were numerous instances of delays and incomplete work, that the contract cost had significantly increased due to numerous price adjustments, and that the difference between the contract amount and the estimated budget exceeded the contingency percentage. Finally, they said that they were not happy with the job that was done and argued that all of this resulted from inadequate planning, oversight, and improper management.

The researcher, during the study through field notes and document analysis, observed that the three organizational project management practices are not equal and have different statuses in project management knowledge area practices. Mesay Oli The general contractor has strong strategic competency in regulating project activities and using standardization, effective resource allocation, adequate communication, and regular documentation. On the contrary, Bahet construction and Mammaru engineering result in poor resource allocation and inadequate monitoring and control. And documentation is not regularly updated.

Nesru and Tekle (2020), who investigated the causes and effects of building construction delays in Ethiopia's Southern Nation Nationalities of People Region in Gurage Zone, reported similar findings. They found that contractor-related issues in Gurage zone included shortage of cash during construction, poor planning, and a slow mobilization of labor.

Participants in the interview schedule acknowledged that external issues such material shortages, transportation, manufacturing, impairment, and material modifications and delivery can affect a project's success.

Similar findings were made in the work of Omran (2012), who discovered that in some developing nations, like Indonesia, the rise of material prices can have an impact on the timeline of a project since the contractor must wait until the price comes down.

Another study on title "The practice of project management in Ethiopian real estate industry and its contribution to project success: The case of selected company in Addis Ababa". Conducted by befekadu (2017) was examined the application of project management practice by depending on the various problems. The major finding involves that project integration, scope, time, HR, procurement, and claim management are well managed in the Industry as well as Project initiation process groups and project closing process group are practiced well and consistently. However, from the knowledge areas project cost management, project quality management, project communication management, project stakeholder management and project risk management are poorly practiced in the real estate industry in Ethiopia. Therefore, it was recommended by the researcher to improve project management practice within the industry in Ethiopia (Befkadu, 2017)

Finally, the results of the collected data from the interview results show that the project management practices in knowledge areas are carried out differently in different projects and that might be a consequence of the inefficient implementation and the project manager's competency. This is more or less similar to the findings of the previous quantitative analysis that was driven by the questionnaire. As mentioned before, in terms of knowledge area practices and lesson learned management, the studied construction company's project management knowledge area and practice level are low and need further consideration and improvement to create a sustainable, competitive, and dynamic business environment.

# 4.7 Discussion

The research has tried to assess the PM practices of three private local construction companies in Addis Ababa. Assessing project management knowledge areas, practices, challenges, and benefits and found the following major points:

The results of the collected data from the interviews and questionnaires show the inefficient implementation and usage of some project management knowledge areas, and most of the project management documentation is informal and undocumented. This might be one of the reasons for the existence of project management challenges in the organization, due to the fact that cost overruns, time delays, scope management problems, and stakeholder management problems in practice affect the performance of organizational success and finally lead to inefficiencies and inconsistencies.

As seen from the results, project management practices in knowledge areas are carried out differently in different projects, and that might be a consequence of the project manager's performance and competency. The analysed data were found to be at a low level. The average mean value of most knowledge areas ranges between 2 and 3, with only one knowledge area having a quality management score above 3. The result indicates that project management bodies of knowledge and practices exist in organizations, but they are not considered organizational standards. These organizational project management challenges might have several reasons for their existence. All these challenges are consequences of a certain level of project management impact from internal and external factors.

In order to minimize and overcome the challenges and to fill the gaps found in the organization, the findings focused on the incorporation of digital technologies, sustainable practices, stakeholder engagement, and integration of project management with other disciplines, with an emphasis on collaboration and teamwork that continues learning and development.

Finally, the studied companies need to develop a strategy, functional improvement, and organizational change for better project planning, coordination, and execution to improve the competitiveness, success, and sustainability of the organization.

# **CHAPTER FIVE**

# SUMMARY, CONCLUSION, AND RECOMMENDATION

# Introduction

This chapter presents the summary of the major findings of the data analysis. Based on the finding's conclusions will be drawn about the project management practices in MESSAY OLI GENERAL CONTRACTROR, BAHET CONSTRUCTION ENGINNERING AND TECHNIQUE PLC AND MAMAR ENGINNERING in Addis Ababa. The recommendations that can help to improve the project management practice within the organization are presented. Finally, the suggestions by the researcher for future studies are discussed.

# 5.1 Summary of Major finding and conclusion

This is a summary of the major findings and conclusions of the data analysis. Based on. Three objectives were used to guide this inquiry on the assessment of project management practices in selected local private construction projects in Addis Ababa. These included researching to assess the project integration, scope, cost, time, quality management, and stakeholder management practices of local private construction companies in Addis Ababa. To identify the current challenges of project management practices for selected local construction companies in Addis Ababa and to examine the project management practices that we learn in managing local private construction companies in Addis Ababa.

The recommendations that can help improve project management practices within the organization are presented. Finally, the suggestions made by the researcher for future studies are discussed.

- ❖ The construction projects are more dominantly worked by males while few numbers of females are participating on it. Furthermore the construction projects are organized by an educated staff member but need more attention for the enhancement.
- According to the finding projects are well performing from the aspects of making regular project status report and projects are considering integration management as an important factor. However it is identified that the practices of integrating resource, tasks, and timeline is poor and needs an attention for better project performance.

- ❖ Another bottleneck for the projects in the case area is that scope and outlines are not well defined by project teams. Moreover the practices of project teams are poor from the aspects of inviting stakeholders to engage in defining and approving project scopes.
- ❖ The quality management practices of the projects are sound likes good. Quality assurance activities are conducted throughout the people life cycle to prevent defects and ensure quality. It is concluded that project quality management is well performed by projects from the aspects of conducting a quality assurance activities, and conducting regular quality review and inspections to address quality issues.
- ❖ Another weak practice is recorded from the aspects of cost estimation. Project managers are not sufficiently implementing cost control measures to ensure project stays within pre-defined budget in the case area. Cost estimation is not accurately done and it is not regularly updated.
- ❖ It is recorded that the practices of defining project timeline clearly and communicating with members is not having sufficient attention. Moreover projects are not implementing regular update for project schedule.
- ❖ Lack of an effective approach to identifying and providing the correct training to the right personnel skill gap in using advanced technology are the factors affecting project success in the case area. Financing project, rework due to errors during construction, ineffective planning, improper construction method, delay in site mobilization, and poor site management have also their own impact on project management practices.
- ❖ One of the limitations of this study is that the data were collected from only three construction companies, and therefore it reflects their experiences and opinions. Data from different projects undertaken by different companies might result in varying findings. However, the main contribution of the study to the literature is that it provides construction-specific measures for project management practices. The proposed knowledge areas could easily be used in other studies, and the findings may be used for comparison. This may serve as the basis for developing a new approach for measuring project management practices. In future work, a new set of knowledge areas might be developed, along with extra tools and strategies to support those areas.

# 5.2 Recommendations

Based on the findings and conclusions the researcher recommends the following improvement.

- ❖ The success of a project depends on a qualified project manager who supports the team, ensures that requirements are well defined before programming begins, and involves clients and stakeholders throughout the whole project development process. It is strongly encouraged to closely monitor project operations to lower the probability of failure. Additionally, the firm needs to invest in managers' competence to manage risks and changes in project schedules.
- ❖ For a project to be implemented successfully, it is imperative that stakeholders are given a strong induction and clear instructions at the beginning of the process. Beyond induction, ongoing awareness-raising talks, training sessions, and seminars are essential for identifying and resolving real-world problems and ensuring project success.
- ❖ The Project should develop a well-established system (like a schedule control system) to ensure that the actual construction schedule and resources are seriously supervised and revised so that the performance is in line with as planned to avoid chances of cost overrun and disputes.
- ❖ To minimize the probability of delay in project organizations are highly recommended to implement Green construction and sustainability in their strategy which will consist of using updated technology, reducing wastage, choosing low impact, non-toxic sustainably formed or recycled use of energy-efficient industrial materials which are products with less energy demand is very decisive in construction work.
- ❖ The study also suggests that all specific projects should have project managers since they have an impact on how projects are carried out. It also suggests that in addition to having a technical and academic background, a project manager should also possess soft skills.

# **5.3 Suggestion studies for Future**

This research was able to offer additional insight into project management practices in the studied selected local private construction companies other perspectives could be explored by further research works. The researcher recommends for future research to include different aspects of project management knowledge areas. Besides, further studies could be done to search and solve gaps within the current project management standard and practice adopted by the organizations. Moreover, more extensive research can be conducted in detail by including various parties within the construction industry across the country as a whole to solve the project management practice problem.

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# APPENDIX Interviews & questionnaires



# ST, MARY UNIVERSITY

# SCHOOL OF GRADUATE STUDIES

# **DEPARTMENT OF PROJECT MANAGEMENT:**

Dear Respondents:

This questionnaire is prepared to collect information to conduct a research entitled; "Project Management Practice's on The Case of three selected local private construction companies in Addis Ababa

Please consider each question in terms of your organization's experience and/or your personal knowledge and indicate your response by marking (X or  $\checkmark$ \_) in the boxes provided..

Please note that:

- 1) The result of these questionnaires is used only for academic research purpose.
- 2) Responses provided will be kept confidential if needed.
- 3) Raw data's obtained from these questionnaires will not be transferred to a third party during the research work.

For any clarification and further information please contact with the following address:

# SAMUEL GIRMA TSEGAYE

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Mobile: +2519 11182035

A.A

Ethiopia

# Part 1; Demographic characteristics of the respondents

1. Sex				
Male [ ]	Female []			
2. Age				
18-30 []	31-40 [ ]	41- 50 [ ]	above 50 [ ]	
3. Educational back	ground			
High-school []	Diploma [ ] ]	BA/BSc[]	MA / MSc [ ]	PHD[]
If other, please sp	pecify			
<ul><li>4, Field of specializa</li><li>5. Position in the or</li></ul>				
Company ov	_	are respondent	States	
Project Man				
Site engineer				
Site Forman	[]			
Consultant	[]			
Client	[]			
6. Project work expe	erience (in yea	r)		
5-10 Year [] 11-15	5 Year [] 11-2	0 year [] abov	e 21-30 year []	

# Part II. Questions related to six selected project management knowledge Areas among 10 of it according to PMBOK

According to your organization working principle and procedure, please share your experience on the under listed project management knowledge areas importance's and effectiveness for the project success.

# ( 1. Strongly disagree, 2. Disagree, 3. Neutral 4. Agree, 5. Strongly agree)

N <u>O</u>	Project management knowledge areas	points				
1.	Project integration management	1	2	3	4	5
1.1	Integration management is a critical component of successful project execution					
1.2.	Project team effectively communicates and collaborates across different project phases					
1. 3	Project manager effectively coordinates resources, tasks, and timelines to ensure project integration?					
1. 4.	Regular project status and progress reports are shared among team member's skills in project integration management					
2.	Project scope management					
2.1	Project team has a well-defined scope statement that outlines project deliverables and objectives					
2.2	Scope changes are managed through a formal change control process to prevent scope creep					
2.3	Stakeholders are actively involved in defining and approving project scope to ensure alignment with expectations					
2.4	Regular scope reviews are conducted to ensure project work remains with the defined scope boundaries					
2.5	Scope management responsibilities and accountabilities are clearly defined with in the project team					
3.	Project quality management					
3.1	Quality requirements are clearly defined and documented for each project deliverables					
3.2	Quality control measures are implemented to ensure project deliverables meet specified quality standards					
3.3	Quality assurance activities are conducted throughout the people life cycle to prevent defects and ensure quality					
3. 4	The project team conducts regular quality reviews and inspections to identify and address quality issues					
3.5	Quality control measures are proactively integrated into project planning and execution processes					
4.	Project cost management					
4.1	Cost estimates are accurately calculated and regularly					

	update and reflect change in scope, resources and constraints		
4.2	The project team actively monitors and manages project costs through the project lie cycle		
4.3	Project managers implement cost control measures to ensure project stays within budget		
4.4	Cost management tools and techniques effectively utilized in project planning and execution		
4.5	The organization provides sufficient resources and support for effective cost management on projects		
	Project time management		
5.1	Project timelines are clearly defined and communicated to all members		
5.2	Project schedules are regularly updated to reflect any changes or delays		
5.3	Project managers actively monitor and track progress against project timelines		
5. 4	The project team proactively identifies and addresses potential delays or bottle necks		
5.5	Time management processes are integrated into overall project management practices		
	Project stakeholder management		
6.1	Stakeholder's requirements and expectations are clearly identified and documented at the beginning of the project		
6.2	The project team actively involves stakeholders in decision –making processes		
6.3	Stakeholder's relationships are effectively managed to ensure project success		
6.4	The organization has formal stakeholder management plan in place for each project		
6.5	Overall how satisfied are you with the stakeholder management practices on project wit in the organization		

Please, desc	ribe your op	tions if you	have any o	other		

# Part III question related to application of project management challenges

Based on your experience in your organization, please give your feedback to what extent do you think the following factors listed under challenges the project management practices

[1= strongly disagree 2= Agree 3= Neutral 4=Agree 5=strongly agree]

N <u>o</u>	Project management challenges	1	2	3	4	5
1	Scope creep is a common challenge in project					
	management and can hinder project success					
2.	Limited resources and budget constraints often					
	make it difficult to manage projects effectively					
3.	Balancing competing stakeholder interests and					
	expectations is a common challenge in project					
	management					
4.	Cost management is a critical aspect of project					
	management and can be a major challenge for					
	project management					
5.	Effective time management is essential in project					
	management and can be a major challenge for					
	project managers					
6.	Quality management is a critical aspect of project					
	management and can be a major challenge for					
	project management					

Thank you for your valuable participation and feedback

# ST, MARY'S UNIVERSITY

# SCHOOL OF GRADUATE STUDIES

# DEPARTMENT OF PROJECT MANAGEMENT

Dear Respondents:

This interview is prepared to collect information to conduct a research entitled; "Assessment of Project Management Practice's on three selected local construction companies in Addis Ababa:

The information is going to be used as primary data for this research. Therefore, your response is will be extremely valuable for this research.

Please note that:

- 1) The result of this interview is used only for academic research purpose.
- 2) Responses provided will be kept confidential if needed.
- 3) Raw data's obtained from these interview will not be transferred to a third party during the research work.

For any contact:-

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# **Project Management Interview Questions**

- 1. What are the most significant challenges you face in managing projects?
- 2. How do you define integrated project management and why do you think it is important in project execution?
  - 3. How do you ensure effective coordination and communication between different project teams in an integrated project management approach?
  - 4. How do you effectively communicate with stake holders and team members throughout a project?
  - 5. How do you ensure that project delivery remains in time, scope and within budget constraint?
  - 6. What is the most common reason for project delays or scope changes?
  - 7 .How do you prioritize tasks and manage your time effectively as a project manager?
  - 8 .How do you prevent scope creep and ensure projects stay on track and within budget?
  - 9 .How do you incorporate feedback from stakeholders and team members to improve future projects?
  - 10. Can you provide an example of how you effectively managed scope on a project to ensure project deliverables were completed on time and within budget?

Thank you for your time and insights todays, is there anything else you would like to share before we conclude the interview?