



ADDIS ABABA UNIVERSITY
COLLEGE OF BUSINESS AND ECONOMICS
SCHOOL OF COMMERCE

MA PROGRAM IN PROJECT MANAGEMENT

INFLUENCE OF MONITORING AND EVALUATION PRACTICES ON THE
PERFORMANCE OF GRADE ONE BUILDING CONSTRUCTION
COMPANY'S PROJECTS IN ADDIS ABABA.

BY

MERON ABAYNEH

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the Award of Master of Arts Degree in Project Management

ADVISOR: - BAHRAN ASRAT (PH.D.)

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BY

MERON ABAYNEH

APPROVED BY BOARD OF EXAMINERS

Dean, Graduate Studies

Signature

Advisor

Signature

External Examiner

Signature

Internal Examiner

Signature

DECLARATION

The undersigned here, declare that this thesis entitled “Influence of monitoring and evaluation practices on the performance of Grade one building construction company’s projects in Addis Ababa.” is my original work, prepared under the guidance of the research advisor. All sources of materials used for the thesis have been duly acknowledged. And further confirm that the thesis has not been submitted either in part or in full to any other higher learning institution for the purpose of earning any degree.

MERON ABAYNEH ADERA

Name

Signature

CERTIFICATION

This is to certify that this project work, "Influence of monitoring and evaluation practices on the performance of Grade one building construction company's projects in Addis Ababa." undertaken by MeronAbayneh for the partial fulfillment of theRequirements for the Award of Master of Arts Degree in Project Management, is anoriginal work and not submitted earlier for any degree either at this University or any otherUniversity.

Research Advisor

Advisor: BahiranAsrat (PH.D.)

Date

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LIST OF ACRONYMS & ABBREVIATIONS

BC- Building Contractors

GDP- Gross domestic product

G1-Grade one

CSF's - Critical Success Factors

M&E- Monitoring and evaluation

ANOVA- Analysis of Variance

SPSS- Statistical Package for Social Science.

SD-Standard Deviation

PMBOK - Project Management Body of Knowledge

VFI - Variance Inflation Factor

UNDP – United Nations Development Programme

ABSTRACT

The purpose of this study is to assess the influence of building contractors' monitoring and evaluation practices on project performance. The research is intended to help and support construction practitioners in better implementing M&E practices to improve project performance. As a result, a three-section questionnaire was produced and distributed to assess the presence of M&E practices and their level of influence on project performance, as well as what exactly is meant by project performance. For data analysis, SPSS software was utilized. As a result, the M& E practices must be determined, and those that have the greatest impact on project performance. The broad aim of this study was to ascertain the influence of the practices of monitoring and evaluation on the performance of building construction projects. The specific aims of this research were to determine the influence of M&E Policy, M&E planning, M&E resource and M&E process on performance of building construction companies in Addis Ababa. The target population for this study was 126 respondents (2 persons for each company). A total number of 126 respondents were targeted. 95 respondents returned their data. The study found out that M&E practices and its adoption significantly influences the project performance. Based on the findings from this study, all correlation showed that independent variables (M&E planning, M&E resource and M&E process) as mandatory practices influences building construction projects performance thus the study recommended that M&E practices should be embraced in projects management. The study concluded on the basis of findings reveals that M&E practices have positive impacts on projects performance in building construction companies. The results from the study contributes to solving various projects M&E constraints that companies go through in implementation of their projects. The study recommends establishment of strategic frame work to define internal process of carrying out M & E, strengthening organizational M & E capacity, and management participation is critical for project success.

Keywords: Construction Project, Monitoring & Evaluation, Influence, Project Performance

CHAPTER-ONE

1. INTRODUCTION

This Chapter provides an overview of the complete research project. It covers the study's background, problem statement, research questions and objectives, significance of the study, scope and limitations of the investigation, definition of words, and study organization.

1.1 Background of the Study

Mazhar&Arain (2015) estimates that, the construction industry's contribution to the global share of the GDP is estimated around 15%. Considering the potential contribution of the industry to economic development, it is imperative to ensure that the inputs (resources), activities and processes are managed efficiently and effectively.

Project performance relates to the accomplishment of goals in fulfilling the technical requirements, customer satisfaction. Effective project management contribute towards the performance of the company performance in the long run, attaining competitive advantages; enhancing the status of the company; increasing market share; along with attaining specified revenues as well as profits (Al-Tmeemy, 2011).

The study by Leung Xha (2014) established the importance of supervising project activities during project implementation. And the study results indicated that a well-functioning supervisory system is a critical part of good project management. (Tengan&Aigbavboa, 2016; Tengan&Aigbavboa, 2018) suggested that this can be achieved via the effective implementation of monitoring and evaluation (M&E) which seeks to manage and measure performance of the project throughout the lifecycle of the project.

Monitoring and evaluating project performance allows for better management of outputs and outcomes, as well as encouraging the allocation of effort and resources where they will have the most impact. M&E can play a crucial role in keeping projects on track, create the basis for reassessing priorities and create an evidence base for current and future projects through the systematic collection and analysis of information on the implementation of a project.(IFC Advisory Services BEE Business Line, 2008).The essential measure of a successful project is

that it has delivered a successful product/service to the business. Closely related to this is project management success, which entails managing project to the approved scope, time limit, budget along with quality (Houston, 2008). According to Dyason (2010), Monitoring is the collection along with the analysis of information regarding a given program or intervention; and evaluation is an assessment whose focus is to answer questions relating to a program or an intervention. Monitoring and evaluation is increasingly becoming an essential program management tool.

Jekale (2004) mentioned that, the construction industry plays major role in the economy of developing countries. For example, in many developing countries, major construction activities account for about 80% of the total capital assets, 10% of their Gross Domestic Product (GDP), and more than 50% of the wealth invested in fixed assets. The construction industry in Ethiopia is challenged by several problems which tend to confront the sector and thus making efforts at developing the construction industry very difficult and complex. Many projects in developing countries face considerable time and cost overruns, fail to fill their proposed aim or even totally terminated and abandoned before or after their completion (Idoko 2008).

Initially, the goal of any project is to meet project objectives and to complete projects within the specified time, budget, and without having any performance challenge. Though the implementation of M&E practices has significantly affect project performance, its effect has been very significant especially on project time and cost performance. Various researchers support this idea. According to the research by Otieno, F.A.O , (2000) The poor understanding of the role of the two management functions; "Monitoring" and "Evaluation" can be blamed for the poor performance of projects in developing nations. Also, due to the application of monitoring and evaluation in several sectors of business, the understanding of the function and role of M&E in construction project management is sometimes misunderstood.

Also (Khan, 2001) Mentioned that with the onset of globalization, organizations all over the world are grappling with internal and external demands and pressures for continuous improvements in project management to enhance performance and stay competitive. These demands come from a variety of sources including donors, governments, private sector, civil society and the media. Whether it calls for greater accountability and transparency in exchange for foreign aid or real results, organizations must be increasingly responsive to stakeholders'

demand to demonstrate tangible results. As a result of this, many organizations are becoming increasingly aware of factors that influence project performance and the need to manage projects meticulously. According to (Gay, 2001), one of the most powerful tools that influence the performance of a project, program, or policy is Monitoring and Evaluation (M&E).

1.2 Statement of the Problem

According to Miller and Lessard (2001) findings, most construction projects globally face challenges that include delays, cost over runs and poor quality. The Concept of systematic Monitoring and Evaluation in the construction industry is often sidelined and focus is instead given to other areas of project management: initiation, planning, implementation and close out (Aigbavboa, 2018). Even if M&E is crucial for project success there are several constraints and challenges faced in conducting effective M&E activities among them are Weak institutional capacity, limited resources and budgetary allocations for monitoring & evaluation, the weak linkage between planning, budgeting, and monitoring & evaluation, weak demand for and utilization of monitoring and evaluation results, poor data quality, data gaps and inconsistencies (Callistus & Clinton, 2018).

M & E transcends throughout all the phases of the project management cycle, and helps to ensure the projects progress is on track. Building construction firms are often at the fore-front this is because they are based on a desire to reduce costs, complete projects on schedule, and make profit. Moreover, there is insufficient information relating to the practice of monitoring and evaluation on building projects. For instance, there are questions as to whether the projects undertaken by the building construction companies are effectively monitored and evaluated the effectiveness of the Monitoring and Evaluation of projects in the industry.

There are several building construction projects in the city, the most of which are constructed by grade one building contractors, who are the largest construction contractors classified in Ethiopia and are fit to perform building construction. The importance of project monitoring and evaluation, as well as the obstacles that come with it, can be seen in the preceding narrative. Monitoring and evaluation are often overlooked as important project performance factors by most companies. This study attempts to fill a knowledge gap by identifying the monitoring and evaluation techniques employed by building construction companies as well as their project

performance. As a result, the purpose of this study is to evaluate the practice and impact of monitoring and evaluation activities on the performance of Grade one building construction companies. Hence it is important to study which of the above mentioned M&E practices cause greatest threat for project performance and hence require outmost attention.

Assessment of projects monitoring and evaluation processes and effect on performance is critical in identifying opportunities for improved M & E project plan. The assessment of regular project performance, enable the managers of projects to take corrective measures and at the same time inform future strategies in the course of initiation and in implementation of projects. Many scholars have linked project performance to the practice of M & E.

1.3 Research Questions

The purpose of this study is to investigate the influence of monitoring and evaluation practices on the project performance of grade one building construction companies. This broad problem statement, however, is subdivided into the following basic research questions, which the study address in order.

1. What are the existing practice of M&E Policy, M&E planning, M&E Process and M&E resources in building construction companies projects in Addis Ababa?
2. What are the degree of influence/impact of these M&E practices have on project Performance of grade one BC companies?
3. What could be recommended to improve project M&E practices of building construction industry?

1.4 Objectives of the Study

General objective

The general objective of this paper is to study the influence of building construction project M&E practices on the performance of grade one building contractors the case of Addis Ababa.

Specific objectives

- To assess the existing M&E practices i.e. M&E Policy, M&E Planning, M&E Resource, and M&E Process at grade one BC Company's projects in Addis Ababa.

- To determine the influence of M&E Policy, M&E Planning, M&E Resource, and M&E Process on the performance of grade one BC company's projects.
- Determine the effect of M&E practice in influencing project performance in order to assist the company in focusing on the most inadequate M&E practices.

1.5 Significance of the Study

Monitoring and Evaluation (M&E) systems are a new concept. As a result, there isn't a lot of literature on the issue. It is, in some ways, a new sector that has evolved in response to requests for results-based and/or performance-related management. As a result, this study adds to the modest body of literature on the subject in academia.

The information collected from the study related to project monitoring and evaluation for analysis to establish best practices in M & E for improved project performance. The study identified existing gaps in M&E practice and opportunities for improvement in order to improve project performance. The results of the study make significant contributions to the comprehension of the association between M & E practice and project performance for better project results. The study contributes to the existing knowledge in addressing the future research problems especially in the monitoring and evaluation of building construction projects.

The findings of the study assist in the replication and optimization of the strengths of Monitoring and Evaluation Systems, as well as the search for solutions to deficiencies in the design, implementation, and maintenance of these systems. The general public also benefits from knowing the importance of Monitoring and Evaluation Systems as management tools in building construction projects.

This research benefits building construction companies, engineering professionals, and project managers by providing a better knowledge of M&E systems and how to enhance them to fulfill stakeholder expectations, as well as vital information for future interventions. It shows how M&E can be used as a powerful management tool to improve the way organizations can achieve greater accountability and transparency. The study is therefore beneficial to companies, M&E professionals, project managers and project management students who can refer to this paper for further studies about the subject matter and related issues.

The study makes significant contributions to the comprehension of the complex association between M & E practice and project performance for better project results. Moreover, the findings arrived at adds significant value to the pool of knowledge to scholars specializing in project management especially in the implementation of monitoring and evaluation practices. It also provide stakeholders with know-how on how to set-up and execute monitoring and evaluation practices that will be strong by avoiding the mistakes that might be pointed out in the study.

1.6 Scope of the Study

The study assessed the M&E practices in the building construction projectperformance of grade one building contractors limited to Addis Ababa city only.The construction industry is divided into several categories, including road, water, and bridge construction. As a result, the research's area focus is on building construction projects. Geographically, the study is confined to Grade 1 building contractors working on Addis Ababa city projects. Beyond these constraints, the number of contractors in the country is high; therefore it's critical to take a representative sample to assess in a timely manner.Furthermore, the projects to be assessed are in theend of execution phase, so the “existing practice of M&E” and “degree of influence on performance” may be accurately determined.This is to ease the burden of tracking down personnel on projects completed long ago, for ease of data collection. Only management and professional engineers are to be included in the sample as they have the relevant information and technical capability to understand relationship between M&E practices and project performance. This is to help reliability of data collected.

1.7 Limitation of the Study

The researcher understands that constraints are expected while doing researches and would like to address them as such. The quality of the study was limited on the questionnaire and interview opinions and ideas’ of the respondents who were selected randomly and collected. Additionally, though project M&E deals with issues which deserve time series data collection, the opinion of respondents is collected once as part of the data collection for this study.Another limitation is that this paper considers Project Performance aggregately, with the internal understanding that it

has time, quality and cost success parameters considered as a single unit and no separate assessment of each is made. To minimize and control information bias, the identity of respondents was withheld. They were assured of confidentiality in the request consent form. The study reviewed available strategic documents for validation of information filed by the respondents.

1.8 Organization of the Study

The research is structured with five main chapters.

The First Chapter shows background of the study, statement of the problem, research questions, and objectives of the study, significance of the study, scope of the study and limitation of the study.

The Second Chapter focuses on factors influencing building construction performance with respect to M&E process and practices. It covers logical framework and theoretical approaches to monitoring and evaluation. It also outlines empirical review as well as the conceptual framework variables.

The Third Chapter outlines the overall methodology to be used on the study including the Research design, population of the study, data collection methods, research procedures and data analysis and presentation and ethical considerations.

The Fourth chapter outlines how data are analyzed, results are presented and discussion of findings according to the data collected.

Finally, the final chapter shows the summary in line with the objectives of the study; concludes with conclusions and recommendations based on the study's primary findings.

1.9 Operational Definitions of key Terms

Project: a temporary endeavor undertaken to create a unique product, service, or result. (PMI, 2008).

Project management: refers to the application of knowledge, skills, tools and techniques to undertake a project successfully in order to add value (PMI, 2014).

Monitoring & Evaluation: Monitoring and Evaluation is the process of systematically collecting and analyzing information on ongoing projects and comparison of the project outcome/impact against the project intentions (PMBOK, 2017).

Monitoring and evaluation Practices; Set of activities done periodically or regular basis to provide information on project status and progress. (Olale J.O, 2017)

M&E System – this is a set of components which are related to each other within a structure and serve a common purpose of tracking the implementation and results of a project. (Olale J.O, 2017)

M&E Planning: Project plans incorporate the Monitoring and evaluation planning process. Monitoring and Evaluation is heavily dependent on good planning according to Bakewell et al, (2003).

Project Performance: This is the success in meeting pre-defined objectives, targets and goals i.e. simple terms refers to getting the job done or producing the result that you aim at. (Harish, 2010)

CHAPTER-TWO

2. LITERATURE REVIEW

2.1 Introduction

This chapter includes a detailed review of several works of literature relating to the study's aims. This chapter begins by highlighting the M&E practices of building construction organizations and then discusses the impact of these practices on their performance in the eyes of various researchers in order to arrive at an operational description of the study. The review then moves on to the factors influencing the implementation of M&E practices which have an impact on project performance. It also includes a review of related material gleaned from various secondary sources such as published books, essays, and associated websites. In this regard, the researcher made every attempt to include as many significantly linked literatures as feasible by reviewing existing papers that illustrate points, with the goal of achieving the study objectives.

2.2 Theoretical Review

2.2.1. Concept of Monitoring and Evaluation (M & E)

In construction, project management has been defined by Fewings (2005) as the planning, monitoring and control of all aspects of a project and the motivation of all those involved to achieve the project objectives on time and to cost, quality and performance. In addition, the Project Management Institute (PMI, 2013) describes project management as the art of directing and coordinating human and material resources through the life of a project using contemporary management techniques in order to achieve set goals such as scope, cost, time, quality and participant satisfaction. Igbokwe-Ibeto (2012) adds that due to the tedious nature of construction projects, it is imperative to monitor and evaluate projects in order to achieve success.

In the absence of effective monitoring and evaluation, it would be difficult to know whether the intended results are being achieved as planned, what corrective action may be needed to ensure delivery of the intended results. (UNDP 2009). On the other hand, it is important that M&E is considered at the planning stage and not left to be discussed until after plans have begun to be implemented.

Thus, PMBOK (2001) clarifies that monitoring and control of project work is the process of tracking, reviewing, and regulating the progress to meet the performance objectives defined in the project management plan. It further explains that monitoring includes status reporting, progress measurement, and forecasting. Performance reports provide information on the project's performance about scope, schedule, cost, resources, quality, and risk, which can be used as inputs to other processes.

In addition Marangu, (2012), explains Monitoring and Evaluation of projects can be of great importance to various project stakeholders including the clients and project financiers as it would ensure similar projects are successful. As such, the majority of literatures dictate successful project managers diligently and regularly review progress against the schedule, budget and quality elements of the project. Regular reviews allow problems to be identified early so that corrective action can be taken to keep the project on track. Review also helps team members to learn and improve their skills.

Monitoring and evaluation is regarded as a core tool when it comes to enhancing project management quality, considering that in the short run and in the medium term, the management of complex projects will entail corresponding strategies from the financial view point, that are required to adhere to the criteria of effectiveness, sustainability along with durability. (Dobrea et al., 2010). The activity of monitoring supports both the project managers and staff in understanding whether the projects are progressing as predetermined (Houston, 2008).

Therefore, monitoring offers the background for minimizing time along with cost overruns, while at the same time ensuring that the required standards of quality are attained in the implementation of the project. On the same note, evaluation is a tool for assisting project planners and developers in assessing the extent to which the projects have attained the objectives that are set forth in the documents related to the project (Crawford and Bryce, 2013).

A study by (Chin, 2012) confirmed that project performance was unresponsive to the level of detailed project plans but conversely discovered that a significant relationship prevails between the monitoring and evaluation practices and performance of project. Measured with an early pointer of project lasting impact. M & E become critical compared to planning in project

performance. On the same note, one of the mechanisms of the project controlling methodology whose aim is to attain its goals was monitoring project advancement.

Monitoring and evaluation are particularly important practices to any project stage, it allows an ongoing review of project effectiveness. Several variables influence the project performance and these variables include but not limited; M&E Policy, M&E Planning, M&E Resource and M&E process.

2.2.2 Monitoring and Evaluation Policy/system and Project Performance

Managing building construction projects require an operational M&E system. According to (SAMDI, 2007) M&E system, is a set of components which are related to each other within a structure and serve a common purpose of tracking the implementation and results of a project It is therefore an integrated system of reflection and communication that support project implementation. A finding byGuijt et al., 2002 shows that M&E system is made up of four interlinked sections, which are: setting up of the M&E system, implementation of the M&E system, involvement of the project stakeholders, and communication of the M&E results.

In addition Khan (2003), coincides that the conceptual design of an M&Esystem is supposed to address issues with regard to the objectives of the system, competentauthority, credibility of information, its management, dissemination and recycling into theplanning process with special emphasis on community participation. M & E systems should bebuilt in such a way that there is a demand for results information at every level that data are collected and analyzed. Furthermore, clear roles, responsibilities, formal organizational andpolitical lines of authority must be established (Kusek&Rist, 2004).

2.2.3 Monitoring and Evaluation planning and Project Performance

According to Bake well et al, (2003) Monitoring and Evaluation is heavily dependent on good planning. If plans are properly developed at the start of a project or a program, then it becomes much easier to implement the project. (Fredric Okuta, 2019) further added that the planning process should be based on a thorough understanding of what the project or programme is setting

out to accomplish. It is important that M&E is considered at the planning stage and not left to be discussed until after plans have begun to be implemented.

In a study conducted by (Mackay, K R;World Bank, 2007), it was found out that planning for monitoring and evaluation is critical in attaining better project performance on government projects. Additionally, a study that was conducted by (Singh, Chandurkar, &Dutt,2017) highlighted that monitoring and evaluation was the major driving factor in development projects.

2.2.4 Monitoring and Evaluation Resource and Project Performance

Lamesgin M, 2020 explained that Monitoring and evaluation are not conducted effectively if there are weak institutional capacity, limited resource and budgetary allocation for monitoring and evaluation, poor data quality and inconsistencies and inadequate involvement of stakeholder in monitoring and evaluation activities. And also the study pointed out that Capacity building reduces the gap between the actual and the expected. Ethics in monitoring and evaluation is critical in this realization. If the data is not of good quality, it is termed irrelevant and cannot be used in decision making.

The literature reviewed identifies the various aspects which are used in assessing the strength of monitoring team which is perceived to be one of the factors influencing project success. These aspects include: Financial availability, number of monitoring staff, monitoring staff skills, frequency of monitoring, stakeholders representation, Information systems (Use of technology), Power of M & E Team and teamwork among the members (Naidoo, 2011; Ling et' al, 2009; Magondu, 2013; Hassan, 2013; Georgieva & Allan, 2008; Gwadoya, 2012) evaluation is at its maximum.

Most organizations are likely to have less budgetary allocation for monitoring and evaluation for projects. (Harvey, 2013) states that due to their limited funds, organizations face notably greater challenges to obtain and run monitoring and evaluation activities effectively. The study by Amponash (2012), notes that critical success and failure factors for projects include planning and field visits, and should be planned for and carried out at appropriate times so as to ensure that the staff is well aware of the success and failure factors for projects include planning and field visits, and should be planned for and carried out at appropriate times so as to ensure that the staff is well

aware of the project areas to enable them to easily carry out monitoring and evaluation. Other issues that are likely to affect monitoring and evaluation include budgeting and resource allocation

2.2.5 Monitoring and Evaluation Process and Project Performance

Effectiveness of project monitoring and evaluation is dependent on the approach of Monitoring and Evaluation process. Stem et' al (2005) established some of the approaches that may be applied by the project managers include; Basic research; accounting and certification; status assessment; and effectiveness measurement.

Alotaibi (2011) discovered that Saudi Arabia lacked an appropriate construction contractor performance evaluation framework, and the identification and exploration criteria and sub-criteria for a selection framework. Lack of evaluation framework has a negative effect on the project success. Mladenovic et' al (2013) establishes a two layers approach for the assessment of PPP projects. The first stage was based on evaluation of project ultimate objectives from the stand point of each stakeholder; profitability for private sector and level of service for the users.

Further The study by (paulmusyoka, 2020) shows that the management should provide full support and should fully engage themselves in the monitoring and evaluation process as this will help them in coming up with sound and well-informed decisions.

2.2.6 Project Performance in Construction

The construction industry is a complex system composed of many actors that require adequate knowledge to stay competitive. Similarly, the construction projects' process needs different specialized services, complex and consumes time to meet the objectives. (Ofori 2019) emphasized that developing countries should enhance their construction project management and economics knowledge base through mainstream capacity and capability development. According to (Khalfan, 2001) performance measurement is implemented by most of the large construction organizations because it can help in improving the continuous performance of their business by optimizing the business processes, management procedures and product manufacturing.

It is obtained by (Lin, 2007) that There are three basis reasons why measurement system is important, firstly because of the development and challenges in the construction project management, secondly there is a need to have proper tools and models in order to measure the performance because now a days construction projects are becoming more complex and lastly the development in performance measurement encourages construction industry to take interest in their performance measurement.

Every project's ultimate goal is to be successful. The success of construction projects is mostly determined by the success of performance. Many earlier studies on the performance of construction projects had been conducted. Time, cost, and quality have all been identified as essential variables for determining success in the building sector. Thomas (2002) acknowledged the main performance criteria of construction projects as financial stability, progress of work, standard of quality, health and safety, resources, relationship with clients, relationship with consultants, management capabilities, claim and contractual disputes, relationship with subcontractors, reputation and amount of subcontracting. Other researchers, on the other hand, have come up with a variety of hypotheses.

According to Ramlee, Tammy, and Noor (2015), project success and key success factors (CSFs) are believed to be a technique to improve a project's efficacy. A construction project's success criteria include not only cost, time, and quality as success factors, but also successful project management, organizational success, and customer satisfaction (Sigurdsson 2009). However, only three critical success factors (CSFs) for measuring project performance are identified in this study: time, cost, and quality.

2.2.7Time Performance Measures

According to Chan and Kumaraswamy (2002), construction time is increasingly important because it often serves as a crucial benchmarking for assessing the performance of a project and the efficiency of the project organization. In addition Chan (2004), described that time can be calculated in terms of construction time, speed of construction and time variation. Construction time is the absolute time that measures the number of days or weeks from start on site to practical completion of the project. Construction typically involves a deadline for work

completion, so construction managers must force attention to time. More generally, a delay in construction represents additional costs due to late facility occupancy and other factors. The duration of activities must therefore be monitored and compared to expected durations so that the project is completed within the time required. (Fredric Okuta, 2019).

In addition Lim and Mohamed (1999) mentioned that it is very important for construction projects to be completed on time, as the clients, users, stakeholders and the general public usually looks at project success from the macro view where their first criterion for project success appeared to be the completion time.

2.2.8 Cost Performance Measure

Bubshait & Almohawis, (1994) defined Cost as the degree to which the general conditions promote the completion of a project within the estimated budget. Cost monitoring seeks to assess how well the project adheres to the planned budget so as to avoid or reduce cost overruns. This is done by auditing the expenditures and costs incurred at every phase of the project on capital, service provision and labor (Andove Wilson 2015).

Project manager competence; top management support; project manager's coordinating and leadership skill; monitoring and feedback by participants; decision making; coordination among project participants; owners' competence; social, economic, and climatic conditions were all listed as factors affecting cost performance in the study by Iyer and Jha's (2005).

2.2.9 Quality Performance Measures

(Shapiro, 2004) elaborated that Project quality assesses how the project adheres to the project specifications, deliverables and scope. Right from the onset, a project has set targets or deliverables to be met within certain quality expectations. Therefore, monitoring, evaluating and controlling the quality and scope ensure that corrective measures are instituted early in the project when shortcomings are discovered and that the project contractor does not deliver shoddy or substandard work.

Iyer and Jha (2005) further described that a contractor's quality assurance system, which ensures consistent quality, is essential in preventing problems and the reoccurrence of problems. In the

construction industry quality is defined as the totality of features required by a product or services to satisfy a given need; fitness for purpose (Parfitt & Sanvido, 1993). Nowadays, quality is the guarantee of the products that persuade the customers or the end users to purchase or use. Specification is one of the criteria that were advocated by (Corbett & Rastrick, 2000).

According to the reviewed literature, one of the construction best practice goals is measurement since it functions as a catalyst in an organization's progress and achievement. Performance measurement is therefore important to assess the achievement of the targets and plan according to master plan as well as organization can recognize their existing standing in both economical and non-economic facets in business (Hoque, 2004). Management of performance is basically monitoring and controlling the performance of an organization (Ankrah, 2005) so it cannot be done if there is no measurement system so it is important for an organization to have measurement system that will help in managing the performance of organization to achieve success. As Faniran et al, (1998) stated, the purpose of carrying out this project monitoring and control strategies is to complete a project within a scheduled time and cost and to specify quality standards. This understanding shows that monitoring and control cannot be separated from project performance.

2.3 Review of Empirical Studies

The reviewed literature revealed various studies in different parts of the world that have largely touched on monitoring and evaluation issues. Callistus and Clinton (2016) found out that effective M&E has critical role in improving construction project implementation if the project implementers are providing adequate resources, technical capacity building, a conducive project environment, and if they allow stakeholders to participate in M&E activities.

Hwang and Lim (2013) studied projects performance in relation to its Monitoring and evaluating practices, fund management, activity scheduling and quality performance. He concluded that this relationship management could result to the success of the project at hand. Ika et al., (2012) carried out a regression analysis to find out how statistically significant and the positive relationship involving the key success factors and project performance. The factors were monitoring, project coordination and design, training and the Institutional setting. He additionally expounded the, consistent theory and practice, the most noticeable project success factor for the

project supervisors are design and monitoring. Ika et al, (2012) asserted that M & E is a major success factor for a project.

The implementation of monitoring and evaluation in the Ghanaian construction industry was facing numerous challenges and as a result the industry was performing poorly. They identified and evaluated the barriers faced by projects in the implementation of monitoring and evaluation in the construction industry. Weak institutional capacity, limited resources and budgetary allocations for monitoring & evaluation, weak linkage between planning, budgeting and M&E, weak demand for and utilization of monitoring and evaluation results and finally, poor data quality, data gaps and inconsistencies were identified as the most significant barriers in the implementation of project M&E in construction projects.

In October-November 2011, UNDP carried out an assessment to find out the performance of development projects. The main goal was find out what needs changed to enhance project performance. The focus was on monitoring, evaluation and planning of the projects. UNDP was keen in projects performance and the development results. According to UNDP, this would have created value for their clients. To support the study they reviewed together with 2008-2011 the strategic plan to simulate findings. Data analyses done from the annual reports, statistical data and outcome trends. The scope of the study extended to all geographical regions, global and corporate levels of Management were involved. Specific case studies done from five countries, Argentina, Egypt, Indonesia, Moldava and Zambia. There were 365 responses and a number of desk reviews of related literature. (Hettmut, 2002)

The research findings were developmental, institutional, and strategic plans defining the internal process of managing project performance. They recommended a knowledge management system, staff capacities evaluation and full participation of management and hold them accountable for project outcomes, cooperation with other stakeholders to strengthen the relationships, find crosscutting issues that can be involved in the planning process, good governance, presentation and recovery of crisis at the outcome level, gender equality and transformational change with possible replication.

Ryman and Harries (2008) study established the constraints and problems that hamper Monitoring and evaluation of development projects. In order to achieve the intended objectives,

data on 37 projects was used. The study found out that the role of monitoring and evaluation of projects is can no longer be underestimated. The study results also showed the main constraints and problems that hampered monitoring and evaluation in development projects. They include; lack of commitment to conduct monitoring and evaluation, failure to carry out, discuss, share and incorporate the results of monitoring and evaluation activities. Other constraints found out from the study were: shortage of trained staff, insufficient technical resources, and inadequate allocation of funds to monitoring and evaluation and limited training opportunities. However, this study was done in Europe and the findings may not necessarily apply in Ethiopia.

A study by Edward Njenga (2013), On Factors Influencing performance of Monitoring and Evaluation of Development Projects (A Case Study Of Machakos District), found that monitoring and evaluation budget, stakeholders' participation, M & E plan, source of funding (donor) and training in M&E had a positive relation with the probability of implementing M & E which was significant at 95% confidence level. However, M&E guidelines were found to have no effect on implementation of M & E. Based on the results the study concluded that performance of Monitoring and Evaluation is important in providing the feedback mechanism of economic interventions.

2.4 Summary of Literature Reviewed and Research Gap

The review concluded that appropriate monitoring and evaluation practices in program / project interventions are required. It has been demonstrated that monitoring and evaluation (M & E) is rapidly being acknowledged as a vital tool for project management. It has also acknowledged the need to improve the performance of shareholder development finance. It encourages management to give careful consideration to information supply in order to promote project implementation. Furthermore, M & E includes a provision for accountability during the exploitation of development resources. A close scrutiny of review shows that despite the importance associated by adoption and implementation of effective M & E practices in the projects, very little attention has gone into questioning and investigating the whether the practices results in project performance construction projects. There are various useful studies on how project performance is influenced by concurrent monitoring and evaluation.

Author	Title	Finding	Research gap
Zerabrukmekele (2019)	An Assessment of the Monitoring Practices in Projects Contracted to YOTEK Construction PLC	Showed that budgetary constraints, coordination and communication lapses in sharing findings, and inconsistency in monitoring practices as the leading challenges affecting the monitoring	The study did not establish relationships between variations in monitoring practices among projects and the corresponding project performances.
Lamesgin Mulugojja m (2020)	An assessment on the practice and challenges of project monitoring and evaluation: the case of road construction projects in Ethiopian road authority	The study showed that implementation of monitoring and evaluation at ERA are weak institutional capacity: in the utilization of information & technology (IT) system, insufficient resources and budgetary allocations for monitoring & evaluation, the weak linkage between planning, budgeting, and monitoring & evaluation:	The researcher didn't assess all issues regarding monitoring and evaluation...

Table 1:-Research Gap

The researcher reviewed a few studies done on the monitoring and evaluation of project performance from the different sectors other than construction. These few studies did not widely focus on monitoring and evaluation as a major influence to the performance of projects. This study attempt to fill a knowledge gap by determining the monitoring and evaluation practices, as well as the project performance of building construction companies.

2.5 Conceptual Framework of the Study

A Conceptual Framework defines and depicts the relationships among all relevant systemic, organizational, individual, or other major aspects that may influence program/project operation and the effective fulfillment of program or project goals. Conceptual framework presents, in a diagrammatic form, the way the researcher conceptualizes the research regarding the relationship among the dependent and independent variable.

The success of the project is, affected by monitoring and evaluation practices. These practice comprise the independent variable; institutional capacity building, resource and budgetary allocation, data quality and consistencies, demand and utilization of monitoring and evaluation results and ethics in monitoring and evaluation, all of which are likely to influence to conduct effective monitoring and evaluation in a project.

The conceptual framework is a combination of the various findings in literature which have been grouped and arranged to a framework which guided this research in an attempt to provide a solution to the research problem. This study strive to address the knowledge gap to determine the practices of monitoring and evaluation, and project performance of building contractors in Addis Ababa. The influences of monitoring and evaluation practices are crucial in facilitating the realization of project deliverables. The success of the project is, affected by monitoring and evaluation practices. These practice comprise the independent variable; M&E Policy”, “M&E Planning” “M&E Resources”, “M&E Process”, all of which are likely to influence the project performance. The conceptual framework is illustrated below.



Figure 1 General conceptual framework (Source: Developed by researcher)

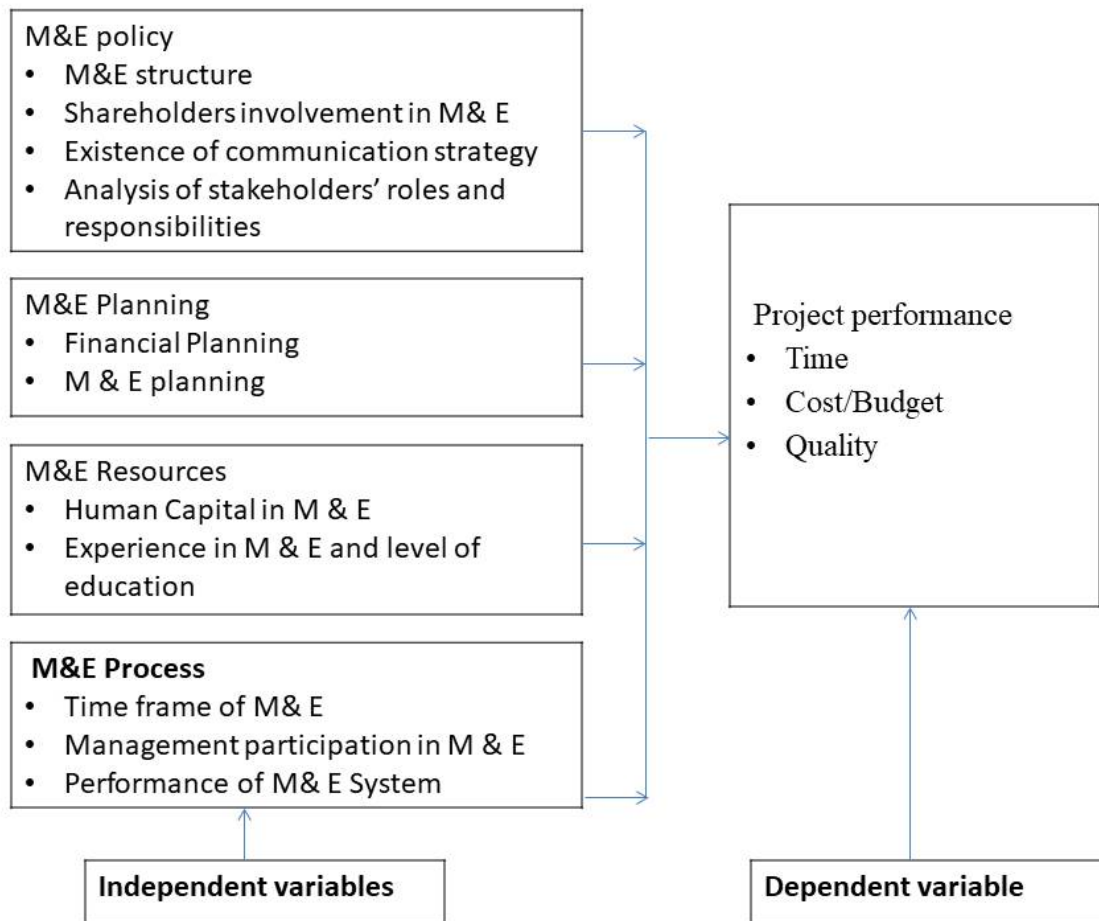


Figure 2: Detailed conceptual framework (Source: Developed by researcher)

CHAPTER - THREE

3. RESEARCH METHODOLOGY

3.1 Introduction

This Chapter discusses the researcher's holistic approach to doing the planned research. It includes the research's research design, population/area of study, sample methodologies, data collection techniques/instruments, and data analysis. Kothari, (2004) Mentioned that, a research methodology refers to a process of following steps, procedures and strategies for gathering and analyzing data in research investigation. This chapter contains the research design and methodology which are useful to carry out the research. It presents research design and approach, the population of the study, Sampling Size and Sampling Technique, source of data, data collection method, and data analysis method. In addition, the chapter provides an explanation of how validity and reliability of the research instrument is be met, it also identifies the method of data analysis that is used, provides the ethical consideration and further gives the operationalization of the variables.

3.2 Research Approach

This study predominantly employed quantitative techniques. This is because quantitative methods are mostly utilized for data collection techniques such as surveys or data analysis procedures such as graphs or statistics that generate or employ numerical data, as is intended with this study's data collection, analysis, and presentation of findings. The research approach for this study is categorized as quantitative.

3.3 Research Design

This study was conducted using Explanatory and descriptive research design to demonstrate associations or relationships between the variables. Similar research designs evaluated M and E practices and project performance. Descriptive research designs are concerned with describing the characteristics of an individual or of a group and ascertain whether variables are associated (Kothari, 2004). According to Kumar (2011) Explanatory research attempts to clarify why and

how there is a relationship between two aspects of a situation or phenomenon. The Research design was appropriate to explore M and E practices that influence project performance. This study established the M and E factors affecting the performance of grade one building construction companies. Quantitative research method is used to examine the relationship among variables. This research contains a dependent and independent variable which was measured numerically by using correlation and regression.

In order to make it suit to the collection of the required information from a larger sample and make the analysis easier, data was gathered from sample management staff and professional engineers via self-administered closed ended questionnaire. Saunders et al (2009) also divide research design into longitudinal and cross-sectional, based on time horizon. In this study, the researcher used a cross-sectional study since data was collected once at a particular time.

3.3 Population, Sample Size and Sampling Technique

3.3.1 Study Population

According to Mark (2009) the full set of cases from which a sample is taken is called the population. The study population is Building Contractors grade 1 under the Addis Ababa construction bureau were considered as the sampling frame. According to this list the number of eligible construction companies for BC 1 were found to be 75.

The target population for a survey is the entire set of units for which the survey data are used to make inferences. Target population of the study is only grade one building contractors assessed with the focus limited to Addis Ababa city. Also the study population comprise of project manager, planning engineer, M&E engineers and engineering staff who are involved in building project. The population size of the study is 75 Grade one building construction companies registered under the Addis Ababa construction bureau.

3.3.2 Sample Size

Sampling is the process of selecting a sufficient number of elements from a population (Raval, 2009). In conducting the research, it was possible to collect the data from the entire population as it is of a manageable size. However, it does not mean that a census would necessarily provide

more useful result than collecting data from a sample which represents the entire population. Sampling can provide a valid alternative to census when the budget and time constraints of the researcher prevent surveying the entire population (Saunders et al., 2009). Due to such reasons the researcher used a sample rather than a census. In order to determine a sufficient sample size, the study employs Solvin's formula, with the below equation, in order to attain 95% confidence level.

$$n = N / [1 + N * (e^2)]$$

Where, n= sample size N= known population size e= error level

e= error level (in this case it is 5% with a confidential interval of 95%)

Based on the obtained list of registered contracting companies from the Addis Ababa Construction Bureau, the total number of registered contracting companies as Grade one contractor is 75. As a result, it was decided to employ a sample size calculated using Solvin's formula to choose a portion of the population from the overall population.

Total Population = 75 BC-1 Contractors

$$n = N / [1 + N * (e^2)] = 75 / (1 + 75 * (0.05^2))$$

$$= \underline{\underline{63}}$$

Organizations	Number of population	SampleSize per Company	Sample Size (2 Respondants per Company)
BC-Constructuion companies[M&E Professionals & Plannning engineers, office engineers.]	75	63	126(100%)
Total			126(100%)

Table 2:-Sample Size

As a result, the questionnaire's intended respondents were construction professionals employed by these construction firms. The respondents had to be construction experts in order to be considered. Project managers, planning engineers, M&E engineers, and engineering personnel are all included.

3.3.2 Sampling Technique

According to mark (2009) sampling is important when it is difficult to survey the entire population when there is a shortage of budget and time constraint that prevents the researcher from surveying the entire population. The study uses Probability & purposive sampling methods. Survey and explanatory research methodologies are frequently related with probability sampling. A simple random sampling technique was used among the probability sampling methods because it gives each member of the research population an equal chance of being selected.

Purposive sampling involves selecting certain number of respondents based on the nature of their occupation. This strategy is appropriate since the chosen sample consists of professionals who have crucial information and data that provides a better understanding of the situation. Depending on the availability of the expert staff assigned, responses were received from the companies. For example, one company may have two Engineers stationed on M&E, but another may have only one.

3.4 Data Collection – Source, Types, Instruments

3.4.1 Data Type

There are two types of research data collection, primary and secondary data collection. The primary data used in this study are collected through a questionnaire survey. The secondary data used in this research are obtained from the organization project, previous researches, procedures, manuals etc. A questionnaire is designed from literature review of various practices of M&E affecting performance of construction projects.

3.4.2 Data Source

To help achieve the research aims and answer the research questions, relevant data was mostly gathered through primary sources. In other words, questionnaires were used to collect data. To answer the research questions and satisfy the study purpose, questions were developed in the questionnaire.

3.4.3 Data Collection Methods

The questions are to be presented in sections including General characteristics, M & E practices and project performance. The selection criteria for inclusion were professional who were working in the M&E unit, decision makers and who could articulate their experiences as it relates to the phenomena being investigated.

According to Mark et al., (2009), the most widely used approach in survey strategy is a questionnaire. A survey is an efficient approach to collect responses from a large sample before conducting analysis. Due to the small sample size and quantitative nature of the study, a structured questionnaire was utilized as a data collecting instrument to acquire the required information.

The questionnaire was organized into three major sections, all with 42 questions. Part I asked respondents for general information. Part II includes a total of 28 M&E Practices divided into four broad groups, each of which contained 7 questions. Part III takes into account a total of seven project performance criteria.

Using a 5-point Likert scale, respondents were asked to express their opinions on the factors most impacting these M&E practices and project performance. The following scores were used: strongly disagree = 1, disagree = 2, neutral = 3, agreement = 4, and strongly agree = 5.

3.5 Data Measurement and Analysis

The questions in the questionnaire is qualitative, hence the descriptive method of analysis is applied for the presentation, interpretation and discussion parts as appropriate. The study uses descriptive statistics such as frequencies, percentages, mean, standard deviations to summarize

collected data. Regression analysis is a statistical model used in this study to establish relationship between M & E practice and project performance.

The data gathered through questionnaires was coded, entered into computer and analyzed and presented in the form of charts, diagrams, and tables by using SPSS Statics software. The data was also analysed using Correlation regression; the study used Spearson correlation to relate the variables, while multiple regressions is used to guided by the model specification as follows

$$Y=\alpha+\beta_1X_1+\beta_2X_2+\beta_3X_3+\beta_4X_4+\epsilon.$$

Where;

Y = Performance of Project

β_0 = Constant Term

β_1 = Beta coefficients

X1= Monitoring and evaluation Policy

X2= Monitoring and evaluation planning

X3= Monitoring and evaluation Resource

X4= Monitoring and evaluation process

3.6 Reliability and Validity Analysis

3.6.1 Reliability of the Research

Reliability refers to consistency of measurement; the more reliable an instrument is, the more consistent the measure. There are different criterion of evaluating the research tools. For this study the resurcher checked the consistency of atributes within the questionnare by using Chronbach's alpha test as recommended by George and Mallery, (2003). The data collected was analyzed using correlation and regression analysis and SPSS computer software. Cronbach's alpha can be written as a function of the number of test items and the average inter- correlation among the items. The formula for the standardized Cronbach's alpha is as shown below:

$$\alpha = \frac{N\bar{c}}{\bar{v} + (N - 1)\bar{c}}$$

-Where N is equal to the number of items,

-C-bar is the average inter-item covariance among the items and V-bar equals the average variance.

A commonly accepted rule of thumb according to Saleh (2009) for describing internal consistency using Cronbach's alpha is as follows.

$0.9 \leq \alpha \leq 1.0$ Excellent

$0.8 \leq \alpha < 0.89$ Good

$0.7 \leq \alpha < 0.79$ Acceptable

$0.6 \leq \alpha < 0.69$ Questionable

$0.5 \leq \alpha < 0.59$ Poor

$0.0 \leq \alpha < 0.49$ Unacceptable

Variables	Cronbach' Alpha	No.Items
M&E Policy/System	0.828	7
M&E Planning	0.815	7
M&E Resoucrses	0.824	7
M&E Process	0.825	7

Table 2:-Cronbach's Alpha Test for Variables.

3.6.2 Validity of The Research

Validity is the applicability to which research findings can be realistic to the real world, beyond the controlled setting of the research. Reliability is a measure of the degree to which a research instrument yields consistent results or data after repeated trials. According to Mugenda and Mugenda, (2003), validity is a measure of relevance and correctness. It is the accuracy and meaningfulness of inferences which are based on the research results. Data

3.7 Ethical consideration

Throughout the course of this study, ethical considerations were taken into account. The researcher informed all potential participants of the nature and purpose of the study, and their participation was entirely voluntary. It was made clear that their responses to the provided questions were just for academic research purposes and would never be revealed to anyone at

any time. When analyzing secondary data from journals, articles, hearings, and other related sources, each source was recognized using both in-text citation and referencing.

CHAPTER-FOUR

4. DATA ANALYSIS,INTERPRETATION RESULT AND DISCUSSION

4.1 Introduction

This chapter discussed the data analysis and findings from 95 questionnaires completed by grade one building contractors in Addis Ababa. Unstructured interviews were conducted. The nature of the interview was such that the interviewees were given the same questionnaires with the purpose of obtaining their insights about each of the statements as opposed to filling them out. Interviewees focused on the statements they deemed most critical and as such their responses were taken notes of. Accordingly, their responses are included as an elaborative supplement following the questionnaire analysis as depicted below.

The purpose of this study was to identify the influence of monitoring and evaluation practices (i.e. M&E Policy, M&E Planning, M&E Resource and M&E Process) on project performance (i.e. Time, cost & Quality) in Addis Ababa building projects. The chapter starts with the respondents' profile and is supported by demographic data. Furthermore, inferential analyses such as Pearson's correlation and multiple regressions were performed.

4.2 Questionnaire Survey Response Rates

A total of 126 questionnaires were distributed to respondents. Out of which a valid response of 95, were returned and used in the analysis and represented a 75.4% response rate which is considered as an excellent response. According to (Mugenda & Mugenda, 2003), a response rate of 50% is adequate for analysis and reporting, a rate of 60% is generally good while a response rate of above 70% is excellent. This is also the same position taken by (Babbie, 2002) who also asserts that a response rate of above 70% is deemed to be very good. . Table 3 shows the distribution and response rate of questionnaires from the respondents. The researcher couldn't get a response rate greater than 75.4% Delay in response of questioners.

Table 3 Rate of response

Target Number of respondents	Number of questionnaires Returned	Response Rate (%)
126	95	75.4%

4.3 Respondent's General Information

The first section of the questionnaire attempted to gather information on respondent demographics, such as gender, educational qualification, work experience, and employment position. This is required in order to portray the personal and professional characteristics of respondents in order to answer the question, "Who exactly are these respondents?"

4.3.1 Respondent's Gender

The respondents were asked to indicate their gender so that participation according to gender is analyzed and discussed. The gender of the respondents was established as indicated in Table 4 the respondents were 57.9% male and 42.1% female. Accordingly, as per Table 4 below, the number of male respondents to female is slightly higher. However, the gender composition has no impact on the statistical power on the data. The study though had adequate representation of both genders.

Table 4 Gender representation in the study

	Frequency	Percent	Cumulative Percent
MALE	55	57.9%	57.9%
FEMALE	40	42.1%	100.0%
Total	95	100.0%	

Source: Survey Output (2022)

4.3.2 Respondent Age Bracket

The survey focused on four age groups, and respondents were asked to select which one they belonged to. The age groupings were: 20-30 years old, 31-40 years old, 41-50 years old, and over 50 years old. According to the data collected, 40% of the respondents were between the ages of 20 and 30, 49.5 % were between the ages of 31 and 40, 10.5 % were between the ages of 41 and 50, and 0 % were over the age of 50.

Table 5 Respondent age bracket

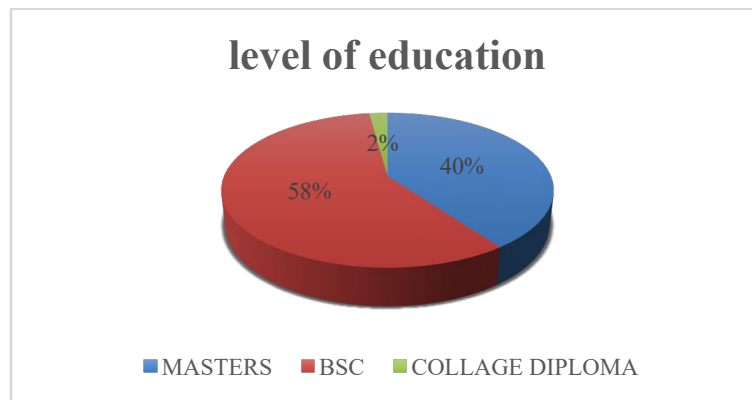
	Frequency	Percent	Cumulative Percent
20-30	38	40.0%	40.0%
31-40	47	49.5%	89.5%
41-50	10	10.5%	100.0%
Total	95	100.0%	

Source: Survey Output (2022)

4.3.3 Level of Education

The education level of the respondents was examined, and the results are shown in figure 3. Academic levels were represented in percentages as follows: Collage diploma 2.1 %, Undergraduate 57.9%, and Postgraduate 40 %. The importance of an education professional cannot be overstated. Their educational level, in particular, aids in comprehending the many dynamics of project performance. As a result, because the respondents have the necessary academic qualifications, they were able to communicate effectively, indicating that there was a fair representation of educational levels and thus authenticating the study's results as objective, resulting in exemplary project performance. According to Murphy and Myors (2004), education level determines the respondents' ability to comprehend the survey questions. Participants with a high level of education provided a large share of the replies to the survey.

Figure 3 Respondents level of education



4.3.4 Respondent department of work

The working department of the respondents was used to describe their characteristics. M&E Department, Operation Department Engineering Department, and Project Office Engineering Department received 29.6%, 36.8%, 17.9%, and 15.8% of the responders, respectively. Given the contributions of the various departments of works, this distribution provides a diverse source of information. Therefore these findings show that there was appropriate representation at all levels of the profession, allowing the study's findings to be more objective.

Table 6 Respondent Department of work

	Frequency	Percent	Cumulative Percent
ENG.DEP	35	36.8%	36.8%
M&E DEP	28	29.5%	66.3%
OPE.DEP	17	17.9%	84.2%
PRO.OFFICE ENG.	15	15.8%	100.0%
Total	95	100.0%	

Source: Survey Output (2022)

4.3.5 Years of service in the company and M&E Experience

Job experience was chosen as one of the respondents' criteria to determine the respondents' experience with BC companies and M&E practices. According to the survey, 48.4 % of respondents have more than 5 years of experience, 38.9% have 6-10 years of experience, 7.4% have 11-15 years of experience, and 5.3 % have more than 15 years of experience. In addition, According to the survey, 57.9 % of respondents had M&E Experience for 1-5 years, 29.5% have 6-10 years of M&E experience, 7.4% have 11-15 years of M&E experience, and 5.3 % have

more than 15 years of M&E experience. The demographic enrolled on the study helped to provide a diverse perception of staffs on the practice of M & E and effect on performance.

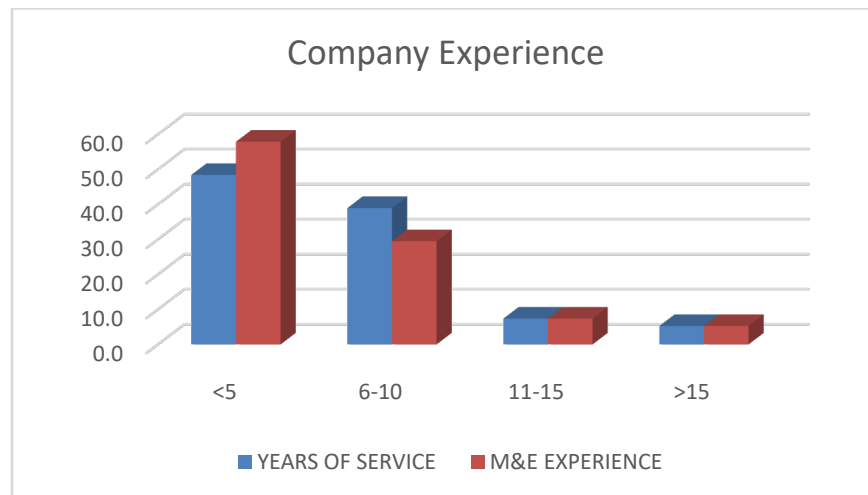


Figure 4M&E Practice implementation

4.3.6 M&E Exercise in the company

When asked how often they carried out M&E Practice in their company projects, 30.5 % replied daily, 35.8% replied weekly, 26.3 % replied monthly, and only 7.4 % replied quarterly.

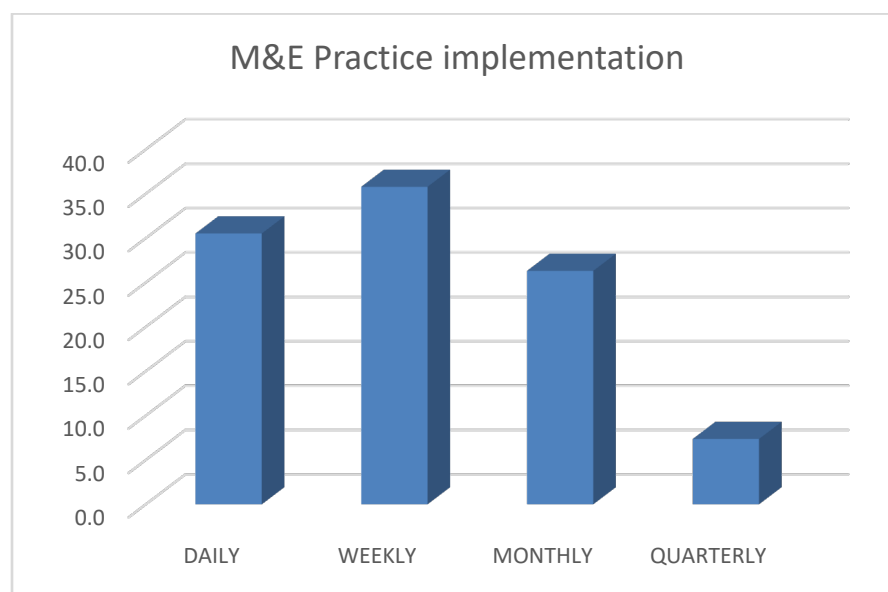


Figure 5M&E Practice implementation

4.4. Descriptive Analysis Result

4.4.Degree of Presence M & E Policy on BC-1 Companies.

The study sought the level of application and practice of M&E Policy. The practice well defined frame work, executive management attitude, project management software's, applicability of existing M& E practice and if M&E procedures are assessed with a five-point Likert scale type. The average mean result was separately presented analyzed and interpreted as follows and the analysis of mean score is based on the below assumptions from Burns, 2008:

- If the mean statistical value is between 0 to 1.5 it implies the respondents strongly disagreed.
- If the mean statistical value is between 1.5 to 2.5 it implies the respondents disagreed.
- If the mean statistical value is between 2.5 to 3.5 it implies the respondents neutral.
- If the mean statistical value is between 3.5 to 4.5 it implies the respondents agreed.
- If the mean statistical value is above 4.5, it implies that the respondents strongly agreed.

Table 7:- Statistics of M&E Policy of BC1 Construction Company

M&E Policy	N	Min.	Max	Degree Of Presence M&E Practice.		Degree Of influence on Project Performance	
				Mean	Std. Dev.	Mean	Std. Dev.
The company has a well-defined policy/frame work and standards for carrying out Monitoring and Evaluation exercise for its projects.	95	1	5	2.42	1.217	4.14	0.846
There are a well laid guidelines on the intervals and the frequencies of carrying out Monitoring and Evaluation	95	1	5	3.20	1.117	4.03	0.778
The Executive management of the company's has a positive attitude towards monitoring and evaluation. And Communication strategy is developed to address the flow of information.	95	1	5	3.81	0.982	4.11	0.792
The organization uses project management software for Monitoring and Evaluation of the projects.	95	1	5	2.28	0.964	3.79	1.041
Monitoring and Evaluation procedures in the company are definite, clear and easily understood in the project.	95	1	5	3.12	1.287	4.01	0.881
The company compares its Monitoring and Evaluation processes to those of other companies.	95	1	5	3.02	1.313	3.61	1.003

M & E tools are well assessed if they are applicable in every project.	95	1	5	2.72	0.975	3.88	0.874
Average Mean Value				2.93	1.122	3.94	0.89

Source: Survey Output (2022)

As it can be seen from the above table, scores of building construction company practices according to the respondents shows the mean values for all variables vary from 2.28 to 3.81, with lowest and maximum standard deviations of 0.964 and 1.313, respectively, according to the summary of scores. On a five-point Likert scale, the mean value represents the average response, while the accompanying standard deviation values represent the variation of these values around the mean. The greatest response is that respondents agree that The Executive management of the company's has a positive attitude towards monitoring and evaluation; this is represented by a mean of 3.81.

Represented by a mean of 3.20, respondents have neither agreed nor disagree to that their organization's well laid guideline on the interval and frequency to carry out M&E. In addition Respondents have neither agree nor disagree to M& E procedures in the company are definite, clear and easily understood in the project, Comparing of its M& E processes to those of other companies and the applicability of M & E tools in every project with a mean of 3.12, 3.02, 2.72 respectively. A mean of 2.42 indicates that respondent's disagree to their company to having a well structure and defined policy/frame work for carrying out monitoring and evaluation. In addition, Respondents disagree to the organization use of project management software to carry out M&E this is represented by a mean of 2.28.

Interview results suggest the appropriateness that M&E Policy is missing in building construction companies. They express "even if there were qualified, skilled & professional, unless the overall implementation of M&E framework is ensured, the M&E Professional can only do so much."

A particular interviewee elaborates "There is a major gap in the company in putting M&E policy, guideline and framework into practice despite the enterprise having an executive management that supports the appropriate degrees in project management"

4.4.1 M&E Policy and project performance

Table 8 represents the degree of influence of the monitoring and evaluation policy practice of grade 1 building construction company's performance where respondents agreed with average mean value of 3.94 and standard deviation of 0.89.

The respondents highly rated that the companies having a well structure and defined policy/ frame work for carrying out monitoring and evaluation, guide line for carrying out the M&E, executive management having good intention to M&E practice and M&E procedures are easily implemented with 4.14, 4.11, 4.03 & 4.01 mean value and standard deviation of 0.846, 0.778, 0.792, & 0.881 respectively will positively influence the performance.

4.5 Degree of Presence M & E Planning on BC-1 Companies

Table 8 Statistics of M&E Planning Process of BC1 Construction Company

M&E Planning	N	Min.	Max	Degree Of Presence M&E Practice.		Degree Of influence on Project Performance	
				Mean	Std. Dev.	Mean	Std. Dev.
At the project initial stage the project allocate funds for monitoring and evaluation	95	1	5	2.24	1.137	3.94	1.147
The project plans contain the M and E planning process	95	1	5	2.38	0.980	4.14	0.918
The M&E employees are well trained on effective project planning practices in the companies' projects.	95	1	5	2.71	1.119	3.95	0.938
The monitoring and evaluation plans are continually checked for improvement in subsequent projects	95	1	5	3.13	1.044	3.94	1.009
The staff roles match their experience and qualifications in the M&E team	95	1	5	3.14	1.038	3.99	0.917
There are regular planning meetings by the M&E team at the Project.	95	1	5	3.65	0.796	4.14	0.807
The company has got skilled personnel who carry out M&E exercise on the projects	95	1	5	3.68	0.704	4.12	0.861
Average Mean Value				2.99	0.974	3.94	1.147

Source: Survey Output (2022)

The above table indicates the statistics of M&E Planning process by the BC 1 construction companies and the perceived outcome of these practices from the viewpoint of respondents. The respondent's response shows the mean values for all variables vary from 2.24 to 3.68, with lowest and maximum standard deviations of 0.704 and 1.313, respectively. A mean of 2.24 indicates respondents' disagreement to the allocation of fund for M&E at initial stage. In addition, Respondents of the selected construction companies disagree that the project plans contain the M and E planning process with a mean value of 2.38.

With a mean of 2.71, 3.13, and 3.14, respondents do not agree or disagree with training M&E workers on effective project planning techniques in the companies' projects, regularly checking for improvement of M&E practice in succeeding projects, and experience & credentials of the M&E team. However, all three of these items have a score higher than the average cutoff of 2.5.

The majority of companies' responses to M&E planning practices were discovered. Respondents agreed on the existence of frequent planning meetings by the M&E team at the project and the existence of skilled employees who carry out M&E exercises on the projects with a mean of 3.65 and 3.68, respectively.

4.5.1 M&E Planning and Project performance

As part of the study objectives, the study sought to find out the influence of M&E planning on performance of BC-1 construction companies in Addis Ababa. The researcher further wanted to establish the influence of some aspects of the project monitoring planning on performance of projects. The findings were highlighted in the above table. The overall score indicates that respondents agree on the impact of monitoring and evaluation planning practice on the performance of grade 1 building construction companies, with an average mean value of 3.94 and a standard deviation of 1.14.

The respondents highly rated that the companies including M&E planning process on project plan, M&E team conducting regular planning meeting at the project and assigning a skilled person on M&E exercise will have a significant influence on project performance with 4.14, 4.14, & 4.12 mean value and standard deviation of 0.918, 0.807, & 0.861 respectively will

positively influence the performance. The finding assures the argument by Dyason 2010 describes monitoring as regular collection and analysis of information involving program or intervention; and evaluation as an assessment of project progress. It is an ongoing process mainly based on predetermined targets and activities that are highlighted during the planning phase. In addition Clarke (2011) also noted that organizations that have developed comprehensive strategic/operational plans make the most progress with regular monitoring of their work. As per IFAD 2012 Monitoring and evaluation per se guides resource allocation in projects and measures their sufficiency and effective utilization.

4.6 Degree of Presence M & E Resource on BC-1 Companies

Table 9 Statistics of M&E Resource of BC1 Construction Company

M&E Resource	N	Min.	Max	Degree Of Presence M&E Practice.		Degree Of influence on Project Performance	
				Mean	Std. Dev.	Mean	Std. Dev.
The organization has adequate capacity or resources to Implement M&E work plan.	95	1	5	3.56	.908	4.11	0.792
The tools, systems, and applications required for proper project M&E are sufficiently available	95	1	5	3.06	.976	4.09	0.716
There are appropriate transportation facilities to let the M&E personnel move around the projects.	95	1	5	2.97	1.056	3.96	0.862
As a kind of motivation, the organization provides suitable compensation to the M&E workforce.	95	1	5	2.91	1.022	3.79	0.898
The company has made a significant financial commitment to the implementation of the M&E work plan for the projects.	95	1	4	2.96	.910	3.86	0.895
The company is willing to invest money to improve the M&E management	95	1	5	3.28	.846	3.85	0.799
The M&E officers are knowledgeable in the day-to day management of the M&E system	95	1	5	3.31	.957	4.15	0.825
Average Mean Value				3.150	0.954	3.97	0.83

Source: Survey Output (2022)

The statistics shows the degree of existence of M&E Resource with in BC-1 construction companies and the perceived outcome of these practices from the viewpoint of respondents. Analysis of summary of scores shows that the mean values range from 3.56 to 2.91 with minimum and maximum standard deviations ranges of 0.846 and 1.056 respectively for all variables. A mean of 3.56 indicates respondents' agreement the capacity of the company to implement M&E work plan.

Respondents have neither agree nor disagree the applications proper project M&E tools & systems, availability of transport facilities, suitable compensation, financial commitment for implementation, investment for improvement and knowledge of M&E officers a mean of 3.06, 2.97, 2.91, 2.96, 3.28 and 3.31 respectively. This finding is in affirmation with the findings of Venessa and Gala (2011) who found that technical capacity and expertise of the staff in conducting evaluations seemingly influences M&E process.

In addition These findings come in line with, (World Bank, 2012) opines that there is need to have an effective M&E human resource capacity in terms of quantity and quality, hence M&E human resource management is required in order to maintain and retain a stable M&E staff. This is because competent employees are also a major constraint in selecting M&E systems (Koffii Tessio, 2002).

4.6.1 M&E Resource and Project performance

Table 9 represents the degree of influence of the monitoring and evaluation resource on grade 1 building construction company's performance where respondents agreed with average mean value of 3.94 and standard deviation of 0.83.

The respondents highly rated that the companies having adequate capacity or resources to implement M&E work plan, tools systems, and applications required for proper project M&E, are sufficiently available and The M&E officers are knowledgeable in the day-to day management of the M&E system will have a significant influence on project performance with 4.11, 4.09, & 4.15 mean value and standard deviation of 0.792, 0.715, & 0.799 respectively.

4.7 Degree of Presence M & E Process on BC-1 Companies

Table 10 Statistics of M&E Resource of BC1 Construction Company

M&E Process	N	Min.	Max	Degree Of Presence M&E Practice.		Degree Of influence on Project Performance	
				Mean	Std. Dev.	Mean	Std. Dev.
Project progress reports are prepared, submitted and acted upon on time.	95	1	5	3.69	.979	4.27	0.831
The progress reports are clear , detailed and Remedial measures are acted upon accordingly	95	1	5	3.65	1.039	4.22	0.732
The communication is effective and efficient	95	1	5	3.39	.992	4.15	0.684
Accountability levels in the projects are good	95	1	5	3.45	1.070	4.21	0.811
The site meetings are scheduled in good time and regularly by the M&E team.	95	1	5	3.63	.968	4.23	0.856
The M&E team holds regular meetings to discuss the project implementation reports	95	1	5	3.68	.926	4.18	0.652
There is smooth flow of information/instructions from the top management to the M&E team at the Company	95	1	5	3.69	1.063	4.20	0.882
Average Mean Value	95			3.597	1.005	4.21	0.78

Source: Survey Output (2022)

Analysis of summary of scores shows that the mean values range from 3.69 to 3.39 with minimum and maximum standard deviations ranges of 0.926 and 1.070 respectively for all variables. From the response, most of the respondents with a mean of 3.56, 3.65, 3.63, 3.68 and 3.69 respondents agree that Project progress reports are prepared, submitted and acted upon on time, progress reports are clear & detailed, site meetings are scheduled in good time and

regularly by the M&E team, regular meetings to discuss the project implementation reports and There is smooth flow of information/instructions from the top management to the M&E team at the Company respectively.

4.7.1 M&E Process and project performance

Table 10 represents the degree of influence of the monitory and evaluation process on grade 1 building construction company's performance where respondents agreed with average mean value of 3.94 and standard deviation of 0.83. The respondents highly rated that the companies caring out preparation of clear & detailed progress report and acted upon on time, conduct site meetings in good time & schedule, regular meetings to discuss the project implementation reports and with a is smooth flow of information/instructions from the top management to the M&E team at the Company will have a significant influence on project performance with 4.27, 4.22, 4.21& 4.2 mean value and standard deviation of 0.831,0.732,0.78, & 0.886 respectively.

Having adequate capacity or resources to implement M&E work plan, tools systems, and applications required for proper project M&E, are sufficiently available and The M&E officers are knowledgeable in the day-to day management of the M&E system will have a significant influence on project performance with 4.11, 4.09, & 4.15 mean value and standard deviation of 0.792, 0.715, & 0.799 respectively. Table 10 displays item statistics of M&E process carried out by the BC-1 construction companies and the perceived outcome of these practices from the viewpoint of respondents. With a mean of 3.56, 3.65, 3.63, 3.68 and 3.69 respondents agree that respectively.

4.7.2 M&E Practices and project performance

Comparing the overall scores on degree of presence M&E practices the questionnaire indicated the following.

Table 11 Scale Rating of M&E Practice's overall scores

				Degree Of Presence M&E Practice.		Degree Of influence on Project Performance	
M&E Practices	N	Min.	Max	Mean	Std. Deviation	Mean	Std. Deviation
M&E Policy/System	95	1	5	2.93	1.122	3.94	0.89
M&E Planning	95	1	5	2.99	0.974	4.03	0.94

M&E Resoucrs	95	1	5	3.150	0.954	3.97	0.83
M&E Process	95	1	5	3.597	1.005	4.21	0.78
Overall score	95			3.166	1.013	4.037	0.858

Source: Survey Output (2022)

The study revealed that there was a significant relationship between M&E practices and projects performance with highest influencer being M&E Process and M&E planning. As a result, this had an impact on project performance because the way M&E processes are carried out influences whether or not projects in the organization meet their goals and objectives. Respondents in the study had a positive regard in areas where the M&E process and about companies commitment in providing M&E resource respective projects.

4.8Project performance

Respondents were asked to rate project performance on a scale of 1 – 5 in terms of performance'. They were also asked to comment were possible. A number of attributes of project performance such as timeliness, quality of projects implemented were rated by respondents and results are shown in Table 12.

Table 12 Project performance

No	Statement	Str. Disagree	Disagree	Neutral	agree	Str. disagree	Mean	Std. Dev
1	The project meets its intended goals and objectives	2.1%	16.8%	13.7%	43.2%	24.2%	3.71	1.081
2	Projects are completed within the expected time frame.	9.5%	34.7%	15.8%	25.3%	14.7%	3.010	1.259
3	Projects are completed within the estimated budget.	14.7%	43.2%	14.7%	16.8%	10.5%	2.65	1.227
4	Concluded projects meet the required scope and quality.	0%	23.2%	18.9%	48.4%	9.5%	3.44	0.953
5	There is proper utilization of projects resources	6.3%	18.9%	20%	31.6%	23.2%	3.46	1.219
6	Monitoring and Evaluation facilitates transparency and accountability of projects resources.	2.1%	9.5%	25.3%	44.2%	18.9%	3.68	0.959
7	Seeking projects feedbacks from stakeholders improves performance	0%	6.3%	16.8%	50.5%	26.3%	3.97	0.831

	Average Mean Value						3.41	1.075
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Respondents provided a likert scale rating of their respective company projects performance indicators of timeline, cost, scope, quality, impact, goals, and accountability of resources, stakeholder feedback and achievement of targets. This section of the analysis highlights the results on project performance.

From the results, it can be seen that the projects are good in meeting the intended goals and objective and seeking stakeholder feedback with a mean 3.71 & 3.97, SD 1.081, 0.831 respectively. It is also uncertain that projects are implemented and completed within expected timeframe and budget with a mean 2.65 & 3.01, SD 1.227, 1.259 respectively. Similarly, it is uncertain that concluded projects normally meet the required scope and quality projects standard (mean = 3.44, SD = 0.95).

4.9BC-1 Construction Companies M&E practice & Project performance

4.9.1 Correlation Analysis

A correlation coefficient is a way to put a value to the relationship (Field, 2009). Correlation analysis was used to investigate the strength of the association between the four M&E practices. Pearson correlation coefficient was used in this study to determine the magnitude and the direction of the relationships between the dependent variable and independent variables. Correlation coefficients have a value of between -1 and 1. A "0" means there is no relationship between the variables at all, while -1 or 1 means that there is a perfect negative or positive correlation (negative or positive correlation here refers to the type of graph the relationship will produce)

Table 13 Correlation between M&E Practices.

Correlations					
		M&E Planning	M&E Process	M&E Resources	M&E Policy
M&E Planning	Pearson Correlation	1	.419**	.660**	.603**
	Sig. (2-tailed)		<.001	<.001	<.001
	N	95	95	95	95
M&E Process	Pearson Correlation	.419**	1	.603**	.642**
	Sig. (2-tailed)	<.001		<.001	<.001
	N	95	95	95	95

M&E Resources	Pearson Correlation	.660**	.603**	1	.691**
	Sig. (2-tailed)	<.001	<.001		<.001
	N	95	95	95	95
M&E Policy	Pearson Correlation	.603**	.642**	.691**	1
	Sig. (2-tailed)	<.001	<.001	<.001	
	N	95	95	95	95

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

Source: Survey Output (2022)

The highest correlation ($r=0.691$) was observed between M&E Policy and M&E Resources.

This is a predicted outcome because most expressions of M&E policy are largely related to required resources. Despite the fact that management directs the organization through M&E policy, the ultimate outcomes will be achieved through resources such as allocating qualified staff. M&E Resources and M&E Planning had the second highest correlation ($r=0.660$). This is also an expected outcome. Managing resources requires planning. Process-oriented companies must plan their resource deployment and discover critical linkages between processes. This, in turn, must be carried out with a plan and by qualified employees within the firm.

4.9.1 Regression Analysis

To examine the impact of M&E practice on the performance of building construction companies, a regression analysis was performed. Before delving into the results of the regression tests for violations of the classic linear regression model assumptions, the following was done.

4.9.1.1 Testing for violations of statistical assumptions

Most statistical tests rely upon certain assumptions about the variables used in the analysis. When these assumptions are not met the results may not be trustworthy, resulting in a Type I or Type II error, or over- or under-estimation of significance or effect size(s). (Osborne and Waters, 2002)

The degree to which valid inferences may be drawn from the results of inferential statistics depends upon the sampling technique and the characteristics of population data. This dependency stems from the fact that statistical analyses assume that sample(s) and population(s) meet certain conditions. These conditions are called statistical assumptions. If violations of statistical assumptions are not appropriately addressed, results may be interpreted

incorrectly. In particular, when statistical assumptions are violated, the probability of a test statistic may be inaccurate, distorting Type I or Type II error rates. (Nimon, 2012).

4.9.1.2 Measures of Distribution; Skewness and Kurtosis

According to Park (2015) one common assumption is that a random variable is normally distributed. In many statistical analyses, normality is often conveniently assumed without any empirical evidence or test. But normality is critical in many statistical methods. When this assumption is violated, interpretation and inference may not be reliable or valid. Lack of symmetry (skewness) and pointiness (kurtosis) are two main ways in which a distribution can deviate from normal. The values for these parameters should be zero in a normal distribution. (Ghasemi and Zahedias, 2012)

Kim (2013) stated that for small samples ($n < 50$), if absolute z-scores for either skewness or kurtosis are larger than 1.96, which corresponds with an alpha level 0.05, then reject the null hypothesis and conclude the distribution of the sample is non-normal. For medium-sized samples ($50 < n < 300$), reject the null hypothesis at absolute z-value over 3.29, which corresponds with an alpha level 0.05, and conclude the distribution of the sample is non-normal. The following table summarizes the skewness and kurtosis results of the variables that were used in the regression models.

Table 14 Skewness and Kurtosis result for M&E practices.

Variables	Skewness		Kurtosis	
	Statistic	Std. Error of Skewness	Statistic	Std. Error of Kurtosis
M&E Policy	-0.652	0.247	-1.249	0.490
M&E Resource	0.282	0.247	-1.475	0.490
M&E Planning	0.191	0.247	-1.375	0.490
M&E Process	-0.060	0.247	-1.598	0.490

Source: Survey Output (2022)

As can be observed from the tables the results; skewness and kurtosis values in relation to standard errors is between the acceptable ranges of ± 2.00 .

4.9.1.3 Multicollinearity Test

Multicollinearity is a situation when a high correlation is detected between two or more predictor variables. It can be detected with tolerance values and Variance Inflation Factor (VIF). According to Pallant (2005) tolerance is an indicator of how much of the variability of the specified independent is not explained by the other independent variables in the model. If the value is very small (less than 0.10) it indicates that the multiple correlations with the other variable is high and it suggests the possibility of multicollinearity. The variance inflation factor (VIF), which is the inverse of the tolerance value, is the other.

There is no multicollinearity if VIF values vary between 1 and 10. If the VIF is greater than 10, there is multicollinearity. As illustrated in table 15 below. There is no multicollinearity based on the variable tolerance and VIF. M&E Policy has a VIF value of 3.125, M&E Resource has a value of 2.233, M&E Planning has a value of 1.932, and M&E Process has a value of 1.857, therefore it fits the criteria and there is no problem with multicollinearity.

Table 15 Collinearity Statistics for Regression

Coefficients

Model		Collinearity Statistics	
		Tolerance	VIF
1	M&E Policy	.320	3.125
	M&E Resource	.448	2.233
	M&E Planning	.518	1.932
	M&E Process	.538	1.857

Source: Survey Output (2022)

4.9.1.4 Multiple Regression Analysis

Since descriptive analysis does not determine any significant results in predicting the effect of various M&E Practices on project performance, further analysis using advanced statistical methods such as multiple linear regressions is required. Multiple regression analysis is widely

used method in research to explore the correlation between one dependent variable and more than two independent variables. In this study, the overall effect on project performance as a dependent variable is correlated with M&E Policy, M&E planning, M&E Process and M&E resources, as independent variables by using the technique of standard multiple regressions in SPSS. The result of multiple regressions is the development of a regression equation (line of best fit) between the dependent and independent variables. The following tables show the regression analysis for the variables, results are discussed and interpreted based on the table below.

Table 16 Regression Model summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.594 ^a	.353	.324	.38318
a. Predictors: (Constant), M&E Policy, M&E Planning, M&E Process, M&E resources				

Source: Survey Output (2022)

The F-ratio in the ANOVA table 17 above tests whether the overall regression model is a good fit for the data. The table shows that the independent variables statistically significantly predict the dependent variable, $p < .005$ (i.e., the regression model is a good fit of the data)

Table 17 ANOVA Test Result

ANOVA^a						
Model		Sum of Squares	DF	Mean Square	F	Sig.
1	Regression	7.201	4	1.800	12.261	<.001 ^b
	Residual	13.214	90	.147		
	Total	20.415	94			
a. Dependent Variable: Influence on Project Performance						
b. Predictors: (Constant), M&E Policy, M&E Planning, M&E Process, M&E resources						

Source: Survey Output (2022)

Table 18 Regression Model Test

Coefficients^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.147	.126		-1.165	.247
	M&E Planning	.145	.069	.247	2.099	.039
	M&E Process	.151	.064	.273	2.357	.021
	M&E resources	.162	.077	.286	2.115	.037
	M& E Policy	-.066	.075	-.118	-.887	.378
a. Dependent Variable: Project Performance						

Source: Survey Output (2022)

The multiple linear regression as indicated in Table 18 shows that the model is statically significant at $p < 0.05$ level. The table also shows a positive relationship ($r = 0.574$) between M&E practices and project performance. As can be seen from the adjusted R^2 value of 0.324, 32.4% of the variability in the dependent variable can be explained by the independent variables.

The ANOVA analysis shows that the model indicates a linear relationship between the variables which is significant at the 99% confidence interval.

From the regression result it can be seen that M&E Process ($\beta = 0.151$), M&E resources ($\beta = 0.162$) M&E Planning ($\beta = 0.145$) are the factors that would most likely have a significant at $p < 0.05$ significance level having effect on Performance of the building construction companies in Addis Ababa with significance level 0.021, 0.037, 0.039 respectively. .

From the regression result it can be seen that M&E Policy ($\beta = -0.066$) is not significant as $p = 0.375$ which is greater than 0.05 significant level.

CHAPTER-FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 INTRODUCTUION

The study sought to establish the influence of monitoring practices on the performance of building construction companies. This chapter provides a summary of the findings of the study based on the objectives of the study presents the conclusions from the findings and gives recommendations and areas of further research in order to fill the gaps identified in the study. The study adopted a descriptive study design, with the questionnaire being utilized as a tool in the collection of primary data from the respondents. The patterns in the collected data were analyzed by the aid of descriptive statistics to include frequency, tables, and means, along with standard deviations.

5.2 Summary of the Findings

The study aimed at investigating the influence of monitoring practices on project performance of building construction companies a case of Addis Ababa city. The independent variables for the study include: M&E Policy, M&E Planning, M&E Resource and M&E Process. Based on the research objective, questionnaires were prepared and distributed to 126 professionals. From this, the researcher collects 95 (75.4%).

The study revealed that there was a significant relationship between M&E practices and project performance with highest influencer being M&E Process and M&E planning. As a result, this

had an impact on project performance because the way M&E processes are carried out influences whether or not projects in the organization meet their goals and objectives. Respondents in the study had a positive regard in areas where the M&E process and about companies commitment in providing M&E resource respective projects. The data gathered through questionnaire survey and analyzed using SPSS software summary of the findings have been outlined as follows:

- The results on M&E policy revealed that respondents disagree on the company having a well-structured policy or frame work and in using of modern technologies for implementation the M&E practices. Furthermore the study shows a promising response that shows there is a good support from the executive management and M& E practices are check with other companies for further improvement. From the respondents over all the M&E policy of a building construction company needs improvement.
- The overall mean on the actual M&E Policy, M&E Planning, and M&E Resource existence in the companies is not that significant with a mean of 2.93, 2.99, and 3.15. Whereas these factors have great impact on the project performance. Based on the response of the degree of influence of the monitoring and evaluation policy, planning, resource and process of grade 1 building construction company's performance is significant where respondents agreed with average mean value of 3.94, 4.03, 3.97 and 4.21.
- Highest correlation between the independent variables indicated a strong relationship between M&E Policy and M&E Resources ($r=0.691$) and M&E Resources and M&E Planning ($r=0.660$).
- From the regression result it can be concluded that M&E Process, M&E resources, M&E Planning are the factors that would most likely have a significant influence on Performance of the building construction companies in Addis Ababa.

Finally, a multiple regression analysis was conducted to test the hypothesis. From the analysis result that M&E Process ($\beta=0.151$), M&E resources ($\beta=0.162$) M&E Planning ($\beta=0.145$) are the factors that would most likely have a significant at $p<0.05$ significance level having effect on Performance of the building construction companies in Addis Ababa with significance level

0.021, 0.037, 0.039 respectively. From the regression result it can be seen that M&E Policy ($\beta = -0.066$) is not significant as $p = 0.375$ which is greater than $p = 0.05$ significant level.

In addition, the result shows that the model tested is significant $p < 0.05$ with R square 0.324. This value indicates that project performance was influenced by M&E Planning, M&E Resource, and M&E process by 32.4%. Moreover, the findings revealed that, the M&E process is found to be the most dominant M&E practice in influencing the effect of project performance in Addis Ababa building Construction Company.

5.3 Conclusion

The conclusions of the whole study were made through a comparison of the research question and the end results. The study's research question was to look at the current M&E practices in construction companies. When compared to the practices of M&E policy and M&E Planning, it was discovered that M&E Resource and M&E Process are more adopted in the various organizations in this study. The study indicated that M&E policy and M&E planning need to be improved since they pave the way for better M&E practice, which will lead to greater project performance.

As per the findings of the study it can be concluded that all the independent variables (M&E Planning, M&E Resource and M&E process practices) in the study influence building construction projects performance (dependent variable). The relationship was confirmed through correlation analysis which revealed that there was a positive significant linear relationship between these M&E practices and projects performance. Therefore, the study concluded that M&E Planning, M&E Resource and M&E process practices influence project performance.

In this study, it was discovered that all M&E practices, including M&E planning, M&E resource, and M&E process related practices, have a significant impact on project performance. This suggests that there is a considerable and favorable association between M&E practice and project performance. This indicates that as M&E practices improve, so will project performance.

According to the findings of the study, M&E practices such as M&E planning, M&E resource, and M&E process had a positive impact on project performance, which is significant. Out of the four independent variables M&E policy does not have an influence of the performance of companies.

Last but not least, we may conclude that if considerable attention is not paid to these practices that have a significant impact on project performance, achieving project objectives will be extremely difficult.

5.4 Recommendations

Based on the findings of this study the following recommendations were proposed in relation to each objective of the study. On the influence of M&E practices on building construction companies. People should be trained on how to prepare monitoring plans and other documents required in projects. The researcher further recommends that

- i. The senior management should give M&E the attention it deserves, follow and assure the presence of adequate and clear M&E rules, and correctly communicate these standards to everyone working in M&E as well as the whole business. It's crucial for all parties involved in a project to share the same knowledge since this makes it easier to carry out efficient project M&E.
- ii. Companies should implement M&E policy to have a well-structured policy or framework. The framework will aid in improving the performance of monitoring and evaluation.
- iii. Companies should put in place a technological system to help with monitoring and evaluation. Using information and communication technology to take use of technology's capacity to enhance data consistency, lower the cost of real-time data collecting, and boost data accuracy. The survey found that the companies are still using traditional monitoring and evaluation methods.

- iv. The different approaches should be taken to improve M and E practices during project implementation to enhance the project performance. Companies can enhance project monitoring and evaluation by conducting assessments of the employees' training needs based on their knowledge and skills, motivation to carry out their duties, and the organizational environment in which they operate, and then providing them with follow-up training on M&E.
- v. Monitoring and evaluation employees should be highly trained in order to meet M&E objectives. Staff should also be given occasional refresher training to keep them current in their specialties. In the course of the study, it was established that lack of training on M&E has a significant influence on the project performance. This will enhance efficiency and productivity of the M&E team.
- vi. The researcher recommends projects must have a specific well-defined source of financing the M&E exercise. In order to improve project performance companies should enhance monitoring and evaluation best practices.

5.5 Recommended areas for further Study

There is a need for similar studies to be carried out in other industries, sectors, and countries for comparison reasons if the link between M&E practices and project performance can be generalized. Future research could be built on this study by analyzing M&E practices in many industries and agencies in both qualitative and quantitative ways, using other approaches not employed in this study. Because project M&E practices are broad, the study recommends that the roles or influences of M&E practices that have not been covered in the study on sharing and transferring project management skills, cognitive skills, technical skills, and human skills within or outside of organizations projects be investigated.

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APPENDX

APPENDEX-A

Questionnaire for data collection

Dear respondents,

I am undertaking a research survey on building construction project focusing on Monitoring and Evaluation. The research is an individual research project as part of my study for MA Degree at Addis Ababa University. The main purpose of the research questionnaire is to collect information regarding the influence of M&E practice on Grade 1 building Construction Company's performance.

You are invited to participate in this survey as a key staff member. The information you submit in response to the questionnaire items will be used to compile the data required for the study. All information you supply will be kept strictly secret and used solely for academic research. As a result, please take your time answering each question. There is no correct or incorrect answer. If you are unsure of an answer, please provide your best guess. I appreciate your participation and appreciate your time, work, and effort. If you have any further questions, please contact me at the address listed below.

Sincerely,

Meron Abayneh

Engineering Department Head at Gift construction PLC.

Post graduate student, Project Management

Addis Ababa University

Email Chinoabayneh@gmail.com

Cellphone No. 0910201604

QUESTIONNAIRE

Please provide the following information about yourself and the firm. Kindly put a tick (✓) in the box next to the selected response.

SECTION A: GENERAL INFORMATION

Name of organization

A. Gender: 1. Male ☐ 2. Female ☐

B. Age (in years):

1. 20-30 ☐ 2. 30-40 ☐ 3. 40-50 ☐ 4. Above 50 ☐

C. Level of Education

1. Masters [MA/MSc] ☐ 2. Undergraduate [BSc] ☐
3. College Diploma ☐ 4. Certificate ☐

D. In which department are you working:

E. Length of service in the organization (in years).

1. < 5 years ☐ 2. 5-10 years ☐ 3. 10-15 years ☐ 4. > 15 years ☐

F. Your work experience in monitoring and evaluation activities.

1. 1-5 years ☐ 2. 5-10 years ☐ 3. 10-15 years ☐ 4. > 15 years ☐

G. How often do you carry out Monitoring & Evaluation exercise in your projects?

1. Daily ☐ 2. Weekly ☐ 3. Monthly ☐ 4. Quarterly ☐

5. Other (specify)_____.

SECTION B: COMPONENTS OF MONITORING AND EVALUATION PRACTICE OF BUILDING CONSTRUCTION COMPANY.

1. Indicate your level of agreement with the following statements as regards monitoring and evaluation practice in the company? Using a scale of 1 to 5 where 1 - Strongly Disagree, 2 - Disagree, 3 - Neutral, 4 - Agree, and 5 - Strongly Agree

Variables	No	Description	Degree Of Presence M&E Practice.					Degree Of influence on Project Performance				
			1	2	3	4	5	1	2	3	4	5
M&E Policy	1	The company has a well-defined policy/frame work and standards for carrying out Monitoring and Evaluation exercise for its projects.										
	2	There are a well laid guidelines on the intervals and the frequencies of carrying out Monitoring and Evaluation										
	3	The Executive management of the company's has a positive attitude towards monitoring and evaluation. And Communication strategy is developed to address the flow of information.										
	4	The organization uses project management software for Monitoring and Evaluation of the projects.										
	5	Monitoring and Evaluation procedures in the company are definite, clear and easily understood in the project.										
	6	The company compares its Monitoring and Evaluation processes to those of other companies.										
	7	M & E tools are well assessed if they are applicable in every project.										
M&E Planning	8	At the project initial stage the project allocate funds for monitoring and evaluation										
	9	The project plans contain the M and E planning process										
	10	The M&E employees are well trained on effective project planning practices in the companies' projects.										
	11	The monitoring and evaluation plans are continually checked for improvement in subsequent projects										
	12	The staff roles match their experience and qualifications in the M&E team										
	13	There are regular planning meetings by the M&E team at the Project.										
	14	The company has got skilled personnel who carry out M&E exercise on the projects										

M&E Resources	15	The organization has adequate capacity or resources to Implement M&E work plan.											
	16	The tools, systems, and applications required for proper project M&E are sufficiently available											
	17	There are appropriate transportation facilities to let the M&E personnel move around the projects.											
	18	As a kind of motivation, the organization provides suitable compensation to the M&E workforce.											
	19	The company has made a significant financial commitment to the implementation of the M&E work plan for the projects.											
	20	The company is willing to invest money to improve the M&E management											
	21	The M&E officers are knowledgeable in the day-to day management of the M&E system											
M&E Process	22	Project progress reports are prepared, submitted and acted upon on time.											
	23	The progress reports are clear , detailed and Remedial measures are acted upon accordingly											
	24	The communication is effective and efficient											
	25	Accountability levels in the projects are good											
	26	The site meetings are scheduled in good time and regularly by the M&E team.											
	27	The M&E team holds regular meetings to discuss the project implementation reports											
	28	There is smooth flow of information/instructions from the top management to the M&E team at the Company											

SECTION C: PROJECT PERFORMANCE OF BC-1 BUILDING CONSTRUCTION COMPANIES.

What factors define project performance in building construction companies? Please indicate your level of agreement with the following statements by making an (X) for the table below with the following scores in mind. 1 to 5 where 1 - Strongly Disagree, 2 - Disagree, 3 - Neutral, 4 - Agree, and 5 - Strongly Agree

S/No	Statement	1	2	3	4	5
	Project Performance					
1	The project meets its intended goals and objectives					
2	Projects are completed within the expected time frame.					
3	Projects are completed within the estimated budget.					
4	Concluded projects meet the required scope and quality.					
5	There is proper utilization of projects resources					
6	Monitoring and Evaluation facilitates transparency and accountability of projects resources.					
7	Seeking projects feedbacks from stakeholders improves performance					

7. Kindly make any other comments on how your organization determine project performance

Thank you for your participation.

No.	Contractor Name	No.	Contractor Name
1	3M Engineering & Construction PLC	39	Koracon Construction
2	Adam Construction (Samuel Bogale)	40	Kulubi Construction
3	Africawit Construction PLC	41	Lorat Construction
4	Alas Construction PLC	42	Lucy Engineering P.L.C.
5	ALTABE PLC	43	Magercon P.L.C.
6	ATS Engineering PLC	44	Megelta Construction PLC
7	Ayenaleme Gashawe Ariga	45	Mela Engineering & Construction P.L.C.
8	Bamacon Engineering P.L.C.	46	Mepo Contracting and Management Services PLC
9	Beha Consturction (Behailu Tefera Seifu)	47	Mohammed Abas
10	Bekele Sorsa Building Contractor	48	Mohammed Yesufe Eshete
11	Bereka Construction	49	Nasew Construction P.L.C.
12	Bereket Endashaw Building Contractor	50	Orbit Engineering & Construction P.L.C.
13	Berhan Tobiaw Mareye	51	Orrix Construction PLC
14	Bright Construction PLC	52	Radar Construction
15	Capstone Engineering	53	Rediete-Dagem Engineering & Construction P.L.C.
16	Cobalt Construction PLC	54	Roel Construction
17	Crafts Construction PLC	55	SA Construction P.L.C.
18	Daniel Tsegaye G/Yohannes	56	SA Construction P.L.C.
19	Data Construction PLC	57	Samket Engineering & Construction PLC
20	Dawit Girmay Building Contractor	58	Samson G/Yohannes Building Contractor
21	Demera Engineering Construction	59	Samuel S/Mariam Endale
22	Desalegn Asrade Kassa	60	Santa Maria Construction P.L.C.
23	Dugda Construction PLC	61	Sina Construction P.L.C.
24	EL General Business PLC	62	Tamrat Temesgen Building Contractor
25	Elmiolindo Construction P.L.C.	63	Teklehaimanot Asgedom Building Contractor
26	Equator Engineering Construction PLC	64	TIKS Construction
27	Etete Construction	65	Tiku Berhane Building Contractor
28	Flintstone Engineering	66	Trust Construction
29	GAD Construction PLC	67	United Construction P.L.C.
30	Genale Construction PLC	68	Unity Engineering P.L.C (Assefa Demssie)
31	Getachew Atsbeha Kidanu	69	Universal Construction P.L.C.
32	Jafar Construction & Real State	70	Yerer Construction P.L.C.
33	Justice Building Contractor P.L.C.	71	Yeshi PLC
34	K.K.G. Building Contractor	72	Yohannes Haile Building Contractor
35	Kasma Engineering P.L.C.	73	Yosef Kassaye Building Contractor
36	Kassa & Sons Construction P.L.C.	74	Zamra Construction PLC
37	Kassahun Abeje Building Contractor	75	Ziquala Building Contractor
38	Kibco Service & Investment PLC		

Table 19 List of BC 1 Contractors