ST. MARY UNIVERSITY

SCHOOL OF GRADUATE STUDIES

ASSESSMENT OF THE PRACTICES AND CHALLENGES OF MONITORING AND EVALUATION IN THE KALITI METAL PRODUCTS FACTORY (KMPF)

BY: NEBIYOU BETRU WOLDEHANNA

Advisor:: ASMAMAW GETIE (ASSISTANT PROFESSOR)

JUNE 2024

ADDIS ABAB, ETHIOPIA

ST. MARY'S UNIVERSITY
SCHOOL OF GRADUATE STUDIES

ASSESSMENT OF THE PRACTICES AND CHALLENGES OF MONITORING AND EVALUATION IN THE KALITI METAL PRODUCTS FACTORY

BY

NEBIYOU BETRU WOLDEHANNA

SGS0522/2015A

A THESIS SUBMITTED TO:

SCHOOL OF GRADUATE STUDIES

IN PARTIAL FULFILMENT OF THE REQUIREMENTS

FOR AWARD OF THE DEGREE OF MASTER OF ARTS IN PROJECT MANAGEMENT

JUNE 2024

ADDIS ABABA

ETHIOPIA

ST. MARY'S UNIVERSITY

SCHOOL OF GRADUATE STUDIES

ASSESSMENT OF THE PRACTICES AND CHALLENGES OF MONITORING AND EVALUATION IN THE KALITI METAL PRODUCTS FACTORY

BY

NEBIYOU BETRU WOLDEHANNA

APPROVED BY BOARD OF EXAMINERS

College dean_____ Signature_____Date _____

Examiner (External) Tassew Shedega (PhD) Signature_____ Date July 09, 2024

Examiner (Internal) Muluadam Alemu (PhD) Signature_____ Date July 09,02024

Advisor Asmamaw Getie (Asst. Prof) Signature_____ Date July 09, 2024

DECLARATION

I affirm that the research work titled **Assessment of the Practices and Challenges of Monitoring and Evaluation in the Kaliti Metal Products Factory** is my original work conducted under the supervision of my advisor, Asmamaw Getie (Assistant Professor). This work has not been submitted to any other institution for evaluation or the conferral of any certificates, diplomas, or degrees, aside from the assessment at St Mary's University. All pages are formatted in the accepted font and margin alignment, and proper acknowledgment has been given to all utilized information and materials.

_____

Nebiyou Betru Woldehanna

St Mary's University

Addis Ababa, Ethiopia

July, 2024

ENDORSEMENT

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

Name of Advisor:

ASMAMAW GETIE (Assistant Professor)

St Mary's University, Addis Ababa

Signature

July 2024

ACKNOWLEDGMENTS

My almighty God, who guided me through every step of this journey, I offer my deepest gratitude. Your unwavering support and blessings sustained me during the challenging moments. Next, I would like to acknowledge my advisor Asmamaw Getie (Assistant Professor) for his support in preparing this thesis from providing the format to the compilation of the whole document and willingness and commitment to guide me throughout of this thesis.

To my father, whose wisdom, encouragement, and sacrifices have shaped my character and fueled my determination, thank you. Your unwavering belief in my abilities kept me going. To my mother, thank you for your constant prayers and support throughout my life. Your faith in me has been a source of strength and inspiration.

I extend my heartfelt appreciation to the management and staff of KMPF (Kaliti Metal Products Factory), who generously shared their expertise and provided valuable insights. Your commitment to excellence in project monitoring and evaluation inspired me.

TABLE OF CONTENTS

Catalog

LIST OF TABLES

LIST OF FIGURES

ACRONYMS

IFRS: International Federation of Red Cross and Red Crescent Societies

ILO: International Labour Organization

KMPF: Kaliti Metal Products Factory LFA: Logical Framework Approach

M&E: Monitoring and Evaluation PMI: Project Management Institute

R&D: Research and Development

SPSS: Statistical Package for the Social Sciences

USAID: United States Agency for International Development

ABSTRACT

This study aimed to assess the current practices and challenges associated with monitoring and evaluation at Kaliti Metal Products Factory. Both qualitative and quantitative data collection techniques were employed. Quantitative methods involve collecting numeric data through surveys, structured questionnaires, and statistical records of M&E practices. In contrast, qualitative methods gather non-numeric data through interviews, focus groups, and observations, offering in-depth, contextual understanding of the experiences, individuals involved in these practices. Purposive sample included fifteen individuals divided into three group's management personnel, five managerial-level staff members, and two technical leaders, all of whom participated in focus group discussions. Additionally, a census sampling method was used due to the limited size of the target population, ensuring that every member was included in the study. Data collection involved primary sources, such as questionnaires and focus group discussions, as well as secondary sources, collected from records of the organization's narrative annual reports. Descriptive were employed to analyze quantitative data, while results from group focus discussions were presented in narrative analysis. However, dissemination of project results was identified as the highest-ranking challenge of effective monitoring and evaluation. The analysis of M&E practices highlights the importance of well-established systems, meticulous data management, and stakeholder involvement for effective evaluation, while challenges exist in planning and stakeholder engagement. KMPF's data management for M&E demonstrates that while the selection of tools and dissemination methods are strong, there is a need to focus on enhancing the use of collected data to influence decision-making and planning processes more effectively. Key challenges include inadequate budget allocation, a lack of qualified M&E technical experts, and limited community involvement throughout production life-cycles. Other issues include irregular training and capacity-building programs for data collectors, impacting their ability to effectively monitor and evaluate projects. The M&E system should be periodically assessed in order to identify areas for improvement and adapt to changing needs.

Key words: ***Monitoring and Evaluation, challenges of Monitoring and Evaluation, effectiveness***

CHAPTER ONE
INTRODUCTION

1.1 Background of the study

The Ethiopian large-scale steel industry, exemplified by the Kaliti Metal Products Factory, tackles with a critical issue like the under-utilization of project management tools and techniques. The Kaliti Metal Products Factory (KMPF) has successfully transitioned from its project implementation phase to full operational status. As a key player in the metal products industry, KMPF is now focused on optimizing its production processes and maintaining high-quality standards. In this context, the application of Monitoring and Evaluation (M&E) practices is essential to ensure that the factory's operational activities align with its strategic goals and deliver sustained performance improvements. This study explores how M&E activities are integrated into KMPF's ongoing operations and evaluates their effectiveness in a real-world, functioning organizational setting (Kitaw, 2017.)

Kaliti Metal Products Factory (KMPF) is one of Ethiopia's manufacturing industries, significantly contributing to the country's socioeconomic development. As a leading metal processing factory, KMPF acts as a catalyst for Ethiopia’s economic growth by supporting critical sectors like construction, job creation, and generating substantial tax revenue. The factory is committed to becoming a strategic player in Ethiopia’s emerging economy, striving to enhance its competitiveness and capture a significant market sharing line with its growth ambitions, KMPF is expanding its product portfolio with new offerings. However, these new products have yet to be evaluated using non-financial performance indicators, such as operational efficiency, customer satisfaction, and innovation capabilities. This gap highlights the need for comprehensive Monitoring and Evaluation (M&E) practices that go beyond financial metrics to assess and optimize the factory's overall performance and market impact(Mesfin & Deres, 2018). This deficiency significantly impedes the achievement of successful project outcomes and overall organizational success. To overcome these challenges and boost the performance and competitiveness of the steel industry, it is imperative to implement robust project management practices, with a particular focus on monitoring and evaluation (M&E) practices (AW et al., 2017).

Project management is the application of knowledge, skills, tools, and techniques to guide a project from its initiation to successful completion (Project Management Institute, 2021). This structured approach ensures that projects meet specific objectives within constraints like time, budget, and scope. It involves a defined life cycle with five core phases: initiation, planning, execution, monitoring and controlling, and closure (Project Management Institute, 2021).

Project management has a critical relationship with monitoring and evaluation (M&E). M&E is a process of collecting, analyzing, and using information to track the progress and outcomes of projects and programs. M&E can help ensure the efficient and effective use of resources, identify and solve problems, enhance accountability and learning, and demonstrate the impact and value of interventions. However, the practice and challenges of M&E in steel industry projects in Ethiopia have not been adequately studied and documented (USAID, 2016).

In the absence of effective monitoring and evaluation, it would be difficult to know whether the intended results are being achieved as planned and what corrective action may be needed to ensure the delivery of the intended results (UNDP, 2009). In order to successfully monitor and assess a project A good organizational arrangement of monitoring and evaluation (UNDP, 2009); reference point used for comparison with monitoring or evaluation data collected during or after the implementation of a strategy, project, or activity (USAID, 2017); setting relevant, clear, and SMART indicators to assess the progress of a plan and setting a plan to disseminate the results of M&E (IFRC, 2011) are among the necessary factors for conducting monitoring and evaluation (M&E).

Even though M&E is essential to the success of a project, carrying out efficient M&E activities has its challenges with difficulties. They include a lack of institutional capacity, a lack of funding and budgetary allotments for monitoring and evaluation, a lack of coordination between planning, budgeting, and monitoring and evaluation, a lack of demand for and application of the findings of monitoring and evaluation, and inaccurate, incomplete, and inconsistent data. Clinton & Callistus (2018).

1.2. Statement of the problem

The existing body of research predominantly focuses on monitoring and evaluation (M&E) in non-industrial construction projects, such as infrastructural, commercial, and residential undertakings (Ayalew et al., 2016; Mengistu & Mahesh, 2019). Effective monitoring and evaluation (M&E) practices are critical for project success. However, existing literature highlights several challenges faced during M&E implementation, including weak institutional capacity, resource constraints, disconnects between planning and M&E, data quality issues, and inconsistencies. Projects lacking robust M&E procedures often receive low performance ratings (Callistus & Clinton, 2018; Robert, 2010). Despite extensive research on monitoring and evaluation (M&E) practices during the construction phase of projects like infrastructure, commercial, and residential developments, there is a significant gap in understanding and implementing M&E during the operational phase. This is crucial for ensuring continuous improvement and sustainability in project outcomes. Moreover, studies conducted in Ethiopia (Tesfalem, 2019; Hailemariam, 2020) emphasize the positive impact of M&E factors on project success across various sectors, recommending improvements in M&E practices to enhance project performance. However, these insights often focus on initial project stages or sector-specific cases, such as telecom expansions and new product launches in banking, without addressing the unique challenges and requirements during ongoing operations. For instance, the Kaliti Metal Products Factory, now in its operational phase, highlights the need for better understanding of sector-specific M&E practices in manufacturing (Hailemariam, 2020).

Additionally, there is a lack of a standardized M&E framework for operational phases, which is essential for achieving consistent operational excellence across sectors. Therefore, it is crucial to explore how organizations can transition effective M&E practices from the construction phase to the operational phase, optimize M&E for operational efficiency in industrial settings, overcome operational challenges in sectors like manufacturing, and develop continuous and standardized M&E systems to support sustained success and operational excellence in diverse contexts.

1.3. Research Question

1. What is the current monitoring and evaluation practices in KMPF?
2. What are the specific challenges faced by KMPF in implementing effective M&E practices?
3. How do these challenges affect the effectiveness of M&E practices at KMPF?

1.4. Objective of the study

1.4.1. General Objective

The main goal of this study was to assess the current practices and challenges associated with monitoring and evaluation (M&E) at Kaliti Metal Products Factory (KMPF).

1.4.2. Specific objectives

- To assess the current monitoring and evaluation practices in KMPF.
- To examine the challenges faced by KMPF in implementing effective M&E practices.
- To explore the impact of the identified challenges on the overall effectiveness of M&E practices.

1.5. Significance of the study

This study holds significant value for improving the monitoring and evaluation effectiveness at Kaliti Metal Products Factory (KMPF). By assessing current, M&E practices and identifying the challenges faced in their implementation, this investigation can provide crucial insights for strengthening KMPF's ability to deliver projects on time, within budget, and achieve their desired out comes. The research contributes to filling the knowledge gap related to effective M&E strategies within an industrial context.

1.6. Scope & Limitations of the Study

1.6.1. Scope of the Study

This study focuses on one of the largest steel manufacturing industries in Ethiopia, the Kaliti Metal Products Factory in Addis Ababa, with a specific aim to assess the current practices and operational challenges within the organization. Given the focus on this single factory, the findings may not be directly applicable to other industries or regions.

The research targets professionals working across different departments of the factory, exploring key operational practices such as manufacturing processes, workforce management, supply chain logistics, sustainability initiatives, and innovation strategies, significant operational challenges, including resource constraints like raw material and financial limitations, technological hurdles in adopting advanced machinery, regulatory compliance issues, market competition pressures, and inefficiencies in production processes.

1.6.2. Limitation of the study

The study is also delimited to the Kaliti Metal Product Factory and research is conducted over a specific period, and longitudinal aspects may not be fully explored. This limitation may affect the ability to capture changes over an extended period. Additionally, it was challenging to find secondary material that was organized and contained recorded evidence.

1.7. Organization of the Study

The study is divided into five chapters structurally. The first chapter covers the study's background, problem statement, research questions, objectives, significance, scope, and delimitation. The theoretical and empirical literature pertinent to the study's goals is examined in the second chapter, which ends with a summary of the body of literature. The third chapter provides an overview of the research approach, demographic and sampling, data collection methods, procedures, instrument validation and dependability, data processing methods, and ethical considerations. The results, discussion, and interpretation of the data are presented in Chapter four, and the study's conclusion and recommendations are summarized and discussed in Chapter five. Chapter six references and the last chapter is the appendixes.

CAHPTER TWO
REVIEW OF RELATED LITERATURE

2.1. Introduction

This chapter determines the related literature on the study to gain insight into the research topic and briefly exposes the readers to some of the major areas of the subject matter under consideration. Relevant papers were examined, with a particular emphasis on theories, frameworks, and methodological approaches.

2.2. Monitoring and Evaluation: An Overview

M&E is the process of continuously collecting data and analyzing it to see if projects and their activities are having any unintended (positive or bad) impacts, and to see if progress is being made toward the predetermined goals and objectives. It is a component of good management practices and the project cycle (UNDP, 2009). The similarities between monitoring and assessment lie in their shared emphasis on project impact, efficacy, and efficiency. While efficiency tells about whether the input into the work is correct in terms of the output, effectiveness measures the extent to which a development program or project is achieving the specific objectives set for it, and impact tells about the difference that the project has brought to the problem situation it is dealing with (Crawford, 2003). Monitoring and evaluation (M&E) are useful tools for managing and improving developmentprojects. According to (Chakraborty, 2016), Monitoring and Evaluation (M&E) plays a vital role throughout the life-cycle of a project. In the planning and design phase, M&E helps establish the project's goals, objectives, indicators, assumptions, and risks. It also assists in creating a logical framework and a performance-monitoring plan, providing a road map for the project's implementation and assessment.

During the implementation and management phases, M&E continuously tracks the project's progress and performance. It ensures that the project stays on track, identifies and addresses any problems or challenges that arise, and promotes accountability and transparency. M&E also facilitates learning and adaptation, allowing the project team to make informed

adjustments and improvements as necessary. In the reporting and communication phase, M&E plays a crucial role in sharing the project's achievements, challenges, and lessons learned with various stakeholders. This includes donors, partners, beneficiaries, and policymakers. By effectively communicating the project's results and insights, M&E helps stakeholders understand the project's impact and make informed decisions.

2.2.1. Project Monitoring

Monitoring is an ongoing process of data collection and analysis for predominantly project control with an internally driven emphasis on the efficiency of the project (Crawford and Brye, 2003). Monitoring is the routine collection and analysis of information to track progress against set plans and check compliance to establish standards. It helps identify trends and patterns, adapt strategies, and inform decisions for project/program management (IFRC, 2011). It helps identify trends and patterns, adapt strategies, and inform decisions for project/program management (IFRC, 2011).

Monitoring is a continuing managerial function that aims to provide managers, decision makers, and main stakeholders with regular feedback and early indications of progress or lack thereof in the achievement of intended results and the attainment of goals and objectives. It involves reporting on the actual performance against what was planned or expected according to predetermined standards. According to (Mulwa and Nguluu, 2003), monitoring involves observing a project frequently and regularly, collecting project information on a timely basis, and sharing it with project stakeholders in the project under focus. Monitoring is a mandatory requirement for government-sponsored projects where governments use them to determine the efficient use of their funds by organizations (Wanjala, 2017).

2.2.2. Project Evaluation

Evaluation is well defined as systematic research to understand if a program can attain its imitated outcomes and impacts. Evaluation is performed initially to determine whether the envisioned objectives and goals have been accomplished or not and furthermore, to see whether the achievement is because of the project intervention (Kultar et al., 2017). An evaluation is an assessment, as systematic and objective as possible, of an ongoing or completed project, program, or policy, its design, implementation, and Results. The goal is to determine the relevance and fulfillment of objectives, developmental efficiency, effectiveness, impact, and sustainability. An evaluation should provide credible and useful

information, enabling the incorporation of lessons 12 learned into the decision-making process of both recipients and donors.

Evaluation relates to longer-term objectives and aims to establish a summary of activities that have taken place, whether these activities have achieved their desired objectives, and the extent to which they have had an impact on the lives of the intended beneficiaries. Some people argue that evaluations should be undertaken by external actors to ensure objectivity and credibility of results, while others promote the idea of engaging the intended beneficiaries in participatory evaluation or the project implemented in self-evaluation (Ruth, 2020). Evaluation relates to longer-term objectives and aims to establish a summary of activities that have taken place, whether these activities have achieved their desired objectives, and the extent to which they have had an impact on the lives of the intended beneficiaries. Some argue that evaluations should be undertaken by external actors to ensure objectivity and credibility of results, while others promote the idea of engaging the intended beneficiaries in participatory evaluation or the project implemented in self-evaluation (Kamau and Mohamed, 2015).

2.3. Tools and Methods used in M&E systems

Project requisites differ in M&E, depending on the operating context, implementing agency capacity, and donor requirements. According to (Chaplowe,2008), at the time of developing an M&E plan, it is important to identify methods, procedures, and tools to be used to meet the project's M&E needs. The tools and techniques used to aid project managers in planning and controlling project activities are project selection and risk management tools and techniques; project initiation tools and techniques; project management planning tools and techniques; project management executing tools and techniques; and project management monitoring and controlling tools and techniques (Nabris, 2002). The study shows that M&E systems use different tools and approaches that are either complementary or substitute for each other, while others are either broad or narrow (World Bank, 2002). The M&E systems tools include performance indicators, a logical framework approach, theory-based evaluation, formal surveys, rapid appraisal methods, participatory methods, public expenditure tracking surveys, impact evaluation, cost benefit, and cost effectiveness analysis. The World Bank,2002) reported that the selection of these tools depends on the information needed, stakeholders, and the cost involved. According to (Nabris, 2002), two main methods of data collection which are formal and less formal methods). Formal methods, although expensive,

have a highdegree of reliability and validity and include surveys, participatory observations, and direct measurements.

(UNDP, 2009) expressed monitoring emphases on the implementation process and requested the key question how well is the program being implemented while analyzing the implementation process. Monitoring produces intermittent reports throughout the program cycle, focuses on project outputs for monitoring progress and making appropriate corrections, highlights areas for improvement for staff, and tracks financial costs against budget (UNDP, 2009). Evaluation measures how well program activities have met objectives, examines the extent to which outcomes can be attributed to project objectives, and describes the quality and effectiveness of the program by documenting its impact on participants and the community.

The management and best practices are determined using the M&E plan. It is an essential tool for organizing, supervising, and recording data collection. The M&E Plan keeps track of our advancements and keeps an eye on the indicators we utilize and their outcomes. By ensuring that data will be gathered and processed on time, it helps the monitoring and evaluation system function more effectively. Additionally, it aims to increase the project team's ownership of the M&E system, adding more accountability and responsibility for the M&E activities' success (Mkutano and Sang, 2018).

2.4. Frameworks for Monitoring and Evaluation

Although no single framework is ideal or suitable in every circumstance, common forms will be covered below, as demonstrated by Frankel and Gage (2007) and other authors. M&E planning, enhances clarity and coherence, and supports decision-making. Overall, it serves as a valuable tool for governments and organizations to effectively assess and improve their programs while ensuring accountability and achieving desired outcomes. Strategic and intended as a management tool, results-based frameworks put the focus on outcomes. United Nations funds, programs, and specialized agencies can refer to the "UNSDG Results-based Management Handbook," which was released by the UN Sustainable Development Group (UNSDG) in September 2011. It offers guidelines on Results-Based Management (RBM). Emphasizing accountability, national ownership of results, and stakeholder engagement, RBM is essential for efficient program administration. Strategic objectives, stakeholder participation, and results measurement are all emphasized in this handbook, which also defines RBM nomenclature. Developing monitoring and assessment strategies, making

educated decisions, and learning about the organization are all emphasized through the application of RBM.

The logic model, sometimes called an "M&E framework," provides a streamlined, linear interpretation of a project has planned use of resources and its desired ends. The logical framework approach (LFA) has played a central role in the planning and management of development and aid interventions over the last 20 years. This is the most widely used approach. Its origins lie in a planning approach for the United States military, which was then adapted by the National Space Agency (NASA) before being adopted by USAID for development projects over thirty years ago. It was adopted by European development organizations in the 1980s, and by the end of the 1990s, the LFA (or an adapted form of it) had become the standard approach required by many donors for grant applications (Aune, 2000: Reidar, 2003: and Kaplan and Garent, 2005). The choice of a particular type of framework depends on the program's specific needs, the M&E team's preferences, and the fund provider's requirements.

2.5. Institutionalizing Monitoring and Evaluation

According to (Kimaro & Tshiyoyo, 2018), institutionalization refers to the process of integrating M&E as a systematic and well-conceptualized phenomenon within an organization or public service environment. The purpose of institutionalizing M&E is to enhance the management of complex public service systems and promote efficiency and accountability. By establishing M&E as an integral part of an institution's operations, it becomes a valuable tool for assessing performance, measuring outcomes, and ensuring that objectives are met. Effective institutionalization of the M&E system results in integrated monitoring, evaluation, accountability, and learning processes. This includes defining and clarifying roles and leadership, aligning and coordinating among sectors and stakeholders, and developing internal staff capabilities.

2.6. Challenges in Project Monitoring and Evaluation

(Salum, 2017) stated that there are several constraints facing project M&E, and it is instructive to state that project failure is a common phenomenon in the Tanzania local government system. Any project that is not properly monitored and evaluated will definitely result in project failure. (Bezawit,2019) identified some factors that can cause project failure

in the public sector to include budget indiscipline, meaning implementation of projects not included in the plan or budget while neglecting, under-funding, or abandoning those in the plan/budget. There is also the challenge of an unstable political environment at the local government level, as witnessed by the constant interference of state governors coupled with a global economic meltdown. Absence of community involvement in project initiation and monitoring may result in shoddy deals and poor project execution. This could pose a security risk for the project itself, as its safety cannot be guaranteed. Community involvement will ensure that standards are upheld and provide people with a feeling of ownership over a project's implementation. These days, very few of them are still manual. Effective and efficient project control requires the use of contemporary management approaches like Management by Objectives (MBO), Zero budgeting system, plan performance and budgeting system, and so on. By fusing employees' individual goals with the organization's objectives, a management by objective approach seeks to increase employee motivation, performance, and training. At the local government level, project management has not yet fully incorporated and embraced this crucial aspect of an organization's operations (George, 2017).

2.7. Empirical Review

Results-Based Monitoring and Evaluation (RBM&E) is a fundamental component in assessing the efficacy of programs and projects across various sectors. (Birhanu et al. 2012) highlight that RBM&E focuses on measuring and assessing performance to effectively produce desired outcomes. This approach ensures that efforts are directly translated into meaningful changes in the lives of beneficiaries and their environments. RBM&E provides a strategic framework for planning and management, emphasizing improved learning and accountability, which is crucial for organizations like Kaliti Metal Products Factory (KMPF).

RBM&E is characterized by its emphasis on defining realistic expected results, monitoring progress, integrating lessons learned into management decisions, and reporting on performance. This framework helps in measuring the outputs that organizations provide and the extent to which these outputs are utilized by beneficiaries. Ultimately, RBM&E assesses how the living conditions of beneficiaries and their environments are impacted (CIDA, 2009; Macky, 2007).

2.7.1. Practices and Challenges of Monitoring and Evaluation (M&E)

(Khan, 2015) argues that RBM&E serves as a vital tool for evaluating program or project performance, allowing managers to take timely actions based on the impacts and benefits of the results. This is particularly relevant in industrial contexts like KMPF, where effective M&E can drive operational improvements and stakeholder satisfaction. Moreover, RBM&E provides frequent and timely information, enabling stakeholders to address problems promptly, take corrective measures, and maintain transparency and accountability (Davis, 2009). (Mathethwa and Jili , 2016) emphasize that implementing a results-based performance feedback strategy is crucial for overcoming challenges in M&E. This strategy helps meet the goals of projects and programs, ensuring that they achieve their intended outcomes. For KMPF, adopting RBM&E can facilitate continuous performance improvements and more efficient resource allocation.

2.7.2. Empirical Studies on M&E Practices

Several empirical studies have investigated M&E practices and their effectiveness in various organizational settings. M&E in Manufacturing Sector: In the manufacturing sector, where Kaliti Metal Products Factory operates, M&E practices are essential for quality control, process optimization, and compliance with standards. A study by (Amaratunga et al. 2002) on M&E practices in the manufacturing industry found that effective M&E systems lead to better decision-making and operational efficiencies. These systems help in tracking performance against set goals and identifying areas for improvement. M&E and Organizational Performance: The work of (Gorgens and Kusek, 2009) explored the link between M&E systems and organizational performance. Their research showed that organizations with robust M&E frameworks tend to perform better in achieving their objectives. They argue that M&E systems provide critical data that support strategic planning and resource management, leading to enhanced performance outcomes.

Challenges in M&E Implementation: Despite the benefits, implementing effective M&E systems is fraught with challenges. A study by (Rogers,2008) highlighted common barriers, including lack of expertise, inadequate funding, and resistance to change. These challenges can hinder the successful deployment of M&E practices in organizations like KMPF. M&E in Public Sector Projects: M&E practices are also crucial in public sector projects, where transparency and accountability are paramount. According to a study by Bamberger (2012), effective M&E systems in public sector projects lead to better governance and public trust.

These systems help in tracking the impact of public expenditures and ensuring that resources are used efficiently. M&E and Capacity Building: Capacity building is a significant aspect of successful M&E practices. A study by (Lusthaus et al., 2002) emphasized the importance of developing the skills and capabilities of staff involved in M&E. They argue that training and capacity- building initiatives are essential for the sustainability and effectiveness of M&E systems. The empirical literature underscores the critical role of Results-Based Monitoring and Evaluation (RBM&E) in improving organizational performance and achieving strategic goals. For Kaliti Metal Products Factory, adopting robust RBM&E practices can lead to significant improvements in operational efficiency, stakeholder satisfaction, and overall impact. However, the implementation of these practices is not without challenges. Addressing these challenges requires a strategic approach that includes capacity building, adequate funding, and fostering a culture of continuous improvement and learning.

Effective M&E ensures adherence to quality procedures and customer satisfaction. (Yirga, 2019) highlights limitations in M&E practices within the plastics manufacturing industry (Yirga, 2019). Companies might prioritize obtaining ISO certification over truly integrating quality practices. This creates a focus on documentation rather than practical implementation, hindering effective M&E. A study by (Mesel, et al., 2020) investigated metal waste management in the Ethiopian metal manufacturing industry, including KMPF (Meselu, et al., 2020). While not directly focused on M&E, the research methodology of data collection (surveys, interviews) could be adapted to assess M&E practices at KMPF. (Morris and Pinto, 2004) emphasize the importance of integrating M&E throughout the project life cycle in any industry (Morris, et al., 2004). This ensures timely identification of deviations from the project goals and allows for corrective actions.

The Project Management Institute (PMI, 2017) offers the Project Management Body of Knowledge (PMBOK Guide), which outlines various M&E frameworks and techniques applicable across industries (PMI, 2017). This study explores the challenges of implementing M&E practices in development projects within African nations. These challenges may be relevant to KMPF, considering Ethiopia's developing economic status. A study examined the role of human resources in effective M&E implementation (LILY, et al., 2017). Skilled personnel and a culture of continuous improvement are crucial for successful M&E practices.

(Oakland, 2003) Explored the use of information technology tools to enhance M&E processes. KMPF's M&E practices could benefit from exploring such technological solutions. (Oakland, 2003) suggests benchmarking performance against industry leaders to identify areas for improvement in M&E practices (Oakland, 2003). KMPF could learn from successful M&E implementations in other metal production facilities.

A research done by Sintayehu on Assessing Project Monitoring & Evaluation practices in Addis Ababa City Administration Health Bureau in the case of the Center for Diseases Control (CDC). This study adopted a descriptive research design and utilized a qualitative method to collect and analyze data on project M&E practices. The findings show that project M&E is not consistently practiced and the role of M&E is narrowly understood to the level of data collection quality assurance rather than the broader strategic project issues. The key factors that affect effective M&E practice are lack of project management knowledge and skill from top management, technical skill gap in M&E team, non-institutionalized M&E system, and functional project structure. Innovative project M&E practices are recommended for overall project success by considering M&E beyond data collection to strategic project issues (Ayele, 2018). Zerabruk Bekele conducted his thesis on An Assessment of the Monitoring Practices in Projects Contracted to YOTEK Construction PLC. Data was collected through questionnaires distributed to all the staff involved in monitoring and found that the weaknesses and strengths were not exclusive to each other, but project specific at times (Bekele, 2019).

Project monitoring and evaluation (M&E) are critical components of project management that ensure that projects are executed as planned and achieve their intended outcomes. The literature on M&E practices highlights the importance of these processes in providing accountability, learning, and decision-making support for ongoing and future projects (Fountzoula et al, 2015).

2.7.3. Monitoring and Evaluation Practices

(Pauline & Mulyungi, 2016) conducted on the impact of M&E on project performance in Kenya using a mixed-methods approach. They found that M&E had a positive and significant effect on project performance and that M&E practices were influenced by various factors, such as stakeholder involvement, project complexity, and project management skills. They also identified some challenges and recommendations for improving M&E practices in

Kenya, such as enhancing stakeholder participation, capacity building, and data quality and availability**.**

(Callistus and Clinton, 2016) found that 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 to implementation of M&E in the construction industry. Weak institutional capacity, limited resources and budgets for M&E, the weak link between planning, budgeting, and M&E, weak demand for and use of M&E results, and poor data quality, gaps, and inconsistencies were identified as the most significant barriers to implementing M&E projects in construction projects.

A study of the Assessment on Performance and Challenges of the Ethiopian Construction Industry undertaken by (Ayalew et al., 2016) found that project management practices in Ethiopia are far behind those of poor-performing developing countries in Africa. The findings of that study revealed that the level of management practice in construction projects in terms of adapting general project management procedures, functions, tools, and techniques is unsatisfactory. Schedule shifts, poor quality, inappropriate procurement systems, the inability to handle project needs, and difficulty applying best practices were also mentioned by the study as difficulties facing Ethiopia's construction industry. The top three obstacles, according to a rating study of the issues, are time, cost, and risk.

A case study on initiatives supported by Compassion International Ethiopia illustrates the impact of monitoring and evaluation procedures on project success in non-governmental organizations. Using programs financed by Compassion International Ethiopia as a case study, this master's thesis evaluates the role that monitoring and evaluation functions have in attaining project success. Monitoring and evaluation procedures and project success were shown to be significantly correlated in the study, which used a mixed-methods approach and an explanatory research design (Mesfin A., 2020).

Using a case study methodology, (Mengistu and Mahesh,2020) investigated the M&E system and practices in the Ethiopian road industry. They discovered that the road sector in Ethiopia had a weak and ineffective M&E system and practices. They also identified inadequate stakeholder participation, coordination, and feedback as major obstacles, along with subpar M&E planning, execution, and reporting. Additionally, they suggested methods for strengthening M&E communication and distribution, creating a clear M&E framework and

structure, and enhancing M&E data collecting and analysis in the Ethiopian road sector. Empirical studies suggest that effective M&E practices are characterized by clear objectives, stakeholder involvement, and the use of robust indicators and data collection methods (Olala & Nyonje, 2020). In the context of manufacturing sectors, such as as KMPF, M&E practices are often tailored to assess both financial and non-financial performance, including quality control, efficiency, and timeline adherence (Abebe, 2018). The empirical literature underscores the necessity for robust M&E practices while acknowledging the challenges that organizations like KMPF face. Addressing these challenges requires concerted efforts to enhance skills, management support, stakeholder engagement, and resource allocation.

2.7.4 Key Components of Effective M&E Systems

An effective M&E system comprises several components: clear objectives, defined indicators, reliable data collection methods, and mechanisms for feedback and adaptation. Bamberger, Rugh, and Mabry (2012) emphasize the importance of stakeholder involvement in developing M&E systems to ensure relevance and accuracy of the collected data. Additionally, a well-designed M&E system should integrate both qualitative and quantitative data to provide a comprehensive view of performance.

Case Studies in Manufacturing

Recent empirical studies highlight the varied M&E practices in manufacturing settings. For instance, a study by Ika and Lytvynov (2011) on the M&E practices in Ukrainian manufacturing firms found that companies with robust M&E systems were more likely to achieve their project objectives and exhibit higher productivity levels. These firms employed a mix of performance indicators, regular reviews, and feedback loops to refine their processes. Despite the recognized benefits, several challenges impede effective M&E implementation. A study by Kamau and Mohamed (2015) identified common barriers, such as lack of technical expertise, insufficient funding, and resistance to change. In the context of the KMPF, similar challenges are likely to exist. For example, the study by Mbiti et al. (2017) on Kenyan manufacturing firms revealed that inadequate training and limited resources were significant obstacles to successful M&E practices.

Specific Challenges in the steel Products Factory

Organizational Structure and Culture The organizational structure and culture at KMPF can significantly influence the effectiveness of M&E practices. Hierarchical structures may

impede communication and delay feedback, reducing the responsiveness of M&E systems (Hofstede, 2011). Additionally, a culture resistant to change can hinder the adoption of new M&E practices, as employees might be reluctant to embrace new processes and technologies. Resource constraints are a prevalent issue in many manufacturing settings, including KMPF. Limited financial and human resources can restrict the scope and quality of M&E activities. According to a study by Wang and Huang (2013), manufacturing firms often struggle with balancing the costs of implementing comprehensive M&E systems against the perceived benefits, leading to underinvestment in these critical functions. The availability of technical expertise is crucial for effective M&E. A lack of skilled personnel can lead to poor data quality, inaccurate analyses, and ineffective decision-making. The study by Gyorkos (2003) on M&E in health projects highlights the importance of training and capacity building in enhancing the effectiveness of M&E systems. This finding is applicable to KMPF, where investment in training programs could mitigate the challenges posed by limited technical expertise.

2.8. Chapter Summary

Monitoring and evaluation (M&E) practices are essential for ensuring the quality, efficiency, and effectiveness of large-scale steel manufacturing operations. However, the literature on M&E practices in the steel industry is scarce and fragmented, leaving a significant gap in understanding how M&E practices influence and are influenced by the industry context and stakeholder perspectives. This study aims to fill this gap by conducting mixed-methods research that explores the practice and challenges of M&E practices at Kaliti Metal Products Factory (KMPF). In addition, most of the empirical literature has focused on challenges and M&E practices in fixed projects and Donor funded programs excluding institutions and manufacturing organizations. This narrow focus neglects institutions and manufacturing organizations, further intensifying the knowledge gap regarding M&E in the industrial sector. This research aims to bridge this gap by providing a detailed examination of M&E practices within a large-scale manufacturing context.

.

2.9. Conceptual Framework

The conceptual framework is a foundational element in research that significantly enhances the clarity, focus, and coherence of a study. By delineating the independent and dependent variables and illustrating their relationships, the conceptual framework guides the research process, aligns it with the study's objectives, and provides a structured approach for interpreting findings. In the context of assessing M&E practices at KMPF, a robust conceptual framework is indispensable for systematically investigating the variables involved, addressing the research objectives, and contributing valuable insights to both academic knowledge and practical applications in the field of industrial M&E practices.

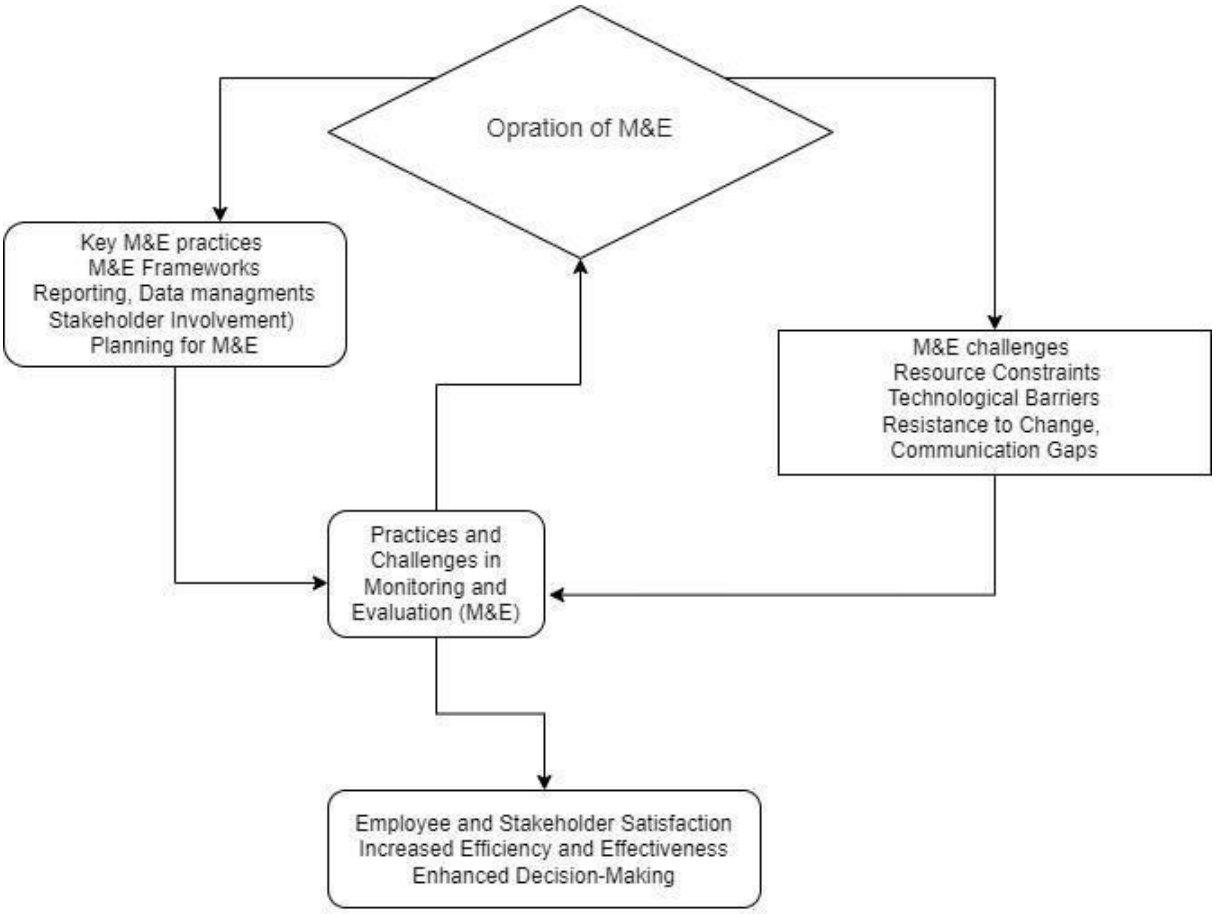

Figure 1 Conceptual frame work, source own

CAHPTER THREE
RESEARCH METHODOLOGY

3.1. Introduction

The research design and methodology employed in the study are presented in this chapter. Research design, research methodology, study population, sample size, sample framing techniques, data collection instruments, validity and reliability of research instruments, data collection processes, data analysis methodologies, and ethical issues are all covered in detail.

3.2. Research Design

A research design encompasses the plan, structure, and investigative strategy carefully crafted to address research questions or problems. It serves as the comprehensive scheme or program guiding the entire research process. The study adopted a descriptive research design and utilized questionnaires and focus group discussions to collect data on M&E practices. Descriptive research, as defined by (Kothari, 2004), involves describing the current state of affairs. It aims to provide a detailed account of who, what, where, when, and how much in a given context. Descriptive research focuses on observing and describing phenomena as they naturally occur.

3.3. Research Approach

There are various methods, such as, qualitative, and quantitative. According to Kumar (2011), qualitative research is a methodology that aims to investigate and comprehend the significance that individuals or groups attribute to a social or human issue. In assessing the practices and challenges of monitoring and evaluation at the Kaliti Metal Products Factory (KMPF), a dual qualitative and quantitative approach is essential. Qualitatively, conducting interviews and focus groups with key stakeholders such as managers, supervisors, and employees will provide rich insights into their perceptions and experiences with current practices. This approach allows for the exploration of subjective viewpoints and the identification of nuanced challenges that may not be captured through quantitative data alone.

Quantitatively, employing surveys or structured questionnaires among a representative sample of employees can gather numerical data on aspects such as performance metrics, satisfaction levels, and adherence to evaluation protocols. By integrating both qualitative and quantitative methods, a comprehensive understanding of strengths and weaknesses in monitoring and evaluation practices at KMPF can be achieved, facilitating targeted improvements and informed decision-making processes.

3.4. Population and Sampling

The practice of choosing a subset of people or observations from a larger population in order to examine the features of the full group is referred to as sampling in research. It is an essential method in social science research, statistics, and many other areas since it is frequently difficult or impossible to investigate an entire population, especially one that is enormous.

In statistics, sampling is crucial for testing hypotheses about population characteristics (Scribbr, 2019). In this study, a two approach was employed to ensure a representative sample of KMPF. Firstly, a census sample of twenty fife management personnel was chosen due to the small size of this target group. This direct engagement with key decision-makers allowed for insights into the existing Monitoring and Evaluation (M&E) systems, their perceived effectiveness, and encountered obstacles. Secondly, to complement the managerial perspective, focus group discussions were conducted using purposive sampling among five managerial-level staff members and several technical leaders. This method facilitated a collaborative environment where participants shared practical insights into how M&E practices influence daily operations and the overall efficiency of the factory. This dual-method approach ensured a comprehensive understanding of M&E practices at KMPF, combining statistical rigor with qualitative depth.

Table 1 sampling table

Department	Number of Respondents
Market Analysis & Commercial	4
Supply Management	4
Finance	2
Operations Department	6
Quality Control & Quality Assurance	4
Human Resources	2

3.5. Data Collection Method

This research used primary and secondary data collection tools, which were suitable for the research design. Primary data was collected from the management staff and operational personnel. The secondary data was derived from records of the organization's narrative annual reports, evaluation reports, internet through company's website and publications related to KMPF and the steel industry in Ethiopia.

3.6. Validity and reliability of the research instrument

3.6.1. Validity

Regarding validity and reliability in this study, the researcher adhered to relevant research guidelines and ethical considerations. For instance, the researcher requested documents to verify responses, ensuring their credibility and reliability. This approach strengthens the validity of the findings by cross-referencing participant insights with documented evidence, thereby enhancing the overall trustworthiness of the study's conclusions. According to Kothari (2004), validity was the most critical criterion and indicated the degree to which an instrument would measure what it was supposed to measure. To ensure the quality of this research, the content validity of the research instrument was checked. The content validity was verified by the advisor to this research, who looked into the appropriateness of questions and the scales of measurement.

3.6.2. Reliability

Reliability was an attribute in which data collection procedures could be repeated with the same results. According to (Kothari ,2004), a measuring instrument was reliable if it provided consistent results. Moreover, to increase the reliability of measurements, the researcher distributed questionnaires through the researcher himself to avoid variations from employee to employee, since they had the best point of sight at different positions. Cronbach's alpha test was used to test the internal consistency of the data. The questionnaires were tested using Cronbach's alpha test. Cronbach's alpha is a coefficient of reliability that gives an unbiased estimate of data generalization. A reliability coefficient of 0.7 and above is recommended(Karimi et al., 2020).

Table 2 Reliability test

Items	Number of items	Cronbach's alpha
Institutionalizing the M&E system	4	0.750
Linking M&E to objectives	1	0.680
Planning for Monitoring and Evaluation	7	0.604
Data management	7	0.812
Stakeholders Engagement in M&E	5	0.718
Effective monitoring and evaluation	10	0.701

Source: Survey result, 2024

The reliability analysis reveals varying degrees of internal consistency among the scales used in the study. The "Institutionalizing M&E system" scale, comprising 4 items, demonstrates good internal consistency with a Cronbach's alpha of 0.750, exceeding the recommended threshold of 0.7. Conversely, the single-item "Linking M&E to objectives" scale's alpha of 0.680 is not meaningful for assessing internal consistency due to its singular nature. The "Planning for Monitoring and Evaluation" scale, consisting of 7 items, falls below the threshold with a Cronbach's alpha of 0.604, suggesting less reliable consistency among its items. To enhance reliability, potential adjustments to scale items should be considered. In contrast, both the "Data management" scale (7 items, alpha = 0.812) and "Stakeholders Engagement in M&E" scale (5 items, alpha = 0.718) exhibit good internal consistency, indicating reliable measurement of their respective constructs. Similarly, the "Effective monitoring and evaluation" scale, comprising 10 items, achieves an acceptable Cronbach's alpha of 0.701, indicating satisfactory internal consistency overall. Thus, while most multi-item scales demonstrate acceptable to good internal consistency, refinement may be beneficial for the "Planning for Monitoring and Evaluation" scale to improve reliability.

3.7. Data Collection Procedures

As part of the data collection process, the researcher distributed a questionnaire and conducted a focus group discussion (FGD). Administering the FGD to the participants, allowed the discussions to be clear to them during the meeting. Second, it ensured that the respondents fully participated in the discussions. Finally, this approach enabled the researcher to obtain the right kind of information required to meet the study objectives.

3.8. Data Analysis and Presentation

After data collection, the filled-in and returned questionnaires were edited for completeness, coded, and entries were made into Statistical Package for Social Sciences (SPSS version 27). Coding is a technical process where raw data is transformed into easily tabulated form by way of assigning symbols. The Likert scale was used to measure the strength of respondents' feelings or attitudes towards statements that were formulated based on the variables and their dimensions. The variables were measured using ordinal types of measurements on a scale of 1-5, represented by strongly disagree, disagree, neutral, agree, and strongly agree.

3.8.1. Data analysis method

To assess the practices and challenges of monitoring and evaluation (M&E) at the Kaliti Metal Products Factory, two methods of data analysis can be employed:

Descriptive Analysis: This involves summarizing the collected data to describe the current state of M&E practices at KMPF. Descriptive statistics such as means, frequencies, percentages, and standard deviations can be used to quantify aspects like the frequency of M&E activities, compliance with evaluation protocols, and satisfaction levels among stakeholders.

Qualitative Narrative Analysis: Focus group discussions, interviews, and open-ended survey responses can be analyzed using thematic or narrative analysis techniques. This approach helps to uncover in-depth insights into the perceptions, experiences, and challenges related to M&E practices from the perspectives of employees, managers, and technical leaders atKMPF.

3.9. Ethical Considerations

This study considered the ethical issues that had to be considered in scientific research. The study results were based on data provided by respondents and document review, and the process was realistic and free of bias. Furthermore, the researcher obtained the consent of the discussions and promised to keep the information gathered for this study confidential.

CHAPTER FOUR

DATA PRESENTATION, ANALAYSIS AND INTERPRETATION

This chapter deals with the presentation of the survey data, the analysis of the collected data, and the interpretation of the data about the objectives of the study. It then provides the collected data by presenting, analyzing, and interpreting the data gathered from questionnaires. The data was coded, evaluated, and tabulated to explain the results of the assessment of M&E practices in KMPF.

4.1. The Profile of the Case Enterprise

The Kaliti Metal Products Factory (KMPF) was founded in 1968 by Italian investor Mr. Riso Sporando, who was a substantial shareholder, according to the 2016 annual business magazine. jointly with more investors, starting with a 500,000-birr capital. Tubular steel sections and profiles of various sorts were manufactured at the mill. The Derg regime nationalized KMPF in 1976, and it joined the National Metal Works Corporation (NMWC). The factory was once again designated as a public enterprise under the terms of Public Enterprise Proclamation 25/1992, with effect from November 10, 1992, through the Counsel of Minister's Regulation Number 54/1992. The factory has more than birr 250 million in working capital.

The factory is located in AkakiKaliti Sub city, Woreda 4 on a total land area of 99,288 square meters. KMPF is one of the metal industries in the country that manufactures range of products. The factory was acquired by Tsehay Industry Share Company from privatization and Public Enterprises supervising Agency (PPESA) since July 12, 2012. It is now working with a total capital of more than Birr 700 million and with a work force of 408 workers which is comprised of 348 38 males and 60 females. The factory is now producing trailer and cargo truck bodies, structural and furniture hollow sections, door and window frame profiles, EGA and ribbed sheets for roofing & wall cladding, galvanized corrugated iron sheet, pressed and plain sheet metal products and other products as per customer’s design.

4.2. Demographic profile of the respondents

The general characteristics of the respondents are very crucial to get insight in to the overall study, so the study started with by looking at the nature of the respondents. It is important to consider the demographic character of the respondents like education level, Job position, and work experience has an impact on project performance.

4.2.1. Age of the respondent

The respondents' age distribution shows that 18.2% are less than 30 years old, 50.0% are between 30-40 years old, and 31.8% are 40 years or older. The majority of respondents (72.7%) are male, while 27.3% are female. In terms of education, the respondents are evenly split between those holding a Bachelor's Degree (50.0%) and those with a Master's Degree (50.0%).

Table 3 Respondents profile

			N	Percent %
Respondents profile	Age	less than 30 years	4	18.2
		30-40 years	11	50.0
		40 and above years	7	31.8
		Total	22	100.0
	Sex	Male	16	72.7
		Female	6	27.3
		Total	22	100.0
	Level of Education	Bachelor Degree	11	50.0
		Master's Degree	11	50.0
		Total	22	100.0
	Position in M&E	Monitoring and evaluation Officer	3	13.6
		Program manager	5	22.7
		Project Officer	2	9.1
		Field officer	4	18.2
		Team Leader	3	13.6
		Other	5	22.7
		Total	22	100.0
	Iinvolved in	No	7	31.8
	conducting monitoring and evaluation of any project at KMPF	Yes	15	68.2
		Total	22	100.0
	Experience in project-related jobs in steel industries and other projects (if any)	1-5 years	8	36.4
		6-10 years	6	27.3
		≥11 years	8	36.4
		Total	22	100.0

Source: Survey result, 2024

4.2.2 Professional Backgrounds

The respondent's positions in M&E at KMPF are diverse, with 13.6% serving as Monitoring and Evaluation Officers, 22.7% as Program Managers, 9.1% as Project Officers, 18.2% as Field Officers, 13.6% as Team Leaders, and 22.7% in other roles. A significant majority (68.2%) of respondents have been involved in conducting M&E for projects at KMPF, indicating a high level of experience and familiarity with M&E practices within the organization.

4.2.3. Work experience of respondents

The respondent's experience in project-related jobs in the steel industry and other projects is substantial, with 36.4% having 1-5 years of experience, 27.3% having 6-10 years, and 36.4% having 11 years or more. This experience is likely to have equipped them with a deep understanding of the challenges and opportunities in M&E within the steel industry.

4.3. Descriptive Analysis of the Study Variables

The mean of respondents in each variable of factors indicates the average amount that each variable has a positive or negative response of respondents; the mean or average is a measure of central tendency that provides a general picture of the data. In this study, the mean of each factor was calculated along with the overall mean/average mean of their respective variables in order to conclude the effectiveness of M&E systems/practices in KMPF.

Continuous Improvement Culture plays a pivotal role in organizational development and effectiveness, as evidenced by the survey results from Kaliti Metal Products Factory (KMPF). The survey revealed that a significant portion of respondents exhibited a positive attitude towards Continuous Improvement, with 63.7% either agreeing or strongly agreeing with its importance. This signifies a foundational support base within the organization for ongoing enhancements and adaptations. Stakeholder Satisfaction, another critical metric, also showed promising outcomes with 68.2% of respondents either agreeing or strongly agreeing with current levels. This suggests a robust alignment between organizational goals and stakeholder expectations, indicative of effective management practices. Further analysis into additional variables such as Involving Experience (Mean Score: 4.00), Time Disseminating Culture (Mean Score: 3.95), and Staff Training (Mean Score: 3.73) underscores the importance of comprehensive strategies in fostering a conducive environment for improvement initiatives. The commitment of staff, although moderately rated (Mean Score: 0.68), represents an area for potential focus to strengthen organizational cohesion and effectiveness.

4.3.1. Implications for M&E Practices at KMPF

The survey results suggest that KMPF has a team of experienced professionals with a strong background in M&E and project management tools and techniques. The respondents' demographic characteristics, professional backgrounds, and experience in project-related jobs indicate a high level of capacity to design and implement effective M&E systems. However, the survey also highlights the need for continuous learning and improvement in M&E practices to address the challenges and opportunities identified.

Effective M&E practices are critical for ensuring that tasks meet their objectives, create value for stakeholders, and contribute to sustainable improvement outcomes. The respondents' experiences and perspectives on M&E practices at KMPF can inform the development of best practices, capacity-building initiatives, and the integration of M&E findings into decision-making processes. By leveraging the strengths and addressing the weaknesses identified in the survey, KMPF can enhance its M&E practices, leading to more effective project management and improved outcomes in the steel industry.

Table 4 Monitoring and Evaluation Practices

			N	Percent
Monitoring and Evaluation Practices	Do you think the Project Administration of Ethiopian steel industries has a well-organized M&E system?	No	7	31.8%
		Yes	15	68.2%
		Total	22	100.0%
	Would you say that Monitoring and Evaluation in Kaliti Metal Products Factory was organized and conducted in a timely manner?	No	8	36.4%
		Yes	13	59.1%
		Yes	1	4.5%
		Total	22	100.0%
	Was there a culture of disseminating Monitoring and Evaluation findings?	No	9	40.9%
		Yes	12	54.5%
		Yes	1	4.5%
		Total	22	100.0%
	Was there a culture of institutional learning and knowledge sharing?	No	8	36.4%
		Yes	13	59.1%
		Yes	1	4.5%
		Total	22	100.0%
	Was there a culture of documenting lessons learned for use in future projects?	No	9	40.9%
		Yes	12	54.5%
		Yes	1	4.5%
		Total	22	100.0%

Source: Survey result, 2024

Administration of Ethiopian steel industries, particularly focusing on the Kaliti Metal Factory project, reveal a mixed perception among respondents. While a majority (68.2%) believe that the Project Administration has a well-organized M&E system, there is an equal split (50.0% each) on whether the M&E system is decentralized and tailored for use in steel industry projects. Regarding the timeliness of M&E activities at Kaliti Metal Products Factory, a slight majority (59.1%) perceive that monitoring and evaluation were organized and conducted promptly. Additionally, there is a positive trend towards disseminating M&E findings (54.5%), fostering institutional learning and knowledge sharing (59.1%), and documenting lessons learned for future projects (54.5%). These results highlight both strengths and areas for improvement in the M&E practices within the Ethiopian steel industry, emphasizing the importance of continuous learning, knowledge sharing, and effective dissemination of findings to enhance the project's effectiveness and stability.

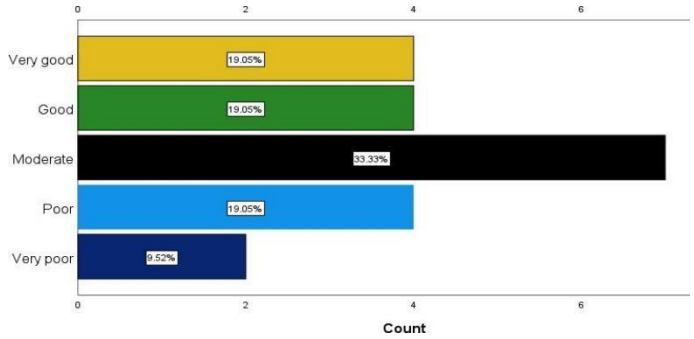

Figure 2 Commitment of top management

4.3.2. Challenges in Implementing Effective M & E Practices

Table 5 Mean description of Institutionalizing (M&E) System

	Rank	Minimum	Maximum	Mean	Std. Deviation
Staff assigned to conduct M&E were sufficient.	1	2	5	3.73	0.70
Roles and responsibilities of the staff in M&E were clearly defined and clarified.	2	2	5	3.68	0.64
Monitoring and Evaluation staff understood M&E policy (guidelines, processes, templates, tools) and framework to harmonize M&E concepts.	3	1	5	3.50	0.91
The firm provided training to staff involved in Monitoring and Evaluation.	4	1	5	3.35	1.03

Source: Survey result, 2024

The highest-ranked statement, with a mean score of 3.73, indicates that the staff assigned to conduct M&E were generally considered sufficient. This suggests that, in terms of quantity, there are enough personnel dedicated to M&E tasks, which is a positive sign for the institutionalization of the M&E system. Closely following, the clarity of roles and responsibilities of the M&E staff received a mean score of 3.68, reflecting that there is a good level of understanding among the staff about their duties within the M&E framework. This is crucial for the smooth operation of M&E activities. The understanding of M&E policy, including guidelines, processes, templates, and tools, had a mean score of 3.50. This indicates a moderate level of comprehension among the staff, suggesting that while there is some awareness of the M&E policy, there may be room for enhancing the staff's grasp of these concepts to ensure better harmonization across the firm. Lastly, the provision of training to M&E staff had the lowest rank and mean score of 3.35, with the highest standard deviation of 1.027. This points to a significant variation in responses, implying that the training provided to staff is an area that requires attention. It suggests that while some staff may have received adequate training, others may not have, leading to inconsistencies in the implementation of M&E practices.

4.3.3. Planning for Monitoring and Evaluation

Table 6 Mean description of planning for monitoring and evaluation

	Rank	Minimum	Maximum	Mean	Std. Deviation
Indicators to be measured were noted in the planning document and communicated with all team members and stakeholders	1	2	5	3.79	0.77
Acceptable levels of performance were identified, so that it is clearly understood whenthe project begins to get out of track.	2	2	5	3.75	0.944
Work plans were prepared ahead for the purpose of aligning M&Esystem with norms and standards.	3	1	5	3.73	0.935
The project was monitored and evaluated as per the documentedpolicy or guideline.	4	1	5	3.55	0.963
Budgetary and resource allocations were	5	1	5	3.36	1.049
sufficient formonitoring and evaluation practices.					
When the project was not progressing as planned, a timelycorrective action was taken as per the findings of the monitoring and evaluation.	6	1	5	3.36	1.136
Policy (guidelines, processes, templates and tools) required forproper project M&E was sufficiently available.	7	1	5	3.12	1.054

Source: Survey result, 2024

The results from the Planning for Monitoring and Evaluation section suggest that the Kaliti Metal Products Factory (KMPF) has a relatively solid foundation in place for M&E, but there are specific areas where improvements could be made to enhance the overall effectiveness of the M&E practices. The highest mean score of 3.79 for the statement regarding the communication of indicators to be measured indicates that KMPF is generally effective in noting and communicating the necessary indicators in the planning documents to all team members and stakeholders. This is essential for ensuring that everyone involved is aware of what needs to be monitored and evaluated. The identification of acceptable levels of performance, with a mean score of 3.75, shows that there is a clear understanding among the team of the performance standards. This clarity is important for recognizing when the project may be deviating from its intended path. Preparation of work plans, with a mean score of 3.73, reflects that there is a proactive approach to aligning the M&E system with established norms and standards. This proactive planning is key to maintaining consistency and quality in M&E practices. Monitoring and evaluation as per documented policy or guideline received a mean score of 3.55, suggesting that while there is adherence to policies, there may be room for more rigorous application or perhaps an update to the guidelines to ensure they are fully effective.

The sufficiency of budgetary and resource allocations for M&E practices, with a mean score of 3.36, along with the timely corrective action taken when projects do not progress as planned, also scoring 3.36, indicate areas that require attention. These aspects are critical for the smooth execution of M&E activities and for adjusting when necessary. Lastly, the availability of policy required for proper project M&E, which received the lowest mean score of 3.12, points to a need for better accessibility or development of M&E policies. Ensuring that guidelines, processes, templates, and tools are readily available and understood by all M&E staff is fundamental for the successful implementation of M&E activities.

4.3.4. Data Management of Monitoring and Evaluation

Table 7 Mean description of data management of monitoring and valuation

	Rank	Minimum	Maximum	Mean	Std. Deviation
Acceptable data collection tools for M&E were selected before starting project implementation.	1	2	5	3.83	0.717
Methods and systems in place to disseminate the findings of Monitoring and Evaluation were effective and efficient.	2	2	5	3.79	0.721
Monitoring and Evaluation data were routinely collected and analysed to measure project performance.	3	2	5	3.77	0.685
Monitoring and Evaluation information was used to assist in decision-making and planning	4	3	5	3.42	0.584

Source: Survey result, 2024

The data management aspect of Monitoring and Evaluation (M&E) at Kaliti Metal Products Factory (KMPF) shows a strong foundation with some areas identified for improvement. The selection of acceptable data collection tools for M&E prior to project implementation received the highest mean score of 3.83, indicating that the tools chosen are generally appropriate and well-received. This is a positive indicator of the initial steps taken in the

M&E process being on the right track. The effectiveness and efficiency of methods and systems to disseminate M&E findings scored a mean of 3.79, suggesting that the dissemination process is largely effective. This is crucial for ensuring that M&E findings are communicated properly and can inform relevant stakeholders. Routine collection and analysis of M&E data to measure project performance had a mean score of 3.77, reflecting a consistent approach to data management. Regular data collection is essential for tracking progress and making informed decisions. However, the use of M&E information to assist in decision-making and planning received a lower mean score of 3.42, with the lowest standard deviation, indicating a more uniform response among participants. This suggests that while data are being collected, there may be a gap in effectively utilizing this information to guide decisions and future planning.

Evaluating the effectiveness and efficiency of Monitoring and Evaluation (M&E) practices necessitates a balanced approach, focusing on both the performance of M&E activities and the prudent use of resources. The provided scores indicate robust systems for disseminating findings and collecting data routinely, yet they highlight a gap in the integration of M&E data into decision-making processes. To assess effectiveness, one should evaluate how well the M&E system achieves its goals, considering how findings are communicated and whether they lead to actionable insights or project improvements. On the efficiency front, it is crucial to analyze the resource allocation for M&E activities, comparing the costs and benefits, and to ensure that the time taken for data processes supports timely decision-making. By addressing these areas, the M&E system can enhance its role in driving project success.

4.3.5. Stakeholders' Engagement in Monitoring and Evaluation

Table 8 Mean description of Stakeholders' engagement in M&E

	Rank	Minimum	Maximum	Mean	Std. Deviation
Dissemination of project results	1	4	5	4.50	.512
In overall management of the project	2	2	5	3.63	.895
Internal monitoring and evaluation of the project	3	2	5	3.50	.740
Implementation stage of the project activities	4	1	5	3.36	1.255
Planning/designing stage	5	1	5	2.55	1.184

Source: Survey result, 2024

The stakeholder engagement in Monitoring and Evaluation (M&E) at Kaliti Metal Products Factory (KMPF) shows varying degrees of involvement across different stages of the project, as indicated by the data provided. The dissemination of project results ranks the highest with a mean score of 4.50, which is quite close to the maximum score of 5. This suggests that stakeholders are highly engaged when it comes to sharing the outcomes of the project. The

relatively low standard deviation of 0.512 indicates that there is consistency in this positive assessment across respondents. In terms of engagement in the overall management of the project, the mean score is 3.63, which points to a moderate level of stakeholder involvement. However, the higher standard deviation of 0.895 suggests that there might be some variability in how stakeholders perceive their role or effectiveness in the overall management process. Internal monitoring and evaluation of the project received a mean score of 3.50, indicating a moderate level of stakeholder engagement in these activities.

This study was supported by the study conducted in (Karimi et al., 2021) this demonstrates a strong positive relationship between stakeholder engagement and the performance of literacy and numeracy educational programs. The reason indicated that stakeholder engagement in monitoring and evaluation significantly influences program performance.

The standard deviation of 0.740 reflects some variation in responses, which could imply differing experiences or expectations among stakeholders regarding their involvement in M&E. During the implementation stage of project activities, the mean score drops to 3.36, with the highest standard deviation of 1.255. This significant variation in responses and the lower mean score suggest that stakeholder engagement at this stage is inconsistent and may be perceived as less effective or less frequent. The lowest mean score of 2.55 was observed at the planning/designing stage, with a high standard deviation of 1.184. This indicates that stakeholder engagement is notably weaker during the early stages of the project, and there is considerable disparity in how stakeholders view their involvement at this phase.

4.4. Effective Monitoring and evaluation system

Table 9 Mean description of Effective M&E system

	Rank	Minimum	Maximum	Mean	Std. Deviation
Corrective Action Effectiveness: When project deviations are identified, corrective actions implemented based on M&E data are effective in addressing the issues.	1	3	5	4.09	.750
Integration with Decision-Making: M&E results are actively considered and used to inform project decisions and adjustments.	2	3	5	4.09	.750
Data Collection Methods: The M&E system utilizes a variety of appropriate data collection methods (surveys, interviews, project reports) to gather relevant information.	3	3	5	4.05	.785
Continuous Improvement Culture: KMPF fosters a culture of continuous improvement where M&E findings are used to identify areas for improvement in the M&E system itself.	4	3	5	4.00	.873
Actionable Insights: M&E results provide clear and actionable insights that can be used to address project deviations or improve performance.	5	3	5	3.82	.664
Timeliness of Reporting: M&E findings are reported to stakeholders in a timely manner to inform decision-making.	6	2	5	3.68	.780
Stakeholder Communication: M&E findings are effectively communicated to all relevant stakeholders at KMPF (management, team members, clients)	7	1	5	3.67	1.065
Data Analysis Frequency: Data collected during M&E activities is analyzed regularly (e.g., weekly, monthly) to assess progress.	8	1	5	3.55	1.262
Clarity of M&E Objectives: The M&E system has clearly defined objectives that align with project goals.	9	1	5	3.55	1.143

Source: Survey result, 2024

As it shown table 9 above, the Corrective Action Effectiveness and Integration with Decision-Making are rated highest, both with a mean score of 4.09, indicating that corrective actions based on M&E data are highly effective and that M&E results are significantly integrated into project decisions. Both indicators have the same standard deviation of 0.750, suggesting consistent responses among the participants. Data Collection Methods follow closely with a mean of 4.05 and a slightly higher standard deviation of 0.785, showing a strong agreement on the appropriateness of the methods used but with a bit more variability in responses. The Continuous Improvement Culture at KMPF is also highly regarded, with a mean score of 4.00 and a standard deviation of 0.873, reflecting a solid commitment to using M&E findings for systemic improvements. Actionable Insights generated from M&E have a mean of 3.82, indicating they are quite clear and useful for addressing project issues. The Timeliness of Reporting and Stakeholder Communication have lower mean scores of 3.68 and 3.67 respectively, suggesting there might be room for improvement in these areas, especially considering the wider standard deviation in stakeholder communication, which is 1.065. Lastly, Data Analysis Frequency and Clarity of M&E Objectives both have a mean of 3.55, which is the lowest among the indicators, and their relatively high standard deviations (1.262 and 1.143 respectively) indicate a significant spread in the responses, suggesting these are areas that could benefit from focused attention to enhance the overall effectiveness of the M&E system at KMPF.

4.5. Focus Group Discussion

To comprehensively assess the Monitoring and Evaluation (M&E) practices and challenges at Kaliti Metal Products Factory (KMPF), it is essential to engage a diverse group of employees through well-structured Focus Group Discussions (FGDs). This method ensures that perspectives from various departments within the factory are captured, providing a holistic understanding of M&E practices and their impacts. The following sections detail how to effectively structure these FGDs, select participants, and derive actionable insights for improving M&E at KMPF.

4.5.1. Participant Selection

To capture a broad spectrum of insights, participants should be carefully selected from different departments across the factory, ensuring representation from:

Production: Employees in this department can share how M&E processes impact daily manufacturing operations, productivity, and efficiency.

Quality Control (QC): The QC team can provide feedback on the effectiveness of M&E in maintaining product standards and identifying operational challenges.

Human Resources (HR): Representatives from HR can discuss how M&E influences workforce management, training, and employee performance evaluation.

Sales and Marketing: Insights from this department can shed light on how M&E practices affect market strategy, customer feedback integration, and sales performance.

Finance: Participants from finance could discuss the budgetary aspects of M&E, focusing on cost-effectiveness and financial performance metrics.

Maintenance: The Maintenance staff can highlight how M&E impacts equipment management and operational uptime. Additionally, to get a complete picture, it's important to include:

Project Officer: These participants, often responsible for the day-to-day implementation of M&E activities, can provide a practical view of operational challenges and insights from a supervisory level.

Program manager: Their strategic perspective is crucial in understanding how M&E aligns with the company's long-term goals and policy implementation.

4.5.2. Structure of Focus Group Discussions

To ensure thorough exploration of M&E practices, the FGDs will be organized into three groups, each comprising five participants. This size allows for in-depth discussion while keeping the group manageable. Each session will be facilitated to provide every participant with an equal opportunity to contribute.

4.5.3. Key Guidelines for FGDs:

1. **Time Management**: Each participant will have up to five minutes to express their views on each question. This ensures balanced contributions and prevents any single person from dominating the discussion.

2. **Summarizing and Steering**: The moderator will summarize points when ideas are repeated, encouraging participants to explore new angles or additional issues. This approach keeps the discussion dynamic and comprehensive.

3. **Facilitation**: A skilled moderator will guide the discussion, ensuring that all voices are heard and that the conversation stays focused on the key aspects of M&E practices and challenges.

Utilizing FGDs as a part of KMPF's M&E assessment provides a platform for diverse voices within the organization to share their experiences and perspectives. This approach not only enriches the understanding of current M&E practices but also uncovers areas for improvement. Implementing the recommended strategies will help KMPF enhance its M&E processes, ensuring they are adaptive, inclusive, and aligned with the company's strategic objectives. The responses from Focus Group Discussion (FGD) members at Kaliti Metal Products Factory (KMPF) provide valuable insights into their roles, the current state of Monitoring and Evaluation (M&E) practices, challenges encountered, and suggestions for improvement. For instance, one participant in the production department, serving as a quality control supervisor for five years, highlights the role specificity and occupation. In terms of M&E implementation, the department conducts quarterly assessments using software to monitor production outputs and quality metrics, complemented by monthly performance reviews for progress evaluation. Even though having a limited budget dedicated to M&E, there are concerns about resource adequacy for upgrading software tools and training new staff. Data accuracy and timeliness emerge as critical challenges affecting decision-making due to data entry errors and reporting delays. However, the effectiveness of current practices in tracking production targets, opportunities exist for enhancing data validation procedures to ensure higher quality data. Communication during monitoring occurs during productionshifts, with reports disseminated through weekly meetings; however, identified gaps sometimes lead to missed improvement opportunities. Suggestions for improvement include investing in advanced training to enhance data analysis skills among staff and improving inter-departmental communication channels to streamline reporting and decision-making processes. These insights underscore the importance of addressing operational challenges andleveraging opportunities for enhancing M&E practices at KMPF through collaborative and strategic improvements.

KMPF's current M&E practices, which include regular progress reports, data collection methods, stakeholder consultations, and performance indicators, provide a solid foundation for undertaking activities. However, as the organization continues to grow and expand its reach, it is essential to continuously evaluate and enhance these practices to meet the evolving needs of stakeholders and ensure the optimal allocation of resources.

Stakeholder perceptions of KMPF's M&E practices reveal both appreciation and areas for improvement. While clients value the transparency provided by progress reports, some stakeholders express concerns about the depth of impact measurement and the effectiveness of stakeholder engagement during evaluations. These perceptions underscore the need for a more comprehensive and inclusive approach to M&E that addresses the diverse needs and expectations of all stakeholders.

To enhance project M&E at KMPF, a multifaceted approach is required. Firstly, ensuring data quality is paramount, as reliable and accurate data forms the backbone of effective evaluations. KMPF should invest in robust data validation processes and consider adopting digital tools or standardized templates to streamline data collection and reporting procedures. This not only improves the quality of data but also enhances the efficiency of M&E activities.

Secondly, capacity-building for staff involved in M&E is crucial. By providing training programs that focus on data collection, analysis, and result interpretation, KMPF can empower its team to conduct more comprehensive and meaningful evaluations. This investment in human resources will not only improve the quality of M&E outputs but also foster a culture of continuous learning and improvement within the organization.

Thirdly, KMPF should prioritize the integration of evaluation findings into decision-making processes. By regularly sharing results with relevant stakeholders and using them to inform adaptive strategies, the organization can ensure that M&E activities are directly aligned with project goals and objectives. This approach not only enhances the relevance and impact of M&E but also demonstrates the value of these practices to stakeholders.

The last point to consider is that successful M&E still depends on effective stakeholder engagement. To this end, KMPF should work to ensure that all parties involved have a voice in the evaluation process and balance diverse perspectives. Regular assessments, feedback mechanisms, and collaborative decision-making can help achieve this. Additionally, by promoting a culture of exclusivity and transparency, KMPF can build stronger bonds with

stakeholders and develop trust, which will ultimately result in more effective and sustainable development outcomes.

Despite the presence of M&E tools in these projects, the implementation of these practices faces significant challenges. The low budget allocated to M&E activities and the absence of technical and professional M&E staff are key obstacles facing KMPF projects/programs. Community and stakeholder participation in M&E practices at KMPF are currently inadequate. The organization holds three annual management meetings, an annual national workshop, prepares annual reports, and inconsistently trains program staff due to limited budget and infrequent field visits. Recommendations include establishing an M&E section to oversee project monitoring and evaluation, ensuring quality data collection and internal report dissemination before external sharing, and enhancing staff capacity through comprehensive training. Similar to findings in (Laub, 1999, 2000) study, these measures aim to improve project performance through effective M&E practices at KMPF, including result-based M&E, alignment with project theories of change, dedicated M&E staff, automated information systems, trained experts, and increased M&E budget.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary of Key Findings

This section presents a summary of the findings of the study in chapter four according to the study objectives in short: introductory information or the demographic characteristics of the respondents the study sought to establish the respondent's‟ age, gender, level of education, duration of service and working position. According to the age distribution of the respondents, 18.2% are under 30, 50.0% are between 30 and 40, and 31.8% are over 40. Men make up 72.7% of the respondents, compared to women's 27.3%. The respondents are evenly divided between those with a bachelor's degree (50.0%) and those with a master's degree (50.0%) in terms of education.

Descriptive analysis results from this study demonstrate the necessity for ongoing learning and enhancement of M&E procedures to handle the opportunities and difficulties found. KMPF has made commendable efforts in establishing an M&E system, but there are opportunities to strengthen the training and policy understanding among the M&E staff to further enhance the effectiveness of the system. KMPF is performing reasonably well in several aspects of M&E planning, there is a notable need for improvement in resource allocation, timely corrective actions, and the availability and understanding of M&E policies to further strengthen the M&E system.

KMPF’s data management for M&E demonstrates that while the selection of tools and dissemination methods are strong, there is a need to focus on enhancing the use of collected data to influence decision-making and planning processes more effectively. stakeholders at KMPF are highly engaged in the dissemination of results, there is a need to strengthen their involvement in the earlier stages of the project, particularly during planning and design, to ensure a more cohesive and effective M&E process. The Monitoring and Evaluation (M&E) system at KMPF demonstrates a robust framework, evidenced by its clearly defined objectives that are well-aligned with the project goals. The system employs a diverse array of data collection methods, including surveys and activity reports, ensuring comprehensive

information gathering. Analysis of the collected data is conducted regularly, providing timely insights that contribute to informed decision-making. The timeliness of reporting is commendable, with findings communicated effectively to all stakeholders, fostering a culture of transparency and continuous improvement. Moreover, the M&E system's ability to generate actionable insights and integrate them into decision-making processes signifies its practical impact. Stakeholders express satisfaction with the system's utility and the value it adds to the project, further affirming its effectiveness.

5.2. Conclusion

This study comprehensively assessed the practices and challenges of monitoring and evaluation (M&E) at Kaliti Metal Products Factory (KMPF) in Addis Ababa. Statistical analysis confirms the achievement of the specific objectives outlined in the first section of the study. While KMPF has established a commendable M&E system, there remains scope to enhance staff knowledge of guidelines and instructions to further optimize its effectiveness. Although the organization excels in several M&E planning areas, opportunities for improvement include better resource allocation, prompt corrective action, and improved accessibility and comprehension of M&E regulations to bolster the system.

Examining the administration of Ethiopian steel industries, with a focus on the Kaliti Metal Factory project, reveals a varied perception among respondents regarding the organization, decentralization, and suitability of the M&E system for steel industry projects. A slight majority view M&E as organized and timely, with positive trends noted in disseminating findings, promoting institutional learning, and documenting lessons for future projects. These findings underscore both strengths and areas needing enhancement in Ethiopian steel industry M&E practices, emphasizing the importance of continuous learning, knowledge sharing, and effective dissemination of findings to improve project outcomes and sustainability.

The assessment of monitoring and evaluation practices at Kaliti Metal Products Factory (KMPF) reveals several challenges and conclusions. Current M&E practices primarily involve field visits and project reports, with few additional tools identified and poor implementation noted among the four M&E tools recognized. Key challenges include inadequate budget allocation, a lack of qualified M&E technical experts, and limited community involvement throughout project life-cycles. Other issues include irregular training and capacity-building programs for data collectors, impacting their ability to effectively monitor and evaluate operations.

Overall, the comprehensive assessment of monitoring and evaluation (M&E) practices at Kaliti Metal Products Factory (KMPF) offers an in-depth understanding of the current state of M&E within the organization. The existing M&E system demonstrates notable strengths; however, addressing the identified challenges and implementing the proposed improvements is crucial to significantly enhancing its overall effectiveness. Prioritizing robust data management, refining planning procedures, and increasing stakeholder and community involvement will enable KMPF to strengthen its M&E practices and achieve superior project outcomes. The insights derived from this research provide valuable guidance for enhancing M&E processes in similar organizations, thereby promoting continuous learning, knowledge sharing, and sustainable development

5.3. Recommendations

Based on the results and conclusions of the study, the following recommendations are proposed.

- ✓ Ensure that all staff members are aware of M&E guidelines and their responsibilities within the system by creating easily comprehensible communication tools.
- ✓ Capacity-Building: Strengthening the skills and knowledge of staff involved in M&E is crucial. KMPF should invest in training programs, workshops, and skill development initiatives.
- ✓ Data Quality Enhancement: To improve project monitoring and evaluation (M&E) practices, KMPF should prioritize data quality. This involves ensuring accurate, reliable, and timely data collection, validation, and storage.
- ✓ Strengthening Stakeholder Involvement: Involve stakeholders early on in programs to make sure their viewpoints are considered. Create a thorough communication plan that will keep them updated throughout the M&E cycle**.**
- ✓ It is important to regularly review and improve the M&E system. To find opportunities for improvement and to adjust the system to changing needs, conduct periodic assessments of the M&E system. To encourage ongoing learning and development, set up channels for information exchange between M&E personnel and related parties.

5.4 Direction for future researchers

This study attempted to evaluate the procedures and difficulties associated with monitoring and evaluating the renowned steel factory KMPF. It encourages further researchers to carry out similar studies in other active manufacturing and steel industries, or to look into the factors that determine how effective monitoring and assessment are by adding additional factors that might have an impact.

References

Al-Rawahi, A. M., & Bashir, H. A. (2011). The role of project monitoring and evaluation in quality management systems implementation: A case study of a Jordanian manufacturing company. *International Journal of Quality & Reliability Management*, 100-113.

AW, D., D, K., & F, E. (2017). The Roles of TQM and JIT For Basic Metal Industries Global Competitiveness. *Industrial Engineering & Management*, *06*(02). https://doi.org/10.4172/2169-0316.1000212

Ayele, S. (2018). Assessing Project Monitoring & Evaluation practices in Addis Ababa City Administration Health Bureau: The case of Center for Diseases Control (CDC). Addis Ababa: Academia.

Bekele, Z. (2019). An Assessment of the Monitoring Practices in Projects Contracted to YOTEK Construction PLC.

Bamberger, M., Rugh, J., & Mabry, L. (2011). *RealWorld Evaluation: Working Under Budget, Time, Data, and Political Constraints*. SAGE Publications.

Bezawit, Tesfaye. (2019). Assessment of Project Monitoring and Evaluation Practice at Bamacon Engineering Plc. St Mary University.

Callistus, T., & Clinton, A. (2018). The role of monitoring and evaluation in construction project management. In *Intelligent Human Systems Integration: Proceedings of the 1st International Conference on Intelligent Human Systems Integration (IHSI 2018): Integrating People and Intelligent Systems*, January 7-9, 2018, Dubai, United Arab Emirates (pp. 571-582). Springer International Publishing.

Crawford, P., & Bryce, P. (2003). Project monitoring and evaluation: A method for enhancing the efficiency and effectiveness of aid project implementation. *International Journal of Project Management*, 21(5), 363-373.

Estrella, M., & Gaventa, J. (1998). *Who Counts Reality? Participatory Monitoring and Evaluation: A Literature Review*. Institute of Development Studies.

Frankel, N., & Gage, A. (2007). M&E Fundamentals: A Self-Guided Mini course.

Gorgens, M., & Kusek, J. Z. (2009). *Making Monitoring and Evaluation Systems Work: A Capacity Development Toolkit*. World Bank Publications.

Gumz, J., & Parth, F. R. (2007). Why use a hammer when you need a wrench: Results-based monitoring and evaluation of projects. In *PMI® Global Congress*.

Hatry, H. P. (1999). *Performance Measurement: Getting Results*. Urban Institute Press.

IFRC. (2011). Project/programme monitoring and evaluation (M&E) guide. Geneva: International Federation of Red Cross and Red Crescent Societies.

Karimi, S. S., Mulwa, A. S., & Kyalo, D. N. (2020). Stakeholder Engagement in Monitoring and Evaluation and Performance of Literacy and Numeracy Educational Programme in Public Primary Schools in Nairobi County, Kenya. *Journal of Educational and Developmental Psychology*, *10*(2). https://doi.org/10.5539/jedp.v10n2p10

Karimi, S. S., Mulwa, A. S., & Kyalo, D. N. (2021). Stakeholder Capacity Building in Monitoring and Evaluation and Performance of Literacy and Numeracy Educational Programme in Public Primary Schools in Nairobi County, Kenya. *Higher Education Studies*, *11*(2). https://doi.org/10.5539/hes.v11n2p186

Kimaro, J. R., Fourie, D. J., & Tshiyoyo, M. (2018). Towards an Ideal Institutionalization of Monitoring and Evaluation (M&E). *Administration Publican*, 26(4), 196-219.

Kothari, C. (2004). *Research Methodology: Methods and Techniques*. 2nd Edition. New Delhi: New Age International Publishers.

Kusek, J. Z., & Rist, R. C. (2004). *Ten Steps to a Results-Based Monitoring and Evaluation System: A Handbook for Development Practitioners*. World Bank Publications.

Laub, J. A. (1999). Assessing the servant organization; Development of the Organizational

Leadership Assessment (OLA) model. Dissertation Abstracts International,. *Procedia - Social and Behavioral Sciences*, *1*(2).

Laub, J. A. (2000). Assessing The Servant Organization: Development Of The Organizational Leadership Assessment (OLA) Instrument. In *Center For Creative Leadership* (Issue April 1999).

Mengistu, D. G., & Mahesh, G. (2020). Challenges in developing the Ethiopian construction industry. *African Journal of Science, Technology, Innovation and Development*, 12(4), 373-384.

Mesfin, L., & Deres, E. (2018). Effects of leadership styles on organizational performance in Kaliti metal products factory. *International Journal in Management and Social Science*, *6*(7).
Oakland, J. S. (2014). *Total quality management and operational excellence: Text with cases*. Routledge.

Patton, M. Q. (2012). *Essentials of Utilization-Focused Evaluation*. SAGE Publications.

Pauline,K.,& Mulyungi, P. (2018). Efficiency of monitoring and evaluation approaches on project performance in Rwanda: A case study of non-government organizations in Gasabo district. *International Journal of Science and Research*, 7(1), 123-1321.

PMI. Project Management Institute. (2000). *A guide to the project management body of knowledge (PMBOK Guide)*. Project Management Institute.
Project Management Institute. (2021). *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)-and the Standard for Project Management*. Project Management Institute. *study: Kaliti Metal Products Factory*.

Wanjala, M.Y., Iravo, M.A., Odhiambo, R., & Shalle, N.I. (2017). Effect of monitoring techniques on project performance of Kenyan State Corporations. *European Scientific Journal*, 13(19), 264-280.

Yirga, A. T. (2019). Uses and Applications of Quality Engineering: The Case of Ethiopian Plastic Share Company (Unpublished Master's thesis). Addis Ababa University, Addis Ababa, Ethiopia.

APPENDIX

ASSESSMENT OF THE PRACTICES AND CHALLENGES OF MONITORING AND EVALUATION IN THE KALITI METAL PRODUCTS FACTORY (KMPF)

1.34 Questionnaire

Dear Sir/Madam,

I am a graduate student of Saint Mary's University who is conducting research on 'ASSESSMENT OF THE PRACTICES AND CHALLENGES OF MONITORING AND EVALUATION IN THE KALITI METAL PRODUCTS FACTORY (KMPF) "is in partial fulfillment of a master's degree in project management. I am kindly asking you to participate in this study by responding to all the items listed in the questionnaire enclosed with this cover letter to the best of your knowledge. You are taking part in this research voluntarily and, thus, can terminate it at any time.

The information you provide is confidential and will be used for academic purposes only.

The questionnaire consists of four parts:

Part I. Demographic Data: Questions 1 to 4

Part II. Monitoring and Evaluation Practices: Questions 5 to 12

Part III. Challenges of Monitoring and Evaluation Practices: Questions 13 to 26

Part IV. Effects of Monitoring and Evaluation on Project Success: Question 27

Your cooperation will be greatly appreciated.

With sincere respect,

Nebiyou Betru

nebiyoub@gmail.com

Direction: Please provide the requested information on the space provided or by ticking the appropriate choice that describes your best answer.

1.34.1 Part I: Demographic Data

1. Your age: ☐ ≤ 30 years ☐ 31 – 40 years ☐ ≥ 40 years
2. Your level of education: ☐ Diploma /Advanced/ ☐ Degree ☐ Masters

   ☐ Other (Please specify): _____
3. Your position in the project/organization (please specify) _____:
4. Your experience in project related jobs in steel industries and other projects, if any: ☐ 1-5 years ☐ 6-10 years ☐ ≥11 years

Part II: Monitoring and Evaluation Practices

5. Do you think the Project Administration of Ethiopian steel industries is having a well-organized M&E system? ☐ Yes ☐ No ☐ Not sure
6. If 'Yes' for #5, do you also think that the monitoring and evaluation system at Project Administration was decentralized and tailored for use in steel industry projects, for our case in Kaliti Metal Factory project? ☐ Yes ☐ No ☐ Not sure
7. Would you say that Monitoring and Evaluation in Kaliti Metal Products Factory was organized and conducted in a timely manner? ☐ Yes ☐ No ☐ Not sure
8. Was there a culture of disseminating Monitoring and Evaluation findings?

   ☐ Yes ☐ No ☐ Not sure
9. Was there a culture of institutional learning and knowledge sharing?

   ☐ Yes ☐ No ☐ Not sure

10. Was there a culture of documenting lessons learned for use in future projects?

☐ Yes ☐ No ☐ Not sure

11. How adequate was the commitment of top management towards Monitoring and Evaluation?

Very poor	Poor	Moderate	Good	Very good
☐	☐	☐	☐	☐

1.34.2 **Part III: Challenges of Monitoring and Evaluation Practices**

Under this part, five possible challenges (A to E) are identified to be assessed. Please provide appropriate information that describes your best answer as per the instruction.

A. Institutionalizing Monitoring and Evaluation (M&E) System

13. Please tick the appropriate answer for the following to show your level ofagreement.

No.	Statement	Strongly disagree	Disagree	Indifferent	Agree	Strongly agree
1	Staff assigned to conduct M&E were sufficient	☐	☐	☐	☐	☐
2	Roles and responsibilities of the staff in M&E clearly defined and clarified.	☐	☐	☐	☐	☐
3	The firm provided training to staff who involved in Monitoring and Evaluation.	☐	☐	☐	☐	☐
4	Monitoring and Evaluation staff had understanding of M&E policy (guidelines, processes, templates, tools) and framework to harmonize M&E concepts	☐	☐	☐	☐	☐

B. Linking Monitoring and Evaluation to Objectives

15. In general, how do you rate the monitoring and evaluation elements that are linked and communicated with an organization's strategy and operations to implement activities efficiently and effectively? (Please tick the appropriate answer.)

Very poor	Poor	Indifferent	Good	Very good
☐	☐	☐	☐	☐

C. Planning for Monitoring and Evaluation

17. Was there a clear plan or road map for the Kaliti Metal Factory?

☐ Yes ☐ No ☐ Not sure

17. Had the organization a clear strategy for monitoring and evaluation?

☐ Yes ☐ No ☐ Not sure

18. Please tick the appropriate answers for the following questions.

No.	Statement	Strongly disagree	Disagree	Indifferent	Agree	Strongly agree
1	Indicators to be measured were noted in the planning document and communicated with all team members and stakeholders	☐	☐	☐	☐	☐
2	Acceptable levels of performance were identified, so that it is clearly understood when the project begins to get out of track	☐	☐	☐	☐	☐
3	Policy (guidelines, processes, templates and tools) required for proper project M&E was sufficiently available	☐	☐	☐	☐	☐
4	Work plans were prepared ahead for the purpose of aligning M&E system with norms and standards	☐	☐	☐	☐	☐
5	The project was monitored and evaluated as per the documented policy or guideline	☐	☐	☐	☐	☐
6	Budgetary and resource allocations were sufficient for monitoring and evaluation practices	☐	☐	☐	☐	☐

7	When the project was not progressing as planned, a timely corrective action was taken as per the findings of the monitoring and evaluation	☐	☐	☐	☐	☐

19. What kind of Monitoring and Evaluation frameworks did Kaliti Metal Factory use? You can tick more than one if applicable. (Please tick the appropriate answer)

☐ Performance indicators ☐ Logical Framework Approach

☐ Results-based Framework ☐ Logic Model

☐ Formal Survey ☐ Rapid Appraisal Method

☐ Other (please specify): _____

20. Considering kaliti Metal Products Factory, do you think Monitoring and Evaluation planning has made the Project Administration at Ethiopian steel industries improve/establish the policies and procedures to ensure successful implementation of other steel industries? (Please tick the appropriate answer)

☐ Yes ☐ No

D. Data Management of Monitoring and Evaluation

22. Please tick the appropriate answers for the following questions

No.	Statement	Strongly disagree	Disagree	Indifferent	Agree	Strongly agree
1	Acceptable data collection tools for M&E were selected before starting projectimplementation	☐	☐	☐	☐	☐
2	Monitoring and Evaluation data were routinely collected and analysed to measure project performance	☐	☐	☐	☐	☐
3	Methods and systems in place to disseminate the findings of Monitoring and Evaluation were effective and efficient	☐	☐	☐	☐	☐
4	Monitoring and Evaluation information was used to	☐	☐	☐	☐	☐
	assist in decision-making and planning					

23. Overall, how do you rate the quality of data management practice of the organization during monitoring & evaluation?

Very poor	Poor	Moderate	Good	Very good
☐	☐	☐	☐	☐

E. Stakeholders' Engagement in Monitoring and Evaluation

24. How much were you involved at different stages of the project? (Please tick the appropriate answer)

No.	Statement	Not involved	Less involved	Involved	Much involved	Very much involved
1	Planning/designing stage	☐	☐	☐	☐	☐
2	Implementation stage of the project activities	☐	☐	☐	☐	☐
3	Dissemination of project results	☐	☐	☐	☐	☐
4	Internal monitoring and evaluation of the project	☐	☐	☐	☐	☐
5	Overall management of the project	☐	☐	☐	☐	☐

25. Please tick the appropriate answers for the following questions.

No.	Statement	Strongly disagree	Disagree	Indifferent	Agree	Strongly agree
1	Stakeholders across areas of interest were mapped before engaging them in project monitoring and evaluation.	☐	☐	☐	☐	☐
2	Proper stakeholder engagement tool was used to identify stakeholders, define their roles, set the optimum stakeholder group, create an engagement plan, and track stakeholder engagement.	☐	☐	☐	☐	☐
3	Based on evaluation findings, stakeholders who had the power to truly create change were communicated with and involved in decision-making process.	☐	☐	☐	☐	☐

Part IV: Effective Monitoring and evaluation system

Please rate the dictators of the effectiveness of the M&E system at KMPF (1= strongly disagree, 2= disagree 3= neutral 4= agree and 5= strongly agree)

Numver	Indicators	1	2	3	4	5
1	**Clarity of M&E Objectives:** The M&E system has clearly					
	defined objectives that align with project goals.					
2	**Data Collection Methods:** The M&E system utilizes a variety of appropriate data collection methods (surveys, interviews, project reports) to gather relevant information.					
3	**Data Analysis Frequency:** Data collected during M&E activities is analyzed regularly (e.g., weekly, monthly) to assess progress.					
4	**Timeliness of Reporting:** M&E findings are reported to stakeholders in a timely manner to inform decision-making.					
5	**Actionable Insights:** M&E results provide clear and actionable insights that can be used to address project deviations or improve performance.					
6	**Stakeholder Communication:** M&E findings are effectively communicated to all relevant stakeholders at KMPF (management, team members, clients)					
7	**Integration with Decision-Making:** M&E results are actively considered and used to inform project decisions and adjustments. pen_spark					
8	**Corrective Action Effectiveness:** When project deviations are identified, corrective actions implemented based on M&E data are effective in addressing the issues.					
9	**Continuous Improvement Culture:** KMPF fosters a culture of continuous improvement where M&E findings are used to identify areas for improvement in the M&E system itself.					
10	**Stakeholder Satisfaction:** Stakeholders are satisfied with the transparency, usefulness, and value provided by the M&E system.					

1. Please mention any other challenges in monitoring and evaluation of any project in the organization.

_____

_____

_____

_____

2. Please mention any other monitoring and evaluation issues that might not have been covered above. Additional issue

_____

_____

_____

_____

_____

3. What do you suggest to enhance the monitoring and evaluation practice of the organization?

_____

_____

_____

Focus Group Discussion

Good morning/afternoon everyone,

Thank you all for taking the time to participate in today's discussion. I Nebiyou, will be facilitating our focus group session. We appreciate your presence and look forward to hearing your valuable insights. This focus group discussion is part of a study titled **Assessment of the Practices and Challenges of the Monitoring and Evaluation System: The Case of Kaliti Metal Products Factory (KMPF)**, Ethiopia. The goal of this study is to understand your experiences with the current M&E practices at KMPF, identify any challenges you face, and gather your perspectives on how these practices can be improved.

1. **Current Role and Experience:**

- "In which project do you belong, and what is your post title? How long have you served in this project or program?"

2. **M&E Implementation:**

- "How is M&E currently implemented in your department? What tools and methodologies are used, and how often are M&E activities conducted?"

3. **M&E Budget and Resources:**

- "Is there an independent budget for M&E in your project or program? What resources or support systems do you feel are lacking for effective M&E?"

4. **Challenges in M&E:**

- "What are the main challenges you face in executing M&E tasks? How do these challenges impact your work and the project's objectives?"

5. **Effectiveness and Data Quality:**

- "How effective do you find the current M&E practices in achieving their objectives? What is your view on the quality of data collected during monitoring?"

7 Reporting and Communication:

- "When do you conduct monitoring, and how are the reports disseminated? Can you provide examples of successful or unsuccessful M&E activities?"

8 Suggestions for Improvement:

- "What improvements would you suggest for the M&E processes at KMPF? How do you think these changes could be implemented to enhance monitoring and evaluation practices?"