SCHOOL OF GRADUATE STUDIES

DEPARTMENT OF CONSTRUCTION TECHNOLOGY AND MANAGEMENT

"Evaluation of Project Communication Practice Using Communication Effectiveness Metrics and Strategic Improvement Framework for Public Building Construction in Addis Ketema Sub-City, Addis Ababa."

Prepared By:Adane Shewalem Debo

Advisor:Belachew Astery (PhD)

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SCHOOL OF GRADUATE STUDIES

EXAMINED AND APPROVED BY

Belachew Astery (PhD)

_____	_____	_____
Advisor	Signature	Date
_____	_____	_____
Internal Examiner	Signature	Date
_____	_____	_____
Eternal Examiner	Signature	Date
_____	_____	_____
Chairperson	Signature	Date
_____	_____	_____
School Dean	Signature	Date

Declaration

Ideclare that this research report entitled “A Evaluation on Project Communication Practice Using Communication Effectiveness Metrics and Strategic Improvement Framework for Public Building Construction in Addis Ketema Sub-City, Addis Ababa” is my original work, and has not been presented for a degree or diploma in any other university or institution.

This research has been conducted under the guidance and supervision of Dr. Belachew Astery, in partial fulfillment of the requirements for the degree of Masters degree at Addis College .

I have acknowledged all sources of information used and have ensured that this work complies with the university's ethical and academic standards.

Name: Adane Shewalem Debo

Signature: _____

Date: August 2025 G.C / August 2017 E.C

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List of acronyms /Abbreviations

CEM	**Communication Effectiveness Metrics**
PDT	**The project development team**
PMI	**Project Management Institute**
IT/ICT	**Information technology /Information communication technology**
SPOC	**Single Point of Contact**
KPIs	**Key performance indicators**
CPD	**Continuous professional development**
PMBOK	**Project management book of knowledge**

Appendices

Abstract

Effective communication is a fundamental component of successful project management, particularly in public building construction where coordination among diverse stakeholders is essential. This study provides evaluation of project communication practices in the context of public building construction projects in Addis Ketema Sub-City, Addis Ababa. The research is guided by three specific objectives: to critically assess the effectiveness of existing project communication practices, to examine the impact of these practices on overall project performance, and to develop a strategic framework for improving communication in future projects. A combination of primary and secondary data collection methods was employed. Primary data was gathered through structured questionnaires and Secondary data sources included project documents, reports, and relevant literature. Communication effectiveness was measured using defined metrics such as timeliness, clarity, accuracy, and stakeholder responsiveness. The study reveals significant shortcomings in current communication practices, including delayed information flow, poor documentation, and insufficient stakeholder involvement, all of which negatively impact project timelines, cost, and quality. Based on the findings, a strategic communication improvement framework is proposed, focusing on structured communication protocols, continuous stakeholder engagement, performance monitoring, and capacity development. This framework aims to enhance communication efficiency and contribute to more successful project delivery in the public construction sector.

***Key words** : Effective communication, project communication practice, strategic framework, project management, communication efficiency.*

CHAPTER ONE: INTRODUCTION

1.1 Background of the study

Communication is a leading key to maintaining project parties well-informed of the progress, as well as to keep them on track to achieve project objectives (Muszynska 2015). It was confirmed by many researchers that communication plays a major role in projects, and effective communication is an essential factor of project success (Zulch 2014).

However, studies concluded that barriers may occur during the implementation of the project. These barriers can be verbal, environmental, emotional, or interpersonal (Fox 2001). Moreover, to effectively communicate, proper communication management schemes must be adopted to set the path for accurate distribution and sharing of the project information.

Communication management is the essential component of project management that defines the required processes of proper planning, collecting, distributing, and retrieving project information among the project participants (PMI 2013a). It was widely mentioned in the literature due to its significance in developing an approach to information sharing between individuals at different levels.

On top of that, the stage of planning the project communication management is fundamental through developing a communication management plan that assists the project manager in defining the involved parties, determining the information to be shared, and allocating the most convenient methods of communication to fulfill the project requirements and clients' needs. Furthermore, the medium of communication can be in any format that is relevant to the project environment, and finally, the message is the core of this process as it initia tes the relationship between the sender and the receiver.

Effective communication is to assure the previously mentioned four elements of the communication process are well-functioning (Van der Walt et al. 1996), the message is well understood by the receiver (Talukhaba, Mutunga, and Miruka 2011), and the required needs and results are eventually met (Norouzi et al. 2015). This is also applicable to the construction industry's projects, as they highly depend on the crucial component of effective communication between project participants (Coughlan and Macredie 2002). Folland (1983) demonstrated that

effective communication is the result of all project participants being aware and efficiently accomplishing their tasks and responsibilities to meet project goals. Applying active and effective communication skills by project managers is a well-established manner to overcome issues and tough junctures during the project.

According to Wong and Lam (2011), the mode of communication and information transfer among relevant stakeholders are key to project performance. Therefore, there is the need for various stakeholders to communicate effectively as to complete project within the cost target, time and quality;

Hence, the purpose of this study was to study evaluation on project communication practices using communication effectiveness metrics and strategic improvement framework for public building construction a case study of Addis ketema subcity, Addis Ababa.

1.2 Statement of problem

The main objective of any industry, including construction, is to achieve project completion within the allocated time, budget and required quality. However, the construction industry is inherently complex, involving multiple stakeholders whose coordination requires smooth and efficient communication.

In the context of public building construction in Addis Ketema Sub-City, Addis Ababa, communication issues have been identified as a critical challenge. Preliminary discussions with employees working on public building projects in the area revealed significant communication gaps between site workers and medium to top-level management, clients, and consultants. These communication breakdowns have led to unexpected losses in work quality, cost overruns, and missed project deadlines.

The key problems of poor communication include the absence of shared information between superiors and workers, workplace stress, negative attitudes from superiors and colleagues toward site workers, misinterpretation of instructions, and inadequate communication skills among workers. These challenges contribute to broader industry issues such as project delays, cost and time overruns, compromised quality, health and safety concerns, environmental pollution, and sustainability problems.

Despite appearing to be a straightforward process, communication has a broad and profound impact on project outcomes. Therefore, effective communication management is essential at every stage of a construction project to ensure successful execution.

Hence, this research aims to analyze the communication practices in public building construction projects within Addis Ketema Sub-City. It focuses on identifying the existing communication methods, challenges, and impacts, as well as evaluating the effectiveness of current practices. Furthermore, the study explores how these projects communicate with their internal and external environments, ultimately recommending strategies and remedial measures to enhance communication performance and improve project outcomes.

1.3 Objective of the study

1.3.1 General objective

The general objective of this study is Evaluation of project communication practices using communication effectiveness metrics and strategic improvement framework for public building construction in Addis ketema subcity, Addis Ababa.

1.3.2 Specific objective

- To assess the effectiveness of existing project communication practices using Communication Effectiveness Metrics to identify key challenges.
- To examine the impact of current communication practices on project performance and stakeholder satisfaction.
- To develop a strategic framework for improving project communication.

1.4 Research questions

The following are the main research questions:

- What are the key communication challenges on building project performance?
- What is the main effect of having poor communication practice among project stakeholders?
- Which strategies are enhancing communication in building construction projects?

1.5 Significance of the study

This study is significant in several ways, particularly for improving communication practices in public construction projects.

1.5.1 To city administration

Helps the administration identify communication gaps in ongoing and future public building projects.

Provides evidence-based insights to improve project delivery efficiency (cost, time, and quality).

Strengthens accountability and transparency in government-funded projects.

Assists in better stakeholder coordination (contractors, consultants, and the public).

1.5.2 To Scientific Community

Contributes to the body of knowledge on project management and communication in developing countries, especially in the Ethiopian context. Offers a framework of communication effectiveness metrics that other researchers can adapt, refine, or test in different regions.

Bridges the gap between theory and practice by linking communication practices with actual project performance outcomes.

Serves as a reference for future studies on construction management, public infrastructure, and urban development.

1.5.3 To Policy Makers

Provides empirical evidence that can guide policy reforms in public construction project management.

Informs the development of communication guidelines or frameworks for government-funded projects.

Supports the adoption of strategic improvement frameworks for better governance and project success.

Enhances policy decisions that ensure public resources are managed more efficiently and transparently.

1.6 Scope of the study

1.6.1 Thematic Scope

Analysis of how communication is managed and implemented among stakeholders (e.g., contractors, subcontractors, project managers, government authorities) in public building construction projects.

Use of various metrics to evaluate the effectiveness of communication in construction projects. These could include response time, clarity of communication, feedback loops, and alignment of communication with project goals.

Exploration of methods or frameworks for improving communication in construction projects, ensuring alignment with the project's strategic goals and enhancing the decision-making process.

Focus specifically on the challenges and practices related to public sector building projects, considering the specificities such as government regulations, public accountability, and large-scale construction.

Understanding how different stakeholders interact through communication processes and evaluating the flow of information, decision-making, and project execution

1.6.2 Spatial Scope

The research would focus on public building construction projects within the Addis Ketema Sub city, a specific area in Addis Ababa, Ethiopia. This woulde encompass all ongoing or recently completed public construction projects within the subcity.

A focus on urban public construction projects in Addis Ababa, especially how communication practices play out in a rapidly growing urban environment with diverse stakeholders and complex logistical challenges.

Concentration on public sector construction projects, such as schools, hospitals, government offices, and other public infrastructure, rather than private sector projects or commercial developments.

1.6.3 Temporal Scope

Time Frame of Study: The research would evaluate communication practices in construction projects that are ongoing, recently completed, or planned in Addis Ketema Subcity. Data collection may cover projects over the last 5 to 10 years, depending on available data.

1.7 Limitation of the study

While conducting this research, several limitations were encountered that may have influenced the scope and depth of the study:

Voluntariness of Participants: One of the primary challenges was the reluctance of some individuals to provide relevant information. The lack of willingness among certain respondents affected the completeness and quality of the data collected.

Transportation Challenges: Conducting fieldwork in highly congested areas, especially around the Merkato area, posed logistical difficulties. These issues hindered timely data collection across multiple project sites.

Limitations in Literature Review: The availability of up-to-date and context-specific literature on communication practices in local construction projects was limited. This may have affected the depth and comprehensiveness of the literature review.

1.8 Organization of the study

This study is structured into five chapters, each addressing a critical aspect of the research process: Chapter One serves as the introduction and includes the background of the study, statement of the problem, research questions, objectives of the study, significance of the study, scope of the study, organization of the study, and limitations of the study. Chapter Two presents a detailed review of related literature, theoretical frameworks to communication practices in construction project management. Chapter Three explains the research design and methodology. It outlines the study's research approach, data collection methods, sampling techniques, and procedures for data analysis. Chapter Four focuses on data presentation, analysis, and interpretation. It discusses the findings of the study in relation to the stated research questions and objectives. Chapter Five offers the conclusion and recommendations. It summarizes the major findings, draws conclusions, and proposes actionable recommendations for improving communication in public construction projects.

Lastly, a comprehensive list of references is included to acknowledge all sources cited and consulted throughout the research.

CHAPTER TWO: REVIEW OF LITERATURE

2.1 Introduction

The construction industry plays a vital role in the economic development of developing countries. However, it is characterized by complexity and uncertainty due to the involvement of multiple stakeholders and the dynamic nature of construction projects. As the industry continues to expand, the management of construction projects becomes increasingly complex, necessitating more effective strategies—among which communication stands out as a critical success factor.

Communication is often described as the lifeblood of project management. Just as breathing is essential to sustain life, communication is essential to the functioning and performance of construction projects and organizations. It serves as the primary mechanism for exchanging project-specific information and creating mutual understanding among project participants.

Effective communication is not only a shared responsibility among all team members but also a key determinant of a project's success. Research has consistently shown that effective communication contributes significantly to project success by facilitating collaboration, increasing motivation, and improving productivity among team members (Gamil & Rahman, 2017; Karanges et al., 2015). Conversely, poor communication can lead to misunderstandings, rework, delays, cost overruns, and even project failure (Love et al., 2015; Yap et al., 2017).

Numerous studies have identified communication failures as a common source of construction project issues, including conflict, reduced quality, and delays (Akintoye & Shehu, 2010; Gorse & Emmitt, 2007). Language barriers, cultural differences, unclear communication channels, and lack of trust further exacerbate these problems (Affare, 2012; Akunyumu, 2016).

Communication in construction projects occurs daily and takes multiple forms—leadership meetings, toolbox talks, emails, notices, and informal interactions. These methods must be adapted to the fast-paced, ever-changing conditions of construction sites, where real-time updates are crucial for safety, coordination, and productivity.

Several scholars have stressed the importance of internal and external communication among stakeholders, including clients, consultants, contractors, and site workers.

Despite the vast body of literature on communication in construction, there remains a gap in understanding how project characteristics influence communication quality and outcomes. This gap is particularly evident in public construction projects in Ethiopia.

Therefore, this study aims to examine the communication practices in public building construction projects in Addis Ketema Sub-City, Addis Ababa, with a focus on identifying challenges, impacts, and strategies for improvement.

2.2 Theoretical Review

2.2.1 Communication Effectiveness Theories to identify communication challenges

Shannon-Weaver Model (Shannon & Weaver, 1949) – basic model of sender, message, channel, receiver, and noise. Helps understand barriers to clear communication.

Transactional Model of Communication – sees communication as dynamic, with feedback loops and context; emphasizes that communication is two-way..

Information Processing Theory – projects involve complex information flows; the capacity to process, encode, interpret information affects how effectively messages are received.

Media Richness Theory – different communication channels have different capacities to convey richness (tone, nonverbal cues, immediacy), affecting effectiveness in different contexts.

I. Barriers to effective communication in public building construction

In the construction sector, effective communication is fundamentally important due to the multifaceted nature of construction activities and the diverse range of stakeholders involved, including clients, contractors, consultants, suppliers, and regulatory bodies. The collaborative and interdisciplinary nature of construction demands precise, timely, and transparent communication throughout the project lifecycle.

When communication is unclear, delayed, or misinterpreted, it can lead to a host of negative outcomes, such as safety hazards, scheduling delays, contractual disputes, diminished productivity, and in extreme cases, injury or loss of life (Olanrewaju et al., 2017; Emmitt & Gorse, 2003). These risks are intensified by fragmented project structures and the transient nature of construction teams, which often hinder the development of stable communication patterns (Loosemore & Muslmani, 1999).

Similarly, Dainty, Moore, and Murray (2006) highlight that communication failures are frequently at the root of operational inefficiencies and coordination breakdowns. Moreover, poor information flow and the absence of shared understanding among stakeholders contribute

significantly to conflict and project underperformance (Kumaraswamy, 1997; Gamil & Rahman, 2017).

II. General cause of communication barriers

Numerous underlying factors contribute to communication breakdowns in construction projects, many of which stem from the industry's inherent complexity and fragmented structure. One major barrier is the use of inappropriate or ineffective communication channels, which can hinder the timely and accurate flow of information between stakeholders (Olaniyan, 2015; Cheng et al., 2001). Compounding this issue is the problem of information overload, where excessive or poorly organized data leads to message filtering, misinterpretation, or the neglect of critical details. A lack of openness and limited feedback loops further restrict effective dialogue and mutual understanding, which are essential for coordination and decision-making.

Communication failures, or breakdowns, have also been identified as a significant impediment, often resulting in rework, misunderstandings, and strained relationships between project participants (Kamalirad & Kermanshachi, 2018). The involvement of multiple, diverse stakeholders—each with their own goals, expectations, and terminologies—adds to the complexity and increases the potential for miscommunication (Dawood et al., 2002). As Carvalho (2008) emphasizes, although communication is often perceived as a simple process, its actual implementation in the dynamic context of construction projects is highly intricate, frequently leading to delays, disputes, and inefficiencies.

Supporting this view, Komi-Sirviö and Tihinen (2005) reported that nearly 74% of issues encountered in construction projects can be directly traced back to ineffective communication practices. This finding aligns with the work of Love et al. (2000), who argue that miscommunication significantly contributes to errors, cost overruns, and productivity losses.

Additionally, Dainty et al. (2006) assert that cultural differences, hierarchical communication structures, and limited training in communication skills among professionals exacerbate these challenges. Taken together, these studies underscore the urgent need for improved communication strategies tailored to the specific demands and stakeholder dynamics of construction projects.

Several general causes of communication inefficiencies have been identified:

- Inappropriate communication channels (Olaniyan, 2015; Cheng et al., 2001).

- Information overload and filtering of messages
- Lack of openness and feedback
- Communication breakdowns (Kamalirad & Kermanshachi, 2018).
- Complexity of stakeholder involvement (Dawood et al., 2002)

Although communication may appear straightforward, its execution is often complex, leading to delays and conflicts (Carvalho, 2008). Nearly 74% of construction project problems stem from ineffective communication (Komi-Sirviö & Tihinen, 2005).

III. Project -specific communication challenges

Within the dynamic environment of construction projects, a number of context-specific communication barriers frequently emerge, often hindering effective collaboration and decision-making. One of the most cited issues is the insufficient use of face-to-face communication, which plays a crucial role in building trust, clarifying misunderstandings, and facilitating immediate feedback. The absence of direct interpersonal interaction—especially in fast-paced or dispersed project settings—can lead to misinterpretation and reduced team cohesion (Fox, 2001; Loosemore & Al Muslmani, 1999).

Another major challenge is the excessive reliance on formal communication channels, such as written reports and contractual documents. While necessary for documentation and legal clarity, formal communication can be slow, rigid, and impersonal, often failing to capture the urgency or nuance required for real-time problem solving (Dainty et al., 2006; Barrett & Barrett, 2006). This overdependence can create bottlenecks in information flow and limit opportunities for adaptive communication.

Unclear communication structures and undefined lines of authority are also commonly cited problems. When roles and responsibilities are ambiguous, messages are easily lost or misdirected, leading to confusion, conflict, and duplicated efforts (Flicker, 2002; Gamil & Rahman, 2017). Similarly, the absence of clearly set or realistic project goals can derail communication efforts, as teams may lack a shared vision or fail to prioritize tasks effectively (Flicker, 2002; PMI, 2017).

Furthermore, inadequate communication planning and the overuse of meetings without structured agendas can contribute to inefficiency and disengagement. Instead of improving coordination, poorly managed meetings often consume valuable time while yielding little

actionable output (Turkulainen et al., 2015). As highlighted by Loosemore and Tan (2000), effective communication in project environments requires not just the presence of communication tools, but a deliberate, strategic approach that aligns methods with project objectives, stakeholder needs, and contextual constraints.

Collectively, these project-specific challenges emphasize the need for tailored communication strategies that are proactive, participatory, and responsive to the evolving dynamics of construction projects.

- Barriers within project environments often include:
- Lack of face-to-face meetings (Fox, 2001)
- Overdependence on formal communication
- Unclear communication structures.
- Unset or unrealistic project goals (Flicker, 2002).
- Inadequate planning and excessive meetings

2.3 Empirical Review

2.3.1 Assess the Effectiveness of Existing project Communication Practice using Communication Effectiveness Metrics

Manaye, Mezgeb (2021) "Assessment of Project Communication Management on Construction Projects: A Case of Private Real Estate in Ethiopia" – this study found that while communication management is practiced, there are major gaps. Barriers identified include poor and distorted information, late dissemination of information, poor means of communication.

Bethelhem Tesfaye (2023) "Assessment of Project Communication Practices of Building Construction Projects: a Case of Renovation Projects in the United Nations Economic Commission for Africa (UNECA)" – focusing on renovation projects, this study assessed communication methods, challenges, and practices among client, contractor, consultant. Found issues with consistency, timeliness, clarity.

Abinew Dejen, Alemu et al. (2022) "Study on Communication Practice on the Public Building Construction Projects among Stakeholders; The Case of Bahir Dar City, Ethiopia" – explored stakeholder communication practices in public building construction; identified that many communication channels exist, but effectiveness is hampered by unclear roles, delays, inconsistent feedback.

These works indicate different metrics of effectiveness have been considered (timeliness, clarity, feedback, consistency), but none have perhaps fully operationalized a robust set of metrics combining quantitative and qualitative dimensions (e.g. response time, stakeholder comprehension, error rate, miscommunication frequency).

2.3.2 Impact of Current Communication Practice on Project Performance and Stakeholder Satisfaction

I. Influencing factors on communication management

Several scholars have identified factors that influence communication success in construction:
Planning and Technology: A clear communication plan and access to modern technology enhance communication (Čulo et al., 2010).

- Human Relationships and Organizational Culture: Strong interaction between management and workers, effective leadership styles, and organizational structure promote communication (Aiyewalehinmi, 2013; Perumal et al., 2011).
- Stakeholder Engagement and Reporting Frameworks: Establishing clear reporting lines, timely information sharing, and stakeholder inclusion are critical (Naqvi et al., 2011; Hoezen et al., n.d.).
- Use of IT/ICT Tools: Technology aids in effective coordination and communication (Peansupap, 2005).
- Communication Strategy and Vision: A shared vision, structured communication plans, and openness in budget and project responsibilities enhance coordination (Garbharran et al., n.d.; Cheng et al., 2004).
- Soft Skills and Attitudes: Communication efficiency depends on active listening, attitude, and awareness of social and cultural contexts (Geren, 2012; DiSalvo et al., 1989).

II. Consequence of poor communication

The impact of ineffective communication in construction projects is profound and far-reaching, often manifesting in a range of critical project failures. One of the most immediate and visible outcomes is the escalation of conflict and disputes among project stakeholders.

Misunderstandings stemming from vague instructions, contradictory information, or unmet expectations can quickly evolve into disagreements over responsibilities, timelines, or contract terms (Cheng et al., 2001; Cheung & Yiu, 2006). These conflicts not only damage working relationships but also consume time and resources that could otherwise be dedicated to project delivery.

Delays in project execution represent another common consequence of poor communication. When vital information is not transmitted accurately or on time, decision-making slows down, work sequences are interrupted, and coordination falters—all of which contribute to time overruns (Wu et al., 2017; Sambasivan & Soon, 2007). Such delays can have a domino effect, affecting procurement schedules, subcontractor engagement, and overall project momentum.

Misinformation and the distortion of facts also pose serious risks, particularly in fast-paced construction environments. Inaccurate or incomplete communication can lead to faulty decisions, design errors, and costly rework (Kennedy et al., 2001; Ejohwomu et al., 2017). Moreover, the absence of a structured communication process often means that key updates are misinterpreted or lost entirely, undermining transparency and accountability across project teams.

A critical operational consequence is the lack of coordination in design documentation and site-level communication. When architectural drawings, technical specifications, and revisions are not shared promptly or clearly, on-site teams may proceed based on outdated or incorrect information. This misalignment can result in construction errors, safety hazards, and significant cost escalation (Garcia et al., 2014; Love et al., 2000).

Additionally, poor communication undermines the effectiveness of collaboration technologies such as Building Information Modeling (BIM), which rely on consistent and accurate data exchange among stakeholders (Succar, 2009).

2.3.3 Strategic Frameworks for Improving Project Communication

Researchers propose several strategies to enhance communication effectiveness within construction projects. Wu et al. (2017) and Thomas et al. (1998) advocate for sufficient interaction among team members using appropriate communication channels to avoid disputes. Cheng et al. (2001) argue that timely and clear communication among stakeholders is essential for on-schedule project completion.

Gorse and Emmitt (2007) emphasize that communication should be maintained from the project's inception to its completion. This view is supported by Tai et al. (2009), Ceric (2001), and Cheng et al. (2001), who stress the need for clear, consistent communication to prevent misunderstandings among project participants.

Garcia et al. (2014) note that project information is often conveyed through technical drawings and documentation throughout the construction process. At the same time, Ejohwomu et al. (2017) and Kennedy et al. (2001) caution against misinformation and distortion, which can lead to conflict and delays.

According to Azmy (2012), many of the conflicts that arise during a project can be mitigated or entirely avoided through effective communication practices.

The literature consistently affirms that communication is a dynamic and indispensable process in both general human interaction and specifically within the construction industry. Effective communication—characterized by accurate encoding and decoding, timely feedback, and the use of appropriate channels—is vital for project success. Despite its importance, the construction sector often falls short in giving communication the attention it deserves, leading to delays, misunderstandings, and conflict. Therefore, strengthening communication processes remains a critical pathway to improving collaboration, coordination, and overall project performance.

i. Communication management plan

A communication management plan is a structured document that outlines how project communication will be managed and executed. It ensures that stakeholders are well-informed and aligned throughout the project. The PMI (2013a) describes it as a core component of the overall project management plan, which defines how information will be planned, distributed, monitored, and controlled.

Kliem (2007) and Bilczynska-Wojcik (2014) explain that the plan includes communication goals, frequency, methods, formats, and stakeholder contact information. It also allocates responsibilities for delivering specific types of information accurately and on time.

The communication management plan is initiated during project planning and evolves throughout the project lifecycle. It typically includes:

- Project background and objectives.
- List of stakeholders and participants.

- Communication needs and preferences
- Selected communication methods (e.g meetings, emails, reports)
- Frequency and schedule of communication
- Reporting structures and documentation requirements

After being drafted and reviewed by stakeholders, the plan is finalized and implemented. However, Carvalho (2008) and Čulo and Skendrović (2010) identified a widespread lack of attention to developing and implementing communication plans, leading to problems such as message misdirection, delivery delays, and a lack of communication at critical times. These issues contribute to project inefficiencies and client dissatisfaction.

Therefore, it is imperative for project managers to prioritize the creation and ongoing refinement of the communication management plan, starting from the early stages of project initiation. Doing so helps ensure that communication remains effective, consistent, and adaptable to project needs.

2.4 Local Studies

Misrak Getu (2024) "Public Private Partnership in City Development: a Strategic integrated Communication Framework for Sheger Smart City Projects" identifies communication gaps, evaluates their impact on PPP collaboration, and proposes a comprehensive multi-stakeholder communication framework including channels, messaging, training, transparency.

Hawi Woldu, Bien Maunahan & Samson Yohannes (2024) "Comprehensive Analysis Of Construction Industry Communication Management Practice In Jimma Town" proposes strategies to improve communication, managerial skills, tailored approaches for communication channels, improving feedback mechanisms.

Bethelhem Tesfaye (2023) (UNECA renovation projects) proposes recommendations for improvements: better scheduling of communication, clearer protocols, better documentation, consistent feedback.

These studies provide building blocks for a strategic communication improvement framework, but often lack some features: e.g. evaluation of cost or resource requirements for implementing the framework; or prioritization among possible strategies; or validation in public sector building projects under constrained resources

What these local studies show:Communication practices are recognized as important and many types of challenges are known: delays in information dissemination; unclear roles; inconsistent feedback; use of informal or inappropriate channels.

They often focus on certain segments (private real estate, renovation, public building) but perhaps not exclusively in public building construction with all stakeholders.

Metrics used are often limited: e.g. descriptive measures of frequency or channels, rather than more quantifiable measures like response times, miscommunication counts, stakeholder comprehension, etc.

Stakeholder satisfaction is less quantifiable in many studies; often measured via perceptions rather than structured metrics.

Frameworks for improvement are proposed but not always validated or contextualized to resource constraints or public sector settings in Addis Ababa.

2.5 Research Gap

Lack of comprehensive communication effectiveness metrics that include both objective and subjective measures (e.g. response time, clarity, completeness, error frequency, stakeholder comprehension) especially in public building construction in Addis Ababa (Addis Ketema). Many studies have used perception or frequency measures.

Limited studies combining communication practice and stakeholder satisfaction in public sector building projects in Addis Ababa. While private sector / real estate / renovation have been studied, public building in sub-cities and stakeholder satisfaction (as distinct from client satisfaction) has been less well measured.

Few strategic communication improvement frameworks validated for public building construction in Addis Ketema Subcity, with resource, cultural, administrative constraints. Existing studies often propose frameworks but lack empirical testing, prioritization, or stakeholder buy-in in similar contexts.

Temporal limitations: many studies are cross-sectional, covering a snapshot, rather than longitudinal, to see how communication effectiveness / improvements change project outcomes over time.

Variations in communication channels and their comparative effectiveness unclear: how much channels like meetings, reports, digital tools, informal vs formal communication, etc. contribute to performance and satisfaction in your specific context.

2.6 Conceptual Review

In the context of construction, communication is not just a managerial tool but a critical process embedded in all project phases. Littlejohn and Foss (2008) regard communication as an essential human activity intertwined with everyday life. Loose more and Muslmani (1999) describe it as a cyclic loop in which information continuously flows between parties.

Cheung et al. (2013) define communication as a two-way process between a sender and a receiver, using agreed-upon methods.Wu et al. (2017) highlight that communication in construction involves sharing, exchanging, and transmitting information among stakeholders throughout a project's lifecycle. Zulch (2014) emphasizes that effective communication involves both encoding—translating thoughts and feelings into messages—and decoding—interpreting and understanding the message by the receiver. These perspectives align in acknowledging communication as a vital mechanism for interaction and project coordination, often involving multiple individuals and processes.

conceptual model that draws together what i have learned and aligns with my objectives.

a) Independent Variables (Communication Practices):

b) Channels used (formal, informal, digital, face-to-face)

c) Frequency of communication

d) Clarity / completeness of messages

e) Feedback mechanisms

f) Roles & responsibilities in communication

Mediating Variables (Communication Effectiveness Metrics):

a) Timeliness of message delivery

b) Accuracy / distortion of messages

c) Stakeholder comprehension / understanding

d) Consistency / reliability

e) Responsiveness / feedback

f) Dependent Variables (Outcomes):

g) Project performance measured in time, cost, quality, delays, defect rates

h) Stakeholder satisfaction: including trust, perceived transparency, engagement, conflict levels

Moderating / Contextual Variables:

a) Project size / complexity

b) Public sector vs private sector

c) Resource constraints

d) Organizational culture / hierarchy

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Description of the study area

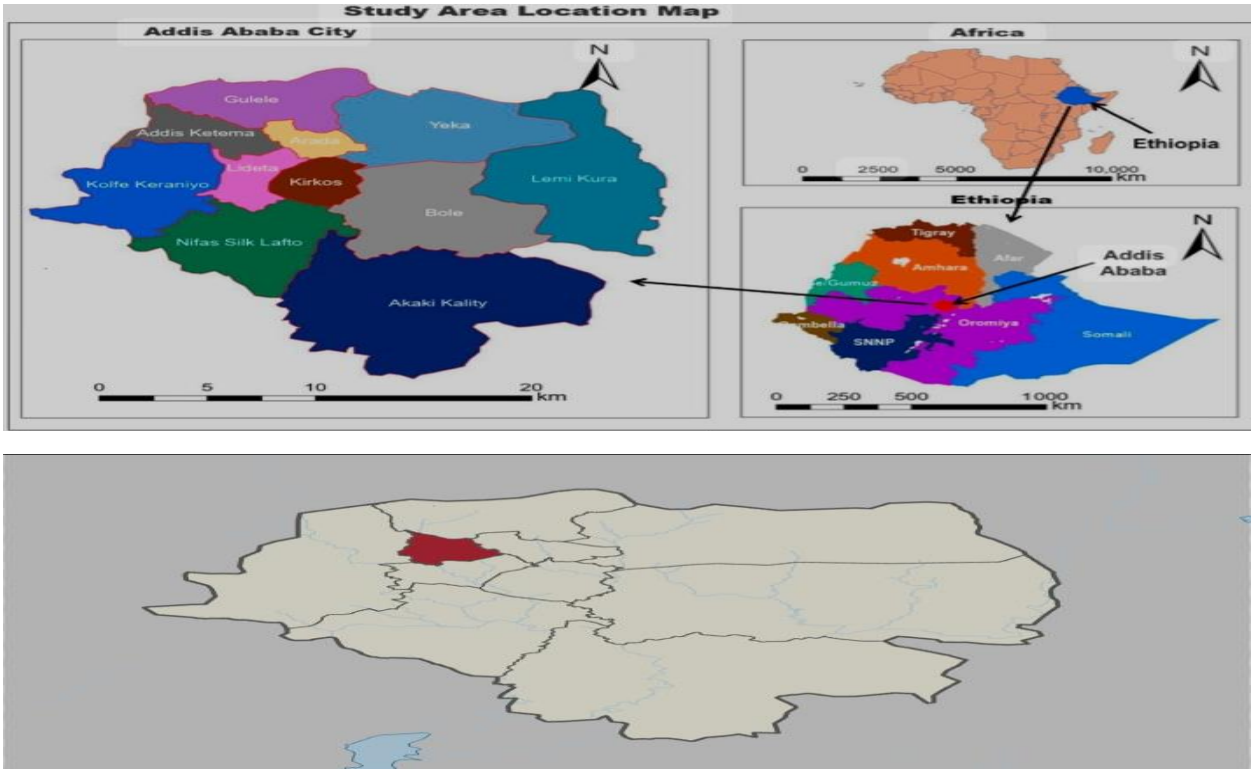

Figure 3.1 the study area map of Addis Ketema Subcity.

This research conducted in Addis Ketema Sub-City, one of the sub-cities of Addis Ababa, Ethiopia. The area has recently experienced a notable increase in public building construction projects, making it a relevant and strategic location for examining communication practices within the construction sector.

The study of the research specifically focus on government-funded and building projects. These types of projects are characterized by the involvement of multiple stakeholders—such as clients, consultants, contractors, and public officials—and often require complex coordination and communication efforts. By narrowing the scope to these public projects, the research aims to provide targeted insights into the communication challenges and practices unique to this project type and context.

3.2 Research design

I. Research Approach

This study adopted a mixed-methods research approach, combining quantitative (metrics, surveys) and qualitative (interviews) data. Quantitative would measure communication effectiveness statistically.

II. **Population and Sampling**

Population: Project Managers, Site Engineers, Supervisors, Contractors, Subcontractors and Client Representatives.

Sampling Technique: Purposive sampling for key inforants (experts, leaders) .I selected specific individuals intentionally because they are most knowledgeable and experienced.

Sample Size:151 participants were directly involved.

III. **Data Collection Methods**

Primary Data: Surveys/Questionnaires Based on established communication metrics (Project Communication Management standards from PMBOK)..

Secondary Data: Project documentation (communication plans, meeting minutes). Literature review on project communication theories, communication metrics, and improvement frameworks.

IV. **Data Analysis Methods:**

Descriptive statistics (percentage), Use Communication Effectiveness Metrics such as: Response time to communication, Frequency of communication, Stakeholder satisfaction rate.

V. Evaluation Framework :

Use a Communication Effectiveness Evaluation Framework such as:

- ✓ Clarity: Is the information clear?
- ✓ Timeliness: Is the information delivered on time?
- ✓ Feedback: Is there a mechanism for feedback?
- ✓ Accessibility: Is information easily accessible?
- ✓ Satisfaction: Are stakeholders satisfied with the communication?

VI. Strategic Improvement Framework Proposal

Based on gaps found in the evaluation, a Strategic Communication Improvement Framework will be proposed, possibly including:

- ➢ Better structured communication plans.

- Clear communication channels and responsibilities.
- Scheduled communication audits.
- Technology adoption (project management software).
- Regular training and workshops.

3.3 Source of data

■ Data Source

The study utilized primary and secondary data sources to obtain comprehensive and reliable information regarding communication practices in public building construction projects in Addis Ketema Sub-City, Addis Ababa.

- ✓ **Primary Data Sources:** Primary data were collected directly from individuals actively involved in public building construction projects. These included:Project managers,Site engineers,Client representatives,Supervising consultants,Contractors' communication officers and Other key stakeholders involved in project delivery.The data were gathered through structured questionnaires and key informant interviews, ensuring first-hand insights into the existing communication practices, effectiveness challenges, and potential improvement strategies.
- ✓ **Secondary Data Sources**:Secondary data were obtained from:Project communication records,Site meeting minutes,Project progress reports,Official correspondences (emails, letters, memos),Construction management guidelines and manuals,Published literature and previous research studies related to communication effectiveness in construction projects.The secondary data provided a context for understanding formal communication protocols and served to validate the primary data findings.

■ Data Type

The types of data collected for this study are categorized into quantitative and qualitative types, although the research primarily emphasizes the quantitative dimension.

- ✓ **Quantitative Data**: Quantitative data consisted of numerical information gathered through structured questionnaires. This included: percentage of data, number of respondents.
- ✓ **Qualitative Data (Supportive):** While the study mainly focused on quantitative analysis, a limited amount of qualitative data was also collected through open-ended questions and

document review to:Capture stakeholders' perceptions and experiences with communication challenges Understand contextual factors influencing communication effectiveness .

3.4 Sampling design

3.4.1 Sample population

The target population for this study comprises stakeholders involved in public construction projects within Addis Ketema Subcity, Addis Ababa. This includes project managers, site engineers, supervisors, contractors, consultants, client representatives, and selected administrative staff who actively participate in the communication and management processes of ongoing or recently completed public construction projects. These individuals were chosen because of their direct involvement in project communication practices, decision-making, and daily project coordination.

This group was selected to capture a broad understanding of communication practices across different levels of project hierarchy, from field-level supervision to top management, ensuring the study reflects practical experiences, challenges, and the effectiveness of communication strategies employed in public construction projects in the Addis Ketema Subcity context.

3.4.2 Sample size

The sample size will be determined using sto vin,s formula for finite population **.**

$$n = \frac{N}{1 + Ne^2}$$

n = Sample size
N = Population size
e = Margin of error
e = 5% or 0.05

For this research, a sample size of 151 projects was selected. Justification for Sample Size:

A sample of 151 out of 243 projects (approximately 61.73% of the population) is statistically reasonable to ensure the reliability and validity of the results.

It allows sufficient data to perform quantitative analysis using communication effectiveness metrics while still being feasible for detailed qualitative evaluation.

The study applied a Purposive Sampling technique. Purposive sampling is a non-probability sampling method where subjects are selected intentionally based on their relevance to the research objectives.

3.4.3 Sample techniques

Identify Eligible individuals From the 243 populations; those with active communication structures, regular reporting systems, or recent handover documentation were prioritized.

- Selection Criteria for individuals: having more expiance more than two years.
- Clear organizational communication structure (e.g., meetings, reporting, and documentation).
- Availability of key personnel for interviews or surveys.
- Selection of Participants within Projects: Project managers, site engineers, supervisors, contractors, consultants, and client representatives directly involved in communication practices were chosen.

3.5 Method of data collection

multiple data collection methods were employed to gather comprehensive and reliable information from a sample of 151 participants drawn from a population of 243 individuals.

The study primarily adopted both quantitative and qualitative data collection approaches (a mixed-methods strategy) to ensure that both numerical evaluation and deeper understanding of communication practices could be captured.

- **Questionnaire Survey:** To collect primary data for this study, a structured questionnaire survey was employed. The questionnaire was designed to critically evaluate existing project communication practices and identify potential areas for improvement within public building construction projects in Addis Ketema Subcity, Addis Ababa.

The questionnaire included both closed-ended and open-ended questions. The closed-ended questions were primarily based on a Likert scale (e.g., strongly agree to strongly disagree) to measure respondents' perceptions, experiences, and satisfaction levels with communication practices. Open-ended questions were included to capture detailed qualitative insights and suggestions for improvement.

A total of 151 questionnaires were distributed to selected participants who were actively engaged in various roles related to public building construction projects. These participants included project managers, engineers, site supervisors, contractors, consultants, and client representatives. The participants were chosen based on their direct involvement in communication processes within their respective projects.

- **Document Review:** Relevant project documents were reviewed to complement the primary data collection.

  - Documents Reviewed Included:
    - ✓ Project Communication Plans.
    - ✓ Site Meeting Minutes.
    - ✓ Email Correspondence Records.
    - ✓ Project Progress Reports.
    - ✓ Contractual Communication Requirements.

This review helped in triangulating the data collected from surveys, ensuring the reliability and consistency of the study findings.

3.6 Method of data analysis

a) Data analysis since this study employed a quantitative research approach, the primary goal of data analysis was to systematically quantify the effectiveness of project communication practices using numerical data collected through structured questionnaires.

The analysis focused on identifying measurable patterns, evaluating communication performance using effectiveness metrics, and statistically interpreting the results to recommend strategic improvements.

b) Data Preparation and Coding:

- **Data Cleaning:** The dataset was screened for missing values, inconsistencies, and outliers. Incomplete or unreliable responses were discarded to maintain data integrity.
- **Coding:** Closed-ended questions were assigned numerical values

  1 = Strongly dis agree,2 = dis agree,3 = Neutral,4 =agree, 5 = Strongly aree

This coding allowed for efficient computation of statistical measures.

Percentages: To represent the proportion of responses across different categories.

Use of Communication Effectiveness Metrics: Quantitative metrics were developed based on the communication aspects assessed, such as:

- ✓ Clarity of Information (measured by average score across respondents).
- ✓ Frequency of Communication (weekly, monthly).
- ✓ Channel Effectiveness (email, meetings, memos, etc.)
- ✓ Feedback Mechanisms (existence and satisfaction with feedback processes)

Each metric was statistically analyzed to measure its current effectiveness level and rank areas needing improvement.

3.7 Methode of data presentation

a) Tables: Summarized numerical findings such as number of response & percentages of data .Comparison tables between different project roles and their responses.

b) Figures: It summarizes the results efficiently.

3.8 Validation

Validity measures the degree to which the instrument used for this study measures what it intends to measure. Validity is also improved through the operationalization of variables. The questionnaires are comprehensive to cover all the variables being measured. reliability refers to the degree to which the instrument used for this study is the same at different measurement times.

Refers to the extent to which data accurately reflects what they are meant to reflect. It means that the instrument measures what it is supposed to measure. Items in the questionnaire are prepared using a five point-Likert scale except the demographic items related to the study. Scales with coefficient alpha between 0.91 to 1 excellent, 0.81 to 0.9 good, 0.71 to 0.8 acceptable, 0.61 to 0.7 questionable, 0.51 to 0.6 poor and 0 to 0.5 are unacceptable.

Inter-item reliability coefficient i.e.Cronbach‘s alpha for overall questionnaire items ranges from (0.731 to 0.914) so the instrument used for this study was acceptable.

CHAPTER FOUR: RESULTS AND DISCUSSION

4.1 Demographic profile response rate of respondents

4.1.1 Demographic profile

4.1.1.1 Role of the respondent

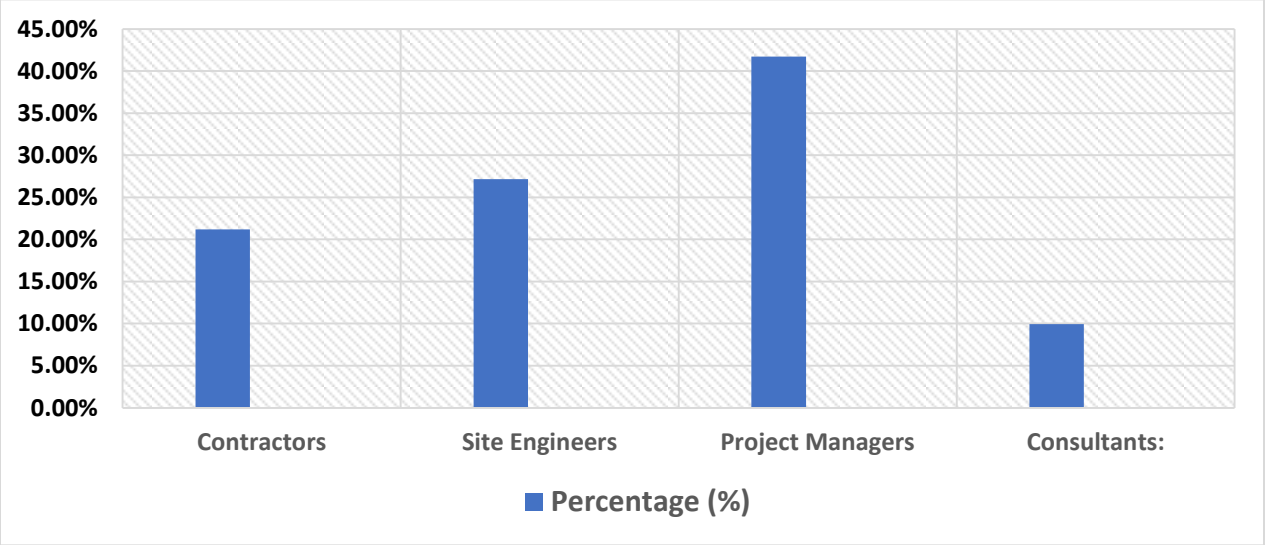

Figure 4.1 Role of the respondents

The largest group is Project Managers, comprising nearly 42% of the total respondents. This suggests that the research has strong representation from decision-makers or higher-level professionals. Their perspective likely reflects broader project oversight, strategic planning, and inter-department coordination.

The Site Engineers account for over 27% of the total. This indicates a substantial technical viewpoint from professionals actively engaged with on-site operations, providing insights on practical implementation and challenges.

Contractors form just over 21% of the sample. While this is not the majority, it offers valuable input from professionals focused on procurement, construction methods, and cost control. Their moderate representation ensures the execution side of projects is considered.

Consultants are the least represented group at around 10%. This may lead to a relatively smaller emphasis on regulatory, quality assurance, and advisory perspectives unless their responses are heavily weighted or influential.

The large share of Project Managers and Site Engineers ensures a strong base of responses from experienced, field-based, and decision-level professionals.

The under representation of consultants could lead to a gap in analytical, quality control, or compliance-based insights.

With three major roles contributing significant input (PMs, Engineers, Contractors), the research likely captures a balanced view across planning, execution, and field coordination—though with room to strengthen the consultant perspective.

4.1.1.2 Respondent years of experience

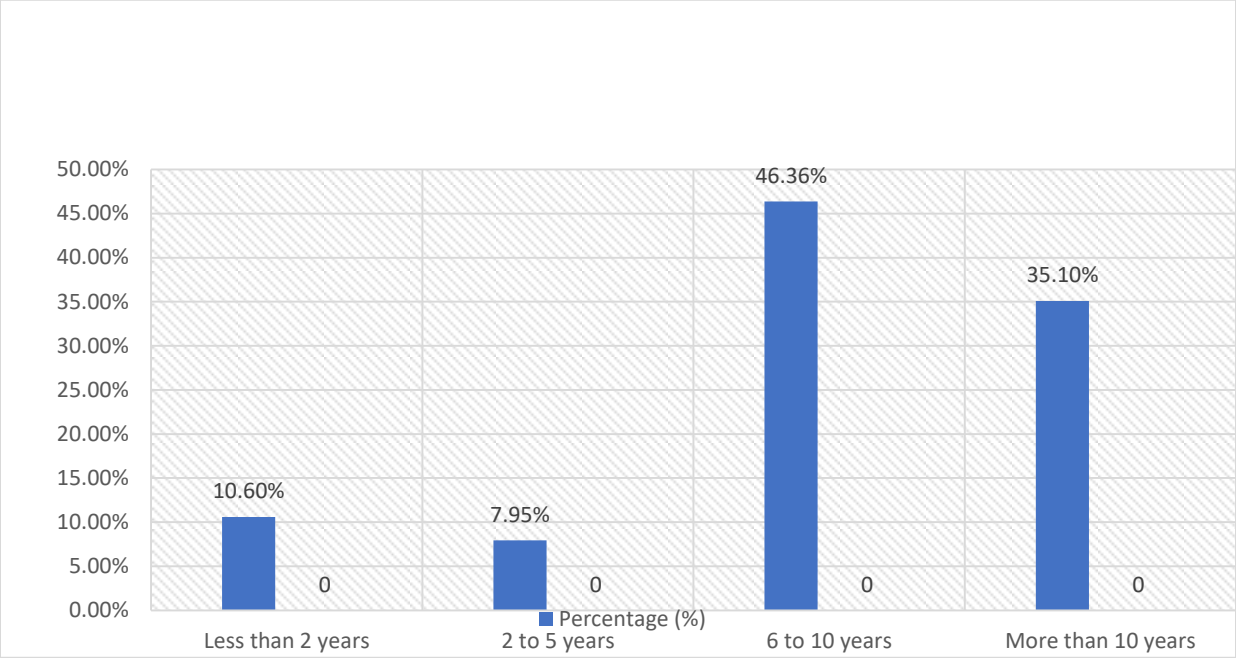

Figure:4.2 Respondents years of Experience

The largest portion of respondents—46.36%—have between 6 to 10 years of experience. This group likely combines practical field knowledge with maturing management skills, making them highly valuable in contributing informed insights on project implementation, decision-making, and industry challenges.

With 35.10% having more than 10 years of experience, the survey benefits from the perspectives of highly experienced professionals. This group is essential in identifying long-term trends, evaluating past and present project performance, and forecasting industry needs.

Only a small portion of respondents—18.55% combined—have less than 5 years of experience: 10.60% with less than 2 years, likely recent graduates or junior staff, 7.95% with 2 to 5 years, possibly in early-mid career.

These respondents may provide fresh insights, current academic influence, and awareness of new technologies, though they might lack depth in practical application or long-term project evaluation.

High Reliability & Depth: With over 81% of respondents having more than 5 years of experience, the dataset is robust in terms of professional maturity and practical knowledge. It enhances the credibility of opinions on technical, managerial, and strategic issues.

While the smaller group of early-career professionals may not dominate the dataset, their inclusion provides a cross-generational view—valuable for understanding adaptation to new tools, methods, and the evolving workforce.

Since the majority of the sample has significant experience, the findings might lean toward traditional methods or conservative views rather than innovation unless prompted specifically in the survey. Here's a detailed description and analysis based on the respondent data regarding recent involvement in public building projects in Addis Ketema Sub-City:

4.1.1.3 The current involvement of respondent in public building

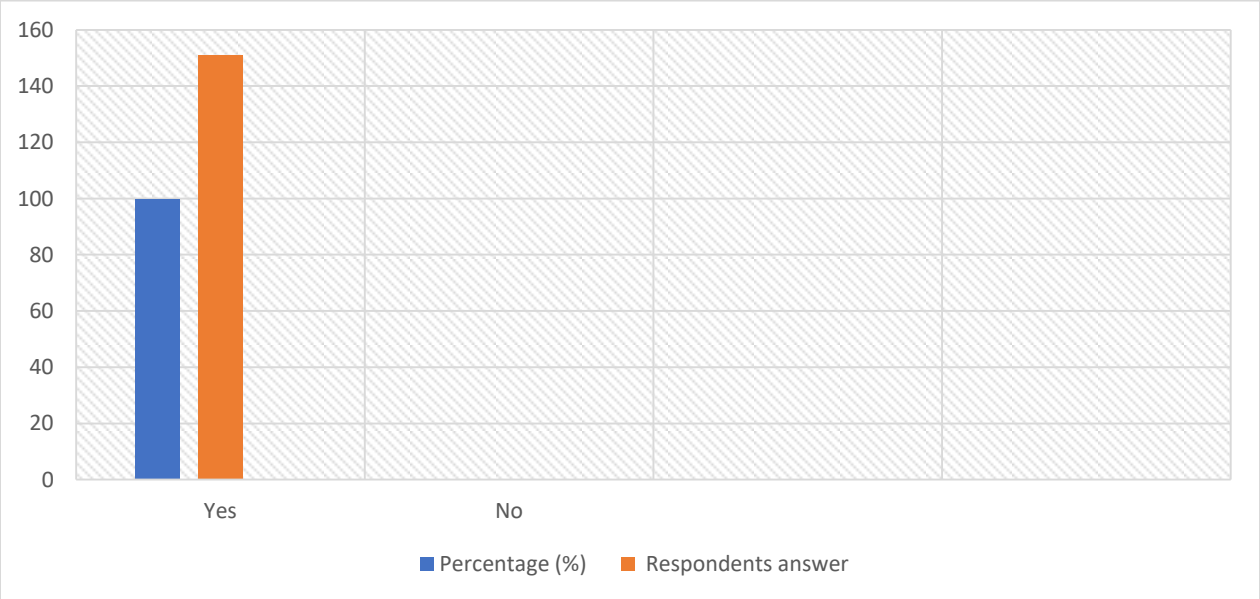

Figure:4.3 The current involvement of respondent in public building at addis ketema subcity

The data shows that 100% of the respondents have been recently involved in public building projects in Addis Ketema Sub-City. This uniformity is quite significant for the reliability and relevance of the research because:It ensures that every respondent has direct, recent experience with the context under study. There is no dilution of the dataset with respondents who lack field relevance or exposure to the specific setting.

The feedback and analysis generated from the study are directly applicable to public construction projects in the specific locality, making it highly contextualized and localized.

Since all respondents are recently engaged in projects within Addis Ketema, the insights are: Timely – reflecting the most current practices, challenges, and dynamics in the area. Geographically specific – valuable for policymakers, stakeholders, or researchers focusing on Addis Ketema.Technically relevant – because it eliminates abstract or second-hand perspectives.

Implications for Validity: The unanimous "Yes" response boosts the internal validity of the research: The population is well-targeted, avoiding irrelevant or off-topic responses. It ensures a homogeneous basis for comparing different roles (contractor, engineer, etc.) or experience levels within a shared context—public building projects in one specific sub-city.

While the 100% involvement rate is highly beneficial for contextual depth, it may: Limit generalizability to other sub-cities or project types (e.g., private sector, infrastructure).Risk over fitting findings to a single geographic or project type if broader insights are required. This full participation rate provides a solid foundation for focused, reliable, and practical analysis of public building projects in Addis Ketema Sub-City. It ensures that the findings of the study are deeply rooted in current local experience, making them highly actionable for improvements or policy decisions specific to that area.

4.1.2 Respondent rate

In this study a total of 151 questionnaires were distributed. From the totally distributed questionnaire, 151 were properly filled and collected from contractors, Architects, site engineers, project managers and others at a different position. It accounts about 75.5% of the total respondents.

Since this sample was sufficient to make analysis, all the discussion below are made on these groups of respondents. The response rate is the extent to which the final set of data includes

sample numbers and is calculated from the number of people with whom filled and returned the questionnaires divided by the total number of people in the entire Sample, including those who refused to participate and those who were unavailable (Koltler, 1997).

4.2 The effectiveness of existing project communication practice

4.2.1 Timely communication between projects stakeholder

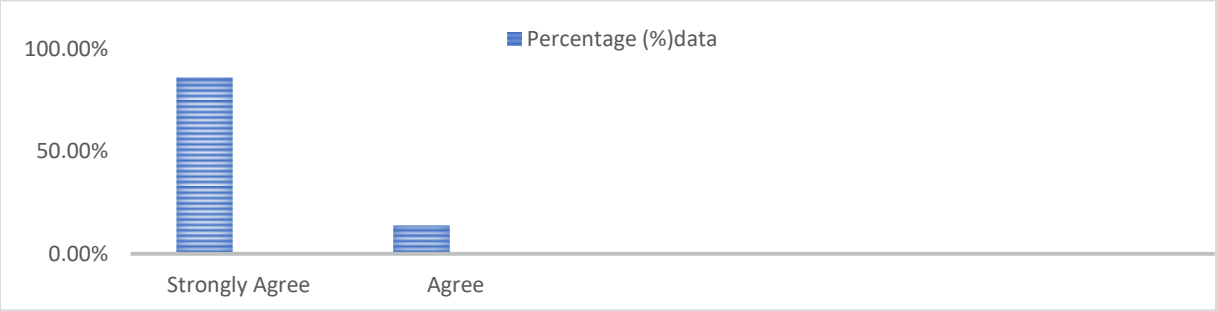

Figure:4.4 Timely communicate between projects stakeholders

A combined 100% of respondents either strongly agreed or agreed that communication between stakeholders is timely: This reflects an exceptionally strong consensus on the effectiveness of stakeholder communication within public building projects in Addis Ketema. With 86% strongly agreeing, this isn't just general satisfaction it shows a high level of confidence and approval.

Efficient communication is a cornerstone of successful project execution, impacting coordination, decision-making, and responsiveness.

Because all 151 respondents reported a positive experience, there is no variance in this dataset segment. While this boosts internal consistency, it might limit comparative or diagnostic analysis on communication issues since no negative cases are reported.

While satisfaction is high, qualitative data (like interviews or open comments) could help explain what communication practices are contributing to this success. Future research could explore whether this timely communication translates into better project performance, such as reduced delays or improved quality. The data reveals a near-unanimous and highly confident belief that stakeholder communication is timely in public building projects within Addis Ketema Sub-City.

This reflects a well-managed communication structure, contributing positively to project outcomes and collaboration. It is a key strength and a best-practice area that could serve as a model for other regions or sectors.

4.2.2 Information shared among stakeholder

Response data	Number of respondent	Percentage (%)data
Strongly Agree	120 respondents	79.47%
Agree	31 respondents	20.53%
Total	151	100%

Table 4.1: Information shared among stakeholder

A combined 100% of the respondents believe that the information shared among stakeholders is accurate, with the vast majority (nearly 80%) strongly agreeing: This indicates a strong level of trust and reliability in communication practices. It shows that information flow is not just timely (from the earlier analysis), but also technically sound and dependable.

Accurate information is crucial for coordination, budget management, scheduling, and quality control. This result suggests that decisions made by project managers, engineers, contractors, and consultants are based on reliable data, reducing the risk of errors, rework, or delays.It strengthens collaborative efficiency, as all stakeholders are working with the same version of the facts.

In the previous analysis, 100% of respondents also confirmed timely communication. This complementary finding that communication is both timely and accurate indicates a high functioning communication environment in public building projects in Addis Ketema.

This data strongly supports the conclusion that stakeholder information sharing is not only timely but also highly accurate in public building projects within Addis Ketema Sub-City. This reflects a robust communication system where trust, clarity, and coordination are prioritized—likely contributing to better project planning, execution, and stakeholder satisfaction.

4.2.3 A clear and easy understanding of project communication

Response data	Number of respondant	Percentage (%)data
▪ Strongly Agree	129 respondents	85.43%
▪ Agree	22 respondents	14.57%
Total	151	100%

Table:4.2 A clear and easy understanding of project communication

A combined 100% of respondents believe that project communication is clear and easy to understand, with the vast majority (85.43%) strongly agreeing: This indicates a high level of satisfaction and confidence in how information is presented and shared across project teams. The clarity of communication likely contributes to effective understanding of roles, responsibilities, expectations, and tasks. No Confusion or Misinterpretation Reported With no respondents indicating neutral or negative responses:

There appears to be no significant confusion, misinterpretation, or complexity in the communication methods used. This might suggest the use of well-structured formats, visual aids (like drawings or charts), or consistent terminology.

Clear and understandable communication can: Reduce the risk of errors, rework, or delays due to miscommunication. Improve collaboration and team coordination, especially between multidisciplinary stakeholders such as contractors, engineers, consultants, and project managers. Enhance compliance with design and safety standards, as everyone fully understands the project requirements. Together, these findings show that project communication in Addis Ketema's public building projects is: Timely, Accurate,Clear and easy to understand.

This forms a comprehensive communication quality profile, reflecting a highly effective communication environment.

This positive feedback may be due to: Structured communication systems, such as regular progress meetings or reporting templates. Use of project management software, email tracking, or visual dashboards. Clear documentation (drawings, schedules, BoQs) that is easily interpretable by all stakeholders. Effective training or orientation for new team members to quickly understand communication channels.

While the findings are extremely positive for this specific setting, future studies could:Compare this result with other sub-cities or private sector projects. Explore whether language barriers, technical terminology, or document formats impact clarity in other contexts. Investigate what specific tools or practices contribute to this clarity, to share best practices across regions or sectors.

The data clearly shows that project communication is perceived as both clear and easy to understand by all respondents involved in public building projects in Addis Ketema. This is a strong indicator of effective communication practices and reinforces earlier findings on

timeliness and accuracy. Together, these factors contribute to a well-coordinated and efficient project management environment.

4.2.4 Consistent flow of communication

Table :4.3 consistent flow of communication

Response data	Number of respondant	Percentage (%)data
▪ Neutral	140 respondents	92.72%
▪ Disagree	11 respondents	7.28%
Total	151	100%

92.72% of respondents selected neutral, indicating a high level of uncertainty or inconsistency in their perception regarding the continuity of communication throughout all project phases. This suggests: Respondents may not feel confident in stating that communication is either consistently maintained or consistently lacking.

Communication might be strong during certain phases (e.g., planning or execution) but may break down during others (e.g., design review, handover, or post-completion).

Although only 7.28%, the 11 respondents who disagreed indicate a clear perception that communication is inconsistent across the full project life cycle. This highlights a communication gap that may become more apparent during project transitions, such as: Shifting from design to construction From construction to project close-out or operation During coordination between subcontractors and consultants.

This result differs significantly from earlier responses which showed:100% agreement that communication is timely 100% agreement that information is accurate .100% agreement that communication is clear and understandable.This contrast implies that while communication is effective at certain points, it may lack continuity or follow-through across all phases. Possible reasons include:Lack of formal communication plans that span from initiation to closure Poor documentation handover between phases .Different teams managing different phases, causing communication breakdowns Project phase silos, where design, construction, and close-out are not fully integrated.

While communication in public building projects in Addis Ketema Sub-City is widely viewed as timely, accurate, and clear, the consistency of communication across all project phases is questionable. The dominance of neutral responses suggests a lack of confidence or awareness in

whether communication flows are maintained end-to-end. The presence of disagreement further supports concerns of potential gaps during phase transitions. This highlights an important area for improvement in project communication planning and management.

4.2.5 A feedback from stakeholders acknowledge and acted upon promptly

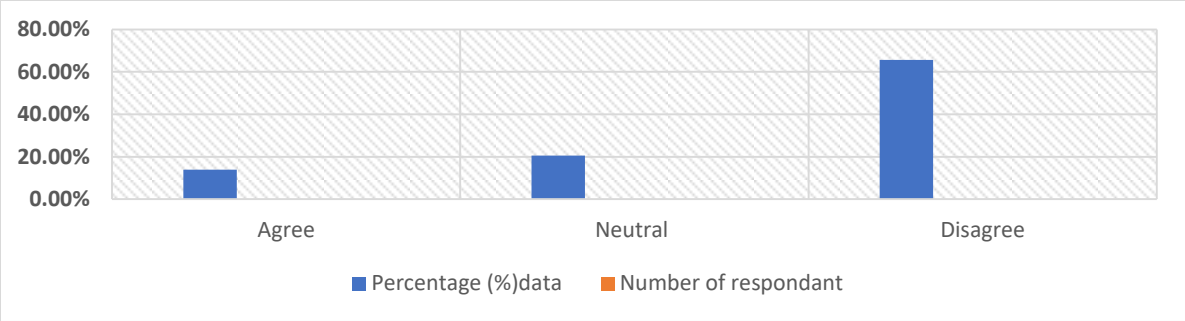

Figure: 4.5 A feedback from stakeholders acknowledged and acted upon promptly

A significant majority—approximately two-thirds (65.56%)—disagree that stakeholder feedback is acknowledged and acted upon promptly. This indicates: A clear systemic issue in how stakeholder input is handled. Stakeholders are likely sharing concerns or insights, but rarely see those concerns reflected in actions or decisions. Feedback may be collected as a formality, but not used constructively, reducing its effectiveness and discouraging future engagement.

The neutral group (20.53%) represents those who are uncertain or feel indifferent about whether feedback is effectively addressed: These individuals may not have seen clear evidence of follow-up. Or they may not be involved directly in processes where feedback is handled and acted upon. This neutrality reinforces the lack of transparency or visibility in the feedback-response system.

Only 13.91% agreed, and no respondents strongly agreed: This is a very small fraction of participants who feel feedback is handled well.

The absence of strong agreement shows limited enthusiasm or confidence, even among the most optimistic respondents.

4.2.6 Effectively use of communication tools

Response data	Number of respondant	Percentage (%)data
▪ Agree	18 respondents	11.92%
▪ Neutral	133 respondents	88.08%
Total	151	100%

Table:4.4 effectively use of communication tools in Addis Ketema sub city public buildings

88.08% of respondents selected neutral, which strongly indicates that: Most respondents are uncertain or unable to assess the effectiveness of communication tools. There may be minimal or inconsistent usage of formal communication tools like emails, calls, or structured meetings. It may also suggest that communication is happening informally, or through non-standardized methods (e.g., verbal updates, messaging apps, or undocumented discussions).
This level of neutrality is unusual, especially compared to other communication-related questions where respondents expressed stronger opinions. It points to a lack of emphasis, visibility, or clarity in how tools are integrated into project processes.

Only 18 respondents (11.92%) agreed that tools are being used effectively. This is a relatively small minority, and: Indicates that a few teams or individuals may be using tools like email or scheduled meetings in a structured and beneficial way.
However, without strong agreement or broader adoption, the benefit of these tools likely remains localized rather than systemic.

Lack of training or awareness on how to use formal communication tools effectively.Project culture focused on face-to-face or informal communication, with minimal documentation.
No enforcement or protocol requiring communication through email, calls, or scheduled meetings. Digital infrastructure limitations, such as inconsistent access to internet or devices among site-based personnel.Tools may be used sporadically or without clear guidelines, making their impact unclear to most stakeholders.

Loss of documentation: Without formal tools, important decisions may not be recorded or easily traceable. Delays in response: Reliance on informal communication can lead to missed or delayed information. Miscommunication or errors: Lack of standardized communication increases the risk of misunderstandings. Reduced collaboration: Effective use of meetings, emails, and calls enhances team coordination—underutilizing them may result in siloed efforts.

The data reveals a concerning lack of clarity and confidence in the use of communication tools in public building projects in Addis Ketema Sub-City. While there is no outright rejection of these tools, the overwhelming neutrality and low agreement levels suggest that email, meetings, and calls are either underutilized or not effectively managed. Bridging this gap is essential to support more transparent, timely, and traceable project communication. Here is a detailed analysis of the responses to the question:

4.2.7 Satisfied with the current communication practice in the project

Response data	Number of respondant	Percentage (%)data
▪ Neutral	10 respondents	6.62%
▪ Disagree	140 respondents	92.72%
Total	151	100%

Table:4.5 Satisfied with the current communication practice in the project

92.72% of the respondents disagreed with the statement, meaning the vast majority are not satisfied with the current communication practices in their projects:
This is a very strong negative indicator. It reflects widespread dissatisfaction across different roles and levels of project involvement.

The communication system in place is perceived as ineffective, insufficient, or broken by nearly all participants. This figure alone implies a critical issue that should be addressed with urgency by project managers and stakeholders.

Uncertainty Among a Small Minority:10 respondents (6.62%) remained neutral: This group may include individuals who have limited involvement in communication processes. Alternatively, they may see both positive and negative aspects, making it difficult for them to take a firm stance. However, this group is small and does not offset the overwhelmingly negative perception. Given such widespread dissatisfaction, several root causes are likely: One-way communication flow: Feedback may be collected but not acted upon (as seen in earlier questions). Ineffective use of communication tools: Majority of respondents had previously reported neutral or uncertain use of tools like emails, calls, and meetings. Lack of clarity or consistency: Earlier data suggested mixed responses about message clarity and inconsistent communication across project phases.

Stakeholders may not be informed about decisions or changes. Infrequent or poorly structured communication: Lack of regular meetings, briefings, or shared updates.
Such poor satisfaction with communication practices can lead to: Low stakeholder morale and disengagement, Misunderstandings and errors during execution phases, Conflicts or mistrust among stakeholders (consultants, contractors, engineers, managers),Project delays or budget

overruns due to lack of coordination, Reputational damage for project leadership and institutions involved.

4.3 Impact of existing project communication performance

4.3.1 Project delay caused by poor communication

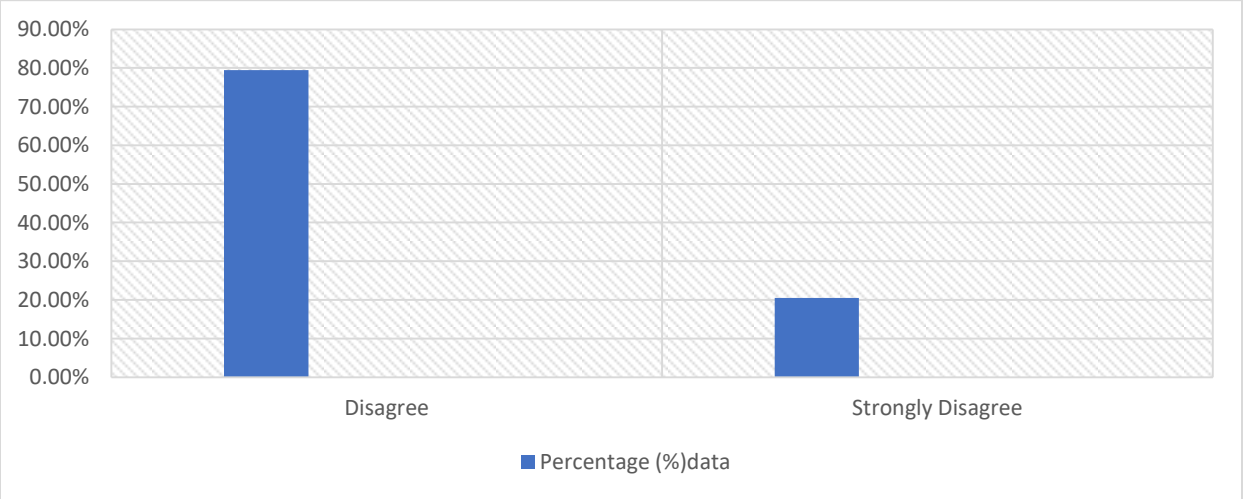

Figure:4.6 project delay caused by poor communication

Every respondent either agreed or strongly agreed that poor communication has caused project delays: This shows a 100% consensus, which is extremely rare in survey research.

It clearly establishes poor communication as a direct and universally acknowledged cause of project delays.Such strong alignment across different roles (contractors, consultants, project managers, and engineers) implies that communication problems are deep-rooted and systemic.

Majority Agreement with Strong Support: 79.47% agreed and 20.53% strongly agreed. This distribution suggests: While most respondents see communication as a major delay factor, a significant portion feels strongly that its impact is serious and possibly repeated or severe.

This finding is consistent with earlier responses, including:92.72% dissatisfaction with current communication practices.Minimal agreement that tools like email and meetings are effectively used Poor feedback handling, where 65.56% disagreed that feedback is acted upon Neutral or inconsistent communication flow during project phases. These combined findings point toward a dysfunctional communication structure, which is directly resulting in delays and performance bottlenecks. Real-world Implications of Communication-Related Delays. When communication is poor, project delays can result from: Unclear instructions or misinterpretation of tasks, Delays

in decision-making due to poor coordination between stakeholders, Missed deadlines because critical updates or approvals were not shared on time, Conflicts and rework, due to different understandings of specifications or schedules, Slow response to on-site issues, resulting in cascading effects on timelines.

The data provides clear and unanimous evidence that poor communication is a major contributor to project delays in public building projects in Addis Ketema Sub-City. With 100% of respondents confirming the issue, it represents a high-priority area for intervention. Without meaningful changes to communication practices, further delays and inefficiencies are highly likely.

4.3.2 Effective communication contribute to staying within the project budget

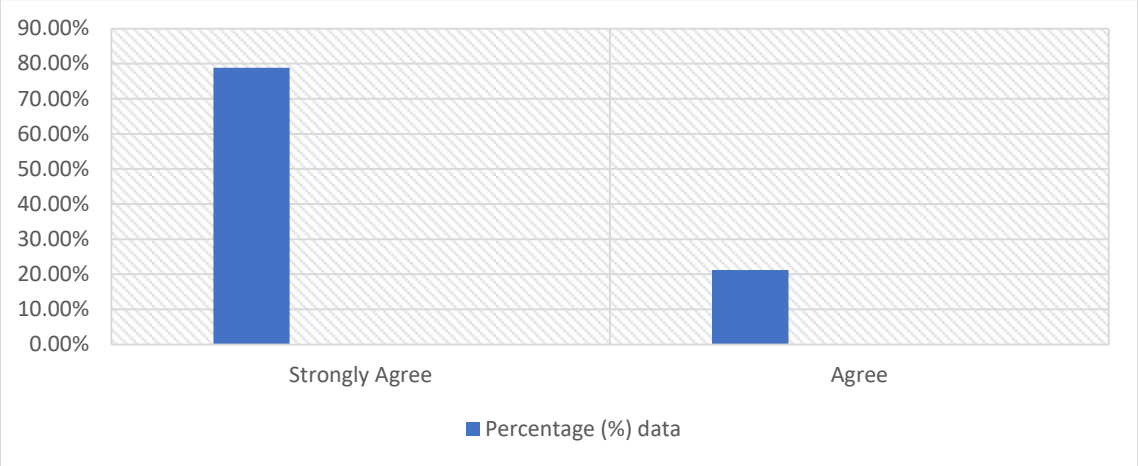

Figure:4.7 effective communication contributes to staying within the project budget

All 151 respondents (100%) agreed that effective communication helps keep projects within budget: This unanimous result indicates a widely recognized and clearly experienced relationship between communication effectiveness and financial performance. It confirms that communication is not just a soft skill—it is a critical financial management tool in project execution. This is especially important in the context of public projects, where budget control is essential due to fixed funding and high public accountability.

A significant 78.81% of respondents strongly agreed, showing high confidence and conviction. The remaining 21.19% agreed, still positive but possibly recognizing that while communication plays a role, it may work alongside other financial controls. This suggests that: Stakeholders believe that communication directly affects the ability to manage costs, avoid overruns, and efficiently allocate resources.

Delays, errors, rework, or misunderstandings caused by poor communication are seen as leading causes of budget increases. This finding strongly aligns with earlier responses across multiple communication dimensions: 100% of respondents previously agreed that poor communication leads to project delays.

Over 92% reported dissatisfaction with current communication practices. Very few respondents felt that feedback, clarity, or consistency in communication were adequate.

Together, these insights demonstrate that the lack of structured and timely communication can derail both schedules and budgets, while effective communication has tangible financial benefits. Reduces Errors and Rework: Clear instructions and updates reduce mistakes that lead to additional labor or material costs.

- **Improves Resource Planning:** Timely communication helps with better scheduling of personnel and procurement.
- **Faster Issue Resolution:** Prompt communication enables quicker decisions, preventing cost escalations.
- **Ensures Scope Clarity:** Shared understanding between consultants, contractors, and clients prevents scope creep and contract disputes.
- **Enhances Team Coordination:** Aligning teams through clear channels minimizes idle time and operational inefficiencies.

If communication is poor, the risks to the budget include:Costly delays and rescheduling of materials or labor,Procurement errors or duplicate orders,Misalignment with client expectations or regulatory requirements,Litigation or penalties due to contractual misunderstandings

The data provides conclusive evidence that effective communication is directly linked to successful budget management in public building projects in Addis Ketema Sub-City. With 100% agreement among professionals—and nearly 80% expressing strong agreement—communication should be treated not just as a coordination tool but as a core component of project cost control strategies.

4.3.3 Misunderstanding due to unclear communication led to cost overruns

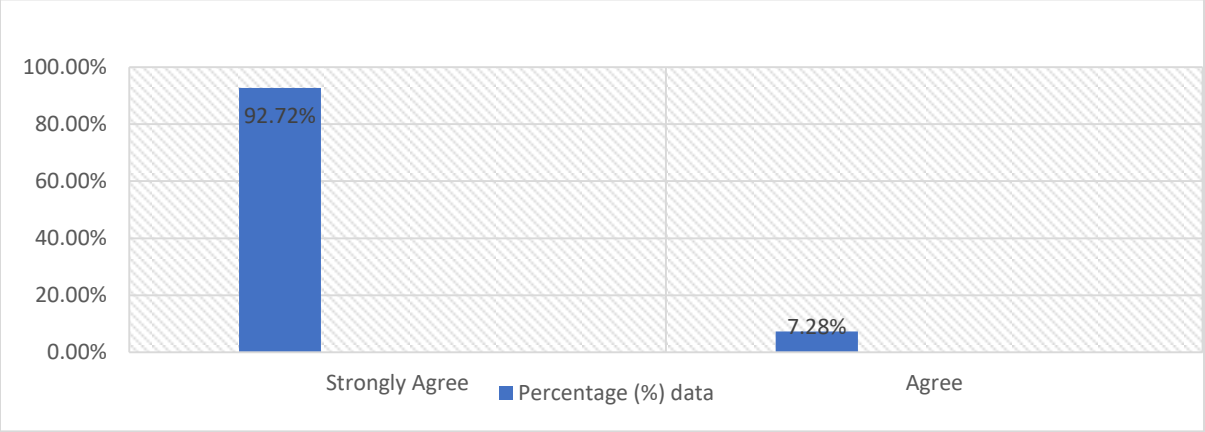

Figure: 4.8 misunderstandings due to unclear communication led to cost overruns

Every single respondent (100%) confirmed that misunderstandings caused by unclear communication have resulted in cost overruns:A remarkable 92.72% strongly agreed, indicating not only widespread recognition of the issue, but also a high level of certainty and concern.

The remaining 7.28% agreed, suggesting a slightly more moderate view, but still fully acknowledging the issue. This consensus suggests that unclear communication is a leading factor contributing to financial inefficiencies in public construction projects in the area.

100% agreed that effective communication helps keep the project within budget. 100% also agreed that poor communication causes delays. A high proportion of respondents (over 90%) expressed dissatisfaction with the current communication practices. Together, this paints a consistent and alarming picture: miscommunication and lack of clarity are not occasional issues—they are systemic and have serious cost consequences.

Based on both this survey and industry practices, the specific ways unclear communication can cause cost overruns include:

- Incorrect Execution of Works: Misunderstood specifications or design intent leads to rework and additional material costs,
- Misaligned Expectations: Different interpretations among stakeholders lead to conflicts, delays, or design revisions.
- Inefficient Resource Use: Time lost to clarification or correction delays labor, equipment use, and deliveries.

- Contractual Misunderstandings: Unclear roles, scope, or contract clauses result in disputes and unplanned claims or variations.
- Change Orders and Scope Creep: Vague instructions can cause unauthorized work or require additional work to fix mistakes, increasing costs.

The implications of these misunderstandings are not just operational but deeply financial: Projects face budget blowouts due to cumulative inefficiencies,Cost overruns erode the value-for-money principle in public projects,Delays tied to miscommunication create indirect costs such as penalties, idle equipment, and overheads,The public and clients may lose trust in the institutions managing the projects.

This survey result makes it abundantly clear that unclear communication is a root cause of cost overruns in public building projects within Addis Ketema Sub-City. With 92.72% of professionals strongly agreeing, this issue cannot be ignored. If project stakeholders aim to reduce cost waste and improve delivery efficiency, improving clarity in communication must be prioritized as a strategic objective

4.3.4 Communication quality impact overall stakeholder satisfaction

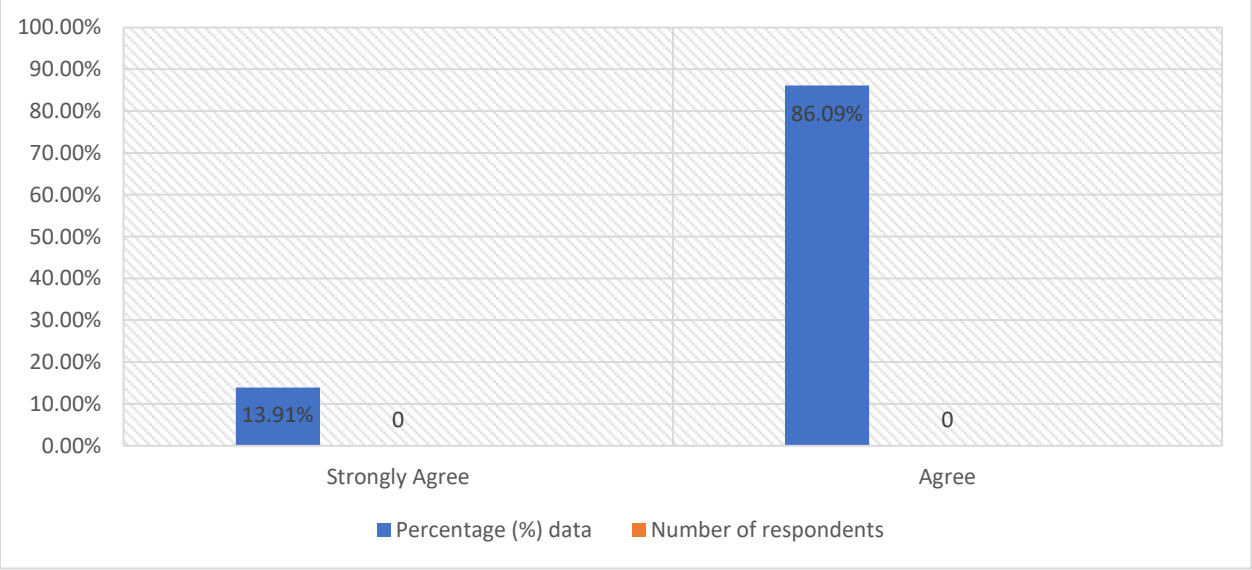

Figure 4.9: communication quality impact overall stakeholder satisfaction

All respondents (100%) confirmed that the quality of communication directly influences stakeholder satisfaction. This unanimous agreement indicates that communication is widely recognized not only as a technical or operational tool but as a central factor in building

stakeholder trust, confidence, and overall project experience. The high percentage of agreement (86.09%) also suggests that while most acknowledge this link, a smaller group (13.91%) holds a strong conviction about its impact—likely due to direct, repeated experiences where communication quality shaped outcomes.

Communication quality affects stakeholder satisfaction in several critical ways:

Trust and Transparency: Clear, timely, and open communication builds trust among stakeholders—whether they are clients, consultants, contractors, or public officials. Lack of communication, or poor-quality communication, often leads to doubt, suspicion, and frustration.

Expectations Management: Effective communication helps align expectations on scope, timelines, cost, and quality. When stakeholders are regularly informed, they are less likely to feel surprised or disappointed by changes or delays.

Conflict Minimization: Miscommunication often leads to misunderstandings and disputes. Clear communication protocols reduce the chance of interpersonal or contractual conflicts, improving the satisfaction of all parties involved.

Responsiveness and Engagement

High-quality communication includes not only sending messages but also listening and responding to concerns. Stakeholders feel respected and involved when their input is acknowledged and followed up. Cross-Link with Other Findings. This response is consistent with several earlier survey results: 99 respondents disagreed that feedback is properly acknowledged and acted upon highlighting communication gaps that likely reduce satisfaction. 140 respondents (92.72%) felt that poor communication has led to project delays, reinforcing frustration. Only 1 respondent (0.66%) was satisfied with the current communication practices, clearly showing that low communication quality is driving dissatisfaction.

In this context, the agreement that communication quality affects satisfaction is not hypothetical—it is based on first-hand, ongoing challenges experienced across projects.

4.4 Strategies to improve project communication for public building projects.

4.4.1 Strategies for improving communication

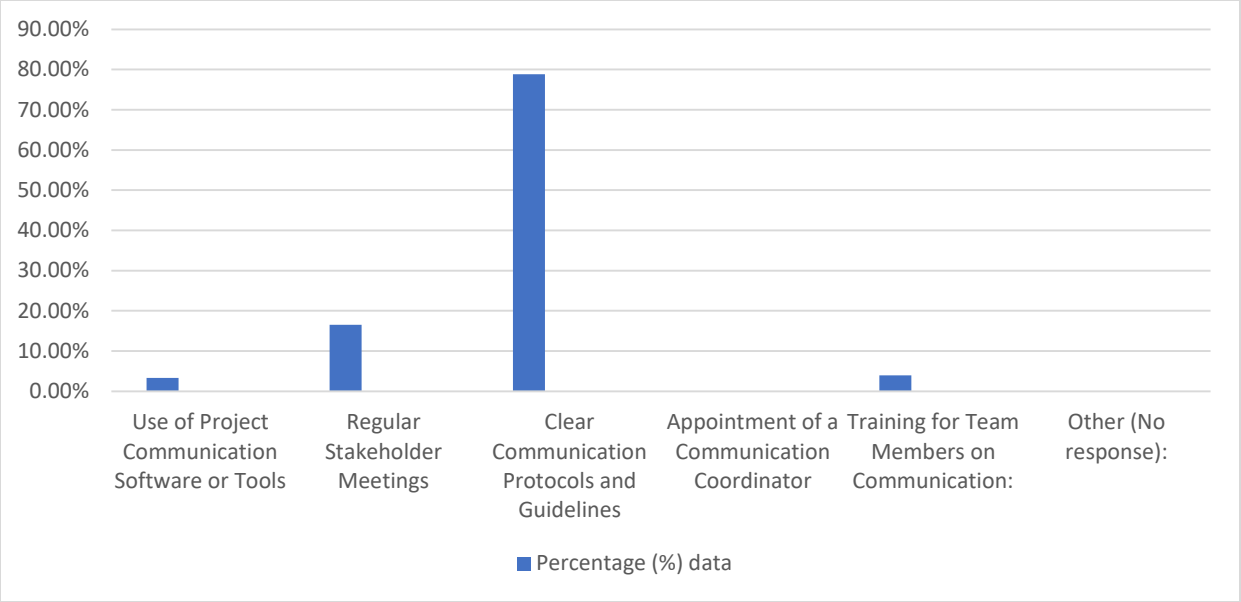

Figure 4.11: strategies for improving communication

78.81% of respondents suggested that clear communication protocols and guidelines would be the most effective strategy for improving communication.This response indicates that standardizing communication practices is seen as a priority. When guidelines are in place, they can provide clarity on the flow of information, roles and responsibilities, and timeliness of communication. The need for clear protocols likely stems from the challenges experienced in previous projects where unclear or inconsistent communication led to misunderstandings or delays. By establishing clear expectations for communication (who communicates with whom, what needs to be communicated, and how), project teams can ensure consistent, organized, and efficient communication throughout the project lifecycle.

16.56% of respondents highlighted the importance of regular stakeholder meetings as a strategy for improving communication. This response emphasizes the value of face-to-face or virtual meetings to ensure that all parties are regularly updated on the project's progress, issues, and decisions. Regular meetings foster active involvement, help resolve misunderstandings quickly, and provide opportunities for stakeholders to address concerns and give feedback.

Stakeholder meetings can be particularly important in complex projects where many parties need to be kept informed and aligned. Ensuring that these meetings are structured, focused, and held frequently enough can enhance communication effectiveness.

3.31% of respondents suggested the use of project communication software or tools.

This indicates that while this option is not overwhelmingly popular, there is a recognition that digital tools can enhance communication. Software tools like Microsoft Teams, Slack, or project management platforms (e.g., Procore, Asana, Trello) can improve real-time communication, allow for easy document sharing, and provide a centralized platform for all project communications.

For this suggestion to gain more traction, respondents might have faced barriers like a lack of training, access to tools, or the right tools to match the project needs. Additionally, not all stakeholders may be comfortable using technology or may prefer traditional communication methods.

3.97% of respondents advocated for training team members on communication.
This is an important strategy for ensuring that all individuals involved in the project understand the best practices for effective communication. Training can help improve listening skills, clarity in messaging, and ensure that messages are understood as intended.
Although only a small percentage of respondents pointed to this, it is clear that enhancing communication skills among team members can significantly improve overall project communication. In diverse teams, effective communication training can also help bridge cultural or language barriers.

0% of respondents suggested the appointment of a communication coordinator.
This might suggest that the respondents feel the existing communication structure already accommodates the need for a centralized communicator, or they may believe that clear communication protocols and regular meetings would suffice without the need for a dedicated coordinator.

However, in larger projects, having a communication coordinator could help ensure that communication is well-managed, especially if the project involves multiple stakeholders or has complex needs.

4.4.2 Develop strategic communication plan

Developing a Strategic Communication Plan is a structured and proactive process designed to ensure that communication within a project is clear, purposeful, audience-focused, and aligned with the project's overall goals and stakeholder needs.

Preparing the project communication plan assists the project team in identifying internal and external stakeholders and enhances communication among all parties involved in the project. The project manager leads the project development team to prepare a communication plan to ensure that an effective communication strategy is built into the project delivery process.

The plan is a framework and should be a living, evolving document that can be revised when appropriate. The communication plan is part of the project management plan.

In public building construction projects such as those in Addis Ketema Sub-City, Addis Ababa effective communication is critical due to the involvement of multiple stakeholders (government bodies, contractors, consultants, communities, etc.), each with diverse expectations and interests.

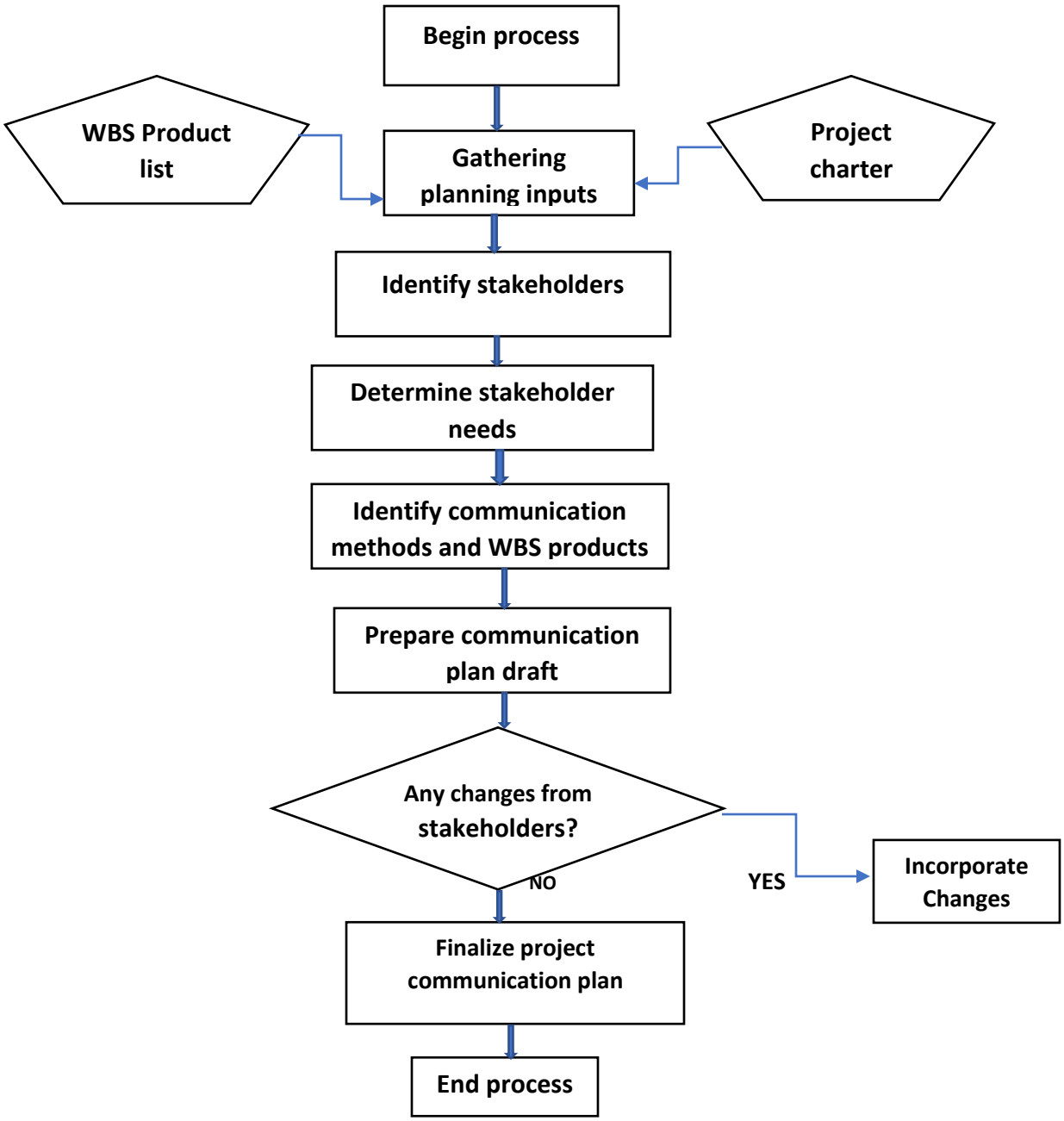

Figure: 4.12 communication plan flow chart

The project development team (PDT) develops a communication plan by asking the following questions:

- Who needs what information?
- when do they need the information?
- Who delivers the information?
- How should the information be delivered?

While all projects share the need to communicate project information, the specific information needs and the methods of distribution may vary widely.

■ Gather Planning Inputs

The PDT develops two inputs for the project communication planning process:

- ✓ **WBS product list**:a list of potential project products, based on the workplan that includes all the elements of the WBS, and the sub products of the WBS.
- ✓ **Project charter**: the record of the agreement between the sponsor and the project manager on the key elements of a project. The project charter lists the project manager, the project sponsor, and the PDT .

■ Identify Stakeholders:

Project stakeholders have information and communication needs. Identifying the information needs of the stakeholders and determining a suitable means of meeting those needs are important factors for project success. The PDT must identify the stakeholders on a project, determine what their needs and expectations are, and then manage and influence those expectations to ensure a successful project. The PDT brainstorms a list of stakeholders using the roles identified in the *Project Management Handbook,* and the Innovation Checklists for project manager (*see Project Management Directive (PMD) 007R*).

■ Determine Stakeholder Needs

Determining stakeholders' needs is the third and one of the most crucial steps in developing a strategic communication plan. After stakeholders have been identified, it is important to understand what information they need, when they need it, how they prefer to receive it, and why it matters to them. In public building construction projects—especially in complex urban environments like Addis Ketema Sub-City, Addis Ababa—stakeholders are diverse, ranging from government agencies and contractors to local communities and civil society organizations.

Each group has unique expectations, concerns, and communication preferences that must be addressed systematically.

This step ensures that communication is purpose-driven, targeted, and effective, rather than

Understand the Nature of Stakeholder Interests: Each stakeholder group is involved in or affected by the project in different ways:

Government agencies may focus on compliance, timelines, and public accountability.

Contractors and consultants are concerned with technical updates, scope changes, and payment schedules.

Community members care about safety, disruptions, employment opportunities, or service accessibility.

Donor/funding agencies want performance reports, impact evaluations, and value-for-money assurance.

Methods for Identifying Stakeholder Needs

- To determine what each stakeholder needs in terms of communication, apply multiple data-gathering methods:
- Interviews and One-on-One Consultations: Useful for high-level stakeholders like officials or senior contractors.
- Surveys and Questionnaires: Help capture broader community feedback or preferences.
- Focus Group Discussions: Engage specific community groups (e.g., women, youth, elders) to uncover concerns.
- Observation and Field Visits: Useful to understand how people are affected on the ground.
- Review of Past Communication Issues: Analyze complaint records, incident reports, or lessons learned from previous projects.

■ Identify communication methods and WBS projects

Project team members and stakeholders use different communication methods at particular times during the project lifecycle. The project team uses the WBS product list to identify the products that may be needed on the project. The PDT identifies:

- Who produces the projects
- Who receives the projects
- The method of product transmittal This information is tied directly to WBS elements and sub-products required for the project.

■ Prepare the Communication Plan Draft

The project communication plan includes the information needed to successfully manage project product deliverables. The project communication plan includes the following ‣ Brief introduction and background — answers the question, “Why do we need a project communication plan?”

- A list of the project sponsor, project manager, PDT members, and other key stakeholders.
- Methods of communications to be used, including formal meetings to be held (who, what, when, how).
- Project reporting information: answers the question, “How will project performance be collected and distributed to the internal and external pro

■ Develop a Conflict Management Strategy

A good communication plan includes a conflict management strategy which is designed to make issues between stakeholders more manageable. Project managers minimize conflicts and resolve issues through constant communication with the project sponsor(s), project team members, and other project stakeholders. Project managers can use the sample strategy that appears later in this section, or can develop a more specific strategy. The project manager negotiates and/or mediates conflict resolution. Project managers encourage project stakeholders to seek win-win solutions to their problems when possible. Because the project manager discusses and develops a conflict management strategy before the project begins, issues are more manageable. The project manager documents in the project record any decisions that utilize the conflict management strategy.

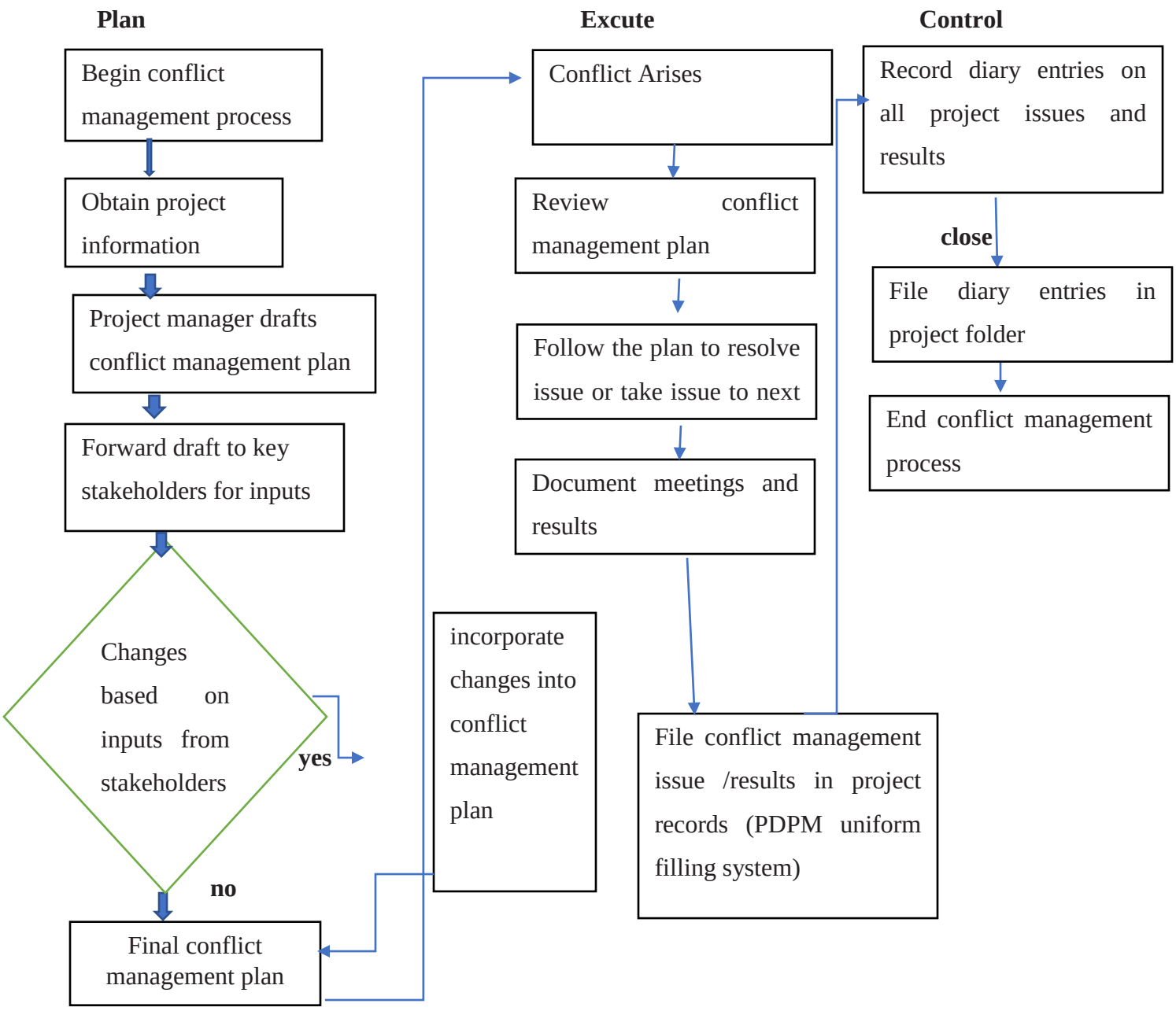

Figure:4.13 Conflict management flow chart

■ Distribute the Communication Plan Draft

The project manager sends the draft project communication plan to the project stakeholders for review and input. When reviewing the communication matrix, functional managers ensure that a task manager is assigned to each WBS elements listed in the functional managers' area of responsibility. The functional managers list all the assigned task managers on the communication matrix and the stakeholder analysis

- **Incorporate Changes and Finalize the Communication Plan:**

The project manager or PDT members incorporate changes from the project stakeholders into the project communication plan. The project manager then distributes the final project communication plan to the project team members. The project management support unit (PMSU) uses the finalized project communication matrix to track the progress of project deliverables. (For a sample of a completed project communication plan,

CHAPTER FIVE: CONCLUSIONS AND RECOMMENDATION

5.1 Conclusion

This study set out to critically evaluate project communication practices in public building construction projects within Addis Ketema Subcity, Addis Ababa, using communication effectiveness metrics and a strategic improvement framework. The research sought to understand how current communication methods are applied, how effective they are in practice, and how they can be improved for better project outcomes.

The findings revealed that communication practices in these projects are largely informal, inconsistent, and often lack clear protocols. Many stakeholders, including contractors, consultants, and government officials, reported delays in information sharing, unclear responsibilities, and insufficient use of modern communication tools. These factors significantly hinder project coordination and progress.

Through the use of communication effectiveness metrics—such as message clarity, feedback timeliness, communication frequency, and stakeholder satisfaction—it was evident that current practices fall short of supporting efficient project delivery. A high percentage of respondents expressed dissatisfaction with how communication is managed across different stages of project implementation.

One of the critical issues identified was the absence of a centralized communication system. Project stakeholders often rely on verbal instructions, phone calls, and fragmented email chains, which result in miscommunication and loss of important information. This situation is further complicated by poor documentation practices and a lack of accountability in message handling.

A critical operational consequence is the lack of coordination in design documentation and site-level communication. When architectural drawings, technical specifications, and revisions are not shared promptly or clearly, on-site teams may proceed based on outdated or incorrect information. This misalignment can result in construction errors, safety hazards, and significant cost escalation.

The strategic improvement framework applied in the study provided practical and adaptable solutions to these challenges. It focused on establishing structured communication protocols, defining clear communication roles, adopting project management software, and setting up regular feedback mechanisms. These strategies were evaluated against best practices in the construction industry and adapted to the local context of Addis Ketema.

Implementing this framework is expected to enhance transparency, increase stakeholder engagement, and reduce project delays. The study emphasizes that successful communication strategies must be tailored to the unique challenges of urban public construction projects, where multiple stakeholders and government agencies are involved.

Another important conclusion is the role of leadership and institutional support in driving communication improvements. Without the commitment of project managers and local

government bodies to enforce and monitor communication standards, even well-designed frameworks will fail to produce lasting change.

In conclusion, the research demonstrates that effective project communication is not just a supplementary activity but a core component of project success. Addressing current gaps through measurable communication metrics and strategic frameworks can significantly improve project delivery and stakeholder satisfaction. The study calls for ongoing research, policy development, and investment in communication infrastructure to sustain these improvements in the long term.

5.2 Recommendation

Establish a Standardized Communication Protocol: To ensure consistency and clarity, it is recommended that all public building construction projects in Addis Ketema adopt a standardized communication protocol. This protocol should clearly define who communicates what information, to whom, when, and through which channels. Formalizing communication procedures will reduce ambiguity and foster accountability among project stakeholders.

Enhance Communication Training for Project Teams: A lack of communication skills was observed among professionals in both technical and administrative roles. Regular training workshops focusing on effective communication techniques, writing professional reports, and using collaborative tools should be introduced.

Define Clear Roles and Responsibilities in Communication Flow: Communication breakdown often results from unclear delegation of roles. The strategic improvement framework should include role mapping that clearly identifies each stakeholder's responsibility in the communication process. This will help prevent duplication, delays, and misunderstandings in information flow.

Establish Feedback and Monitoring Mechanisms: Implementing communication effectiveness metrics alone is not enough without consistent evaluation. Projects should include feedback mechanisms such as surveys, interviews, or regular review meetings to assess communication performance. Monitoring these metrics over time will help identify trends and areas for improvement.

Encourage Stakeholder Engagement from the Planning Phase: Many communication issues arise from the late involvement of critical stakeholders. It is recommended that stakeholders, including community representatives, contractors, and consultants, be actively involved from the planning stage of the project. Early engagement helps align expectations, clarify objectives, and avoid conflicts later.

Promote Documentation and Record-Keeping Culture: Poor documentation was a common challenge observed in the case study. Projects should prioritize maintaining comprehensive records of meetings, agreements, site instructions, and approvals. This ensures traceability, helps resolve disputes, and supports future learning and accountability.

Finally, the strategic improvement framework developed for Addis Ketema Subcity can serve as a model for other subcities in Addis Ababa and beyond. It is recommended that further studies be

conducted to adapt and validate the framework in diverse urban settings, with adjustments made based on the unique challenges and capacities of each area.

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APPENDICES

APPEND I: Questionnaire

Dear respondents

The purpose of this questionnaire is to collect data for a critical Evaluation on project communication practices using communication Effectiveness metrics and strategic improvement framework for public building construction: A case study of Addis ketema subcity,Addis Ababa. Believing that your frank and genuine responses will contribute vastly to the findings of this study, we would like to request you kindly to complete this questionnaire which will be kept confidentially for the study purpose. We would also like to express our heartfelt thanks in advance for taking part in this endeavor.

Questionnaire: Communication Practices in Public Building Construction Projects

Section A: General Information

Please put a"√" mark to all your responses in the box provided beside each statement.

1. Position/Role in Project:

   ☐ Client

   ☐ Contractor
   ☐ Consultant
   ☐ Site Engineer
   ☐ Project Manager
   ☐ Government Representative
   ☐ Other (please specify): _____

2. Years of Experience in Construction Projects:
   ☐ Less than 2 years
   ☐ 2–5 years
   ☐ 6–10 years
   ☐ More than 10 years

3. Are you currently or recently involved in a public building project in Addis Ketema Sub-City?
   ☐ Yes
   ☐ No

Section B: Communication Effectiveness

Please rate the following statements based on your experience using the scale below:
1 = Strongly Disagree | 2 = Disagree | 3 = Neutral | 4 = Agree | 5 = Strongly Agree

No.	Statement	1	2	3	4	5
B1	Communication between project stakeholders is timely.	☐	☐	☐	☐	☐
B2	Information shared among stakeholders is accurate.	☐	☐	☐	☐	☐
B3	Project communication is clear and easy to understand.	☐	☐	☐	☐	☐
B4	There is a consistent flow of communication during all project phases.	☐	☐	☐	☐	☐
B5	Feedback from stakeholders is acknowledged and acted upon promptly.	☐	☐	☐	☐	☐
B6	Communication tools (emails, meetings, calls) are effectively used in the project.	☐	☐	☐	☐	☐
B7	I am satisfied with the current communication practices in the project.	☐	☐	☐	☐	☐

Section C: Impact of Communication on Project Performance

No.	Statement	1	2	3	4	5
C1	Poor communication has caused project delays.	☐	☐	☐	☐	☐
C2	Effective communication contributes to staying within project budget.	☐	☐	☐	☐	☐
C3	Misunderstandings due to unclear communication have led to cost overruns.	☐	☐	☐	☐	☐
C4	Communication quality impacts overall stakeholder satisfaction.	☐	☐	☐	☐	☐
C5	Communication contributes significantly to the success of project goals.	☐	☐	☐	☐	☐

Section D: Suggestions for Improvement

D1. What do you think are the main challenges in current communication practices?

☐ Lack of clear roles and responsibilities

☐ Delayed information sharing

☐ Ineffective communication tools

☐ Language/clarity barriers

☐ Lack of stakeholder involvement

☐ Other: _____

D2. What strategies would improve communication in your opinion? (Tick all that apply)

☐ Use of project communication software/tools (e.g., WhatsApp, Trello, MS Teams)

☐ Regular stakeholder meetings

☐ Clear communication protocols and guidelines

☐ Appointment of a communication coordinator

☐ Training for team members on communication

☐ Other: _____

D3. Please provide any additional suggestions for improving communication in public construction projects:

_____

_____

.....……. .Thank you for your participation.....