

ADDIS ABABA UNIVERSITY
COLLEGE OF BUSINESS AND ECONOMICS
SCHOOL OF COMMERCE
OFFICE OF GRADUATE STUDIES



**THE ROLES OF EFFECTIVE COMMUNICATION ON
PROJECT SUCCESS: IN THE CASE OF CORPORAT
ETHIO TELECOM CIVIL WORK RENOVATION
PROJECTS**

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ADDIS ABABA UNIVERSITY

SCHOOL OF COMMERCE

DEPARTMENT OF PROJECT MANAGEMENT

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BY

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DECLARATION

I, the undersigned, declare that this research entitled The role of effective communication on project effectiveness, is my original work, prepared under the guidance of Dr. Bahran.A All resources and materials used here in have been properly acknowledged. I further confirm that the project work has never been presented either in part or in full to any other university for the purpose of earning any degree.

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Approval

The thesis entitled “THE ROLE OF EFFECTIVE COMMUNICATION ON PROJECT SUCCESS: IN THE CASE OF CORPORAT ETHIO TELECOM CIVIL WORK RENOVATION PROJECTS.” Submitted by Yewebnesh Birhanu in partial fulfilment of the requirements for the award of a Master’s Degree in Project Management to the school of commerce department of Project Management; the University of Addis Ababa. The University has been carried out under my supervision. Therefore, I hereby approve and recommend that it has fulfilled the thesis requirements and can be submitted to the department for examination as the University advisor.

Name of Advisor

Signature

Date

Certification

We, here, as members of the Examining Board of the Final MA Open Defence, have read and evaluated the thesis entitled “THE ROLE OF EFFECTIVE COMMUNICATION ON PROJECT SUCCESS: IN THE CASE OF CORPORAT ETHIO TELECOM CIVIL WORK RENOVATION PROJECTS” submitted by Yewebnesh Birhanu. We certify/ recommend that it has fulfilled the requirements for the partial fulfilment of the requirement for a Master’s Degree in Project Management to the school of commerce department of Project Management; at the University of Addis Ababa.

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Abstract

The main purpose of this study was to study the role of effective communication on project effectiveness: in the case of corporate Ethio telecom civil work renovation projects. This study used descriptive research designs. And was used mixed or both quantitative and qualitative approaches. The project effectiveness has been evaluated in line with effective communication elements; clear and timely communication, stakeholder engagement and feedback, and conflict resolution. The questionnaire was distributed to 137 respondents based on each variable and 133 questionnaire returned with properly filled. The data from the questionnaire was quantified using SPSS software and analyzed quantitatively. The numerical information is presented using tables and figures. Based on the quantitative and qualitative data, majority respondents were young, well-educated, male participants and has less than ten years work experience. The study focuses on project effectiveness and effective communication. Clear communication, stakeholder engagement and feedback, and conflict resolution analyzed and found that they significantly impact project effectiveness. Also, 41.7% of the variance in the dependent variable based on the independent variables showed which means they have moderate relationship. In order to enhance project effectiveness, the researcher concludes: enhancing clear communication, encourage stakeholder participation and resolve conflicts in timely manner. In addition, training should be provided to stakeholders to have common understanding on effective communication.

Key words:

- *ET civil work department, stakeholder, Performance, Resource management, Clear communication, Stakeholder engagement, Conflict resolution, and Project effectiveness.*

Chapter 1: Introduction

Effective communication is the process of exchanging information, ideas, thoughts, or feelings in a clear and concise manner that is easily understood by the recipient. It involves both verbal and non-verbal elements such as body language, tone of voice, and facial expressions. Effective communication also requires active listening, feedback, and the ability to adapt the message to the needs and preferences of the audience. Overall, effective communication helps to build strong relationships, resolve conflicts, and achieve mutual understanding and cooperation.

1.1 Background of the Study

1.1.1 Background of the Study:

Effective communication is a critical factor in the success of construction and renovation projects, as it facilitates collaboration, coordination, and knowledge sharing among various stakeholders involved. Renovation projects involve multiple stakeholders, such as project owners, contractors, architects, engineers, suppliers, and regulatory authorities, each with their own interests, expertise, and responsibilities. The effective exchange of information, ideas, and feedback among these stakeholders is essential to ensure project objectives are met, conflicts are resolved, and resources are managed efficiently.

Numerous studies have emphasized the significance of effective communication in construction and project management contexts. For example, (Smith and Love, 2018) conducted a comprehensive review on communication in construction projects and highlighted the positive impact of effective communication on project outcomes. They found that clear communication channels, well-defined roles and responsibilities, and regular information sharing contribute to improved project performance, reduced errors, and enhanced stakeholder satisfaction. ^[20]

Moreover, previous research by (Zhang, 2016) examined the role of communication among stakeholders in construction projects and identified communication gaps as a common challenge in the industry. They emphasized the need for effective communication

strategies, including the use of appropriate communication tools and technologies, to bridge these gaps and enhance project outcomes. [21]

Based on this previous literature, it is evident that effective communication plays a crucial role in renovation projects, enabling stakeholders to exchange information, align their goals, resolve conflicts, and optimize resource management. However, there is a need for further investigation to specifically examine the role of effective communication among stakeholders in the context of renovation projects and its impact on project success.

Previous empirical studies have explored the relationship between effective communication and project outcomes in the construction and renovation industry. For instance, a study by (Liu, 2020) examined the impact of communication quality on project performance in construction projects. Through a survey of stakeholders involved in renovation projects, they found a strong positive correlation between effective communication and project success, including improved schedule adherence, cost control, and client satisfaction. [22]

Furthermore, research conducted by (Wang, 2019) investigated the role of communication in reducing conflicts and improving collaboration among stakeholders in construction projects. Their empirical findings demonstrated that effective communication practices, such as regular project meetings, clear documentation, and open dialogue, significantly reduced conflicts and enhanced the overall project performance. [23]

Additionally, research conducted by Bani-Hani and Khasawneh (2019) explored the role of communication in the success of telecom projects. Their study highlighted the significance of clear communication channels, effective collaboration, and timely information exchange in achieving project objectives. Its findings underscore the relevance of effective communication in the broader telecom industry and aims to investigate the role of effective communication among stakeholders, including project managers, contractors, technicians, and other relevant parties involved in telecom renovation projects. [24]

A research conducted by (Chen, 2019), which investigated communication practices and their impact on project performance in a telecom company's renovation project examined

the role of effective communication among stakeholders, including project managers, engineers, technicians, and other relevant parties involved in the renovation process.

In their case study, Chen, Y., Lu, Y., & Liu, R. (2019) found that clear and timely communication played a critical role in ensuring project success. Effective communication channels, such as regular project meetings, collaborative platforms, and clear documentation, helped stakeholders align their goals, share relevant information, and address project challenges promptly. The study highlighted that effective communication fostered improved coordination, enhanced decision-making processes, and facilitated the smooth execution of renovation projects within the telecom company. ^[25]

Numerous studies examine the significance of effective communication among stakeholders in projects and organizations. The studies emphasized that effective communication among stockholders enhance project completion performance from quality, budget and time constraints perspective.

In general, Clear and timely communication has great significance in managing the complexities of renovation offices and new buildings in civil work projects for an organization. This includes the need for accurate transmission of design specifications, safety protocols, materials procurement, contractor payment preparation and project progress updates to ensure that all stakeholders are well-informed and can make decisions based on current and accurate information. In addition, effective communication helps to improve project delivery timelines, cost savings through streamlined processes, enhanced safety measures, and the ability to meet the evolving needs of modern office spaces and civil infrastructure.

Technological advancements have impact on communication effectiveness in civil work related projects. For example, the integration of digital collaboration tools, Building Information Modeling (BIM), and project management software to enhance communication efficiency, facilitate real-time information sharing, and improve coordination among project teams.

Internal and external effective communication within the organization is essential for ensuring that employees understand the company's goals, strategies, and policies.

Internally, it helps in fostering a positive work environment, improving employee engagement, and ensuring that everyone is aligned with the company's mission and vision. Externally, it helps in building trust and maintaining a positive brand image.

Since, there is a lack of comprehensive assessment on the role of effective communication in corporate Ethio-telecom civil work renovation projects, this study is needed for the improvement of civil work renovation project execution performance. The study will assess the current communication practices, challenges, and their impact on the renovation projects performance in this specific unit.

1.1.2 Background of the organization

Ethiopia Telecommunications Corporation is the oldest public telecommunications operator in Africa. According to the company website (<https://www.ethiotelecom.et>, 2021) explains, the telecom service was introduced in Ethiopia by Emperor Menelik II in 1894 during the commencement of the telephone line installation from Harar to Addis Ababa. Subsequently, the inter-urban network underwent significant expansion in various directions from the capital, connecting numerous significant centers within the Empire via landlines. This expansion aimed to facilitate long-distance communications, with intermediate operators serving as verbal human repeaters to ensure seamless transmission. [26]

Following the conclusion of the war against Italy, which resulted in the destruction of Ethiopia's telecommunication network, the country undertook a reorganization of its Telephone, Telegraph, and Postal services in 1941. Proclamation No. 131/52 of 1952 led to the establishment of the Imperial Board of Telecommunications (IBTE). Endowed with complete financial and administrative autonomy, the Board assumed responsibility for the provision and expansion of telecommunications services throughout Ethiopia. [27]

The Imperial Board of Telecommunications of Ethiopia, which became the Ethiopian Telecommunications Authority in 1981, was placed in charge of both the operation and regulation of telecommunication services in the wake of the market reforms. In 1996, the Government established a separate regulatory body, the Ethiopian Telecommunication

Agency(ETA) by Proclamation 49/1996, and during the same year, by regulation 10/1996, the Council of Ministers set up the Ethiopian Telecommunications Corporation (ETC).^[27]

Building upon the 2005/06-2009/10 five-year plan, which initially focused on education, health, and agriculture, the Ethiopian government made the decision to shift its attention towards the advancement of telecommunication services. Recognizing their significance as a key driver of Ethiopia's development, the government prioritized the expansion and improvement of telecommunication infrastructure and services. Ethio Telecom was established on November 29, 2010, with the aim of actively supporting the continuous growth of our nation. Ethio Telecom has its current status since 29th November 2010 as a part of Ethiopia's 2005/06 – 2009/10 GTP following the federal government's decision to target in improving telecom services, taking them as key to national development. Consequently, the country's telecom infrastructure and services are transformed to world-class standards to facilitate the development of the country with a good paradigm shift within the improvement of the world.^[26]

1.2 Statement of problem

Effective communication within telecom company is crucial for successful project outcomes. Clear and timely communication has great significance in managing the complexities of renovation offices and new buildings in civil work projects for an organization. This includes the need for accurate transmission of design specifications, safety protocols, materials procurement, contractor payment preparation and project progress updates to ensure that all stakeholders are well-informed and can make decisions based on current and accurate information. In addition, effective communication helps to improve project delivery timelines, cost savings through streamlined processes, enhanced safety measures, and the ability to meet the evolving needs of modern office spaces and civil infrastructure.

Since, there is a lack of comprehensive assessment that study the role of effective communication in corporate Ethio-telecom civil work renovation projects. Due to this, the level of effective communication practice and understanding throughout the staffs is not well known. Sometimes project delays raised due to information gap. This study

is needed for the improvement of civil work renovation project execution effectiveness. The study will assess the current communication practices, challenges, and their impact on the renovation projects timely completion, resource management and stakeholder management in this specific unit.

1.3 Research Questions

1. What is the role of clear communication among stakeholders on civil work renovation projects effectiveness from timely completion and resource management perspective?
2. What is the role of the role of stakeholder engagement and feedback among stakeholders on civil work renovation projects effectiveness from timely completion and resource management perspective?
3. What is the role of conflict resolution among stockholders on stakeholder management of renovation projects in civil work department, corporate Ethio telecom effectiveness from timely completion and resource management perspective?

1.4 Research Objectives of the study

1.4.1 General objective:

To assess the role of effective communication among stockholders in corporate Ethio telecom civil work renovation projects' effectiveness.

1.4.2 Specific objectives:

The specific objectives of this research are:

1. To assess the role of clear communication among stakeholders on civil work renovation projects effectiveness from timely completion and resource management perspective.

2. To assess the role of stakeholder engagement and feedback among stakeholders on civil work renovation projects effectiveness from timely completion and resource management perspective.
3. To assess the role of conflict resolution among stakeholders on civil work renovation projects effectiveness from timely completion and resource management perspective.

1.5 Significance of the Study

This study aims to understand how effective communication practices, impact the successful execution of civil work renovation projects in corporate Ethio telecom. It assesses the current communication platforms and report templates used. It will identify the specific ways in which effective communication contributes to project success, stakeholder engagement, and overall project outcomes. By examining how effective communication influences the engagement of various stakeholders, the study will assess how clear and open communication among project team members can enhance collaboration, productivity, and the ability to resolve issues in a timely manner. Additionally, the research will explore how effective communication practices contribute to meeting project timelines and managing resource constraints. Ultimately, the study will recommend successful communication practice that have been effective in civil work projects within the Ethio telecom organization.

1.6 Scope of the Study

- The study focuses on civil work renovation projects within the corporate scope of Ethio telecom in Addis Ababa, Ethiopia.
- The study specifically concentrates on the timely delivery and resource management that aspects of renovation projects in the specific unit. This is due to they are critical success factors, and unable to add more factors because of time and budget constraints.
- The study specifically targets corporate staff members of Ethio telecom who are actively involved in civil work renovation projects.

1.7 Limitations of the Study

This study was constrained by the following key factor: biases by human factors, including individual perceptions, attitudes, and interpersonal dynamics, the inability to meet all of the targeted respondents due to their busy schedules, time and resource constraints, which affected the extent and range of data gathering, analysis, and the breadth of recommendation. Lastly, since the findings of the study is specific to corporate Ethio telecom civil work renovation projects, it cannot be directly applicable to other organizations.

1.8 Organization of the Study

This study contains five chapters. Chapter 1 deals with the introductory parts of the study. Chapter two reviews literature related to the study. Chapter 3 focuses on methods of data collection and data analysis. Chapter four deals with data analysis and finding. Lastly, Chapter 5 provides a conclusion and recommendation

1.9 Definition of terms

Ethio telecom civil work management- A department in corporate Ethio telecom that handle design structural, electrical and sanitary work for new building and renovation works, square lands for business, and prepare and validate payments for contractors.

Stockholder- a party that has an interest in a company and can either affect or be affected by the business. In this case customers, higher managements, suppliers, contractors, sourcing, Governmental construction permit body.

Performance- the action or process of performing a task or function. In this case, delivering new buildings and renovations projects with quality, efficiency and within deadline.

Resource management- A series of processes and techniques used to ensure you have all the necessary resources to complete a project or meet business objectives.

Clear and timely communication: refers to the process of conveying information in a straightforward, easily understandable manner and doing so within an appropriate timeframe

Stakeholder engagement: Stakeholder engagement is the process of involving individuals, groups, or organizations that have an interest in a project, business, or activity.

Conflict resolution: involves addressing and resolving disagreements or disputes between parties in a constructive and effective manner.

Project effectiveness: refers to the degree to which a project achieves its intended goals and objectives, delivering the desired outcomes within the constraints of time, budget, and resources.

Chapter 2: Literature Review

2.1 Literature Review

According to the ‘best practice’ principles such as PMBOK and Prince 2 and large numbers of related research institutions such as Gartner, Communication is an important factor for the success of any project or activity within the information systems departments.^[1]

According to (Beckham and King, 1992) communication is the exchange of the words and meanings of the words that involve two-direct processes (sending and receiving messages).^[2] According to (Ross, 2006), effective communication involves strengthening relationships; it helps to build trust and cooperation and helps to remove the confusion and misunderstanding and reduces the problems and differences.^[3]

Berry (2011:186-206) defines communication as the transferring and exchanging of information as well as understanding from a single person to another person. It requires the use of symbols that carry the same meaning between the individuals concerned. ^[12]

There is a positive relationship between effective communication in a construction programme and effective delivery of a construction programme.

Young found that communication was thought to be the most imperative expertise out of 23 skills and knowledge subjects between high level manager of the construction industry; for directors at a middle management level, it was the most significant expertise out of 18 skills and knowledge subjects; and for other employees it was the second most significant expertise out of 20 skills and knowledge subjects (as cited in Egbu, 1999). ^[4]

The general significance of communication abilities for project and programme success was further confirmed by Müller and Turner (2005).^[5] Yang, Huang, and Wu (2011) demonstrated the significant impact of teamwork on project success, while highlighting that group communication is a critical function of teamwork. They also demonstrated that things like team commitment enhance effective communication.^[6]

According, to Gaith, F. (2012) Onyegiri, I., & Nwachukwu, C. (2011) emphasized that construction is an information-intensive industry since hundreds and thousands of pieces of information need to be transferred and exchanged between various departments/ units during the project life-cycle. Therefore, each department/unit in construction organization is responsible for disseminating the related information needed to formulate effective communication. An effective communication plays a vital role in all stages of construction project which asserted that as a construction project unfolds, communication occur in various directions which revolves from the organization to top management (horizontal communication), within the project team (lateral communication), from superior to subordinate (downstream communication) and from subordinates to superior (upward communication).^[7,8]

There are many definitions of communication. In this dissertation, communication is defined as the act of using words, sounds, signs or behaviors to express your thoughts or feelings to someone else (Webster, 2015).^[9] Aucoin (2007) describes communications in any organization as aimed at achieving the following outcomes: Achieving coordinated results, managing change, Motivating employees, Understanding the needs of the workforce.^[10]

A major function of project communication is to transfer information that will enable and commit the recipient of a communication to carry out actions that will take the project forward and to provide feedback as to the outcomes of these actions and occurrences in the project environment to stakeholders. This is true for communications within the project team as well as between the project team and external stakeholders such as the client, supply chain members and various disciplines. Transmitting, receiving and acting on information forms the major part of any project involving multiple stakeholders and much of this is normally facilitated by the project manager.^[11]

Communication is recognized as one of the ten essential knowledge areas for successful project implementation. This aspect of project execution entails delivering information to the appropriate individuals in a timely manner and in the correct format.

Changes are experienced in almost every infrastructure construction project. ^[14] These changes are among the major reasons for project time delays and over budget. ^[15] Ignoring stakeholders may become the main reason for a complex project failure. ^[16] It is widely accepted that the stakeholder consensus and satisfaction is achieved through communication. Effective communication routines enable the identification of realistic stakeholder expectations. Insufficient communication and lack of stakeholder integration are among the most common drivers for unattended change causes and UN-controlled change impacts in a project. ^[17]

The development of effective communication routines between stakeholders requires considerable attention and efforts during the project development and planning phase. The stakeholders may have different national and organizational cultures (Prajogo and McDermott, 2005), which affect the project communications. Loo (2002) identified that the project cultures are not stable as they change during time (Loo, 2002). The effective communication routines (Baken, 2005, Kerzner, 2009) help to maintain stakeholder trust (Turner, 2009) and to keep track on the project culture changes (Marrewijk, 2007) in order to prevent the development of dysfunctional culture (Bate, 1994)

Turner, J. R. (2009) explores the relationship between effective communication and resource management. Effective communication between stakeholders plays a crucial role in facilitating resource management within an organization. By fostering clear and transparent communication channels, stakeholders can collaborate more efficiently and make informed decisions regarding resource allocation. ^[18]

Clear and Timely communication:

Effective communication among stakeholders in renovation projects enables effective resource management by facilitating coordination, decision-making, and information sharing. Olawale, Y. A., & Sun, M. (2010) highlights the importance of effective

communication in managing project resources, including materials, manpower, and equipment. [19]

Effective communication is fundamental to the success of any project. Freeman (1984): Emphasized the significance of stakeholder theory in project management. Effective communication is essential for understanding and managing stakeholder expectations, which aligns their interests with project goals, reducing conflicts and enhancing satisfaction. Bourne and Walker (2005): Found that projects with well-defined communication plans that regularly engage stakeholders are more likely to succeed. Regular updates and transparent communication channels build trust and facilitate stakeholder support. Kerzner (2013): Identified communication as a cornerstone of project management, necessary for accurate planning, risk management, and decision-making.

Effective communication ensures that all team members are aligned, which is crucial for coordinating activities and meeting project timelines. Pinto and Slevin (1987): Developed a project success model that includes communication as a critical success factor, influencing team alignment, goal clarity, and conflict resolution, all vital for project success. Some authors relate clear communication and technologies. For example, Daft and Lengel (1986): Introduced media richness theory, suggesting the effectiveness of communication depends on the richness of the communication medium used. For complex tasks, richer media like face-to-face meetings are more effective than emails or memos. And, Verburg, Bosch-Sijtsema, and Vartiainen (2013): Examined communication technologies in virtual project teams. They found that collaborative tools and clear communication protocols significantly improved team performance and project outcomes by enabling real-time information sharing and reducing misunderstandings.

In general, the literature consistently underscores the pivotal role of clear and effective communication in enhancing project effectiveness. Effective communication facilitates better stakeholder management, improves project planning and execution, enhances team coordination, and supports risk management. To maximize project success, project managers must prioritize communication by developing comprehensive communication plans, leveraging appropriate communication technologies, and fostering an environment of open and transparent dialogue.

Stakeholder engagement and feedback:

Effective stakeholder engagement and feedback are critical components in achieving project success. Freeman (1984): Introduced the stakeholder theory, emphasizing that the active involvement of stakeholders is crucial for aligning project outcomes with stakeholder expectations. Engaging stakeholders early and throughout the project lifecycle helps in identifying needs and concerns, thereby enhancing project relevance and acceptance. Bourne and Walker (2005): Demonstrated that projects with proactive stakeholder engagement strategies tend to have higher success rates. Regular interactions with stakeholders ensure continuous alignment of project objectives with stakeholder interests, fostering a sense of ownership and commitment.

Also, Pinto and Slevin (1987): Highlighted that continuous stakeholder feedback is vital for effective project planning and execution. Feedback mechanisms help in refining project plans, adjusting timelines, and reallocating resources as needed, ensuring that the project remains on track to meet its goals. Kerzner (2013): Emphasized that stakeholder feedback plays a critical role in project monitoring and control. By systematically gathering and analyzing feedback, project managers can identify potential issues early and implement corrective actions promptly.

In conclusion, effective stakeholder engagement ensures that project objectives are aligned with stakeholder needs, enhances risk management, and improves overall project performance. To maximize project success, project managers must prioritize stakeholder engagement by developing comprehensive engagement plans, establishing systematic feedback mechanisms, and fostering an environment of open and transparent communication.

Conflict resolution:

Conflict resolution is a critical aspect of project management that significantly impacts project effectiveness. Effective conflict resolution strategies can lead to improved team dynamics, enhanced stakeholder relationships, and successful project outcomes. Jehn (1995): Explored the impact of intragroup conflict on team performance. The study found that while task conflict can sometimes be beneficial by encouraging critical thinking and

innovation, relationship conflict generally has a negative impact on team performance and project outcomes. De Dreu and Weingart (2003): Conducted a meta-analysis on the effects of task and relationship conflict on team performance. Their findings suggest that both types of conflict negatively affect team performance, with relationship conflict having a more detrimental effect.

In the other hand, Fisher and Ury (1981): Introduced the concept of principled negotiation in their book "Getting to Yes." They argue that focusing on interests rather than positions leads to more effective conflict resolution and better project outcomes. This approach fosters collaboration and creative problem-solving, essential for project success. Also, Thomas and Kilmann (1974): Developed the Thomas-Kilmann Conflict Mode Instrument, identifying five conflict resolution styles (competing, collaborating, compromising, avoiding, and accommodating). The choice of conflict resolution style can significantly impact project effectiveness, with collaborative and compromising styles often leading to more positive outcomes. Here again, Bourne and Walker (2005): Emphasized that effective conflict resolution is crucial for maintaining positive stakeholder relationships. Projects that actively engage in conflict resolution are better able to address stakeholder concerns, leading to higher levels of stakeholder satisfaction and support, thereby enhancing stakeholder satisfaction and project success.

In addition, Barki and Hartwick (2001): Discussed the impact of interpersonal conflict on project success. They found that unresolved interpersonal conflicts can lead to project delays, cost overruns, and reduced quality, highlighting the need for effective conflict resolution mechanisms. Tjosvold (2008): Highlighted that effective conflict resolution fosters a positive organizational climate, enhances trust among team members, and leads to more successful project outcomes. The literatures here consistently explore the critical role of conflict resolution in enhancing project effectiveness. Effective conflict resolution strategies improve team performance, enhance stakeholder satisfaction, support risk management, and contribute to overall project success. To maximize project effectiveness, project managers must prioritize conflict resolution by developing comprehensive conflict management plans, fostering a collaborative team environment, and addressing conflicts proactively.

In this paper, knowing all the positive impact of effective communication among project stakeholders, the role of effective communication among stakeholders in corporate ethiotelecom civil work renovation projects timely delivery and resource management will be assessed.

2.2 Conceptual frame work

Based on an overview of related literature and a description of the study problem, the following conceptual framework for conducting this particular study has been developed as follows

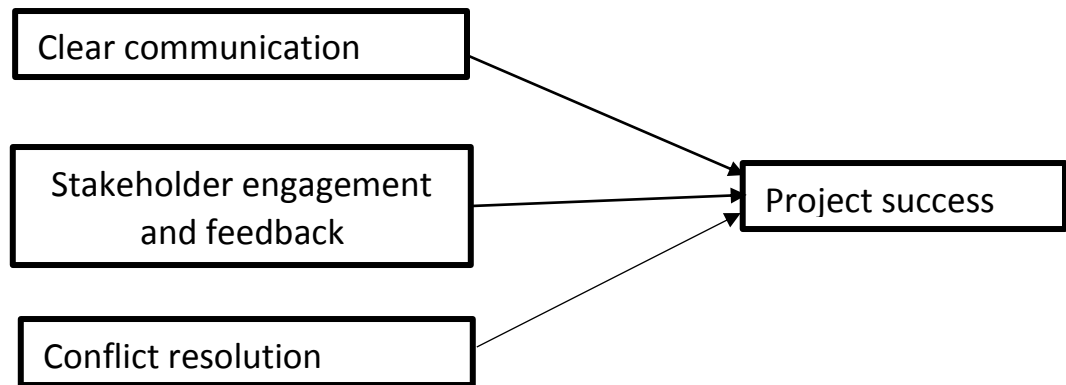


Figure 1 frame work

Chapter 3: Research Methodology

3.1 Research Design

A combination of qualitative and quantitative research approaches will be used because of the nature of the problem. Since this is primary research in specific unit, the intention of the research is to show the relationship of effective communication and project success in that unit. Two stages used for the study, namely; literature review and the empirical study. The plan included personal distribution and collection of questionnaires as a research instrument to reach all the respondents. With regards to this, the questionnaire had three sections; Section A, biography, Section B – Likert scale and Section C, open ended questions. Likert scale chosen due to its simplicity and ease of use, its flexibility, its sensitivity to variation, its reliability and validity. Here, a mixed research approach is suggested for this study to take advantage of the benefits from both the qualitative and quantitative research approaches.

3.2 Population and Sampling

The sample size was set at 137 respondents in order to obtain a reasonably representative understanding of the population. Since the total population size is relatively small, the entire population was sampled to enable precise data collection. Since the entire population was taken for the data collection, census sampling type is practiced. By collecting data from the entire population, a census provided the most precise and accurate information about the population.

The research population for this study consisted of individuals who were directly or indirectly involved in civil work renovation projects in corporate Ethio telecom. This included stakeholders such as project managers, architects, engineers, contractors, subcontractors, user sections, supply chain unit, supplier unit and other relevant personnel involved in the planning, management, and execution of civil work renovation projects.

3.3 Data Collection Methods

This study utilized both primary and secondary data collection methods. The primary data is gathered through interviews and questionnaires, while the secondary data is obtained from literature reviews.

3.4 Data Analysis Techniques

The research instrument used to collect the quantitative data was a closed-end and well-structured questionnaires from the randomly selected respondents. Also, qualitative data gathered from management staffs through interviews.

In this study quantitative data was collected and analyzed using SPSS and excel, which enable to create visually appealing and informative graphs, charts, and plots to present data. Descriptive statistical analysis was used to present the results of the study that assisted in the summary and interpretation of data in order to reach the findings.

This study utilized both primary and secondary data collection methods. The primary data is gathered through interviews and questionnaires, while the secondary data is obtained from literature reviews and observational analysis.

In addition, multivariate regression analysis is used to examine the relationship between the independent variable and dependent variables. Here the independent variable is effective communication whereas the dependent variables are civil work renovation project timely completion and resource management.

3.5 Ethical Considerations

In this study the researcher ensured all protection, rights, and well-being of research participants and maintained the integrity and trustworthiness of the research process. Also, the researcher ensured the confidentiality and anonymity of participants' data and has obtained informed consent from the participants.

3.6 Reliability Test

According to Creswell (2003), the reliability of an instrument is the degree of consistency that the instrument or procedure demonstrates. Reliability concerns the degree to which the measurement is free of random error. In this study Cronbach's Alpha (α) was used to check the internal consistency of the instrument that is the questionnaire developed by the researcher.

According to Ghazali (2013), the accepted standard of reliable data is one in which the value of Cronbach's Alpha (α) is greater than 0.7. If the value gets closer to the point of 1, it means that the instrument is high reliability. The Cronbach alpha value of 0.80 or higher are considered as high reliability, those between 0.70 and 0.80 are regarded as good reliability, those between 0.60 and 0.70 are fair, and value lower than 0.60 are of questionable reliability (Hair, Wolfinbarger, Ortinaw, & Bush, 2010).

A pilot sample of 10 respondents was selected using convenience sampling technique to check the reliability of the questionnaire and the result has proved the questioners intended to collect the desired data was reliable.

The Cronbach's alpha values for each effective communication element, as shown in Table 1 below, are consistently above 0.7, suggesting a strong level of internal consistency. This indicates that the questions posed in the questionnaires are likely to effectively fulfill the study's objectives. Consequently, these results are deemed acceptable for further analysis.

Table 1 Reliability test of the variables under study

Variables	Cronbach's Alpha	N of items
Project effectiveness	.729	5
Clear and timely communication	.706	9
Stakeholder engagement and feedback	.701	7
Conflict resolution	.710	3

(Source: own survey, 2024)

The reliability of instruments pertains to their consistency. Creswell (2003) defines reliability as the extent to which instruments or procedures exhibit consistency. This means that reliability indicates the lack of random error, allowing future researchers to obtain the same results if they replicate the study following the same steps (Yin, 2003). Internal reliability was tested to determine whether the indicators that make up the scale or index are consistent. Cronbach's alpha is the most commonly used taste of internal reliability (Bryman and Bell, 2007). Therefore, Cronbach's alpha was used to assess internal consistency of variables with the acceptable value of 0.70.

Chapter 4: Data Analysis, interpretation and Findings

This chapter deals with the presentation, analysis and interpretation of sample data that is collected from the respondents through questionnaires and interviews. According to Saunders (2007), for survey-based questionnaires a response rate of 70 percent and above is sufficient to carry out data analysis. [28] For the purpose of this study, 137 questionnaires were distributed to corporate Ethio telecom staffs in Addis Ababa and 96% of the questionnaires were correctly fill and returned. Since the response rate is 96%, the data is sufficient to do the analysis. The questionnaires were handed to participants in person and via google form (online survey). The statistical analysis of the data was facilitated by using SPSS (statistical package of social science) software version 25. In addition, qualitative data is taken from management staffs through interview and discussed in this chapter.

4.1. The Response Rate of Respondents

In this study, the target population of this study was all corporate Ethio telecom staffs who actively involved in civil work renovation projects. The questionnaire consists of 24 close ended questions, designed in a Likert scale.

Table 2 response rate of respondents

Distributed Survey	Survey Returned	Percentage
137	133	96%

Source: Own survey, 2024

As shown in Table 2 above, about the response rate, 137 survey questionnaires were distributed to respondents, and 133 were appropriately filled and returned with the rate of 96%. Based on this sample size (96%) the next analysis was carried out.

4.2 Demographic Analysis

This section provides a descriptive analysis of profile of survey respondents; such as gender, age, educational level and work experience. From the survey, information of 133 respondents were gathered and presented as follows.

Table 3 demographic of respondents

Demographic Factors		Frequency	Percent (%)
Gender	Male	76	57.1
	Female	57	42.9
	Total	133	100
Age Group	20-30	52	39.1
	31-40	74	55.6
	41-50	4	3
	>50	3	2.3
	Total	133	100
Educational level	BA/BSc	95	71.4
	Masters	38	28.6
	Total	133	100
Work experience	1-5	35	26.3
	6-10	79	59.4
	11-15	15	11.3
	>15	4	3
	Total	133	100

Source: Own survey, 2024

As shown in table 3 below, the highest proportion of the participants (57.1%) were male, whereas (42.9%) of the respondents were females. From this we can say that the proportion

of male is greater than female, which indicates that male respondents were more dominant in the survey.

Regarding the age group of the respondents shown in the table 2, the highest proportion of respondents belong to the age group of 31-40 years (55.5%) followed by age group 20-30 years (39.1%) which represents the majority of the respondents are young staffs. Those respondents in the age category of 41-50 years represent 3%, while those above 50 years were 2.3%. These shows small number of respondent's adults. In overall the data implies that the younger strata of the populations were more participants in the renovation project works.

With regard to the educational level of the respondents, as shown in table 2, 71.4% of the respondents were BA/BSc degree holder and 28.6% of the respondents were master degree holder. This figure implies that all the respondents were highly educated and in a good academics status in overall.

In relation to work experience the highest respondents were 6-10 years (59.4%) experienced and followed by 1-5 years (26.3%) experienced group. From the rest respondents 11.3% of the respondents were 11-15 years experienced and only 3% of the respondents were more than 16 years of work experienced. These figures indicate that the majority of the respondents were less than 10 years experienced in Ethio telecom. From these data we can also conclude that the majority of the respondents well know the organization culture, mission and vision of the organization in their working years.

In general, table 3 tells the respondents were young and well-educated staffs and the male category dominated.

4.3 Descriptive analysis of the variables

In this section, descriptive statistics of the responses to the survey question is undertaken. In order to carry out the analysis, civil work renovation project related staffs asked to rate the level of agreements for each question under the three attributes of effective communication elements which are clear and timely communication, stakeholder engagement and feedback, and conflict resolution. Also, they rated project effectiveness

due to effective communication from timely completion and resource management perspective.

From the collected data, mean scores and standard deviations were calculated for all four-point Likert Scale items. The calculated mean score of an item were classified in ranges to fit the five-point Likert scaled measure of responses (strongly disagree, disagree, neutral, agree, and strongly agree) as shown, mean scores 1.00-1.50 is poor, 1.51-2.50 fair, 2.51-3.50 moderate, 3.51-4.50 is good, and 4.51-5.00 is taken to be excellent or very good.

Respondents were asked to indicate their choice of answer on a five-point Likert scale type ranging from 1 to 5. (1=strongly disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=strongly agree), and the analysis of the mean score is based on the below assumptions;

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

The mean score for each component of the variables has been calculated based on the assumptions provided above, and an analysis is presented for each variable. The mean scores for each variable were individually presented, analyzed, and interpreted. The standard deviation is a measure of the amount of variation or dispersion of a set of values. A low standard deviation indicates that the values tend to be close to the mean (also called the expected value) of the set, while a high standard deviation indicates that the values are spread out over a wider range.

4.3.1 Descriptive analysis of clear and timely communication variable

Table 4 Clear and timely communication responses

Clear and timely communication	Valid N	Mean	Std. Deviation
Project updates and progress reports shared in a timely manner	133	3.92	.958
Current communication channels (email, letters, social media, face to face, phone call and SMS) are effective in facilitating communication on project time schedule	133	4.16	.960
Internal stakeholders feel adequately informed on projects milestones, changes, and any potential impact on the timeline	133	3.13	1.27
There are challenges in communicating with external stakeholders (e.g., contractors, suppliers) on timeline	133	3.86	.963
I prefer verbal communication than written communication	133	2.90	1.31
Current communication channels or platforms are effective in facilitating communication on project resources	133	3.71	.814
Internal stakeholders feel adequately informed about renovation projects milestones, changes, and any potential impact on the resources	133	3.35	1.04
there are challenges in communicating with external stakeholders (e.g., contractors, suppliers) on resource need	133	3.62	.572
Current communication channels (email, letters, social media, face to face, phone call and SMS) are effective in facilitating communication on stakeholders participation in timely manner	133	3.82	.833
Total	133	3.61	.969

Source: Own survey, 2024

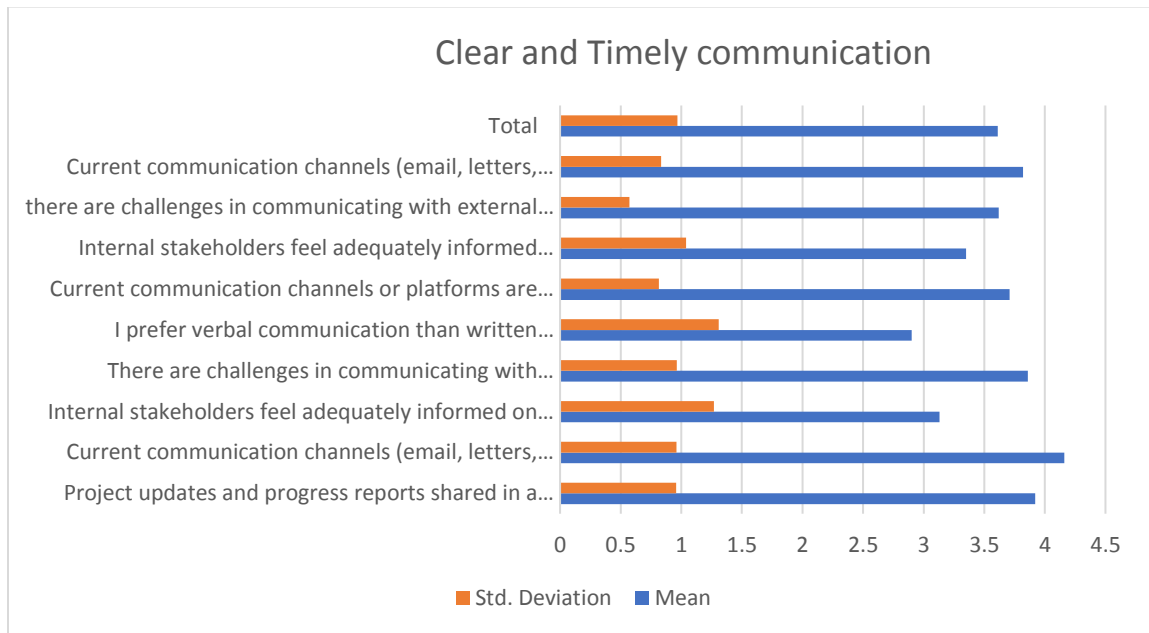


Figure 2 Clear and Timely communication

From the above table the respondents were agreed (mean value 3.96) on the timely sharing of Project updates and progress reports shared in a timely manner. Also they agreed on that current communication channels (email, letters, social media, face to face, phone call and SMS) are effective in facilitating communication on project time schedule, project resources and stakeholder’s participation in timely manner (average mean value). Their mean rating values fell between 3.5-4.5, suggesting general agreement. However, this also implies there is still some room for improvement in this area. The table also indicates, there are challenges in communicating external stakeholders on resource need and project timeline. This situation has led to delays in the renovation work and shortage of resource. The majority of respondents did not express a clear preference for either verbal or written communication. This suggests they are comfortable using both forms, or that they do not have a strong preference either way.

4.3.2 Descriptive analysis of stakeholder engagement and feedback variable

Table 5 stakeholder engagement and feedback responses

S.N	stakeholder engagement and feedback	Valid N	Mean	Std. Deviation
1	Effective communication with suppliers and the sourcing team accelerates the timely completion of projects, surpassing the impact on other stakeholders.	133	4.26	.813
2	Effective communication with suppliers and the sourcing team plays a crucial role in resource management than other stakeholders.	133	3.62	.822
3	Effective communication among stakeholders plays a significant role in participating stakeholders actively	133	4.29	.805
4	There were instances where miscommunication or lack of communication led to stakeholder's disengagement	133	4.05	.727
5	Currently, there are collecting and responding to feedback from stakeholders using surveys, interviews, focus groups and panel discussions	133	3.17	1.24
6	Stakeholders receive timely updates on the project and are given the chance to contribute their input.	133	3.25	.883
7	Identifying stakeholders and analyzing their power, influence, and interests in the project is effectively processed.	133	3.41	.962
	Total	133	3.72	0.890

Source: Own survey, 2024

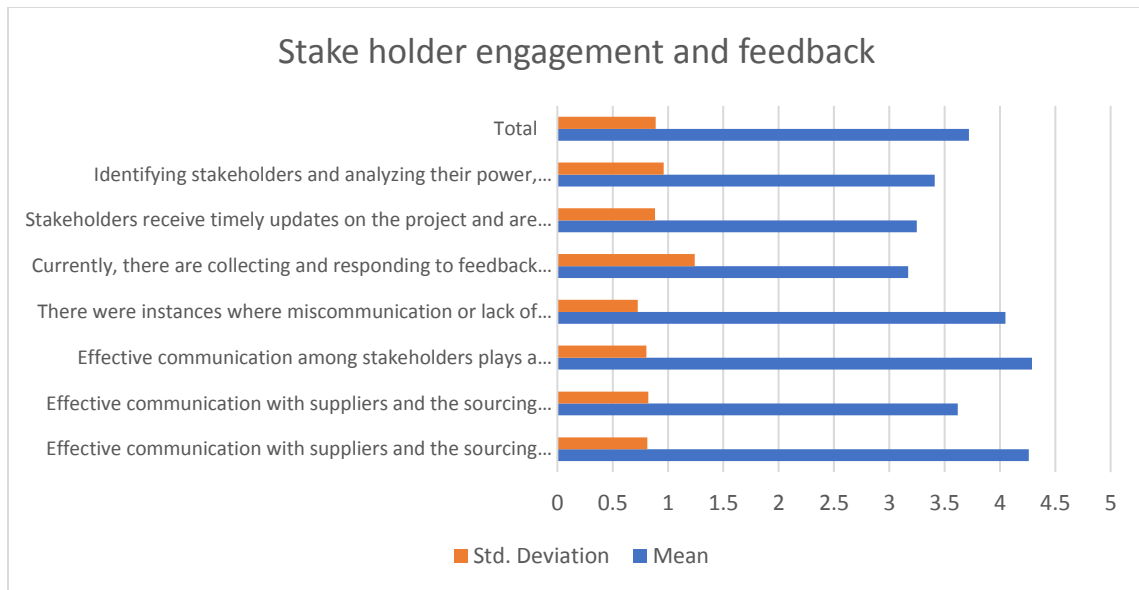


Figure 3 stakeholder engagement and feedback

Majority of respondents agreed that effective communication with suppliers and the sourcing team accelerates the timely completion of projects and resource management, surpassing the impact on other stakeholders in civil work renovation projects. These implied suppliers and sourcing team has great effect in resource preparation and for project the sake of project effectiveness. In addition, almost all respondents assured (with 4.29 mean) that effective communication plays a significant role in participating stakeholders actively and miscommunication or lack of communication led to stakeholder disengagement, which delays the whole project. Finally, the respondents' feedback tends to lean towards neutrality regarding the current feedback system. This suggests that either respondents completed the survey hastily or they are uncertain about their opinions on the matter.

4.3.3 Descriptive analysis of conflict resolution variable

Table 6 conflict resolution responses

S.N	Conflict resolution	Valid N	Mean	Std. Deviation
1	There is equal understanding on the role of effective communication on timely completion.	133	2.87	.891
2	There is equal understanding on the role of effective communication on resource management.	133	2.68	.989

3	There were instances where effective communication helped conflicts resolution among stakeholders	133	3.89	.813
	Total	133	3.14	.897

Source: Own survey, 2024

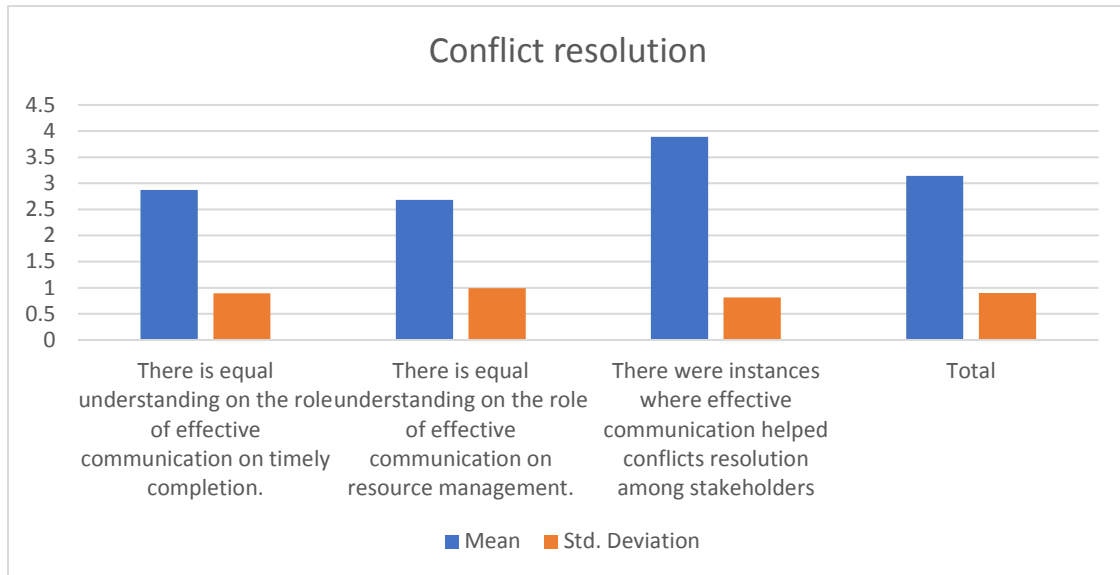


Figure 4 Conflict resolution

The preceding table indicates that there were occasions where effective communication aided in resolving conflicts among stakeholders, leading to an improvement in resource utilization. Additionally, respondents are uncertain about whether there is a mutual understanding regarding the role of effective communication in achieving timely completion and efficient resource management. If there were a mutual understanding, conflicts would likely be minimized. However, in its absence, there is a need for a shared understanding to enhance conflict resolution efforts.

4.3.4 Descriptive analysis of project effectiveness variable

Table 7 Project effectiveness responses

S.N	Project effectiveness	Valid N	Mean	Std. Deviation
1	Effective communication among stakeholders play a significant role in meeting renovation project deadlines	133	4.51	.821
2	There were instances where miscommunication or lack of communication led project to delay	133	4.36	.644
3	Effective communication among stakeholders plays a significant role in managing resources	133	4.56	.501
4	There were instances where miscommunication or lack of communication led to resource wastage	133	4.26	.760
5	Effective communication contributes in reducing wastes (time, labor, material)	133	4.65	.491
	Total	133	4.47	0.827

Source: Own survey,2024

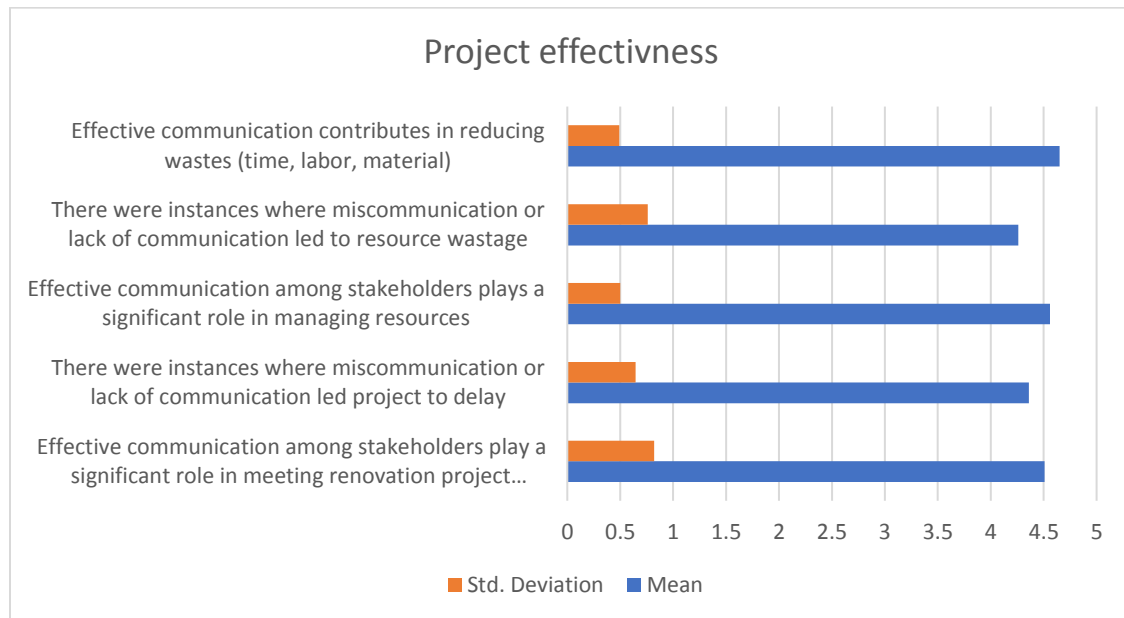


Figure 5 Project effectiveness

The data from the table indicates that a vast majority of respondents strongly support the notion that effective communication among stakeholders is vital for meeting renovation project deadlines and efficiently managing resources. Furthermore, they also expressed strong agreement regarding the positive impact of effective communication on reducing waste, including time, labor, and materials. In addition, respondents had agreement regarding on instances where miscommunication or insufficient communication resulted in project delays and wasted resources. These findings underscore the significance of effective communication in enhancing project effectiveness, particularly in terms of timely completion and resource management.

4.4 Inferential analysis

The study utilized both correlation and regression analyses to ascertain whether a statistically significant relationship exists between the independent variable (effective communication) and the dependent variable (project effectiveness).

4.4.1 Correlation Analysis

A correlation coefficient is a very useful means to show the relationship between two or more variables. Correlation is perhaps the most basic and most useful measure of association between two or more variables.

The coefficient is a single number that falls between -1 and +1 (Kotharie, 2004). Pearson Correlation is the most widely used method to measure the magnitude, direction of relationships either positive or negative and strength of relationship between the dependent and independent variables (Kothari, 2004).

According to Gujarati (2009), correlation coefficient of +1 implies perfect correlation, a coefficient of +0.60-0.99 is a strong correlation, a coefficient of +0.3-0.59 is moderate, and +0.1-0.29 is weak.

For the purposes of this study, a bivariate correlation was used to scrutinize the relationship between the dependent (project effectiveness variable) and each of the independent (clear and timely communication, stakeholder engagement and feedback, and conflict resolution) variables by using two tailed statistics at 95% level of significance.

Table 8 Pearson Correlations coefficient

Correlation		
		Project effectiveness
Clear and timely communication	Pearson coefficient	0.299**
	Sig. (2-tailed)	.001
	N	133
Stakeholder engagement and feedback	Pearson Correlation	.424**
	Sig. (2-tailed)	.000
	N	133
Conflict resolution	Pearson Correlation	.289**
	Sig. (2-tailed)	.000
	N	133
**. Correlation is significant at the 0.01 level (2-tailed).		

Source: Own survey, 2024

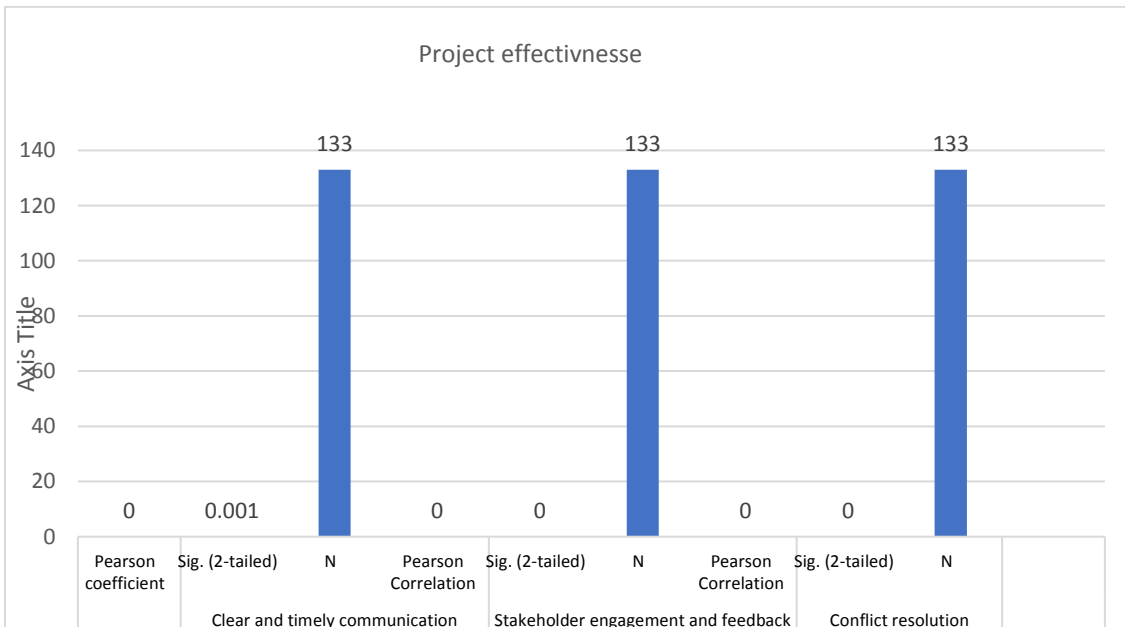


Figure 6 Correlation

As indicated in the above table 8, all the independent variables were positively correlated with the dependent variables with a correlation coefficient that range from 0.293 to 0.59 at 0.00 level of significance. The independent variables are significantly and positively correlated with the dependent variable: clear and timely communication ($r=0.293$, $p=0.000$), for stakeholder engagement and feedback, it is ($r=0.424$, $p=0.000$), for conflict resolution, it is ($r=0.310$, $p=0.000$).

The finding shows that clear and timely communication, stakeholder engagement and feedback, and conflict resolution have moderate relationship with project effectiveness in corporate Ethio telecom civil work renovation projects. Among the independent variables, stakeholder engagement and feedback has better relationship with project effectiveness compared to the other variables. Moreover, it is also shown that all independent variables are positively correlated with each other. This means that the results of this study are important for corporate Ethio Telecom civil work renovation projects and other projects currently underway in Ethiopia.

4.4.2 Regression analysis assumption test

Table 9 regression Analysis Model Summary

Model summary					
	R	R Square	Adjusted R square	F change	Sig. F change
1	.646 ^a	.417	.403	30.748	.000
<p>a. Predictors: (Constant), Conflict_resolution, Clear_timley_communicaition, Stakeholder_endgagement_feedback</p> <p>b. Dependent Variable: Project_effectivness</p>					

Source: Own survey,2024

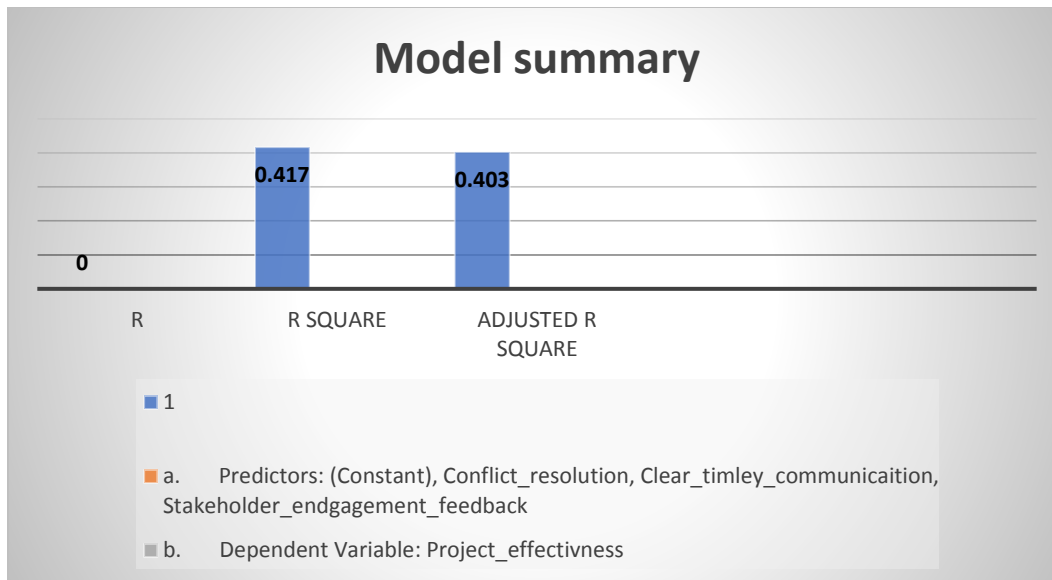


Figure 7 model summary

According to (KVALSETH 1983) linear model, the coefficient of determination (R^2) is perhaps the single most extensively used measure of goodness of fit for regression models. This proportion varies between 0 and 1 and is represented by R^2 (R Square). As shown in Table 9 above, the value of R^2 is 0.417, which means that 41.7% of the total difference in the length of the study is 'explained'. This indicates that the regression model explains 41.7% of the variance in the dependent variable based on the independent variable(s). While this shows a moderate relationship, there is still a substantial amount of variability that is unexplained by the model, suggesting potential for further refinement and inclusion of additional predictors. 41.7.1% means that project effectiveness variable was fully explained or relatively strong by the activities in the independent variables.

4.2.3 Analysis of Variance (ANOVA)

ANOVA tests determine whether the model significantly improves prediction accuracy compared to using the mean as a "best guess." A significant ANOVA model suggests differences exist among group means. This statistical technique is suitable for assessing the impact of a less-than-interval independent variable on at least an interval dependent variable. If the F-test outcome is not significant, the model should be disregarded (Wubeshet, 2017)

Table 10 Analysis of Variance /ANOVA/

ANOVA ^a					
Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	11.398	3	3.799	30.748	.000 ^b
Residual	15.940	129	.124		
Total	27.338	132			

a. Dependent Variable: Project_effectiveness

b. Predictors:(Constant),Conflict_resolution,Clear_timley_communicaiton,Stakeholder_endgagement_feedback

Source: Own survey, 2024

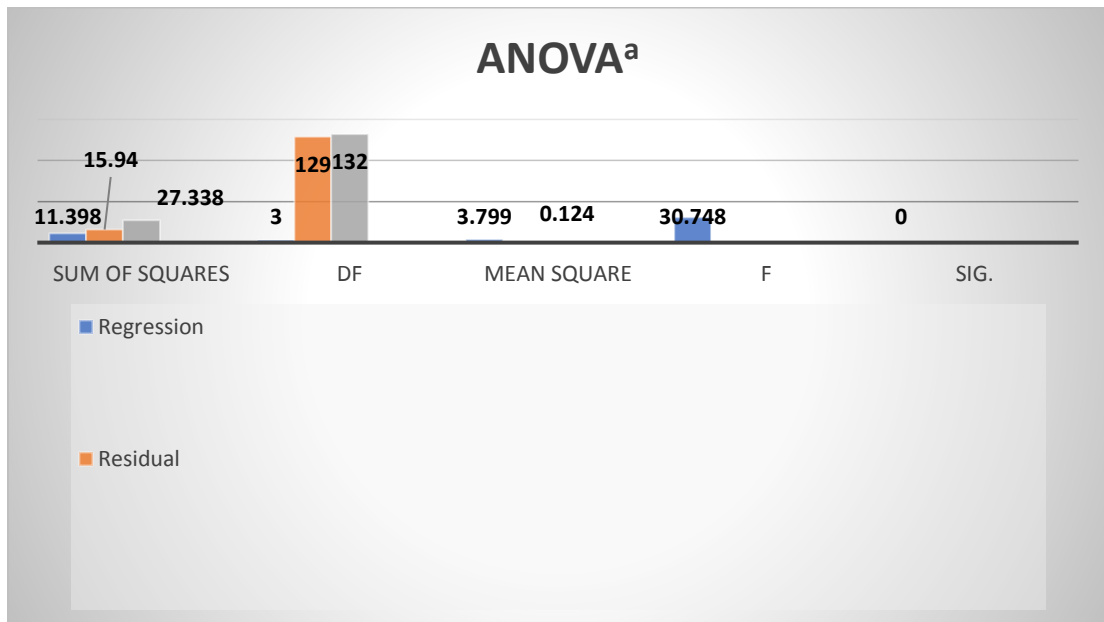


Figure 8 ANOVA^a

As demonstrated in the table above, the purpose of the multiple linear regression analysis in this study is to evaluate whether the proposed explanatory variables significantly influence the dependent variable or (clear and timely communication, stakeholder engagement and feedback, and conflict resolution) have a significant effect on project effectiveness. The statistical acceptability of the model was assessed using the ANOVA table, revealing that the model achieved statistical

significance (Sig = .000, indicating $p < .0005$). This indicates that the predictors collectively explain a statistically significant portion of the variance in the criterion variable. Therefore, the regression analysis in this study obtained a statistical significance value of 0.00. This implies that their scientific finding or implied truth significantly distorts the scientific process, as described above.

Table 11 Regression analysis Coefficient

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.823	.245		11.531	.000
Clear communication	.157	.066	.187	2.358	.002
Stakeholder engagement and feedback	.329	.078	.751	8.042	.000
Conflict resolution	.410	.060	.064	.680	.001
Dependent variable: project effectiveness					

Source: Own survey (2024)

The objective of the regression in this study is to find such an equation that could be used to find the influence of predictors on dependent variable.

From the above table 11, looking at the significance levels, the study established that there is a significant relationship between effective communication (clear communication, stakeholder management and feedback and conflict resolution) and project success at 5% significance level. This means that all effective communication elements account for the greatest contributions to influence project effectiveness of renovation project.

As shown in the table above, the constant (2.823) indicates the value of the dependent (project effectiveness) variables when all the independent (namely; clear communication, stakeholder engagement and feedback and conflict resolution) variables are zero.

According to, the multiple regression model result shown in table above indicates that Beta (β_1) coefficient of clear communication is about 0.157. This indicates the presence of a statistically significant positive relationship between clear communication and project effectiveness. In other words, keeping other variables constant, increase in clear communication will result in a .0157-

unit increase in project effectiveness, a result which is statistically significance at ($p < 0.05$) confidence interval.

Likewise, it is indicated that stakeholder engagement and feedback has beta (β_2) coefficient values of 0.329, Assuming other predictor variables are keep constant, one-unit increase in stakeholder engagement and feedback was associated with an average 0.329 unit increases in project effectiveness, which is statistically significant at ($P = 0.000$) level of confidence interval.

Finally, the table above shows conflict resolution has a coefficient beta (β_3) value of 0.410; this shows that conflict resolution has positive influence on project effectiveness, and an increase in this factor would lead to an average of 0.410 unit increases in project effectiveness

4.3 qualitative analysis

The qualitative data from interviews explained the different communication practices that adopted in their team. These practices are Email, meeting, letter, messaging, phone conversation, face to face, daily report on social media groups (telegram, wats up), documentation (design & spec, take off and payment certificate) from these practices email, face to face and daily report on social media groups are effectives.

The management thinks effective commination has a greater role for project effectiveness. Effective communication smooth situations among stakeholders, facilitate effective resource usage, timely informing any change on the project and lead to project effectives.

The management at corporate Ethio telecom civil works strongly believes that effective communication plays a pivotal role in project effectiveness. They recognize that fostering effective communication practices can have a significant positive impact on project outcomes.

Firstly, effective communication helps smooth out situations and resolve conflicts among the various stakeholders involved in the civil work projects. By facilitating open and transparent dialogue, it allows for mutual understanding and collaborative problem-solving, preventing communication breakdowns that could hinder project progress.

Secondly, effective communication supports the efficient utilization of resources. When information about project timelines, resource requirements, and any changes are communicated clearly and in a timely manner, it enables the team to better plan, allocate, and manage the necessary resources, leading to improved resource efficiency.

Lastly, the management emphasizes that effective communication is crucial for keeping all stakeholders informed about any changes or updates to the project. Proactive and transparent communication helps ensure that all parties are aligned and can adapt to evolving project needs, ultimately contributing to the overall effectiveness and success of the civil works projects.

The management also acknowledged some of the common challenges that hinder effective communication within the civil works projects. One key challenge is the skill and educational background differences among the diverse stakeholders involved.

The civil works projects bring together individuals with varying levels of technical expertise, communication skills, and educational backgrounds. This diversity can sometimes lead to misunderstandings or difficulties in conveying and comprehending information effectively.

Chapter 5: Conclusion and Recommendation

5.1 Summary of the study

The survey had a high response rate, with 133 out of 137 distributed questionnaires being filled and returned, resulting in a response rate of 96%. This strong participation indicates reliable engagement from the respondents, providing a robust basis for the subsequent analysis.

The survey data reveals several key demographic insights about the respondents. The majority of participants were male (57.1%), indicating a male-dominant survey population. Most respondents were young, with 55.5% aged 31-40 years and 39.1% aged 20-30 years, while those aged 41-50 years and above 50 years were only 3% and 2.3%, respectively. This suggests that younger individuals were more involved in the renovation project works. Educationally, 71.4% of the respondents held BA/BSc degrees, and 28.6% held master's degrees, highlighting a highly educated participant group. In terms of work experience, 59.4% had 6-10 years of experience, and 26.3% had 1-5 years, with fewer respondents having more than 10 years of experience. This indicates that most respondents were relatively young in their careers but familiar with the organization's culture, mission, and vision. Overall, the survey data indicates a predominance of young, well-educated male participants with moderate work experience

Descriptive statistics were used to analyze survey responses regarding three key attributes of effective communication: clear and timely communication, stakeholder engagement and feedback, and conflict resolution. Participants rated their agreement with various statements on these topics, as well as the overall project effectiveness from the perspectives of timely completion and resource management, using a five-point Likert scale. Mean scores and standard deviations were calculated, classifying responses from strongly disagree to strongly agree. The analysis shows how respondents generally felt about each communication attribute and the project's effectiveness, with the mean

scores indicating overall agreement levels and the standard deviations reflecting the consistency of responses.

The survey results indicate that respondents generally agree (mean value 3.96) that project updates and progress reports are shared in a timely manner. They also find current communication channels effective for discussing project timelines, resources, and stakeholder participation. However, the data suggests room for improvement in these areas. Challenges in communicating with external stakeholders about resource needs and project timelines were noted, leading to delays and resource shortages. Respondents showed no strong preference for verbal or written communication, indicating comfort with both forms or a lack of preference.

The survey reveals that most respondents agree that effective communication with suppliers and the sourcing team significantly accelerates project completion and resource management, highlighting their crucial role in project effectiveness. Nearly all respondents (mean value 4.29) also affirmed that effective communication is vital for active stakeholder participation, with miscommunication or lack of communication causing stakeholder disengagement and project delays. However, feedback on the current feedback system was neutral, suggesting respondents either completed the survey hastily or are unsure about their opinions on this aspect.

Effective communication has been instrumental in resolving stakeholder conflicts and improving resource utilization. However, respondents are uncertain about the mutual understanding of its role in achieving timely completion and efficient resource management. A shared understanding is needed to further minimize conflicts and enhance project outcomes.

The data shows that most respondents strongly support the importance of effective communication among stakeholders for meeting project deadlines and efficiently managing resources. They also agree that effective communication reduces waste, including time, labor, and materials. Additionally, there is consensus that miscommunication or insufficient communication leads to project delays and wasted resources. These findings highlight the critical role of effective communication in enhancing project effectiveness, particularly in timely completion and resource management.

The findings indicate that clear and timely communication, stakeholder engagement and feedback, and conflict resolution have a moderate relationship with project effectiveness in Ethio telecom's civil work renovation projects. Stakeholder engagement and feedback show the strongest relationship with project effectiveness among these factors. Additionally, all independent variables

are positively correlated with each other. These results are significant for Ethio telecom's projects and other ongoing projects in Ethiopia

The multiple linear regression analysis aimed to determine the influence of clear and timely communication, stakeholder engagement and feedback, and conflict resolution on project effectiveness. The model was found to be statistically significant ($p < .0005$), indicating that these predictors collectively explain a significant portion of the variance in project effectiveness. Thus, the regression analysis confirms that these factors have a meaningful impact on project outcomes.

5.2 Findings

- The survey had a high response rate of 96%, with 133 out of 137 distributed questionnaires being filled and returned, indicating reliable engagement from the respondents.
- The survey data revealed demographic insights about the respondents: Majority were male (57.1%), Mostly young, with 55.5% aged 31-40 years and 39.1% aged 20-30 years, highly educated, with 71.4% holding BA/BSc degrees and 28.6% holding master's degrees, relatively young in their careers, with 59.4% having 6-10 years of experience and 26.3% having 1-5 years
- Descriptive statistics analysis showed that respondents generally agreed that: Project updates and progress reports are shared in a timely manner (mean=3.96) but still has some gap; current communication channels are likely effective for discussing project timelines, resources, and stakeholder participation, Effective communication with suppliers and the sourcing team significantly accelerates project completion and resource management; Effective communication is vital for active stakeholder participation (mean=4.29)
- The survey revealed that effective communication has been instrumental in resolving stakeholder conflicts and improving resource utilization, but respondents were uncertain about the mutual understanding of its role in achieving timely completion and efficient resource management.
- The findings indicate a moderate relationship between clear and timely communication, stakeholder engagement and feedback, conflict resolution, and project effectiveness, with stakeholder engagement and feedback showing the strongest relationship.
- The multiple linear regression analysis confirmed that these factors (clear and timely communication, stakeholder engagement and feedback, and conflict resolution) collectively have a meaningful impact on project outcomes.

- The study found a positive relationship between effective communication and project effectiveness, as indicated by a high level of agreement among respondents on the importance of communication in various project aspects.
- Respondents strongly supported the notion that effective communication is vital for meeting renovation project deadlines and efficiently managing resources, highlighting the significance of clear communication in enhancing project outcomes.
- The data analysis revealed that instances of miscommunication or insufficient communication led to project delays and wasted resources, underscoring the critical role of effective communication in project management.
- The mean scores of the variables, calculated based on Likert scale responses, indicated a general agreement among respondents regarding the positive impact of effective communication on reducing waste and enhancing project effectiveness.

Overall, the findings emphasize the importance of prioritizing effective communication strategies in project management to ensure timely completion, efficient resource utilization, and overall project success.

5.3 Conclusion

The study focuses on civil work renovation projects within the corporate scope of Ethio Telecom in Addis Ababa, Ethiopia, emphasizing timely delivery and resource management. It conducted a thorough analysis of the data collected from questionnaires and interviews to investigate the relationship between effective communication and project effectiveness. In general, by integrating quantitative and qualitative data analysis methods, this research provides valuable insights into the impact of communication on project effectiveness, offering practical implications for managers and staffs in achieving successful project outcomes.

A response rate of 96% was achieved from the distributed questionnaires, ensuring the reliability of the data for analysis. The mean scores of the variables were calculated, indicating the level of agreement or disagreement among the respondents. In addition, correlation and regression analyses were utilized to determine the statistical relationship between effective communication and project effectiveness. Addressing the assumptions of regression analysis was crucial to ensure the validity of the results obtained from the study.

Effective communication practices play a crucial role in the successful execution of civil work renovation projects within corporate Ethio Telecom civil works. The research findings emphasize

the positive impact of clear and timely communication among stakeholders on project effectiveness, particularly in terms of timely completion and resource management.

Effective communication is crucial for the success of construction and renovation projects, facilitating collaboration, coordination, and knowledge sharing among stakeholders. Stakeholder engagement and feedback play a significant role in the effectiveness of civil work renovation projects, impacting timely completion and resource management

Despite limitations such as human biases and constraints in data gathering, the research underscores the importance of clear and timely communication, stakeholder engagement, and conflict resolution in enhancing project outcomes.

The findings suggest a significant positive relationship between effective communication and project effectiveness, highlighting the importance of clear communication in enhancing project outcomes. The study emphasizes the need for organizations to prioritize effective communication strategies to improve project management practices and overall success.

5.4 Recommendation

- Strengthen communication channels to provide clear and timely updates on project timelines, resource needs, and stakeholder participation.
- Establish a shared understanding among stakeholders about the role of effective communication in achieving project objectives, such as timely completion and efficient resource management.
- Identify and address the specific challenges in communicating with external stakeholders, such as suppliers and the sourcing team, to mitigate delays and resource shortages.
- Develop structured processes for conflict resolution among stakeholders to minimize disruptions and ensure mutual understanding of communication's role in achieving project goals.
- Provide training or guidance to stakeholders on effective conflict resolution techniques to foster a collaborative environment. Also, establish clear and consistent communication to facilitate a shared understanding of the role of effective communication in achieving project objectives,
- Consider ways to encourage more diverse participation in future surveys, as the current sample seems to be predominantly young, male, and well-educated.

5.5 Suggestion for Further Study

This study was focused on limited points due to time, resources, and methodological constraints. Thus, I recommend that further study to assess the role of effective communication on project effectiveness from quality and scope perspective. Hence researchers may expand the scope and further investigate including other effective communication parameters.

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APPENDICES

Questionnaire

Addis Ababa University School of Commerce

Master of Project Management

Dear respondent,

The purpose of this questionnaire is to collect data about “role of effective communication on project effectiveness: In the case of corporate Ethio telecom civil work renovation projects.” for the partial fulfilment of an MA degree in Project Management. The information you provide was be used only for academic purposes and kept confidential. Therefore, I kindly request you to provide me with reliable information for the quality of the research. Thank you in advance for your cooperation.

(Name of the researcher: - Yewebnesh Birhanu)

General Direction

- No need to write your name
- Read each question and put (√) on the given space/ box

Part One: The profile of respondents

Please put a tick mark (√) on the appropriate response category:

1. Sex/ Gender: Male Female
2. Age: (20-30 years) (31-40 years) (41-50 year) >50 year
3. Educational level: Diploma , BA/Bsc , Masters PhD
4. Work experience: 1-5 years 6-10 years 11-15 years >15 years

Part Two: Questionnaires on effective communication and project effectiveness

Please put tick (✓) in the table provided for each of the given statement using the following scales

1 = Strongly Disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; 5 = Strongly Agree

Note:

Stockholders refers: sourcing, suppliers, facility department, contractors, user section, budget department, civil works department, warehouse team, finance team, information system team, power and infrastructure team

s/ n	Questionnaire project effectiveness	scales				
		1	2	3	4	5
1	Effective communication among stakeholders play a significant role in meeting renovation project deadlines					
2	There were instances where miscommunication or lack of communication led project to delay					
3	Effective communication among stakeholders plays a significant role in managing resources					
4	There were instances where miscommunication or lack of communication led to resource wastage					
5	Effective communication contributes in reducing wastes (time, labor, material)					
	Questionnaires on clear and timely communication					
1	Project updates and progress reports shared in a timely manner					

2	Current communication channels (email, letters, social media, face to face, phone call and SMS) are effective in facilitating communication on project time schedule					
3	Internal stakeholders feel adequately informed on projects milestones, changes, and any potential impact on the timeline					
4	There are challenges in communicating with external stakeholders (e.g., contractors, suppliers) on timeline					
5	I prefer verbal communication than written communication					
6	Current communication channels or platforms are effective in facilitating communication on project resources					
7	Internal stakeholders feel adequately informed about renovation projects milestones, changes, and any potential impact on the resources					
8	there are challenges in communicating with external stakeholders (e.g., contractors, suppliers) on resource need					
9	Current communication channels (email, letters, social media, face to face, phone call and SMS) are effective in facilitating communication on stakeholders participation in timely manner					
Questionnaires on stakeholder engagement and feedback						
1	Effective communication with suppliers and the sourcing team accelerates the timely completion of projects, surpassing the impact on other stakeholders.					
2	Effective communication with suppliers and the sourcing team plays a crucial role in resource management than other stakeholders.					
3	Effective communication among stakeholders plays a significant role in participating stakeholders actively					

4	There were instances where miscommunication or lack of communication led to stakeholders disengagement				
5	Currently, there are collecting and responding to feedback from stakeholders using surveys, interviews, focus groups and panel discussions				
6	Stakeholders receive timely updates on the project and are given the chance to contribute their input.				
7	Identifying stakeholders and analyzing their power, influence, and interests in the project is effectively processed.				
	Questionnaires on conflict resolution				
1	There is equal understanding on the role of effective communication on timely completion.				
2	There is equal understanding on the role of effective communication on resource management.				
3	There were instances where effective communication helped conflicts resolution among stakeholders				

Part three: Interview questions

1. what are the different communication practices that adopted in your team, which one is more effective?
2. what do you think about the role of effective communication, on timely completion, resource management and stakeholder's management of renovation project?
3. what are the common effective communication challenges in the area?

Note: The close ended and open ended questions developed with referring the below references:

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