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Department of Project Management

ASSESSMENT OF PROJECT COMMUNICATION MANAGEMENT PRACTICES IN THE MINISTRY OF HEALTH: THE CASE OF COVID-19 EMERGENCY RESPONSE PROJECT.

BY;

BERSABEH TADESSE

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ADDIS ABABA, ETHIOPIA

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THESIS SUBMITTED TO ST. MARY'S UNIVERSITY SCHOOL OF GRADUATE STUDIES IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF ARTS IN PROJECT MANAGEMENT

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I the undersigned declare that this thesis is my original work, prepared under the guidance of **Dr. Muluadam Alemu**. All sources of materials used for this thesis have been duly acknowledged. I further confirm that the thesis has not been submitted either in part or in full to any other higher learning institution for the purpose of earning any degree.

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

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01

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ABSTRACT

This study focuses on assessing communication management practices within COVID-19 Emergency Response Project. The purpose of this study is to find out communication management factors that influence project management effectiveness. A comprehensive analysis of project communication management practices are assessed using a mixed approach and descriptive research design. A five-point Likert scale-based questionnaire was used to collect data from 49 participants, including project managers, project team members, support staff, and technical advisors. The findings demonstrate that the COVID-19 Emergency Response Project's communication management practices are good. Project professionals have a strong knowledge base in communication areas such as project communication and communication technologies. The implementation of the project communication management process and appropriate communication channels were found to significantly affect the effectiveness of project management. The findings also confirm that formal and informal communication channels can aid in the improvement of the project management process and importance of carefully evaluating different communication channels in project management settings and choosing those that are most appropriate and effective for the given context and objectives are crucial. The study recommended that ensuring proper and effective project communication through good personal contact with team members and stakeholders, developing positive relationships and positive communication is so compulsory for effective project management.

Key Words: Project communication, Project management effectiveness, project management

Table of Contents

ABSTRACT	vii
CHAPTER ONE	1
1.1 Background of the study	1
1.2 Statement of the problem	4
1.3 Research Question	7
1.4 Objective of the study	7
1.4.1General objective	7
1.4.3 Specific objectives	7
1.5 Scope of the Study	8
1.6 Significance of the study	8
1.7 Limitation of the Study	8
1.8 Definition of Terms	9
1.9 organization of the study	9
CHAPTER TWO	11
2.1Theoretical review	11
2.1.2Communication process	11
2.1.3Types of communication	12
2.1.3.1 Verbal communication	12
2.1.3.2Written communication	13
2.1.3.3 Nonverbal communication	13
2.1.3.4Formal communications	14
2.1.3.5 Informal communication	14
2.1.4 Communication channel	14
2.1.5 Project communication management process	15
2.1.6Communication technology	16
2.1.7 Plan communications management	16
2.1.8 Manage communication	17
2.1.9 Monitor communication	18
2.1.10 Project management	19
2.1.11 Types of communication in project management	20
2.2Empirical review	21

2.2.1 Project management	21
2.2.2 Project management effectiveness	22
2.2.3 Project communication management	22
2.2.4 Communication channels	23
2.3 Conceptual frame work	24
CHAPTER THREE	25
3.1Introduction	25
3.2 Research design	25
3.3 Target population	25
3.4 Sources of data and data collection	26
3.5 Data analysis method	26
3.6 Validity	26
3.7.2 Reliability	27
3.8 Ethical issue	28
CHAPTER FOUR	29
4.1Introduction	29
4.1.2Background of the respondents	29
4.2 Demography characteristics of the respondents	30
4.2.1Gender Distribution	30
4.2.2Age Distribution	30
4.2.3Academic Qualification distribution	31
4.2.4Position in the organization distribution	31
4.3.1 Project communication practice in MOH COVID-19 Emergency Response project	32
4.3.2 Discussion of result for Features of project communication practice in MOH COVID-19 Emo	0 ,
4.3.2 Relationship between project communication and project management success	
4.3.2.1 Discussion of result for Relationship between project communication and project	
management success	
4.3.3.1 Discussion of result for how communication affects the effectiveness of project mana	•
4.3.4 How project professional value communication	40

4.3.5 Communication channels applied by project professionals	41
4.3.5.1 Discussion of result Communication channels applied by project professionals	43
4.4 Correlation and regression analysis	43
4.4.1 Correlation	43
4.4.2 Regression analysis	44
CHAPTER FIVE	48
5.1 Introduction	48
5.2 Summary of major findings	48
5.3 Conclusion	50
5.4 Recommendation	50
5.5 Recommendations for Further Studies	51
References	52
APPENDIX	56
LIST OF TABELS	
Table 1- Reliability statistics	27
Table 2- Respondents response rate	29
Table 3-Respondents gender distribution	30
Table 4- Respondents age distribution	30
Table 5- Respondents Academic qualification distribution	31
Table 6- Respondents position in the organization	31
Table 7- Communication Practice of MOH COVID-19 Emergency Response project	32
Table 8-project communication and project management success relationship	35
Table 9- Impact of communication on the project management	37
Table 10- value of communication for project professionals	40
Table 11- Types of communication channels applied in MOH COVID-19 Emergency Response	project 41
Table 12- Correlation Analysis	44
Table 13- Model summary	45
Table 14- multiple regression variables entered	45
Table 15-coefficient table	46

LIST OF ACRONYMS

COVID-19- Corona Virus Disease

MOH- Ministry of Health

PMI- Project Managements Institute

PM- Project Management

WHO- World Health Organization

CHAPTER ONE

1. INTRODUCTION

1.1 Background of the study

The PMI (2017) defined project as "temporary endeavor undertaken to create unique product, service or result." Projects are undertaken at all organizational levels it can be there in one organization for a single purpose or multiple organizations can create alliance to reach a certain common goals or objectives. Organizations may have various reasons to initiate a project it can be, meet regulatory, legal or social requirements, to satisfy stakeholder request or needs, implement or change technological or business strategies and create improve or fix products, process, or services.(PMI,2017)

As the book of the fast forward MBA in project management state (Verzuh, 2008), every project has a start and a finish, and every project yields a different output. Each project has certain activities that must be finished within a given time frame in order to contribute to the outcome. Ongoing operations in contrast are continues and do not have a deadline for completion. A project's collaborators may originate from various departments inside an organization or even from outside the organization. After the project is over, these individuals will go on to the new endeavors or return to their former roles within their companies (Levy, 1994). Since each project has unique qualities and traits, project management will differ from regular management in this situation.

Although each projects are unique most of them share similar characteristics, they are taken to meet a defined objectives, have started and end point, have a specific resource and defined outcome that can be measured and initiate change in the end result, last but least all project have a common life cycle, these are initiate, plan, implement, monitoring and closing phase. (PMH, 2018)

Project management is the process of using knowledge, skills, tools and techniques to project activities in order to satisfy the needed requirements. It enables organizations to carry out initiatives in an effective manner. Project management offers a driven method for a significant development process and successfully executing change. This effect helps organizations to remain competitive and relevant. (PMBOK, 2017)

Westland, J. (2006) Project managers must be able to meet the objective determining what is required, planning how to align activities to satisfy quality, managing resources and ensuring timely completion and successful delivery. To summarize the above project management is the series of activities and process used to track and manage project's time, cost and quality of a project.

The project management institute (PMI) identifies a body of knowledge areas known as project management body of knowledge (PMBOK), which are Project Integration Management, Project Scope Management, Project Time Management, Project Cost Management, Project Quality Management, Project Human Resource Management, Project Communication Management, Project Risk Management, Project Procurement Management and Project Stakeholder Management. Project communication management is one of the knowledge areas selected as the subject of this study.

The Latin verb communicate which means "to share", is the root of English term communication. Communication is the process of imparting knowledge and a shared understanding from one person to another (Keyton, 2011). It is transmission of meanings between entities or groups utilizing signals and semiotic principles that are mutually understood. Communication is the exchange of information, voluntarily or involuntarily. The information can be in different form such as ideas, instructions or emotions. Information can be shared as written form, verbally, and through gesture the communication ensures the information exchange is sent and received. (Project Communication Hand Book, 2007)

Communication regulates relationship between project manager and project stakeholders as well as how the team members collaborate to accomplish the predetermined project goal (Rodríguez, 2017). Project stakeholder may misunderstand when communication is neglected in project management and one of the reasons to project fail is a lack of understanding.

One of the most crucial aspects of a project's success is effective communication. Every successful project requires effective communication, which is also a crucial project management skill. According to Laswell's Maxim (1940), communication is defined as "who says what to whom in what channel with what effect." Effective communication involves the efficient exchange of information from one project point to another. The term "communication" has been acknowledged by Dainty et al. (2006) as being "a multifarious and complex term, which can mean different things in different contexts and situations."

The covid-19 pandemic has presented a number of challenges to healthcare systems worldwide. The ministry of health is responsible for leading the national response to COVID-19 including managing projects related to testing, treatment, and vaccination. Effective project communication management is crucial to ensure that all stakeholders are informed and engaged in the MOH's COVID-19 projects. (WHO, 2020)

Wray (2018) in the context of COVID-19 projects, effective communication is even more critical. These projects involve multiple stakeholders, including healthcare professionals, government agencies, non-profit organizations, and community members. The urgency of these projects also means that communication must be timely and accurate to ensure that resources are allocated efficiently and effectively. Another challenge is the need to communicate complex scientific information to non-expert stakeholders. COVID-19 projects often involve scientific research and data analysis, which can be difficult for non-expertise to understand. Effective communication strategies must be developed to ensure that stakeholders understand the implications of the research and can make informed decisions.

In conclusion, effective project communication management is critical to the success of MOH's The purpose of this study is to asses communication management practices within COVID-19 Emergency Response Projects to determine how effective project management has been. The hope is that the findings can then help project managers and team members be more effective in their roles by providing insights about how to improve communication practices and, eventually project outcome

1.2 Statement of the problem

One of the biggest challenges that any company has during the project management process is communication. To address the Corona pandemic response plans, it is crucial to choose the right communication method. Even when there are significant risks at the beginning, Effective and efficient communication may transform the course of a project. A project manager may reduce the risk by making sure that stakeholders involved is adequately informed about the scenario in advanced and that team ideas are being shared politely.

The project team members need to be as well-informed as possible regarding the projects objectives, timeframes, deliverables, and participant expectation. Additionally, project managers should be careful to include information on the collaboration software and other project management tools that will be utilized, the timing, quality, and format of recurring meetings and the steps to be taken in the event that project scope changes. Project teams who are in good communication are more likely to be in agreement on the project goals and understand exactly what is required of them. Additionally, it contributes to the development of team trust, which improves collaboration throughout the whole project. Employee cooperation toward the projects goal and objectives is another benefit of effective project communication.(Schmidt,2009)

Rajkumar(2010) defined the importance of communication in project management as "there are no more important to the success of a project than effective communication. More effective communication means better project management which is known to everyone in project management, but we do face difficulties in implementing it due to various factors like the nature of the project, structure of the organization and others." The study also reveals that 90% of project manager's time is devoted to communication. This is a result of the fact that all stakeholders frequently communicate with the project management through a variety channels.

The PMI (2013) Effective communication results in more successful projects. Which enables firms to become high performers, according to the crucial function of communication research completing an average of 80 percent of projects on time, on budget and meeting original goals. These companies take on 14 times less financial risk than their underwhelming competitors. The report also focuses on communication issues that prevent organizations from completing more successful projects and identifies crucial initiatives that can assist organizations in improving

their communication as they deal with their particular problems in such a complex and risky environment.

In order to fully comprehend what the stakeholder's desire and how their demands might be addressed, communication from the stakeholders is also necessary. For instance, a project developing software for a particular party must routinely engage with the customer to comprehend the projects intended criteria (Taylor, & Dow, 2013).

In Africa, where numerous studies have shown that ineffective communication management techniques have resulted in project failure. In Nigeria research by Luka and Patricia (2014) found that ineffective communication had led to project delays, cost overruns, and project abandonment. The effectiveness of professionals working in the project areas has also been found to be significantly impacted by project communications and communication management. Titus, Clinton and wellington (2019) in their findings showed that the project in Ghana and South Africa environment has particular communication performance issues. Communication difficulties, like delays, distortions, and protocol issues, were also regularly seen in Ghana but not in South Africa. The rise of misunderstandings further confirmed that this is, in fact, a communication issue that is universal and not specific to any particular environment or nation.

In Ethiopia, few studies on project communication management have been conducted. Yonatan Edegilign (2017), evaluated assessment of project communication management in sele enat mahber, the study found that, the NGO is behind in project management, has had a number of project failures, One of the main reasons is project communication management in the organization is not recognized, not participatory, disorganized, and without any guiding document in this crucial scenario is inability to manage project communication. Abadi(2020), indicates in his research practice of communication management in IT projects: the case of commercial bank of Ethiopia (CBE) The study's findings suggest that there is a discrepancy between the standard practice of project communication principles.

Meron (2018) has researched methods to increase project performance as well as the effects of project communication on project performance. Poor communication had caused project delays, project expense overruns, and project termination, the researcher had concluded. In order to increase job performance, organizations should regularly communicate their policies, aims, and

objectives to their workers. Poor or absent communication can result in workflow misunderstandings, a weak return on investment, and even revenue loss. According to the project management institute, over 30% of projects fail because of poor communication. Collaborative minds sharing notions and ideas to tackle problems as they arise is the key to work efficiency. Teamwork will obviously suffer from a lack of communication. Speaking is important, but so is immersing oneself in what others are saying and sharing. Samu Festus Femi (2020). The study reveals that ineffective communication might impact employee's performance. For labor or company tasks, productivity or advancement is essential. Employees need to see consistency, scalability, and visibility in a project. To ensure that the project proceeds in the appropriate manner everyone has a role to play.

Project managers that downplay the relevance of communication put their project at risk. According to project management institute (PMI) 40% of project failure can be directly related to the lack of effective communication understanding the value of communication in project help managers and project team members helps information flowing, even in crisis. PMI (2012), another study done by project management institute (PMI) reveal that poor communication had negative impact on successful project implementation.

As contextual gap some researches are done worldwide but not in the context of Ethiopia concerning Communication Management in COVID-19 emergency response project. This study tries to fill this gap.

Despite the critical role of effective communication management in project success, there is a lack of research on the assessment of project communication management in the Ethiopian Ministry of Health COVID-19 projects. This issue gap in knowledge raises questions about the effectiveness of communication processes, channels, and technologies used in these projects and their impact on project outcomes.

This study aims to examine the practice of project communication management in COVID-19 emergency response project in ministry of health in Ethiopia.

1.3 Research Question

This research aims to answer the following research questions

- What are the features of project communication practice in MOH COVID-19 project?
- What is the relationship between project management communication and project management success in MOH COVID-19 project?
- How project managers manage the information flow to the project professionals under their project teams?
- What are the communication techniques and channels used in COVID-19 project of MOH?

1.4 Objective of the study

1.4.1General objective

The main goal of this study is to assess the practices of project communication management in Ethiopian ministry of health COVID-19 project.

1.4.3 Specific objectives

The specific objectives of this study are

- To determine the features of project communication practice in COVID-19 project
- To determine how communication affect the effectiveness of the project management in COVID-19 emergency response project
- To determine how project professionals in covid-19 project value communication
- To assess the communication techniques and channels used in covid-19 project of MOH

1.5 Scope of the Study

The study focused only on the assessment of project communication management of the Ethiopian COVID-19 Emergency Response Project. The study was conducted only on the Ethiopian COVID-19 Emergency Response Project in Addis Ababa, which may not be good enough to extrapolate the findings directly to other projects, and it does not analyze the practice of other analogous projects in other locations. In terms of time, this study was a cross-sectional study, with data were collected at a certain point in time.

1.6 Significance of the study

The significance of this study is investigating the practices of communication management in the Ethiopian COVID-19 Emergency Response Project in order to achieve its intended objectives. The success of this project may have a significant impact on effective communication management and project sustainability by incorporating important stakeholders and replicating in the areas. The finding of this study helps to give a better knowledge and teach policymakers on how communication management ideas may be more effectively implemented in this specific industry, as well as how it might improve project completion and sustainability. The findings of this study will provide insights into the strengths and weaknesses of communication management practices in emergency response projects and guide the development of best practices for effective communication management.

It is also beneficial for future researchers who may desire to do future research on project communication management.

1.7 Limitation of the Study

This study has some drawbacks, much as any other studies. The key limitations of the study, a lack of up-to-date literature, and a lack of comparable studies in the Ethiopian context, is the major challenges encountered while conducting this study. The investigation centered on the COVID 19 Emergency Response Project. Directly applying the findings to other projects may be challenging to accomplish for a variety of reasons. Time and resources are limited. Due to the

researcher's lack of expertise and time constraints, summarizing and analyzing the data to be obtained was difficult.

1.8 Definition of Terms

Project: A project is a one-of-a-kind collection of coordinated operations with a distinct beginning and end point, undertaken by an individual or organization to achieve particular goals within specified time, cost, and performance criteria (British Standards Institution, 2000). **Project Management:** The application of information, skills, tools, and procedures to project activities in order to achieve project requirements is referred to as project management (Rose, 2013).

Communication: Is the process of imparting knowledge and a shared understanding from one person to another (Keyton, 2011).

Project Communication Management: It encompasses the procedures necessary to assure timely and proper project planning, gathering, development, distribution, storage, retrieval, management, control, monitoring, and final disposition of project information (PMBOK, 2001)

COVID-19: Coronavirus disease is a highly contagious respiratory disease caused by the SARS-CoV-2 virus. (WHO, 2020)

Pandemic: A pandemic is an epidemic of an infectious disease that has spread across a large region, for instance multiple continents or worldwide, affecting a substantial number of individuals. (WHO, 2020)

1.9 organization of the study

The study is organized into five chapters which includes chapter one on the background of the study, the objectives, research questions, scope of the study, significance of the research and limitation of the research. Chapter two includes the literature review consisting of theoretical review, empirical review and conceptual framework. Chapter three consists of research methodology that was adopted in carrying the study. Chapter four comprises the data analysis,

interpretations and discuss				pter five on the	
summary of the key findin	gs, conclusions a	nd recommendat	ion.		

CHAPTER TWOLITERATURE REVIEW

2.1Theoretical review

Danity, et.al,(2006) have stated that the term "communication is in itself a multifarious and complex term, which can mean different things in different context and situations. Fisher and Harms, (1983) genuine communication is basic human need, much like access to food, cloth and shelter. There doesn't appear to be any question that communication is crucial to an organization performance. Although managers work on variety of duties and activities depending on the industry, it has been shown that communication takes majority of their time. Drucker (1985) highlights the value of communication for managers and argues that effective communication skills are necessary for success. Cherry (1978), communication is the exchange of meaning throughout interpersonal interactions. Sivert, (1986) emphasizes the value of communication in project management and claims that a high percentage of problems in working relationship may be due to poor communication. The main process of communication is to exchange information so that it will create a sociable environment for employees by creating common understanding in projects, since communication is "the nervous system of any organized group and glue that hold organization together" (Olsson & Johansson (2011).

2.1.2Communication process

Communication process is one of the fundamental methods to emphasize the significance of communication as means of spreading information and knowledge to others. Radhika kapur (2020).

The communication process requires a sender and receiver. The message is created by the sender and it is intended for the receiver. The content is created by sender with a specific purpose in mind. The message is received by receiver who then responds to it in accordance with their personal perception. The message is open for him or her to accept, modify or reject. The technique requires a unique medium that can take on any form in order to reach the receiver. Depending on the quality of the communication received the receiver may approve the medium.

The medium may be changed by the receiver in order for him to choose how he wants to understand the message. (Samakova,2014)

Al-Nady et al. (2013), the communication process requires a message. The message can be delivered in a variety of ways often in hard or soft format, hard formats are often written on paper whereas soft formats are digital. A message is required to start a conversation and spark a relationship between two or more individuals, regardless the format feedback is necessary for the communication process between sender and receiver. Feedback maybe neutral, positive or negative depending on how receptive the sender or receiver is. Feedback might be straightforward or complicated. Simple feedback is when there are only two participants. When there are three or more participants it is called complex feedback.

The receiver might not always get the message exactly during the communication procedure. The message delivered can be influenced by beliefs, values, emotional effect of communication the media used this are known as noise.

2.1.3 Types of communication

2.1.3.1 Verbal communication

Verbal communication is exchange of information through speech that is understood by all parties involved. (Grimsley, 2014)

Samakova (2014) the norms of personal meetings must be defined within verbal communication which is greatly influenced by communication skills, particularly those of project managers.

- Identifying one complex problem of the encounter
- Only inviting person who are truly necessary for the meeting
- Setting the meeting time limit
- Expressing interest in the many perspectives of each participant
- Using terminological dictionary
- Summary of the particular task that resulted from the conference

- Establishing mutually beneficial with each meeting participant. Dealing with the phone
 call policy is just as important as the rules of personal meetings when communicating
 verbally. These are the following rules;
- Determining who creates a brief written record from a phone call
- Determining the person in charge of keeping the data archived
- Determining who gets written record from a phone call and who distribute it

2.1.3.2Written communication

Sharma,(2016) 'Written communication' refers to the transmission of message, orders, or instructions through letters, circulars, manuals, reports, telegrams, office memos, and bulletins. When discussing written communication, the implemented project must establish the guidelines for email communication among project teams.

- Identify the person who respond to the message
- Specify the priority of the message
- Identify who is responsible for archiving of the email communication

2.1.3.3 Nonverbal communication

Nonverbal communication is a little more complicated. It is communicating a message without the use of language. It consists of a wide range of various components (Shawn Grimsley, 2014). Nonverbal communication plays an important part of creating and implementing multicultural initiatives. The nonverbal component of communication is crucial because it may clarify or confuse the message being transmitted. The receiver's comprehension of the message is influenced by the sender nonverbal indications. The social effect of either frequently hinges on tiny nonverbal indication that are transmitted during conversation, either voluntarily or involuntarily (Tarjani, 2017). An example of nonverbal communication includes eye contact, gesturing, mimicry and more.

2.1.3.4Formal communications

Formal communications are often written and are intended to address the unique requirements of the business. Examples include corporate manuals, handbooks, bulletins and annual reports. It relate to the specific role of the communicator and the recipient within the framework (Kumkum Sharma,2013). Formal communication adheres a defined set of norms and has a clear intention. Goal-oriented, explicitly stated, function-related communication that cuts through hierarchy adheres to establish conventions and spans time and location is what is known as formal communication (Katz & Kahn, 1978). In formal communication the probability of mistakes and misinterpretation is rather very low compared to informal communication. (Caln, 2019).

2.1.3.5 Informal communication

Informal communication is any form of communication that travels freely within an organization and flows in all direction (Surbih, 2018). This kind of communication takes place between persons who are able to communicate freely or outside the business or corporate environment. There are no strict restrictions or rules; the only requirement is that all parties may communicate with one another. There is no set subject for this form of conversation. It's just regular dialogue between familiar parties (Sihag 2013). Informal communication, such as word of mouth moves more quickly than formal communication due to its oral character it may reach the greatest number of individuals, regardless of their positions, in the shortest amount of time for little or no cost. (Sharma, 2016).

2.1.4 Communication channel

When choosing a communication route, a project manager should take into account whether it will effectively and promptly provide the information to the right stakeholder. He/she should explain the importance of adhering to the communication plan in order to ensure that all project team members are aware of and prepared for their roles in communicating with external stakeholders (PMI, 2013). These lines of communication can be divided into three categories; vertical, horizontal, and diagonal, the project manager decides which sorts of information go to

which project team members and which of them communicate with which of them throughout the first communication planning process.

2.1.5 Project communication management process

PMI, (2013) defines project communication management as a method that entails the procedure necessary to guarantee the timely and suitable planning, gathering, developmental, distribution, strong, retrieval, management, control, monitoring, and final disposition of project information. Communication will take place during all stages of the project, even though they are often started after the communications plan has been written. Therefore, this procedure is applicable to all formal communications made throughout the project's duration Hodgkison, (2009). Therefore effective project communication guarantees that the appropriate stakeholders have the appropriate information, at the appropriate time to enable informed decision making Saunders, (2009). Because every project is unique and requires a different project communication management, project communication management is not an auto-mated procedure. (Samakova, 2018).

In their study on the impact of communication management on project performance, Li et al. (2016) found that effective communication management positively influences project outcomes such as schedule performance, cost performance, and customer satisfaction. The authors noted that communication management involves not only the exchange of information but also the creation of a shared understanding between project team members and stakeholders. They further emphasized that communication management should be integrated into the project planning process to ensure that communication channels and messages are aligned with project objectives.

Project communication management is crucial for achieving project success. It helps in creating a shared understanding among project team members and stakeholders, building trust and relationships, and influencing project outcomes such as schedule performance, cost performance, and customer satisfaction. Therefore, project managers should prioritize communication management by integrating it into the project planning process and ensuring that communication channels and messages are aligned with project objectives, (Sharma, 2016).

2.1.6Communication technology

The internet is one of the most significant communication technologies that have led to the development of e-commerce and global digital economy with new prospects (Al-Nady et al., 2014). Communication technology has significantly altered several businesses related elements. The tools, processes and equipment used to transmit various types of information to the project's stakeholders are referred to as communication technology. The use of technology is a significant aspect of the communication process in project management because new technical innovations are being created every day. Technology transfer can happen in variety of ways, from phone calls to straightforward written materials. Since these technical tools make it simpler to gather, deliver and retrieve information, they serve as the major source of information sharing. However, have such technological means successfully delivered the communication, created the interaction, and built the relationships that strengthen the organization's achievements and goals (Arons, 2010). The choice of these technologies should be based on assessment on the kind of difficulties that confront the stakeholders (Ksenija Čulo, 2010). Staff experience with the technology is another factor. Are the project team members and stakeholders experienced at using this technology, considering the duration of the project and the project environment (PMP, 2018). In this regard the choice of the technology must depend on its acceptance by the stakeholders, its endorsement, and incorporate to the system already in use. The methods used to transfer information among project stakeholders may vary significantly. Common methods used for information exchange and collaboration include conversations, meetings, written documents, databases, social media, and websites.

2.1.7 Plan communications management

The purpose of a communication plan is to produce the proper information for the audience at the appropriate time and place, Hartely (1997) emphasizes the value of preparation for minimizing risks and errors. The process of creating a suitable strategy and plan for project communications activities based on the information requirements of each stakeholder or group, available organization resources, and the needs of the project, as defined by PMI Guide (6th edition), is known as plan communication management. It involves identifying the information requirements of project stakeholders and developing a communication strategy (PMI, 2013). The

project manager's desired information flow is also demonstrated by the communication plans, which often include information that has to be gathered. The project communication management plan describes how to accomplish the project communication goals, Burke & Barron (2014). The main advantage of this procedure is formalized method for quickly and effectively involving stakeholders with relevant information. As necessary this procedure is carried regularly on an ongoing basis throughout the project. The urgency of the information, technology, project personal, project length, and project environment were listed by Rajkumar (2010) as aspects that might affect the communication plan. The majority of project managers concur the effective project communication planning is essential for project success, and the majority of them adhere to the theoretical framework. Odelia Lys (2015). Project stakeholders (analysis of stakeholders, stakeholder expectations, and responsibility matrix for project communication) are considered in the planning of project communication, along with methods, tools, and support for communication (identification of methods, tools, and support for communication, groupware matrix, and communication schedule) and content of communication, (Judith 2018).

2.1.8 Manage communication

Managing communication involves information gathering, creating, distributing, storing, retrieving and managing information. Utilizing efficient procedures, technologies, and processes is necessary. When managing communications, it's critical to consider stakeholder expectations. The procedure should also make it easier for participants to provide comments and request clarification or more information (PMI 2017).

According to Lewis (2017), this process includes controlling and carrying out stakeholder communication in accordance with the communication plan. Manage communication is the process of making sure project information is collected, created, distributed, stored, retrieved, managed, monitored and ultimately disposed of in a timely and suitable manner. The project team and the stakeholders may exchange information more effectively and efficiently when communications are managed. Throughout the project this procedure is used. All elements of good communication, including the selection of the most relevant technology, methods, and approaches are identified through manage communication process.

According to Kodebryan Hossac, (2011), Considerations for effective communications management include but are not limited to:

Sender-receiver models-Incorporating feedback loops to provide opportunities for interaction/participation and remove barriers to effective communication.

Writing style- Appropriate use of active versus passive voice, sentence structure, and word choice.

Choice of media- This how decisions about application of communications artifacts, such as decision whether to communicate in writing or orally, when to prepare an informal memo versus a formal report, and when to use push/pull options and the choice of appropriate technology about the needs of specific activities.

Meeting management- Preparing an agenda, inviting essential participants, and ensuring they attend. Dealing with conflicts within the meeting or resulting from inadequate follow-up of minutes and actions, or attendance of the wrong people.

Presentations- Awareness of the impact of body language and design of visual aids.

Facilitation- Building consensus and overcoming obstacles such as difficult group dynamics, and maintaining interest and enthusiasm among group members.

Active listening- Listening actively involves acknowledging, clarifying and confirming, understanding, and removing barriers that adversely affect comprehension.

2.1.9 Monitor communication

The project manager is responsible for managing the information exchanged and the flow of communication. Meetings include a number of regulations and the project manager spends between 85-90% of their time in meetings, PMI (5th edition).

George Lewis (2017), the project teams and stakeholders information demands are meet throughout the monitor communication phase. The best information flow, as specified in the stakeholder engagement strategy and the communication plan, is the main advantage of this procedure. Throughout the project this procedure is used.

The goal of the project communication control, according to Jana Samakova (2018), is to provide a report about the management of project communication as a component of an extensive project status report. Assessing if the project's information requirements are met participants needs are satisfied. Communication control the procedure for altering communications as necessary to meet the projects information demands participants needs are satisfied. According to PMEducation (2014), the monitor communication phase aids in determining whether project activities have affected the stakeholder's willingness to support expansion. For a matrix of stakeholder participation various techniques, like customer satisfaction surveys, gathering lessons learned, team observations, examining data from the problem log, or assessing improvements maybe needed to monitor communication.

2.1.10 Project management

The process of organizing, planning, directing, coordinating, and regulating all project resources from start to finish in order to meet project objectives on schedule, within budget and to the needed quality standards is referred to as project management. Project management is defined by Maylor (1996) in terms of four critical success factors: goal orientation (the project ultimate aim), limitations (resources and time), measurability of the output, and project change. Robert and Wysocki (2014), project management is a structured, common sense strategy that makes use the right client participation in order to satisfy sponsor needs and expectations and provide the anticipated additional business value. The majority of writers concur the project management is about employing project resources to meet schedule, cost and quality objectives while taking into account the overall strategic and tactical client needs. Project management is described as a "structured and formalized way of managing changes in a rigorous way" by Payne et al. (2011). Project management, according to PMI (5th edition), is the process of applying knowledge, skills, tools and methods to project activities in order to achieve project requirements. With the proper use of these five process groups, project management is accomplished. In a study on the analysis of successful project implementation, Ashely (2007) came to conclusion that successful project implementation is repeatable and needs a lot of research to understand in order to achieve cost effectiveness and competitiveness. Planning effort, project team motivation, project management commitment to goals, project manager technical skills, control system, and specification of the scope and tasks are listed as the key aspects. The project life cycle the

planning oversight of the project from inception to completion is another topic on which there is broad consensus. Although there are many various organizational structures that might exist, they often so as a result of unique project features like size and complexity but it is still necessary to distinguish between internal and external project-management structures.

2.1.11 Types of communication in project management

Project communication utilizes a variety of communication methods and approaches. The life cycle of the projects may be impacted in some way by these sorts of communication with the view point listed below, Michael Martinez PMP (2012), established many project management communication styles are said to be developed as a result of the project management views listed below.

2.11.1 The project service

When evaluated from the standpoint of project itself, communication is typically divided into two categories; internal communication and outward communication.

Internal communication usually refers to the information sharing that takes place between those who are directly involved in a project, the project manager, and their team. It is frequently distinguished by extensive conversation that takes place during planning or problem solving.

On the other side external communication describes the exchange of information between project team members and important stakeholders who aren't directly involved in the project. The CEO, other departments or projects, the press, as well as internal and external clients might be part of this.

2.11.2 The organizational perspective

Martinez. (2019), from an organizational standpoint communication may be divided into three types; vertical, horizontal, and diagonal. This viewpoint considers how organizations are structured.

Vertical communication often known as "upward" or "downward" communication occurs when people working at various organizational levels within an organization interact with one another.

Upward communication can take the form of project team member informing the project management about a specific obstacle impending the completion of a job or the project manager updating their superior on the project status. When a project manager allocates tasks to members of their team, downward communication operates in the other manner.

Horizontal communication occurs within an organization between people who are on the same level. It's the communication that takes place between peers and coworkers, as when a team comes together for a stand-up or daily meeting to agree on which duties will be accomplished.

Diagonal communication refers to the communication that occurs between people inside various functional divisions or departments within the company and it is often restricted to corporations and institutions with higher organizational complexity.

2.11.3 The formality perspective

When looking at communication through the lens of formality, it is typically divided into informal and formal communications which have definitions that are very simple. Internal conversations like ones mentioned above are sometimes referred to as informal communications. The majority of this communication which is typically rough and unrefined is made up of daily emails, touch bases, and unexpected meetings. Martinez, (2019). On the other hand formal communications are more frequently viewed as consumables this category frequently includes reports, news announcements, presentations made to important stakeholders.

2.2Empirical review

2.2.1 Project management

Meron, (2018). Conducted a research on the role of project communication management in enhancing project performance of building constructions. This study set out to investigate the communication gaps that result from improper communication management the effects is those gaps and the most effective methods of communication. The researcher came to conclusion that the project office internal and external communication virtually use the same channel of communication and that the corporation place a greater emphasis on external communication.

Despite mentioning that the organization has well organized communication the researcher doesn't list the gap in communication management.

BG Zuich (2014) performed a study that ascertains if communication may serve as the cornerstone of project management and the strategy for attaining the trade-off. Second to explore if the different project management procedures and activities might be combined and coordinated in the area of communication. The study came to the conclusion that communication is essential for conveying information about cost, scope, and time as well as quality. It is possible to think of communication as having a foundation role to support all other areas since it combines cost, scope, and time to produce a quality result.

2.2.2 Project management effectiveness

Zhongqing Wang and Qiang Hu (2012), explored the links between project communication and project performance. They concluded by demonstrating that the greatest influence on project timeline comes from project communication. According to Muszynska (2015), a majority of project managers concur that good communication with all stakeholder is the key to project success.

2.2.3 Project communication management

Fikadu Tadesse (2018) examined project delivery success elements that affect communication management. The study described the internal project team communication strategies throughout the project life cycle and identified the individuals with whom communication take place to influence their reputation on the project. Data were gathered by the researcher using an explanatory qualitative study design with questionnaires, interview schedules, and guides. The researcher came to conclusion that different types of communication, and the face to face meetings and discussions, phone calls, and email are the most frequently used forms of communication when trying to influence how the project is perceived by outside stakeholders.

Safapour, (2019), Effective communication speeds up the phases and duties required for a projects successful completion. Ineffective communication disrupts the projects natural flow, slows down its processing and jeopardizes its eventual success. Project communication is one of

the main issues that endanger the success of the project, according to Jana et al. (2012), who focused on the management of project communication. Project communication is highly significant aspect for the success of the project. Jana et al. who focused on project communication management, communication inside a project is crucial to its success and one of the main issues that jeopardize that success is project communication.

There should be also a clear and concise communication plan to address project responsibilities and the types of communication that will take place (Ksenija Čulo and Vladimir Skendrović (2010).

In a recent study Biruk Tebebu (2019) evaluated the internal project stakeholder communication practices in the sector association and chamber of commerce of Addis Ababa University. The study concentrated on the obstacles and possibilities in communication and how a project manager interacts with internal stakeholders. In order to conduct the analysis, the researcher employed both primary and secondary data resources in the form of an interview and a questionnaire. Both qualitative and quantitative analyses of the data were done. As a result, the researcher arrived at the conclusion that the company project communication management is efficient and well-managed.

2.2.4 Communication channels

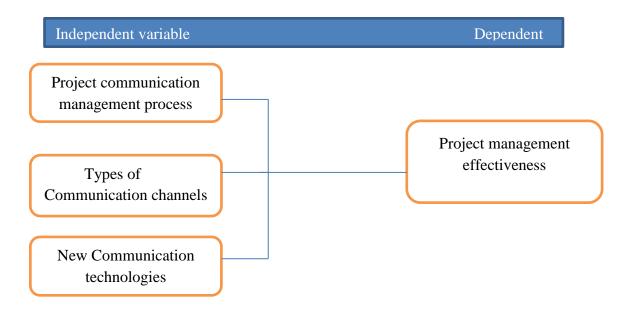
According to the traditional definition of a communication channel, it is formal or technical aspect of the communication process that enables us to transmit information from sender to receiver and vice versa, Reinsch NL,Jr,Lewis PH (1984). When a channel enables an organization to communicate information or get feedback from the recipient of that information, it is seen effective. At the same time communication speed, dependability, and high efficiency determine how successful a channel is Westmyer et al, (1998). Each communication channel has a maximum quantity of information that can be transferred in a special length of time which defines the effectiveness of the channel.

According to McKay (2016), "in the modern business world, people communicate by text, phone, email, written correspondence and verbal communication". In order to communicate effectively you must select the channel that is the most appropriate for the message. Business

people who are skilled communicators may not be skilled writers which can lead to misunderstandings in email and written contact. By increasing their dependence on some channels while decreasing their reliance on others, people or organizations adopt alternative channels, Reliability, speed and effectiveness are the key factors to consider while analyzing various communication channels. (Sanina et al., (2017)

2.3 Conceptual frame work

Any attribute that can have varying values, such as height, age, species, or exam score, is referred to as a variable in research. In scientific studies, the impact of one variable on another is frequently investigated. The independent and dependent variables in a research of a cause-and-effect connection are referred to as such. The cause is the independent variable. Its value is unaffected by other study variables. Effect is the dependent variable. Changes in the independent variable affect its value. Lauren Thomas (2020). This study assumes the project management effectiveness dependent variable and the project communication management process, communication channel and communication level independent variables.



CHAPTER THREE RESEARCH METHODOLOGY

3.1Introduction

This chapter discusses procedures and activities undertaken, focusing on the study's research design, questionnaire design, data collection methods and instrument of data collection, sampling strategy, data processing and analysis and instrument development. Besides, the section deals with a discussion on the ethical issues followed while conducting the study.

3.2 Research design

The research design is the entire strategy for connecting the research challenge to applicable and useful empirical research. In other words the study designs offer a strategy or framework for gathering and analyzing data. A descriptive research design was used in the study to evaluate the project management techniques. The goal of descriptive research design is to give a through and understandable inference by collecting data and handling it methodically (Orodho & Kombo, 2020). Since the study goal is to document the system as it is this design is thought to be suitable.

3.3 Target population

Target population as defined by Hair et al. (2010), is predetermining group of individuals or item that may be questioned or observed in order to provide the necessary data structures and information. There for all project managers, project team leaders, project team members and support staff members that are participating in Ethiopian covid-19 emergency response project are target for this study. The sample size will be 52.

3.4 Sources of data and data collection

The study was incorporated by both primary and secondary data sources for data collection purpose. Employees who are participating in the COVID-19 emergency response project were the main sources for the primary data. Besides, secondary data was collected through review of the different projects, journals and the Internet. The Study base itself much on the primary sources of data by means of questionnaire data collection. The questionnaire was structured in the form of close ended questions.

3.5 Data analysis method

This research used Quantitative and Qualitative research approach which depends on the researcher's integrative and personal knowledge of the environment. For qualitative data, the researcher analyzes the research progresses, continually refining and reorganizing in light of the emerging results. The quantitative data was feed to SPSS software to measure descriptive parameters. Descriptive statistics measures like percentage, frequency, measures of central tendency (mean and standard deviation) were used. The results are discussed in descriptive measurement method and contextually.

3.6 Validity

According to Yin (2008), research validity may be accomplished in two steps: internal and external validity. Internal validity refers to the correctness or quality of the study activity, whereas external validity refers to the degree to which conclusions or conclusions may be generalized. Given that the questionnaires were delivered in person, the data collecting technique reliably measured what it is meant to assess, and the research is certain that the findings are what they claim to be about. Because the theoretical framework developed is extensive in scope, it allowed to internally validate the survey, and the responses of respondents also allowed to examine the degree of external validity. The theoretical framework included specific theories allowed the researcher to validate the survey, which was validated with other comparable

research within the subject of our study; so, we can conclude that the survey generated is validated to some extent because it was produced from numerous research works.

3.7.2 Reliability

Williamson (2002) defines reliability as the extent to which a research may be repeated with the same findings. The survey's dependability may be defined as obtaining quality replies to the questions and being able to get the respondents to comprehend the questionnaire. To do this, sample questions were utilized in conjunction with a scaling mechanism. The survey was carefully designed to guarantee that respondents can react in the best possible way and that there is a high response rate. As a result, in order to assure the reliability of the measuring instrument, the researcher first standardized it before distributing it to all respondents. Cronbach's alpha was also utilized to examine the internal consistency of each construct. As a result, the data gathering approach produced consistent results, and there was openness in how the raw data are interpreted.

The result of the coefficient alpha for this study's instrument was found to be overall 0.908, as an indication of the acceptability of the scale for further analysis. As a consequence, because the results are satisfactory, additional analysis is carried out.

Table 1- Reliability statistics

Variable	Item	Cronbach's Alpha
Communication process	8	.916
Communication channel	10	.709
Communication	6	.809
technology		
Overall	25	.908

Source -own survey 2023

3.8 Ethical issue

In this study, confidentiality of information regarding the organization and respondents was maintained the questionnaire. In addition, the data collected were solely used for this research and were not transferred to a third party or used for any other purposes beyond those of the researcher and the respondents. Lastly, when answering to the questionnaire, the respondents were instructed not to write any personal information, such as their name or other codes. This is necessary to prevent any bias that can cause the research to provide false results.

CHAPTER FOUR DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.1Introduction

This chapter presents analysis and findings of the study as set out in the research methodology. The study findings are presented on to analysis the Assessment of Project Communication Management Practices in the Ministry of Health: The Case of Covid-19 Emergency response Project. Data was gathered from the questionnaire, and document review as the research instrument. The questionnaire was designed in line with the objectives of the study. First, the background characteristics of respondents are shown and following that the interpretation and result discussion is displayed.

4.1.2Background of the respondents

Based on sample size, questionnaires were prepared and distributed to the respondents, from the total respondent that I distributed 49 were return back the questionnaire by filling all the questions. Due to this reason, 94% of the distributed questioners are collected. According to Mugenda (2003) a response rate of 50% is adequate for analysis and reporting, 60% is good and 70% and above is excellent. So the response rate of this researcher is excellent for analysis due to 94% is effectively returned.

Table 2- Respondents response rate

No	Data collection tools	No. of respondents	No. of answered	No.of unanswered	Response rate
1.	Questionnaires	52	49	3	94.23%

Source: own survey, 2023

4.2 Demography characteristics of the respondents

4.2.1Gender Distribution

From the total number of respondents the gender distribution is predominantly male, with 67% of the respondents being male and 32% being female. The frequency of female respondents is 16, while the frequency of male respondents is 33.

Table 3-Respondents gender distribution

Gender	Gender												
	Frequency	Percent	Valid Percent	Cumulative									
				Percent									
Female	16	32.7	32.7	32.7									
Male	33	67.3	67.3	100.0									
Total	49	100.0	100.0										

Source: own survey, 2023

4.2.2Age Distribution

From the information collected 20(40.8%) percent of the general respondents are aged from 36-45 Years, 15(30%) percent of them are in the age group of 26-35 Years, 13(26%) of them are in above 45 Years. and 1(2%) of them are less than 25 years.

Table 4- Respondents age distribution

Age												
	Frequency	Percent	Valid Percent	Cumulative Percent								
Above45 years	13	26.5	26.5	26.5								
Between26-35years	15	30.6	30.6	57.1								
Between36-45years	20	40.8	40.8	98.0								
Lessthan25years	1	2.0	2.0	100.0								

Total	49	100.0	100.0	

Source: own survey, 2023

4.2.3Academic Qualification distribution

As indicated in the Table below majority of the questionnaire 36(73%) respondents hold MSC degree, 10(20%) of them hold BA degree, 3(6%) of them hold PHD degree.

Table 5- Respondents Academic qualification distribution

Education background											
	Frequency	Percent	Valid Percent	Cumulative Percent							
Degree	10	20.4	20.4	20.4							
Masters	36	73.5	73.5	93.9							
Phd	3	6.1	6.1	100.0							
Total	49	100.0	100.0								

Source: own survey 2023

4.2.4Position in the organization distribution

Most of the respondents participated were project team members which are 33(67%), Project managers are 6(12%), project team leaders 6(12%), technical advisor 2(4%) and 2(4) of them are other support staff of all the respondents.

Table 6- Respondents position in the organization

Position in the project				
	Frequency	Percent	Valid Percent	Cumulative Percent
Other support staff	2	4.1	4.1	4.1
Projectmanager	6	12.2	12.2	16.3
Projectteamleader	6	12.2	12.2	28.6
Projectteammember	33	67.3	67.3	95.9
technicaladviser	2	4.1	4.1	100.0
Total	49	100.0	100.0	

Source: own survey 2023

4.3.1 Project communication practice in MOH COVID-19 Emergency Response project

Table 7- Communication Practice of MOH COVID-19 Emergency Response project

	N	Stro	ngly gree	Disa	igree	Neu	tral	Agr	ee	Stro Agre	ngly ee	Mean	SD
		n	%	n	%	n	%	n	%	n	%		
Plan for communication activities	49	1	2	0	0	9	18.4	23	46.9	16	32.7	4.08	.838
Timely and appropriate distribution of information	49	2	4.1	3	6.1	1	2.0	23	46.9	20	40.8	4.14	1.021
Constant and timely briefing on the status update	49	1	2.0	5	10.2	11	22.4	19	38.8	13	26.5	3.78	1.026
Suitable communication technologies	49	3	6.1	3	6.1	9	18.4	27	55.1	7	14.3	3.65	1.011
Trainings and assign experts to help team learn communication technologies	49	4	8.2	6	12.2	11	22.4	21	42.9	7	14.3	3.43	1.137

Note: 1 Strongly Disagree, 2 Disagree, 3 Neutral, 4 Agree, 5 Strongly Agree

SD: Standard deviation, n: Frequency

To determine the communication practice in MOH COVID-19 Emergency Response project the Likert type questions on table 7 were presented to respondents to answer. A weight is given for each of the choices as strongly disagree 1, disagree 2, Neutral 3, and agree 4 and strongly disagree 5. The mean is the average of the data, which is the sum of all the observations divided by the number of observations. Mean Values have been interpreted by using the criteria

suggested by (Scott, 1999). He suggested that for Likert type scale ranging from 1 (Very poor/highly dissatisfied) to 5 (Excellent/Highly Satisfied), interpretation should be as; mean up to 2.9 is considered as Disagree, from 2.9 to 3.1 means neutral or to central value and mean above 3.1 is considered as an agreement.

Communication planning is a major part of the communication process, to asses that participants were asked if communication planning is used in their project activities.2% strongly disagree, 18.4% have neutral opinion, 46% have agreed and 32% have strongly agreed. The calculated mean for their answer is 4.08 which fall in to the category of Agreement. Since that the response rate is positive, it indicates that there is good experience in developing the communication plan document.

For the question timely and appropriate distribution of information, 4% strongly disagree,6% disagree,2% neutral,46% agree, 41% strongly agree. The mean 4.14 is recorded, which shows the agreement of most of the respondents and there is a good experience of information delivery in a timely manner. The standard deviation shows 1.021 and indicates that respondents' perception of this item is somewhat varied, as it is greater than one.

In response to the question holding a constant and timely briefing of the status update of the projects 2% strongly disagree,10% disagree,22% neutral,38.8% agree, 26.5% strongly agree. The recorded mean for this question is 3.78, which is in the category of agreement.

In the answer for applying suitable communication technologies, 6% strongly disagree,6% disagree,18% neutral,55% agree, 14% strongly agree. The mean of 3.65 indicates that respondents are agreed there is suitable communication technology in Covid-19 Emergency Response Project. However, the overall standard deviation value (1.011) indicates that respondents' perception towards this item is somehow varied, since it is above one.

For the last question which assessed if the company have been assigning experts and training them when there are new communication technologies to be applied regarding to the project, 8.2 strongly disagree,12% disagree,22% neutral,42.9% agree, 14% strongly agree. From the mean 3.43, it shows that there is a good amount of focus given to train employees with new communication technologies.

4.3.2 Discussion of result for Features of project communication practice in MOH COVID-19 Emergency Response project

- A strong communication strategy improves the project's consistency of management. Communication among the participants should be consistent as they carry out the plan. Additionally, the management should make sure that all parties involved are informed of any modifications or requirements for the project (Shelley Frost, 2019). In response to the question of whether the firm has a communication plan, 46.9% agree, and 32.7% strongly agree, for a total of 79% agreement, demonstrating that the organization has been employing planning techniques for the communication process. This shows the company has been practicing planning for the communication process. The result can be considered as a positive finding.
- All employees need to be on the same page in order to boost productivity in the workplace. No specifics should be missed from the distribution of important information across the organization. According to PMI Pulse (2013), effective communication processes keep project teams motivated and stakeholders interested. Keeping internal and external stakeholders aware of any new developments is essential. The reported mean for timely and appropriate distribution of information is 4.14, indicating a successful outcome. The success of a project or organization is closely tied to the efficient distribution of information. The PMI Pulse of the Profession (2013) found that high performers are better communicators and that organizations with better communication had more successful projects.
- Constant and timely status report briefings are critical for project progress and cost
 overrun management. All parties involved may follow the project's current status and
 compare it to the original plan using these reports. They can recognize risks and take
 corrective action early on (Jose Maria, 2019). The respondents' mean score was 3.78,
 indicating that there is good practice in the organization for informing on project status
 updates.
- The reported mean for appropriate communication technology is 3.65, which indicates a pleasant experience. Depending on the nature of the message, the organization should

employ relevant technology to enable more effective and efficient interactions with stakeholders and others. Be sure to utilize the right tool/technology for the right scenario (Derosa & Lepsinger, 2010).

 As seen by the 3.43 mean result for giving training for new communication technologies, there is a good experience of delivering appropriate trainings to the project team, which may be regarded optimal findings of this research. Employee performance in their professions is affected by training and development (Aidah Nassazi, 2013).

4.3.2 Relationship between project communication and project management success

Table 8-project communication and project management success relationship

	N		Strongly Disagree		Disagree		Neutral		Agree		ngly ee	Mean	SD
		n	%	n	%	n	%	n	%	n	%		
Managing communication process contribute for effective information flow	49	2	4.1	1	2.0	1	2.0	16	32.7	29	59.2	4.53	.866
Using communication management process to boost project management	49	2	4.1	0	0	2	4.1	16	32.7	29	59.2	4.43	.913
Importance of using project communication management process	49	1	2.0	2	4.1	0	0	13	26.5	33	67.3	4.41	.956

Note: 1 Strongly Disagree, 2 Disagree, 3 Neutral, 4 Agree, 5 Strongly Agree

SD: Standard deviation, n: Frequency

To assess the relationship between the project communication and project management success, some questions related to the topic were included in the questionnaire. 32.7 % of respondents

agreed and 59.2% strongly agreed that managing the communication process can result in effective information flow between project stakeholders. 4.1% of them disagreed and 2% of disagree which result 4.53 mean indicating a high degree of agreement.

59.2% of respondents strongly agreed, 32.7% agree with the idea of positive relationship between communication process and management success, While 4% disagree. The recorded mean is 4.43, indicating that respondents believe strengthening the communication process will enhance the project management system.

From total of 49 respondents, 93.8% of them agreed and only 2% of them strongly disagreed on the importance of using project management communication process. The mean 4.41 indicates that there is strong agreement on the statement.

4.3.2.1 Discussion of result for Relationship between project communication and project management success

- Project Communications Management involves the procedures required to guarantee that the project's and its stakeholders' information demands are satisfied through the creation of artifacts and the execution of activities targeted at ensuring successful information sharing (George Lewis, 2016). The transfer of information from one place to another across time is referred to as information flow. There is a clear link between communication process management and effective information flow. In response to the association between managing communication and information flow, the recorded mean of 4.43 reveals a significant connection between the two.
- According to PMI (2013), one out of every three projects suffers from a communication breakdown. In fact, companies risk \$135 million for every \$1 billion spent on a project, and new research shows that ineffective communications put \$75 million (56 percent) of that \$135 million at risk, indicating a critical need for organizations to address communications deficiencies at the enterprise level. According to the responses to this question, 91.9% of respondents agreed on the association between project communication and project management success.

4.3.3 How communication affect the effectiveness of project management

Table 9- Impact of communication on the project management

	N	Stro		Disa	agree	Neu	tral	Agr	ee	Stro Agr	ngly ee	Mean	SD
		n	%	n	%	n	%	n	%	n	%		
Communication technologies in reducing cost, time and prevent mistakes	49	1	2.0	0	0	4	8.2	26	53.1	28	36.7	4.16	.773
New communication Technology shape project management	49	4	8.2	6	12.2	11	22.4	21	43.9	7	14.3	3.65	1.011
Importance of formal communication channels	49	2	4.1	0	0	5	10.2	25	51.0	17	34.7	4.22	.771
Importance of In formal communication channels	49	2	4.1	5	10.2	9	18.4	25	51.0	8	16.3	4.06	.775
Project status report to top managements can affect PM	49	4	8.2	5	10.2	8	16.3	22	44.9	10	20.4	3.59	1.171

Note: 1 Strongly Disagree, 2 Disagree, 3 Neutral, 4 Agree, 5 Strongly Agree

SD: Standard deviation, n: Frequency

The results of the Likert analysis indicate that a majority of respondents 53.1% agreed that communication technologies can reduce cost, time, and prevent mistakes. Additionally, 36.7% of respondents strongly agreed with this statement, indicating a high level of confidence in the benefits of communication technologies. On the other hand, a small proportion of respondents

(2.0%) strongly disagreed with the statement, suggesting that there may be some skepticism or resistance to the use of communication technologies in certain contexts.

For the response to the question of new communications can shape project management, 12.2% strongly disagree, 22.4% have neutral opinion, 43.9% have agreed and 14.3% have strongly agreed. The mean for this response is 3.65

Respondents were asked to provide answers if using formal and informal communication channels can be good factors in contributing to the effectiveness of project management. 86.7 and 67.3% of agreed on using formal and informal communication channels with the means of 4.22 and 4.06 respectively.

For the project status report to top managements can affect project management, 8.2% strongly disagree, 10.2 disagree, 16.3% have neutral opinion, 44.9% have agreed and 20.4% have strongly agreed. The mean recorded for this response is 3.59.

4.3.3.1 Discussion of result for how communication affects the effectiveness of project management

- Because communication technologies are constantly evolving and changing the communication process, it was critical to ask respondents if they agreed that communication technologies can save cost, time, and prevent mistakes during the communication process, as well as contribute positively to project performance and project management. Andy Holtman, (2011) Construction projects are all too often over budget and behind time, which can be a major issue in an industry with razor-thin profit margins. Fortunately, the construction sector is beginning to innovate by introducing new technologies that aid in increasing production and lowering expenses. The question on the above table assessed if this could be applicable on this research scope. The mean for technologies saving project cost and time and the mean for technologies shaping project management are 4.16 and 3.65 respectively. This indicates communication technologies have impact on both project and project management.
- Fischbach & Gloor, (2009), if formal communication is the skeleton of the organization, informal communication is the nerve system that drives the process, thoughts, and action

in the business unit. Formal communication is often organized and time-consuming to prepare. Reports, presentations, and media releases are all examples of this. Informal communication channels provide a rich infrastructure for message transmission inside the project, as well as building and strengthening teamwork and individual team member performance. However, in order to get the greatest advantage from these channels, the necessary circumstances for their long-term survival and stability must be created (Micro LU, 2021). The mean for the importance of formal communication is 4.22 and for the importance of informal communication is 4.06, which both of the numbers indicate significant positive value supporting the idea.

According to project manager, ultimate guide to project status report, project status
reports give an overview of where the project currently is, and helps determine if the
project is on time and under budget. For the last question raised to assess the project
status report affecting project management, the mean is 3.59 which falls is in the category
of agreement and could considered as positive response of the finding.

4.3.4 How project professional value communication

Table 10- value of communication for project professionals

	N		Strongly Disagree		Disagree		Neutral		Agree		ngly ee	Mean	SD
		n	%	n	%	n	%	n	%	n	%		
Planning communication management engage relevant information	49	2	4.1	3	6.1	1	2.0	23	46.9	20	40.8	4.14	1.021
Communication management plan can be included in PM plan document	49	1	2.0	2	4.1	7	14.3	21	42.9	18	36.7	4.08	.932
Communication contribute as a factor for PM	49	2	4.1	0	0	0	0	23	46.9	24	49.0	4.37	.859

Note: 1 Strongly Disagree, 2 Disagree, 3 Neutral, 4 Agree, 5 Strongly Agree

SD: Standard deviation, n: Frequency

The results of the research indicate that project professionals recognize the importance of communication management in project success. A vast majority of participants 87.7% agreed that planning communication management can engage relevant information and only a small proportion 10.2% responded with disagreement towards the statement. The mean score of 4.14 suggests that project professionals strongly agree that planning communication management is crucial for effective project communication. Research has shown that effectively planning and managing communication can lead to improved team collaboration, enhanced stakeholder engagement and satisfaction, clearer project objectives, and a higher likelihood of project success (Zhai et al., 2018)

Furthermore, the respondents also agreed that communication management plan should be included in the project management plan document, with a mean score of 4.08 indicating agreement. This suggests that project professionals in MOH COVID-19 Emergency Response

project recognize the importance of formally documenting communication management plans as part of overall project management planning.

Finally, the research also revealed that 95% of respondents agreed that communication contributes as a factor for project management. This further emphasizes the importance of effective communication in project success. According to the Project Management Institute (PMI, 2012), communication is one of the most critical variables and a key factor in determining a project success or failure. The PMI states that over 70% of project management problems arise due to poor communication. Effective communication channels ensure that information is circulated to all stakeholders within a project in a timely and accurate manner which avoids redundancies and saves time.

4.3.5 Communication channels applied by project professionals

Table 11- Types of communication channels applied in MOH COVID-19 Emergency Response project

	N	Stro	ngly gree	Disa	igree	Neutral		Agree		Strongly Agree		Mean	SD
		n	%	n	%	n	%	n	%	n	%		
Communication info. flows are applied	49	2	4.1	2	4.1	12	24.5	25	51.0	8	16.3	3.71	1.182
More number of communication channel more complex communication	49	4	8.2	14	28.6	10	20.4	18	36.7	3	6.1	3.29	1.137
Applying different types of channel for different result	49	2	4.1	8	16.3	5	10.2	19	38.8	15	30.6	3.04	1.117
Nonverbal (written) channel better suits for daily report	49	3	6.1	10	20.4	13	26.5	16	32.7	7	14.3	3.71	.935

Note: 1 Strongly Disagree, 2 Disagree, 3 Neutral, 4 Agree, 5 Strongly Agree

SD: Standard deviation, n: Frequency

Around 4.1% of the respondents strongly disagree and 4.1% disagree that proper application of communication information flows is being followed in the organization. This suggests that there are some issues related to how communication is being handled within the organization. On the other hand, 51% of the respondents agree, and 16.3% strongly agree that proper application of communication information flows is being followed in the organization. This indicates that a significant number of respondents believe that the organization is doing well in terms of applying effective communication channels. However, around 24.5% of the respondents remain neutral, which implies that they may not have enough knowledge or experience to provide a clear opinion on whether or not proper application of communication information flows is being used in the organization. Overall, this input suggests that while the majority of respondents believe that effective communication channels are being applied within the organization, there may still be some issues that need to be addressed as some respondents indicated otherwise or remained neutral on their opinions.

Participants were asked whether the application of a high number of communication channels could result in complexity of communication, and that the responses to this question varied. Only a small proportion of participants strongly disagreed 8.2% while 28.6% disagreed and 20.4% were neutral, indicating some uncertainty or lack of consensus among respondents. A larger proportion of participants 36.7% agreed or strongly agreed with the statement, suggesting that they believed that a high number of communication channels could indeed result in complexity of communication. This result highlights the importance of considering the potential downsides or complexities of using multiple communication channels in project management, and the need to carefully evaluate the benefits and drawbacks of each channel in order to optimize communication efficiency and effectiveness

The input provides more detail on the analysis of different types of communication channels, with a mean score of 3.04 indicating a neutral opinion. The standard deviation result of 1.117 suggests that there was a fair amount of deviation from the mean among participants, indicating that there was a wide range of opinions about the effectiveness of different communication channels. The responses by level of agreement also indicate that there was considerable variation in opinions among respondents. A relatively small proportion 4.1% strongly disagreed with the statement, while a larger proportion 16% disagreed. The largest proportion 38% agreed with the

statement, while 30.6% strongly agreed., these findings highlight the importance of carefully evaluating different communication channels in project management settings and choosing those that are most appropriate and effective for the given context and objectives

In response to a question about the efficacy of nonverbal (written) communication channels for daily project status update reporting, 47% of participants agreed that these channels are better suited for this purpose. This suggests that a significant proportion of respondents believe that nonverbal cues are more effective and efficient than verbal communication for providing regular project updates. However, 26.5% of respondents did not agree with this statement.

4.3.5.1 Discussion of result Communication channels applied by project professionals

- Sebastian (2019), the number of communication channels in a project helps project managers in the planning, management, and monitoring of project communications. It might also be an indicator of the project's communication management complexity. On the second question, this inquired if having more communication channels increases communication complexity, a computed mean of 3.29 was obtained and may be taken as agreement, which is backed by Sebastian's (2019) hypothesis given above.
- Keith Davis (1969), Nonverbal communication is an effective means of conveying large amounts of information. Written communication is an effective channel when context, supporting data, and detailed explanations are necessary to inform or persuade others. Many researchers believe for a large number of data like project reports, it is conventional to use nonverbal communications. Which the mean for 3.71 confirms it validity.

4.4 Correlation and regression analysis

4.4.1 Correlation

From table 12, a strong positive coefficient correlation of was established between communication process, communication channel, and communication technology with project management effectiveness. The correlation was significant at 0.01 level of significance. A

positive strong correlation indicates that communication process, communication channel, and communication technology influence project management effectiveness. Notice that the cells in the upper right to lower left diagonal show coefficients of 1.00. This is because they show the relationship of each variable correlated with itself. The off diagonal cells contain the coefficients showing association between the three variables. The cells are identical because they reflect the relationship between the same three variables. In these data analysis all the independent variables are fulfill the standard correlation requirements.

Table 12- Correlation Analysis

Correlations								
		Communicat ion channel(cc)	Communicatio n process(cp)	Communication technology (ct)				
cc	Pearson Correlation	1	.038	.419**				
	Sig. (2-tailed)		.796	.003				
	N	49	49	49				
	Pearson Correlation	.038	1	.028				
ср	Sig. (2-tailed)	.796		.850				
	N	49	49	49				
ct	Pearson Correlation	.419**	.028	1				
	Sig. (2-tailed)	.003	.850					
	N	49	49	49				
**. Co	rrelation is significant at	t the 0.01 level (2	2-tailed).	<u> </u>				

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

Source: Own Survey, 2023

4.4.2 Regression analysis

About 30.2% of the variance is coming for in project management effectiveness independent variables. The R Square statistic tells us the proportion of variance in the dependent variable that is accounted for by the independent variables. In this case the model accounts for 30.2% of the variance in the independent variables, Respondent's. The adjusted R square is the coming for

number of predicted variables that is including in the model. The adjusted R Square is lower, indicating 25% of the variance is accounted for by the model.

Table 13- Model summary

Model Summary ^b							
Model	R	R Square	Adjusted R Square	Durbin-Watson			
1	.550a	.302	.256	.812			
a. Predictors: (Constant), communication technology, communication process, communication channel							

b. Dependent Variable: project management effectiveness

Source: Own Survey, 2023

Table 14- multiple regression variables entered

	Variables Entered/Removed ^a						
Model	Variables Entered	Variables Removed	Method				
1	communication technology, communication process, communication channel		Enter				
a. Depe	endent Variable: project management effec	ctiveness					
b. All r	equested variables entered.						

When doing regression analysis we determine whether or not there is a relationship between the independent variable and the project management effectiveness by examining the ANOVA table. This can be thought of as the overall fit of the regression model. If the F statistic is significant, we can assume the independent variable, taken together, have a relationship with the dependent variable. In this case, the probability of the F statistic for the regression analysis is 0.001, it is less than the level of significance of 0.05. So we say that there is a significant result. There is

strong relationship between the dependent variables/project management effectiveness and the independent variables.

Table- regression analysis

ANOVA ^a								
Model		Sum of Squares	df	Mean Square	F	Sig.		
	Regression	21.083	3	7.028	6.504	.001 ^b		
1	Residual	48.621	45	1.080				
	Total	69.704	48					

a. Dependent Variable: project management effectiveness

b. Predictors: (Constant), communication technology, communication process, communication channel

Source: Own Survey, 2023

Table 15-coefficient table

Coefficients ^a									
Model	Unstand Coeffi	lardized icients	Standardized Coefficients	t	Sig.				
	В	Std. Error	Beta						
(Constant)	900	1.074		838	.606				
communication channel	. 290	.089	.325	3.236	.004				
communication process	.566	.177	.398	3.191	.003				
communication technology	.380	.229	.228	1.661	.104				

a. Dependent Variable: project management effectiveness

Source: Own Survey, 2023

Based on the finding in Table 15, there was a positive and relatively significant association between the project management effectiveness and communication channel (p = 0.04) and project management effectiveness and communication process (p = 0.03). While there is insignificant association between project management effectiveness and communication technology (p=.104) as the independent variables have the 'p' value greater is than 0.05.

CHAPTER FIVE

SUMMARY CONCLUSION AND RECOMMENDATION

5.1 Introduction

This chapter summarizes the findings from chapter four, as well as the conclusions and suggestions. The chapter also included recommendations for future research in order to answer the research question or achieve the research aim.

5.2 Summary of major findings

Participants were questioned if there is a practice of communication planning if the company delivers project information in a timely manner, and if the company provides training and awareness sessions new communication technologies. The findings show that the organization is employing proper project information distribution practices, which is a good sign for communication planning. Since more than half of the respondents believed that the communication process was important, implementing it into projects has a major positive impact on how effectively projects are managed and how effectively information is shared within the project team. One of the strong aspects found is communication practices is the continuous and timely briefing on the status update of the projects. The selection of communication technology is suitable for the nature of project activities, as shown by the study in chapter four.

According to the findings of the relationship between project management and project communication process, utilizing the right communication management process has a positive effect on the success of the project. Additionally managing the communication process contributes to the effective and efficient flow of information.

The findings confirm that formal and informal communication channels can aid in the improvement of the project management process. New communication technologies improve the project management system by lowering costs, saving time, and preventing errors. The effectiveness of project management is significantly influenced by the delivery of project status

reports. As the results show, the majorities of respondents have a favorable mark of project communication and agree on the significance of adopting the project communication process.

Finding show the importance of carefully evaluating different communication channels in project management settings and choosing those that are most appropriate and effective for the given context and objectives

Respondents believe that non-verbal communication channels are suitable for daily reporting of the status update of the projects. Their perception for using different channels for different outcomes where neutral and more than half of the respondents disagree that it is not advanced to use different channel for different outcome.

For multiple regression of a given project variables model summery indicates adjusted R square value has 30% of the dependent variables variance is depend on independent variables. This model summery also has a Durbin-Watson a value of .812 indicates low interactions of variables.

The Anova table of multiple regressions of dependent and independent variables the 'P' value is 0.01, it less than 0.05 or 5% according to the regression rule if the 'P' value is less than 0.05 the variables have significant result, so this 0.01 'P' value indicates the given project has a significant result of dependent and independent variables.

In coefficient of multiple regression only communication technology has 0.104 'P' value which is greater than 0.05 and doesn't fulfill significant result for the given project data interpretation, for the other two variables (communication process and communication channel) have a 'P' value of greater than 0.05 that is significant result of the dependent and the independent variables.

5.3 Conclusion

The study's broad objective was to assess the practices of project communication management in Covid-19 Emergency Response Project. The study's findings led to the following conclusions;

According to finding the project communication management practices of project were good. Project professionals have good knowledge in the area of communication and its relationship with a project management system. Regarding communication channels, communication technologies, and these independent variables are statistically significant and have a positive influence on effective project management. From the results, it can be concluded that communication has highly affected the project communication system in the COVID-19 projects.

In conclusion, the assessment of project communication management in the case of COVID-19 emergency response projects has shown positive findings. The study has highlighted the importance of effective communication in managing emergency response projects during a crisis. The research has provided insights into how project professionals in ensuring effective communication and the strategies that can be employed to overcome challenges. The findings suggest that the use of technology and clear communication channels can enhance communication and collaboration among team members. The study has also highlighted the need for continuous monitoring and evaluation of communication processes to ensure that they are effective in achieving project goals.

5.4 Recommendation

Based on the findings of the analysis and the conclusions reached, the following suggestions are made:

Prioritize effective communication planning practices in project management, effective
communication planning is crucial for the success of any project. By prioritizing effective
communication planning practices, project managers can ensure that the right information
is delivered to the right people at the right time.

- Ensure timely delivery of project information, timely delivery of project information is essential for effective communication. Project managers must ensure that all stakeholders receive the information they need when it is needed.
- Provide training sessions for new communication technologies as new communication technologies are constantly emerging, and it is important for project managers and team members to stay up-to-date with these developments. These trainings can help project teams to adopt new technologies and use them effectively to enhance communication.
- Explore specific strategies and technologies that are most effective for different types of
 projects and organizations. Different types of projects and organizations require different
 communication strategies and technologies. Project managers must explore specific
 strategies and technologies that are most suitable for their particular project and
 organization.

5.5 Recommendations for Further Studies

This research looked at the assessment of project communication management. In this study, Covid-19 Emergency Response Project was used as a case study. This study only emphasis on Covid-19 response project. For future studies, more comprehensive data gathering is advised. Communication management differs from project to project. Each project has its unique approach to relationship management. As a result, future research can use case study technique and perform within and cross case analysis.

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APPENDIX

Dear Respondents,

This is an academic research for the completion of MA in project management at St. Mary's University, the research is titled as "ASSESMENT OF PROJECT COMMUNICATION MANAGMENT: THE CASE OF COVID-19 EMERGENCY RESPONSE PROJECT". The purpose of this study is to assess the project communication management practice and how it can be a factor for successful project management.

I respectfully request that you join in this project by completing the accompanying questionnaire. To maintain the paper's confidentiality, do not provide any identify of the respondent, including your name. I also genuinely request that you answer the questions honestly and return the completed surveys.

I'd like to thank you for your willingness and time; the information you submit will be used for academic purposes only and will be kept totally confidential. If you have any questions or comments about this research topic, please contact me at:

+251922334618

Bersabeh Tadesse

General Instructions

Please tick _" $\sqrt{}$ " for your answers in the given box. You can use a space provided, for answers that are not fully covered by the choices and to add additional information.

Part 1: Demographic information

1. Gender
□ Male []
□ Female []
2. Age
☐ Less than 25 years []
□ 26-35 years []
□ 36-45 years []
☐ Above 45 years []
3. Educational background
□ Degree []
□ Masters []

□ PhD []	
4. Position in the Project	
☐ Project manager []	
☐ Project Team leader []	
☐ Project Team member []	
☐ Other, please specify []	

Part 2: Project management communication process

Please indicate your level of agreement or disagreement with the following statements which relate to project communication practice in your projects. Please put " $\sqrt{}$ " in front of each statement among the given scale in the provided space.

No		Strongly	Disagree	Neutral	Agree	Strongly
		Disagree				Agree
1	It is important to use project					
	communication management					
2	Using project					
	communication management					
	helps boost the project					
	management system					
3	communication management					
	process is applied to					
	COVID-19 emergency					
	response project					
4	Managing communication					
	process contributes to					
	efficient and effective					
	information flow between					
	the project team and the					
	stakeholders					
5	your organization used plans					
	for project communication					
	activities in COVID-19					
	projects					
6	Planning communication					

	management effectively			
	engage relevant information			
	in a timely manner			
7	communication planning is			
	included in your project			
	management plan document			
8	Your project section hold			
	constant and timely briefing			
	on the status update of			
	projects			

Part 3 Project management communicational channel

No		Strongly	Disagree	Neutral	Agree	Strongly
		Disagree				Agree
1	Applying different					
	communication channels, on					
	a project team, can give					
	different results in the					
	communication success					
2	Formal forms of					
	communication channels					
	(Reports, Proceedings)					
	within the project team can					
	be a good factor for the					
	effectiveness of the project					
	management					
3	Informal forms of					
	communication channels,					
	like verbal communication,					
	within the project team can					
	be a good factor for the					
	effectiveness of the project					
	management					
4	Statement of Nonverbal					
	(written) communication					
	system better suit for daily					
	reporting on the status					
	update of a project					
5	Project status reports to top					

	managements can affect the			
	overall management process			
6	Digital communication			
	channels (emails, intranet			
	and project management			
	tools) are more appropriate			
	for your company's structure			
	and ease the project			
	management flow			
7	The more number of			
	communication channels			
	exist in project teams, the			
	more complex the			
	communication would be			
8	The number of			
	communication channels that			
	is established for a project			
	team must be dependent on			
	the number of team members			
	you have			
9	organizational			
	communication flows are			
	applied in your project teams			
	and all stakeholders			
10	Communications can be			
	contribute factor to the			
	project management process			

Part 4 Project management communication Technology

No		Strongly	Disagree	Neutral	Agree	Strongly
		Disagree				Agree
1	Your organization apply					
	suitable communication					
	technologies (Software's,					
	project logs and web					
	logsetc.) to ease the					
	project management system					

2	Communication technologies			
	can be useful in bringing			
	virtual project teams from			
	different regions together for			
	project update and meetings			
3	There is an experience of			
	using any project			
	management software's that			
	can be used for complex and			
	big projects			
4	Communication technologies			
	provide a competitive			
	advantage for your project			
	by reducing cost, saving			
	time, or preventing mistakes			
	which upgrade the project			
	management performance			
	and project success			
5	Your organization			
	communication technology			
	choices depend on the ease			
	of use and being user			
	friendly			
6	Your company provide			
	trainings and assign experts			
	to help the project team learn			
	quickly new communication			
	technologies deployed for			
	the project work			

Thank you!!