ST. MARY'S UNIVERSITY

SCHOOL OF GRADUATE STUDIES MBA PROGRAM IN PROJECT MANAGEMENT

ASSESSMENT ON THE RELATIONSHIPS BETWEEN STAKEHOLDERS MANAGEMENT AND PROJECT PERFORMANCE: IN CASE OF ETHIO TELECOM-TEP PROJECT

BY TIGABU HIRPA

Advisor: Maru Shete (Ph.D)

February, 2022

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TIGABU HIRPA

A Project Submitted to the School of Graduate Studies St. Mary's University in Partial Fulfilment of the Requirement for Degree of Master of Art in Project Management.

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LETTER OF CERTEFICATION

This is to certify that Tigabu Hirpa carried out his project on the topic entitled **Assessment on the Relationships Between Stakeholders Management and Project Performance: In Case of Ethio Telecom TEP Project.** This work is original in nature and is suitable for Submission for the award of Master Art in Project Management.

Advisor: Dr. Maru Shete (PhD)

Signature: _____

Date: _____

Declaration

I, Tigabu Hirpa, declare that this research entitled **Assessment on the Relationships Between Stakeholders Management and Project Performance: In Case of Ethio Telecom TEP (Telecom expansion project)**, is the outcome of my own effort and study and that all sources of materials used for the study have been fully acknowledged. I have produced it independently except for the guidance and suggestion of the Research Advisor. This study has not been submitted for any degree in this University or any other University. It is offered for the partial fulfilment of the degree of MA in Project Management.

Submitted by:

Full Name: Tigabu Hirpa Roba

Signature: _____

Date: _____

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Acronyms

ASM	*Attributes of Stakeholder Management*
ANOVA	*Analysis of Variance*
CCTV	*Closed Circuit Television*
ETA	*Ethiopian Telecommunication Agency*
ETC	*Ethiopian Telecommunications Corporation*
FASM	*Factors Affecting Stakeholder Management*
ICT	*Information Communication Technology*
ISP	*Internet Service Provider*
IT	*Information Technology*
ITU	*International Telecommunications Union*
PM	*Project Management*
PMBOK 204	*Project Management Body of Knowledge*
PMI	*Project Management Institute*
PMP	*Project Management Professional*
PPI	*Project Performance Indicator*
PPM	*Project Portfolio Management*
SMP	*Stakeholder Management Practice*
SPSS	*Statistical Package for Social Science.*
TEP	*Telecom Expansion Project*
UK	*United Kingdom*
XPM	*Extreme Project Management*
ZTE	*Zhong Xing Telecommunication Equipment*

Abstracts

Stakeholder engagement in project management plays a vital role in project performance. In Ethiopia Ethio telecom launched huge Telecom Expansion Projects dividing it to different vendors for the whole country to enhance the network type, coverage and service quality: This has involved a number of stakeholders, the general objective of the study was to assess on the relationship between stakeholder management and ICT project performance in Ethio telecom. The study adopted quantitative method and the descriptive research design. For the proper accomplishment of the study, the primary data were collected using Likert scale type questionnaire by distributing to and collecting from project management office in Ethio telecom. The collected questionnaires were cleansed and analyzed using SPSS Version 25 and Microsoft excel. The analysis includes descriptive, correlation, regression and ANOVA. The major finding of the study indicated that the relationship between factors affecting stakeholder management, stakeholder management practice and attributes of stakeholder management with project performance is positive. However, project monitoring and evaluation on required specification are practiced poorly. Hence, to proactively avoid the challenges of poorly practiced project management variables, the researcher recommends to use project management tools and techniques, provide a good communication channel and support between stakeholders and higher officials, involve user throughout the project implementation and use a good project follow up and monitoring methods.

Key Words: *Stakeholder management, Project management, ICT, Project Performance, Ethio telecom*

CHAPTER ONE

1. INTRODUCTION

1.1. Background of the Study

ICT Project management is different than the rest of others project management practice. Most generally the ICT projects are unique in nature as it is specially designed to meet a specific target audience's requirement in mind. Thus, the ICT projects are undetectable and are often innovative by its nature. The majority of ICT projects are designed to enhance, progress, or address specific business challenges, and so only endure a few years (not throughout the lifetime). These challenges create a lot of ambiguity when it comes to building any project because it necessitates a lot of knowledge when it comes to merging the project's business and objectives. As a result of this consideration, the project or deliverable is planned, designed, and estimated in an iterative manner. Multiple parties are involved in the development life cycle of a typical ICT assignment or project, including stakeholders, sponsors, the design and implementation team, and the end users. It has been discovered that the more project managers contact with various teams, the better. Traditional project management, on the other hand, focuses on the project content, technical deliverables, tools and processes, and other methodologies that are engaged in the project. Many organizations place a greater emphasis on project deliverables than on the total cost of the project. Many senior leaders regard ICT as a cost center and, as a result, do not demonstrate the necessary interest in supporting ICT projects (Dekkers, C. A. & Forselius, P, 2007).

As a result of several ICT initiatives that have already been completed, the world has now become a global village (Gholami et al, 2008). According to the International Telecommunication Union (ITU), over 3 billion individuals (40 percent of the world's population) use the internet, and the number of mobile broadband subscriptions has reached 2.3 billion, with 55 percent of them in developing nations. The project management discipline has grown in recent years as a result of the publishing of various standards best practices research articles and significant expansion in its professional community (Pollack & England, 2007).

According to a survey conducted in the United Kingdom by a special interest group focused on organizational elements of IT, the success rate of IT projects is roughly 20%-30% at best, with 70% of IT initiatives failing in some way. Over 61% of projects were thought to be a flop. More

than three-quarters of those surveyed went over budget by at least 30%, and more than half went over by a significant margin. It has been demonstrated that the coordination strategy has an impact on the success of ICT projects (Nidumolu 1996; Nidumolu & Knotts 1998; Andres & Zmud 2001). "The joining together of diverse components of the organization to fulfil a collective set of tasks" is what coordination is all about (Van de Ven, Delbecq, & Koenig, 1976). The degree to which horizontal and organic or vertical and mechanistic coordinating mechanisms are used in a project can be determined.

Vertical and mechanical coordination involves formal, regulating, and centralized coordinating activities, as well as the use of well-defined procedures and norms, whereas horizontal and organic coordination involves informal, cooperative, and decentralized mutual adjustment and communication (Nidumolu 1996, Andres & Zmud 2001).

Scholars in stakeholder research have developed various conceptualizations and definitions of stakeholders (for an overview, see Mitchell et al., 1997). However, the pioneer work of Freeman (1984) defined a stakeholder as “any group or individual who can affect or is affected by the achievement of the organization's objectives” (p. 46; similar wording in Freeman et al., 2010), and this definition is still widely used and forms the basis for many other definitions. Thus, drawing on stakeholder theory, we define project portfolio stakeholders as any group or individual in a relationship with a project portfolio, such that the group or individual can affect or is affected by the achievement of the portfolio's objectives (similar definition for program management in PMI, 2006). Because PPM is a distributed process (Jonas, 2010), in one context related parties can be part of the management of “the organization” (in Freeman's, 1984, hub and spoke definition) that manages (for) stakeholders. In another context, those related parties can be stakeholders. Therefore, the portfolio (and its objectives and decision making) that is represented by different players in the PPM process could be perceived as being in the middle of this hub and spoke system. Hence, our stakeholder definition includes all groups that “have a stake in” such a portfolio acknowledging that these groups may also be part of the organization that is managing (for) stakeholders (Evan and Freeman, 1988, pp. 75–76). Goodpaster (1991) has noted that Freeman's definition (1984) implies the notion of two types of stakeholders: strategic (affecting) and moral (being affected). Further, Freeman (1984) differentiated with respect to organizational aspects between firm internal and external stakeholders. The focus of this paper is on strategic stakeholders (i.e., those affecting project portfolios) while acknowledging that moral

stakeholders can also become strategic over time (Goodpaster, 1991) and that, from a normative perspective, management actions should follow ethical guidelines and also serve moral stakeholders (Freeman et al., 2007). Further, this study has focuses on the strategic stakeholders (i.e., those who directly involved the Telecom Expansion Project) because they constitute the core of the project. As such, the researcher expect these stakeholders to be a major source of influence with respect to project success either positively or negatively.

1.2 Background of the Organization

Ethiopia's first telecommunications system was established in 1884. Ethiopian Telecommunications Corporation is Africa's first and oldest public telecommunications company. When the extensive open wire line system linking the capital with all of the country's main administrative centers was laid out during those years, the technological scheme helped to the integration of Ethiopian society.

In 1941, Ethiopia reorganized the Telephone, Telegraph, and Postal services at the end of the war with Italy, during which the telecommunication network was destroyed. Proclamation No. 131/52, issued in 1952, established the Imperial Board of Telecommunications. The Board was responsible for providing and expanding telecommunications services in Ethiopia and had complete financial and administrative authority.

Following the country's market reforms, the Imperial Board of Telecommunications of Ethiopia, which renamed the Ethiopian Telecommunications Authority in 1981, was given responsibility for both the operation and regulation of telecommunication services. By Proclamation 49/1996, the Government established a separate regulatory organization, the Ethiopian Telecommunications Agency (ETA), and the Council of Ministers founded the Ethiopian Telecommunications Corporation.

The major responsibility of ETC, which is overseen by the ETA, is to maintain and grow telecommunication services in the country, as well as to provide domestic and international telephone, telex, and other communication services. In this regard, ETC is now the only provider of telecommunications services (Worku Bogale, 2005). By 2010, Ethiopian Telecommunication Corporation has been turned into a new state-owned entity known as Ethio telecom.

Ethio telecom is the only telecom service provider in our country and provides variety products and services like internet, mobile, land line connection, data service and ISP services like email, web site, domain name and others. The telecom expansion program of Ethio telecom was planned and started in 2013 to achieve the telecom sector expansion objective of the growth and transformation program specifically to solve the quality, coverage and capacity challenges of the network service.

1.3 Statement of the Problem

According to Beringer et al. (2013), stakeholder management is considered, from both a professional and an academic standpoint, to be extremely important for achieving success in projects. For these author, the stakeholders have a dual relationship with the performance of the ICT project, because their actions can influence the project, but, on the other hand, the results of the project may affect their interests. Stakeholder management in a project must also involve an understanding of the behaviour of the stakeholders during the life cycle of the project, with the aim of performing actions that meet their expectations (Beringer et al. 2013).

Projects have always required planning, management and control to deliver the desired outcome, from the building of the pyramids in ancient Egypt to the implementation of new information and communication technology (ICT) systems in the modern world, satisfying key stakeholder requirements has been central to achieving a successful outcome (Bourne, 2006).

Today, a wide range of organizations have embraced the concept of projects as a means of delivering change and involving stakeholders in project planning and design. Limited stakeholder commitment, incentive expectations from stakeholders, especially from government sectors (wants payment from stakeholder meeting), turnover in government office stakeholder members, and a lack of equal understanding level among stakeholder members are all issues that need to be addressed in project stakeholder management. Furthermore, due to a lack of understanding of the nature and trade-offs among stakeholders, these projects' ability to effectively address the growing and complex stakeholder management challenge is limited.

Therefore, this study seeks to assess the relationship between stakeholder management practices and ICT project performance on the telecom expansion project (TEP).

1.4 Basic Research Questions

The aim of this basic research question is to critically see the Telecom expansion project (TEP) project performance and stakeholder management practice. Specifically, the researcher conducted this research /and developed the following research questions after collecting the information from stakeholders and analysing the data. This questions are: -

- What type stakeholder management practiced in ICT project?
- What are the factors that affect the stakeholder management?
- What type of relationship does they have between stakeholder management and Project performance?

1.5 Objectives of the Study

1.5.1. General Objectives

The overall objectives of these study is assessing on the relationship between stakeholder management and project performance on ICT project.

1.5.2 Specific Objectives

The specific objectives of the study: -

- ✓ To assess the stakeholder management practice on ICT projects.
- ✓ To Identify the factors that affect stakeholder management.
- ✓ To assess what type of relationship between the stakeholder management and project performance.

1.6. Significance of the Study

Beginning from 2010, Ethio telecom has conducted and has been conducting huge projects with different vendor financing both from national and international companies to improve telecom services reliability and coverage across the country. Though to minimize the total project cost and risk on one side and to increase the success rate of these projects on other tip, knowing the performance status of a given project and the drawback faced during the planning,

implementation, monitoring and evaluation phase is a key factor. At the end of the study, the study could contribute many benefits for both the reader and the owner of the project itself. Among these benefits:

- ✓ Help to identify critical sets of challenges faced Ethio telecom expansion project on stakeholder management practice and project performance and forward an input for the owner of the project to take action for other same projects to be conducted in the future.
- ✓ This research assesses the relationship between stakeholder management practice and project performance
- ✓ Lastly the study also used as reference materials for other readers (scholars used for related studies based on interested topic area).

1.7. Scope of the Study

The research has been studied the Assessment of relationship between stakeholder management practice and project performance during ICT project implementations, monitoring and Evaluations. Even if project performance is a combined result of different constraints. The study which held regarding this topic area doesn't explain about the Assessment of relationship between stakeholder management practice and project performance of any project. The reason why the researcher focused on these study is the nature of ICT project by itself more sophisticated and complicated by the stakeholders involved on it.

The study has been focused how stakeholder management practice related with project performance on Ethio Telecom Expansion Projects. And due to geographically constraint, those employees working in the capital specific location Head Quarter (Project Management Office) were considered in this study.

1.8. Limitations of the Study

Limitation of a study help to identify possibly expected bottle necks that can affect the process and output of the research. Here below listed limitation that faced the researcher in his operational research work track:

- Access of information from all project management and project individuals was so difficult due to geographical location of the project population from the country side sites of Ethio telecom. This means it is too difficult to gather data from the whole target

population by covering all project sites (offices) due to largeness of project area and dispersion of project population at different project sites and also costly. Because of this data collected from PMO staffs at the Head Quarter only.

- Access to some project documents manuals was difficult to get due to confidentiality purpose that tackled via questionnaire distribution and interview (triangulating the data).
- Due to current COVID-19 Pandemic the researcher faces difficulty on distributing and collecting the necessary data via questionnaire.

1.9. Organizations of the Study

The thesis is organized and presented in five major different chapters. The first chapter stands for introduction of the study which consists of background of the study, background of the organization, statement of the problem, objectives of the study, significance of the study, scope of the study, limitation, and organization of the paper. The next chapter which is chapter two contains different literatures on the area which discusses various theories and concepts on significance of Stakeholder management practice. Then, chapter three shows the research methodology. Furthermore, chapter four presents all the collected data in a clear manner and the analysis accordingly. Finally, the fifth chapter portrays the summary, conclusion and recommendation part.

CHAPTER TWO

THEORETICAL REVIEW

2.1. Concept of Project Management

A project is a one-time, multitask job with a definite starting point, definite ending point, a clearly defined scope of work, a budget, and usually a temporary team. A project is defining as 'A unique set of co-ordinated activities, with definite starting and finishing points, undertaken by an individual or organization to meet specific objectives within defined schedule, cost and performance parameters.' It is "A temporary endeavour undertaken to create a unique product or service" (PMI; Project Management Institute, 2004, p. 5).

The PMBOK definition of project management is ". Application of knowledge, skills, tools and techniques to project activities to achieve project requirements. Project management is accomplished through the application and integration of the project management processes of initiating, planning, executing, monitoring and controlling, and closing" (PMI; Project Management Inistitute, 2004, p. 8).

People use project management to organize and control project work using a set of principles, methods, and procedures. It provides a solid foundation for effective planning, scheduling, resource allocation, decision-making, control, and re-planning. Project management principles and approaches aid in the timely completion of projects while staying within budget and adhering to project criteria. At the same time, they assist the business in achieving its other objectives, such as productivity, quality, and cost effectiveness. The goal of project management is to reduce the cost, duration, and quality of a project.

IT project management is distinct from other project management. There is an immature body of knowledge to guide their management. Moreover, each project is specifically designed to meet the user's requirements, thus it is unique in nature. Finally, IT projects are often undertaken to improve or solve certain business problems and therefore usually only last for a certain period of time (McLeod & Smith, 2011). Owing to these three features, the pressures of uncertainty appear; the need for integrating both business and project objectives is required, and planning and estimating are undertaken iteratively at each stage of the development life cycle. In a conventional IT project, there are various parties involved in the system development life cycle, viz. sponsors, stakeholders, the design and implementation team, and finally the users.

Frequently it is the interaction between these players that makes IT projects so difficult to manage. According to Thomsett (2002), the more time the PM spends with the stakeholders, the better.

In contrast to traditional project management, which focuses on the content of the project, the technical deliverables, technology, tools, and methodologies involved in a project, Thomsett's (2002) extreme project management (XPM) methodology is more concerned with the context of the project the organizational, social, political, and financial environment in which a project is developed. He argues that what happens after the project is over is more important than what happens during the project. He claims that satisfying customers at delivery time is crucial, yet only recently has the post-implementation review received much attention. Most organizations focused on the development component, and very few accurately tracked either the support costs or the realization of benefits. Consequently, most senior managers do not realize the benefits brought by the implementation of IT projects; instead, they view IT as a cost center and are, therefore, often reluctant to support the IT project (Thomsett, 2002).

Most projects take place in a context where stakeholders play a major role in the accomplishment of tasks (Karlsen, 2002). According to various authors, many of the problems associated with IT projects are not technical in nature, but rather concerned with management, organizational, or behavioral issues (Johnston, 1995; Martin, 1994; Whitten, 1995; Yeo, 2002). Additionally, a project may be sensitive to actions and decisions taken by stakeholders; stakeholders, in turn, may also create both problems and uncertainty for the PM.

Stakeholders have power because they control information and resources: Many Project managers have encountered stakeholders making greater demands on project execution (Karlsen, 2002). Part of a stakeholder's power lies in their being ultimately responsible for determining project success, given that they define and finance the project, though end users ultimately decide the usefulness of the project results. Indeed, “the issue of system acceptance may go beyond the usability and technical quality of the final product; extending to other more complex soft issues that are social and cultural in nature, including politics in information management” (Yeo, 2002, p. 241).

According to researchers (V.Palanisamy & K.Vishnuvardhan, 2015), a project has a defined scope, is bound by finite resources, involves a large number of individuals with varying levels of

expertise, and is often elaborated over time. (Wheatley), (Stanleigh, 2007), (Cleland & Ireland, 2002), (Stanleigh, 2007). Many and varied definitions for project management have been given, similar to the situation for projects. Taking a look at those definitions in a nutshell Project management can be defined as the application and integration of modern management and project management knowledge, skills, tools, and techniques to the overall planning, directing, coordinating, monitoring, and control of all dimensions of a project from inception to completion, as well as the motivation of all those involved to produce the project's product, service, or result on time, within authorized cost, and to the required quality and requirement, and to ensure that the project is completed on time, within authorized cost, and to the required quality and requirement.

Project management, according to Krezner (2002:5), is an exciting managerial activity that entails the art of creating the illusion that any outcome is the result of a series of predetermined, deliberate acts when, in fact, it was dumb luck, in which all works have interdependence and inter-relationships with others. The goal and objective of project management, according to Krezner (2002) and Keeling (2000), is to complete the project on time, within the assigned resources, time, stated quality, and intended outcomes for the benefit of society. The identification and acceptance of project management as a profession has been a crucial step in its global recognition and acceptability, according to (Waldt, 2008). The Project Management Institute (PMI) gave the first Project Management Professional (PMP) exam in 1984, and the Project Management Body of Knowledge (also known as the PMBOK handbook) was published in 1996.

2.1.2. The Concept of Project Success

Devir (1998) defined success factors as "key variables that contribute to project success" as well as "levers" that project managers can employ to increase the likelihood of meeting the project's objectives (Westerveld, 2003). A project's success or failure is impacted by a variety of factors, and adjusting these factors at the right time improves the chances of success (Savolainen, 2012).

Davis (2014) looks at project management success in the literature from the 1970s to the present, dividing success variables into decades. According to this study, success factor approaches have changed from focusing on project operation in the 1970s to embracing a

stakeholder-focused strategy in the 2000s (Davis, 2014). Several lists of success factors exist as a result of the numerous studies that have been conducted on the subject of project success.

The 1987 work by Pinto and Slevin, which developed a list of ten success indicators that have been corroborated by other writers (Turner, Müller, 2005), serves as a benchmark: The project's mission includes client consultation, people, technical tasks, client acceptance, monitoring and feedback, communication, and troubleshooting (Pinto, Slevin, 1987). Collaboration and communication, timing, identifying/ agreeing objectives, stakeholder satisfaction, acceptance and use of final products, cost/ budget aspects, project manager competencies, project strategic benefit, and top management support were among the nine themes Davis (2014) used to describe project success factors in her paper. The empirical research given in this paper is based on lists of the factors stated above, which were produced with feedback from practitioners.

2.1.3. Stakeholder Management Practice

A project is considered successful when it meets or exceeds the expectations of its stakeholders. But who are the stakeholders? Stakeholders are those who are concerned about or have a strong interest in your project. They are people or parties who are actively involved in the project's work or who stand to benefit or lose as a result of it. When you manage an ICT project to add new services and network quality to telecom sector, you are influencing stakeholders in a favourable way. This kind of influencing can cause internal and external significance on the project performance. Both for during and after the project you have facing negative influence on end customers.

Figure 2.1 Project Stakeholders

The above figure (Figure 2.1) shows a sample of the project environment featuring the different kinds of stakeholders involved on a typical project. A study of this diagram confronts us with a couple of interesting facts. First, the number of stakeholders that project managers must deal with ensures that they will have a complex job guiding their project through the lifecycle. Problems with any of these members can derail the project. Second, the diagram shows that project managers have to deal with people external to the organization as well as the internal environment, certainly more complex than what a manager in an internal environment faces. For example, suppliers who are late in delivering crucial parts may blow the project schedule. To compound the problem, project managers generally have little or no direct control over any of these individuals.

In a project, there are both internal and external stakeholders. Internal stakeholders may include top management, project team members, your manager, peers, resource manager, and internal customers. External stakeholders may include external customers, government, contractors and subcontractors, and suppliers.

The goal of project stakeholder management is to achieve alignment of the project stakeholders with the project's goals, or to maintain the stakeholder's support when it exists already.

Stakeholder management contains four main subtopics:

1. Stakeholder Identification
2. Stakeholder Analysis
3. Stakeholder Management
4. Stakeholder Control

1. Stakeholder Identification

Anyone who is affected by or interested in a project is referred to as a stakeholder. This can range from big players with a vested interest in the outcome to individuals who simply want to be kept informed. They can be in favour of the project or against it. Each has their own set of demands and requirements, which must be met in their own way. As a result, the first stage is to determine who all of the stakeholders are.

When a tiny stakeholder feels they are not being appropriately consulted, it is surprisingly easy to disregard them, and they wind up having a disproportionately significant say in the project. This is a scenario I've seen repeated time and time again, even by the same groups that launch similar projects on a regular basis. Hence, stakeholder identification is a non-trivial, foundational first step to strong stakeholder management.

The stakeholder register, which is a list of project stakeholders with some basic classification information such as internal/external, supporting/opposed, and so on, is the main product of this procedure.

2. Stakeholder Analysis

A stakeholder analysis establishes what their stake is, how they can affect the project, and how the stakeholder needs to be managed after the stakeholders have been identified.

There are two characteristics of each stakeholder that represent the core variables of the project manager's concern with the stakeholder.

These are: -

1. **Power**
   The ability of a stakeholder to halt and/or amend the project. If a government regulatory approval agency, for example, withheld project approvals, they would have unprecedented power. An activist protester may not have the same amount of clout.
2. **Interest**
   The amount of overlap between the stakeholder's and the project's areas of interest, or the stakeholder's level of interest in the project. A subcontractor, for example, may have a high level of interest, but a member of the public may have a low level of interest.

Figure 2.2 Power vs Interest graph

To characterize the stakeholder, a Power-interest matrix is produced, and each stakeholder is mapped on it.

- The Stakeholders with both **high power** and **high interest** must be actively managed. They are intimately involved in the project.
- The Stakeholders with **high power** but **low interest** must be kept satisfied. They can derail a project very easily over minor things.
- The Stakeholders with **low power** but **high interest** must be kept informed. If not, they could attempt to increase their power or influence others to drop support for the project.
- The Stakeholders with both **low power** and **low interest** should be monitored to ensure they do not adversely affect the project.

In terms of support for the project, stakeholders fall into one of five categories:

1. **Unaware.** They do not know about the project or its potential impacts on them.
2. **Resistant.** They are aware of the project and its potential impacts on them, but not in support of it.
3. **Neutral.** They are aware of the project, but have no opinion on it.
4. **Supportive.** They want the project to succeed.

5. **Leading.** They are actively engaged in the project's success, and willing to lend assistance to the project management team.

Stakeholders frequently demand that a project be moved from the resistant to the neutral or favorable categories. Others can remain resistant if the project does not require their explicit support to proceed. In any case, the stakeholder engagement plan is developed using this matrix as a guide. The stakeholder engagement strategy formally documents the activities that will be done to achieve (or maintain) the project's stakeholder support. This strategy outlines the communication needs of each stakeholder, as well as the types and frequency of communication, and provides a project control baseline.

Stakeholders can be motivated by any number of factors, or a combination of:

1. Financial interests
2. Moral and ethical values
3. Religious beliefs
4. Political opinions
5. Business interests
6. Demographics
7. Environmental stewardship
8. Value of ownership
9. Communication preferences

Each of these factors must be analysed to gain a full and deep understanding of the stakeholder, to guide the negotiations during the project execution phase.

3. Stakeholder Management

The stakeholder engagement plan is implemented and modified throughout the project's execution phase, based on the needs and requirements of each stakeholder. It is uncommon for a stakeholder's criteria to remain constant throughout a project. Following communication events, each stakeholder should be re-evaluated to ensure that their power and interests have not changed, and if they have, appropriate action should be taken.

Managing stakeholders involves four primary actions:

I. **Engaging stakeholders** according to the stakeholder engagement plan. This engagement results in a response from the stakeholder, which is used to affirm / deny their support for the project.
II. **Managing stakeholder expectations** through negotiation and ongoing communications.
III. **Addressing risks or concerns** that the stakeholder has raised, and anticipating future project issues based on the information obtained from the stakeholder.
IV. **Resolving issues** that have been raised by the stakeholder, including the introduction of project scope changes.

Interpersonal skills are paramount to the successful management of stakeholder engagement. This includes:

- Leadership
- Active listening
- Cultural awareness
- Networking
- Political awareness

4. Stakeholder Control

Humans are hardwired to stay away from conflict. Unfortunately, conflict in projects often arises at the intersection of stakeholder communication, and the tendency can be to hide small indicators of stakeholder dissatisfaction when the exact opposite response is required to avoid the project experiencing unwanted changes, or worse, a complete shutdown. As a result, it's vital to maintain a careful eye on stakeholder communication on the project control side to ensure that project concerns and potential obstacles are spotted as soon as possible. Stakeholder communications should be assessed throughout project control activities, such as when the project schedule and budget are reviewed, to verify that everything is running well. Any small indicators of future concerns should be addressed, and the stakeholder engagement approach should be adjusted accordingly.

Significance of Stakeholder Management Plan

Stakeholders play a critical role in the project's success. They are investing time, money, and resources in your initiative because they believe in it. They can make things incredibly clumsy with a lot of red tape if they are not properly managed.

Communication Benefits

Stakeholder management plans are also crucial from a public relations standpoint. Consider that these stakeholders do not function in isolation; they receive updates on the project's progress from other resources and stakeholders. It's critical that their interests are protected, and that you don't end up with a furrowed brow from a disgruntled stakeholder who has received bad news. The most critical stage in an effective stakeholder management plan is to keep that channel of open communication open.

Risks of a Project not having Stakeholder Management Plan

Stakeholders, once again, make the world go round. Investors, customers, neighbors, and producers are among them. They can either be your strongest supporters or drag the initiative to a halt. It's critical to connect with stakeholders effectively and efficiently because they frequently entail numerous key contacts across many distinct routes. You could wind up spinning your wheels trying to validate the requirements of a stakeholder with low priority and low interest without having interviewed them ahead of time or evaluating their priority or interest, leaving those with a high priority disappointed at the process. Worse yet, you may be setting your company up for a shortage of finances or a terrible client experience on the following project. Don't let a lack of resources, cash, or time put your company at risk.

2.2. Empirical Review

Project Stakeholders

The company's president, vice presidents, directors, division managers, the corporate operations committee, and others may make up top management. These individuals are in charge of the organization's strategy and growth. On the plus side, you're more likely to get top-level support,

making it easier to hire the finest people for the job and procure the necessary materials and resources; visibility can also help a project manager's professional status within the firm. On the negative side, failure can be quite dramatic and visible to everyone, and if the project is large and expensive, the cost of failure has been higher than for a smaller, less visible project.

Some suggestions in dealing with top management are:

- Develop in-depth plans and major milestones that must be approved by top management during the planning and design phases of the project.
- Ask top management associated with your project for their information reporting needs and frequency.
- Develop a status reporting methodology to be distributed on a scheduled basis.
- Keep them informed of project risks and potential impacts at all times.

Support of Higher Management

A study on important success elements for information technology initiatives was conducted by (Imtiaz et al, 2013). The purpose of this research was to look back at previous essential success factor studies that was relevant to IT projects. This was accomplished by searching the full-text of articles published between 1999 and 2012 in the Google Scholar, Science Direct, IEEE Explorer, ACM, and Emerald databases. Based on strong evidence provided in their respective studies, the study identified 15 criteria that were deemed to be crucial for the success of ICT initiatives. Higher management support was on the list, as was selecting a project manager with the necessary technical expertise, management experience, and interpersonal skills to successfully manage the project, as well as providing appropriate resources and providing incentives to the team members. Higher management support stakeholders have a significant impact on the success of ICT projects, according to the study's findings. Higher management is required to hold regular review meetings to ensure and monitor project progress, follow up with customers to determine general customer satisfaction, and finally recognize and reward project team members upon project completion.

The availability of resources and staff dedication to the project are ensured by higher management support. According to the findings of the study, stakeholder cooperation is critical to the success of an ICT project's good performance.

Project Management Practice

(Oluigbo et al 2014) conducted a case study on the effect assessment of factors affecting information technology projects in Rivers State, Nigeria, with a focus on project management techniques. The report examines the impact of several elements on River State's Information Technology (IT) projects. Three IT projects were reviewed utilizing key critical success characteristics to establish a check list for a successful IT project in River State in order to prevent IT project failure. A total of 85 people were chosen from a total of 100 for the study.

The respondent draws were conducted utilizing the stratified random sampling approach in the analysis of variances (ANOVA), which was used to examine the data acquired via a research provided questionnaire. The results of the analysis revealed that the three main Information and Communication Technology (ICT) projects used in this study, namely ICT Agriculture, ICT for all (Primary and Secondary School), and Closed-Circuit Television (CCTV) Camera, showed that many of the respondents strongly agreed to ICT for all (Primary and Secondary School), while very few respondents agreed to ICT Agriculture and Closed-Circuit Television (CCTV) Camera. This study suggests that authorities encourage the usage, update, and introduction of new ICT projects that must pass the appropriate quality assurance tests, such as if the project is completed on time, within budget, fulfills scope goals, satisfies user needs, and achieves its objectives. The impact assessment of factors affecting information technology projects in Rivers State was the subject of this study, which offered an empirical basis for issue solving.

Communication

In his study of factors impacting project implementation in Kenya, Gharashe (2009) determined that project management quality, operational environment, worker motivation, communication, insufficient resources, and project team organization are all factors affecting project implementation. Inexperienced project managers, poor communication, and poor monitoring and control systems, according to Mwadali (2006), all have a detrimental impact on project management efficiency. In project execution, effective communication develops a common perception, changes behaviors, and gathers information (Brown 2011). A lack of communication

might have a detrimental influence on the project (Ruuska, 2007). Project communication is a useful tool for informing all relevant organizations about what is going on in the project. The value of communication in a project's success cannot be overstated. As a result, careful communication planning and setting the correct expectations with all project stakeholders is critical.

Project Monitoring

Project success is not solely defined by the project manager's, monitoring, and control activities, according to Chua et al (2009). Similarly, Chen et al. (2007) investigated crucial project success determinants in Taiwan and found that project owners, team members, vendors, and other associated stakeholders who are directly or indirectly involved in the work all had a substantial impact on project success. In Hong Kong, Chan et al (2004) looked at three case studies of key performance indicators for assessing project implementation success. He came to the conclusion that the three most essential markers of project success were still money, time, and quality. Other factors, such as safety, functionality, and satisfaction, are gaining popularity. Pheng et al. (2007), on the other hand, investigated how environmental factors influence project manager performance. He identified the following 13 elements that would influence performance: Salary, job satisfaction, job security, and information availability were job-related factors; project-related factors included project environment, project size, time availability, project complexity, team relationship, materials and supplies, and project duration; and organization-related factors included level of authority and type of client. Project success criteria cited by Nguyen (2004) and Pheng et al (2007) include a competent project manager, appropriate finance, a competent project team, commitment, and information availability. Poor contract management, funding and payment arrangements, resource shortages, erroneous forecasts, and overall price escalation were identified as important causes driving project delays by Mansfield et al (2006). Karani (2007) conducted research on the elements that influence project delivery reliability. Cash flow issues, late payments to vendors, underestimation of project duration, unqualified people on the project team, insufficient work supervision, and an increase in scope of work were among the major concerns he found. He came to the conclusion that the primary stakeholders in any project are responsible for these inputs and transformational process variables.

Project Performance

In today's world, an increasing number of companies are shifting their organizational culture to one focused on projects. Each firm faces a significant challenge in consistently improving its project management processes in order to improve output quality and customer satisfaction. Measuring project management implementation maturity can help with this by offering a useful foundation for improving performance. Andrej Miklosik's work Improving project management performance through capability maturity measurement intends to present the findings of research conducted in Slovakia's ICT sector using a standardized methodology. According to the findings of the study, ICT companies in Slovakia often use a standardized project management approach and strive to enhance their project management procedures. However, there is a lot of room for them to enhance their mind-set toward constant improvement. The study examines factors that contribute to poor performance in a variety of domains and proposes strategies to reduce their impact on project and company outcomes.

Many firms have adopted a project-oriented approach to both external delivery and internal control processes in recent years. This move benefits the organization by systematizing the work that is being done. More and more activities are being classed as projects in order to achieve project deliverables. In this sense, a project can be defined as a temporary organization with resources (people, funding, tools, and so on) that exists for a set length of time with the goal of delivering project deliverables. If work is arranged in this manner, there are numerous potential benefits for both the firm and its clients. However, if projects are not managed systematically using a project management framework, there are numerous risks and issues that can arise. The study's goal is to present potential measures for enhancing project management performance in the ICT sector. This will be accomplished by assessing the maturity of project management procedures inside these firms and identifying performance factors. The capacity maturity model (CMM) is used to assess maturity. In-depth interviews with top managers or board members of 25 selected ICT companies active in the Slovak market are used to obtain primary data. Finally, the study found that businesses recognize the value of a methodical approach to project management. In Slovakia, most ICT firms use a defined project management methodology and strive to enhance their project management practices.

2.3. Understanding Stakeholder Influence in Project

This section presents the review related to stakeholder involvement and performance of ICT projects. It will be based on the research variables.

Stakeholder Involvement in Project Identification and Project Performance

To begin with, project stakeholders are persons, groups, or organizations who are actively involved in a project or who have a vested interest in the project's execution, completion, or outcomes, and who may also have influence over the project's objectives and outcomes. Stakeholders are interested in the project's conclusion. It could be a right, an interest, or ownership. In some cases, rights might be either legal or moral ownership (Carol, Cohen and Palmer, 2004). On the one hand, stakeholders benefit from having their expectations acknowledged and managed through proper open communication lines, while on the other hand, ensuring that stakeholders understand and support the project. Furthermore, the beginning stages establish and specify the project's scope and nature. If this phase is not completed properly, the project's success in meeting community expectations would most likely be jeopardized (Nijkamp et al., 2002).

Understanding the project environment and ensuring that the necessary needs and technical specifications are included into the project are the two key project identifications required here. Any shortcomings or flaws, according to Albert (2004), should be recognized, documented, and a recommendation made to correct them. The initiation stage, which serves as the starting point for project implementation, should include a plan that includes the following activities: selecting the best project for the community or organization's needs, recognizing the project's benefits, assigning a project manager, defining the needs and requirements into realistic goals, financial, social, and economic cost-benefit analysis, identifying funding sources, and stakeholders' analysis.

To cope with their possible impact on the project, legitimate and genuine stakeholders must be recognized, and their power, closeness, and influence must be understood (Curley, Steve and Ricky, 2006). Stakeholder identification is a step in the project execution process that involves designating individuals and groups who are affected or used by the project. Then, to increase the positive influence of stakeholders, relevant and appropriate measures can be devised and

implemented. This is a critical risk management issue for project managers, and failing to develop a complete link between project hazards and stakeholder involvement will almost certainly result in project failure (Malunga & Banda, 2004).

Stakeholder Involvement in Project Planning and Project Performance

Stakeholder participation in project planning activities includes defining the project's work requirements, quality, and objective, specifying the resources needed and their allocation, defining the timetable, assessing various risks, and deciding on delivery methods. The benefit of involving stakeholders at the planning stage is that it allows project managers to improve the project's execution process or outcome. In addition, Nobeoka & Cusumano (1995) conducted research in Japan to examine the relationship between stakeholder participation in project planning procedures and project performance.

They discovered that stakeholder involvement during the planning phase had an impact on project goals, resource allocation, task specification, and, ultimately, project performance. Stakeholder involvement in planning, according to Harold (2003), helps to understand the place and roles of stakeholders in determining how to plan, developing milestones, scope statements, assigning the planning team, identifying deliverables, creating the work breakdown structure (WBS), estimating the required resources for activities, developing schedule, estimating time and cost necessary for activities, risk planning, and receiving formal approval to begin work (Rosario, 2000).

Furthermore, important processes such as project planning, outlining the roles and responsibilities of all stakeholders, and maintaining a positive working relationship with them are all generally appropriate for project success. Project Plan and Milestones Reviews are the most popular strategies or tools used in stakeholder involvement in the planning stage. The method entails the complete participation of all stakeholders in the planning process. The project managers develop the project budget, assign goals to each participant, and schedule work at this level (Madeeha and Imran, 2014). The Administration and Control of Major Projects and Public Procurement in Guinea plays this responsibility. They provide advice and assistance to the government or organizations in the planning and management of various projects.

In their respective professions, various operating departments approve project budgets, schedules, and work plans. Finally, the rationale for involving stakeholders in the planning stage

is to ensure that projects are successful and long-lasting by identifying, assessing, scheduling, coordinating, and regulating all factors that potentially affect project performance.

Stakeholder Involvement in Project Implementation and Project Performance

Stakeholder participation in project implementation is one of the most crucial aspects of project management. During the implementation stage, project managers assist in the coordination of people, the efficient use of resources, and the effective appraisal of risks in order to carry out the project plan. Duncan (1996), for example, stated that stakeholder involvement in project implementation is required to translate a project's planned programs and objectives into realistic, well-structured tasks and activities in order to meet the project's objectives.

The complexity of stakeholder commitment in project implementation is related to the project's features, which include a long term, a large investment, and numerous unanticipated and emerging circumstances (Chang, 2013). The risks and challenges related with stakeholder involvement in project execution and project performance can be classified in a number of ways, according to the authors. Project sponsorship development, the business environment, government restrictions, political influence, financial feasibility, procurement, and social acceptability are just a few examples (Floricel & Miller, 2001).

(Low Sui et al. 1996). claim that the success of a development project is substantially determined by the attitudes of various stakeholders. As a result, if key project stakeholders are not committed to fully carrying out their tasks during implementation, the overall project performance will suffer. Stakeholder participation is critical to project success, according to Deming, 1986 and Joaquin et al., (2010), and taking into consideration their claims and interests during the project implementation stages is mainly essential to meet project objectives. It's also worth noting that the link between initiatives and stakeholder involvement has a reciprocal effect. In other words, while stakeholders can have an impact on project outcomes, development programs can also have an impact on stakeholders. Implementing higher-standard projects in the building or mining sectors, for example, can improve and modify people's living standards, but pollution and environmental degradation will show the project's negative consequences on some stakeholders (Olander, 2002; Olander & Landin, 2005a). Furthermore, according to Atkin & Skitmore (2008), using an appropriate stakeholder participation method in project

implementation will make it easier to manage stakeholder needs and predict hazards that could affect project success.

Stakeholder Involvement in Project Monitoring and Project Performance

Project monitoring necessitates a high degree of control and evaluation. Cleland compares planned and actual results to measure progress and performance (1999). Project evaluation is the process of establishing the true state of a project, and it is essential to assess whether the project is being handled properly or not. According to Coulter, project monitoring has a major impact on project quality (2010). As a result, a suitable control instrument is necessary that provides organized and ongoing information on the project's progress. Both before and after the project's implementation, it should be evaluated. Monitoring and control, for example, is used to quantify the effects of each factor and then examine the performance of each element in terms of project success. Bhim Chimoriya, (2014). "Control," according to Fayol (1949), "is ensuring that everything happens in accordance with established rule and spoken command." The specific purpose is to provide a complete approach to planning, sustainability, and decision-making in order to achieve project objectives.

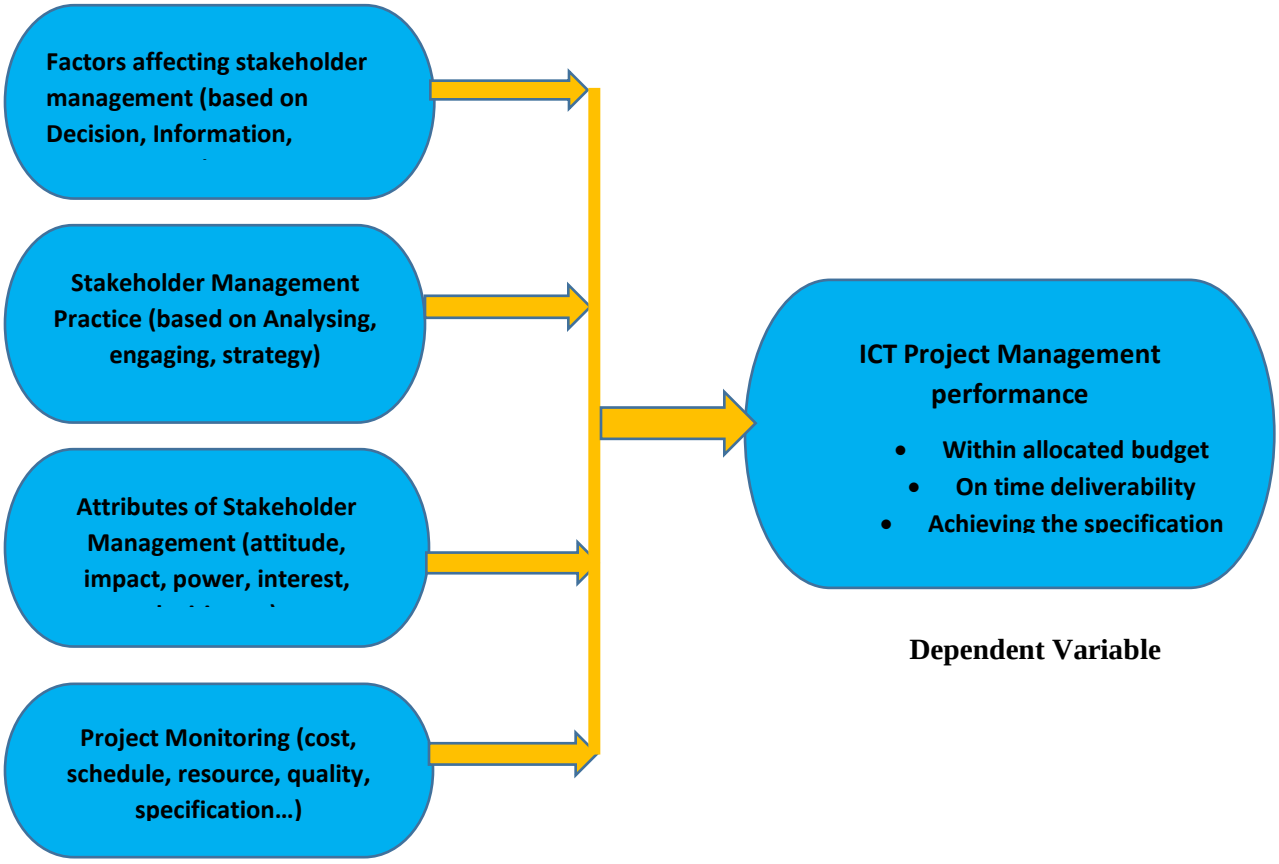
Stakeholder participation in monitoring has an impact on development project performance, according to Flanagan & Norman (2003), because involving affected stakeholders in the monitoring phase increases the likelihood of success. Coulter (2010) also stated that organizations play a significant part in project monitoring and supervision, and that he discovered a favourable and strong association between stakeholder involvement during the monitoring stage and the influence of those stakeholders on project performance.

Stakeholder involvement in development initiatives through monitoring and reporting aids in the identification of roadblocks and obstacles. Stakeholder involvement in monitoring can be used by top management in businesses to impact and promote project success (Katiku, 2011). As a result, having a constructive and well-informed stakeholder in project monitoring is beneficial to businesses because it will greatly improve project performance.

2.4. Conceptual Framework

A conceptual framework is a model that identifies the topics under investigation and their relationships. According to Mugenda (2008), a conceptual framework is a brief description of the phenomenon under investigation that is complemented by a graphical or visual representation of the study's primary factors. A conceptual framework, according to Young (2009), is a diagrammatical representation that depicts the link between dependent and independent variables. In this context the dependent variable is ICT project performance, factors affecting stakeholder management, stakeholder management practice, attributes of stakeholder management and project performance indicators are independent variable. See below figure.

Figure 2.3 Conceptual Framework of the relationship of stakeholder management and project performance



CHAPTER THREE

METHODOLOGY OF THE STUDY

3.1. Research Approach and Design

Quantitative research, according to Creswell (2005), is a type of educational research in which the researcher chooses what to study, asks specific, narrow questions, collects numeric (numbered) data from participants, analyzes these numbers using statistics, and conducts the investigation in an unbiased, objective manner. Thus, in terms of methodology, this research used a quantitative method to gather, organize, and analyze data while conducting the study. Close ended Likert type questionnaires were issued to and collected from selected personnel of Ethio telecom Project Management office for data collection, and it was then summarized and analyzed in order to describe and conclude on the population.

3.2. Research Design

The researcher design is descriptive study, correlational design, and linear regression were used by the researcher. For documenting the current descriptive properties of the variables, a descriptive study design is preferred. The regression is used to show the cause and effect relationship between the independent variables; factors affecting stakeholder management, stakeholder management practice, evaluating the attributes of stakeholder management in the ICT project performance, project performance indicators.

3.3. Data Source

Primary data was used in this investigation. The primary data was collected from concerned Ethio telecom employees via questionnaires in order to identify, evaluate, and manage the importance of stakeholder management on ICT project performance (factors affecting stakeholder management, stakeholder management practice, evaluating the attributes of stakeholder management in the ICT project, project performance indicators) from the perspective of the Project Management Office. Secondary data on stakeholder management and other related topics was gathered from books, research journals, and articles.

3.4. Populations and Data Sampling

The population of the study was the Ethio telecom Staffs who are working under Network and Transport Division. This division by itself have different departments. The researcher focused on the Project Management Office(PMO) Department. Because the study required respondent should have project management knowledge or skills. The Project Management Office, also known as PMO, of an organization, will have several project managers, project professionals, or project delivery related personnel to complete projects successfully in an organization. A project management office is run with a variety of roles. Each role contributes differently to the mission of the project. If one role is missing, achieving the project objectives may become difficult. The team members in the project management office work together and help each other throughout the project.

3.5. Research Participants

Employees and staff members of Ethio telecom's Project Management Office, who are responsible for every project from planning to implementation, were the subject of the study. In the year 2021, the total number of employees in this department surpassed 72. For 60 of them, the sampling process was dispersing the prepared questioneries. As a result, the subjects were all 60 employees working at the project management office, who were assigned to various positions and responsibilities. Initially, the researcher attempted to distribute the study to all employees. The respondents filled out and returned 60 of the total given questionnaires (an 83.33 percent response rate). According to Mugenda & Mugenda (2008), a 60 percent response rate is acceptable for such a study. As a result, such a response rate can be assumed to be appropriate. The Project Management Office of Ethio telecom was chosen for this study because it is responsible for the overall success of an Ethio telecom ICT project's inception, planning, design, execution, monitoring, controlling, and closure. These personnel are the focus of the study since they are crucial to the research. Directors, managers, supervisors, specialists, and engineers are among the employees who are further divided into different sectors.

3.6. Measurements/Instruments

The survey instrument used was a questionnaire. The structured questionnaire used the standard fixed-response alternative questions, in which the respondent must choose from a predetermined set of answers to each topic. A five-point Likert Scale was employed in the study, ranging from (1) strongly disagree to (5) strongly agree. It's a popular rating scale that asks respondents to rate

their level of agreement or disagreement with a series of statements or questions (Albaum, 1997 as cited in Samuel, 2006). This rating scale is simple to create and administer, and respondents quickly grasp how to use it (Malhotra & Birks, 2003, as cited in Samuel, 2006). The items in the questionnaire were designed to be scored on a five point Likert type scale, 1 (strongly disagree) and 5 (strongly agree) for indicators that could assess the relationship of stakeholder management and project performance on ICT project. In this research respondents were asked to choose any of the numbers to show their level of agreement with each statement (questions) according to their experience of project management. The questionnaire also included some questions about educational background of respondents, employee level (position title) of the respondents, experience in the current position at current department.

3.7 Data Collection and Analysis Procedures

The following processes are used to collect and analyze data: The project management office staff were given a briefing on the questionnaires first. The questionnaires were then delivered to those who follow and monitor ICT projects, as well as those who are responders to this study. In order to allow the respondents enough time, the questions were collected from them within a month. The remaining questionnaires were gathered, coded, and usability tested. As a result, the data was entered into SPSS version 25 for analysis utilizing various statistics in SPSS. The final paper was then written.

3.7.1 Generating New Variables (Transforming Data)

In this study the researcher used SPSS to have to enter data and then perform a transformation of the data. Transforming data is performed for a whole host of different reasons, but one of the most common is to apply a transformation to data that is not normally distributed so that the new, transformed data is normally distributed. Transforming a non-normal distribution into a normal distribution is performed in a number of different ways depending on the original distribution of data, but a common technique is to take the log of the data (https://libguides.library.kent.edu).

The Transform drop-down menu provides procedures for generating new variables or changing the values of existing ones. The Compute… command is frequently used to generate variables suitable for statistical analyses or the creation of graphics. The resulting Compute dialogue can be used to create new variables or replace the values of existing ones. The name of the variable

to be created or for which values are to be changed is typed in the Target Variable list. For new variables, the Type & Label sub-dialogue box enables specification of variable type and label. The expression used to generate new values can be typed directly in the Expression field or constructed automatically by pasting in functions from the Functions list or selecting arithmetic operators and numbers from the "calculator list". When pasting in functions, the arguments indicated by question marks must be completed (Sabine Landau & Brian S. Everitt, 2004). In this study the researcher does the responded questioner data in to new transformed variable. The generated variables are FASM, SMP, ASM and PPI. And the analysis part used this transformed data.

3.8. Methods of Data Analysis

The questionnaires were cross-checked for completeness and consistency before the quantitative data was analyzed. After that, it was analyzed using SPSS version 25. Bar charts, graphs, and pie charts were used to display the data. The relationship between the independent and dependent variables was determined using correlation analysis. The goal of correlation was for the study to be able to forecast how a variable would depart from the normal. To display preliminary findings, simple descriptive statistics (frequency distribution and mean) were utilized. Furthermore, the independent sample T-Test and the one-way ANOVA The difference between demographic characteristics (Gender, Education, Employee Position, and Experience) and stakeholder management was investigated using ANOVA. Multiple linear regression is used to examine or determine the influence of independent variables on the dependent variable. The following is the model that was used to demonstrate this influence:

The linear regression model assumes that for any subject/individual with response Yi and predictor Xi1, ..., Xip satisfies

$$Yi = \underbrace{\beta 0 + \beta 1 Xi1 + \ldots}_{\text{Predictable}} + \underbrace{\beta pXip}_{\text{unpredictable}} + \ldots + \varepsilon i$$

Since we have four variables,

For these study the model becomes

$$\mathbf{Y = \beta 0 + \beta 1 X1 + \beta 2 X2 + \beta 3 X3 + \beta 4 X4 + \varepsilon}$$

Where:

Y = Dependent Variable

$\beta 0$ = Intercept (value of Y when X= 0)

$\beta 1$ = Slope

X1= factor affecting stakeholder management

X2= stakeholder management practice

X3= attributes of stakeholder management

X4= Project performance indicator

ε = the error

3.9 Validity and Reliability

The reliability and validity of scales used in survey-based research are crucial. Even though the measuring variables and scale questionnaires are derived from well-validated instruments, it is critical to determine whether they can be used in Ethiopia. Likert-type scales, according to Gleam & Rosemary (2003), In the social sciences, marketing, medicine, and business, scales are widely used to collect data on attitudes, emotions, perspectives, personalities, and descriptions of people's environments. Individuals typically use multiple item scales and summated ratings to quantify constructs that are not immediately measurable while seeking to measure constructions that are not directly quantifiable. The metrics in this study were validated using Internal Consistency and Predictive Validity.

Validity

Validity is the extent to which differences found with a measuring instrument reflect true differences among those being tested The two main types of validity are content validity which is the extent to which a measuring instrument provides adequate coverage of the topic under study SPSS 25 and criterion-related validity which relates to our ability to predict some outcome or estimate the existence of some current condition (Kothari, 2004). Validity is the degree to which an instrument measures what it purports to measure, for this study validity of instruments was determined by adopting standardly constructed questioners, restricting the questions to the conceptualized variables and the use of questioners that are verified by advisor.

Reliability

Reliability refers to consistency of research study or measuring test, if findings from research are replicated consistently they are reliable (saul Mcleod, 2013). In this research for reliability of variables, adapting standardized questioners used from previous studies was used and testing questioners with Cronbach alpha test have been conducted. Cronbach's alpha ($\alpha < 0.6$ indicates unsatisfactory internal consistency reliability and Cronbach's alpha > 0.6 indicates satisfactory internal consistency reliability.

3.9.1 Cronbach's Alpha (Reliability Test)

Cronbach's alpha is a coefficient (a value between 0 and 1) that is used to assess a test's internal consistency (homogeneity) or correlation. A good test evaluates various aspects of the trait under investigation. Cronbach's alpha is an internal consistency estimate of test score reliability that rises as the intercorrelations between test items rise. Cronbach's alpha is usually thought to implicitly suggest the degree to which a group of items assesses a single construct because inter correlations across test items are maximum when all items measure the same construct (Gleam & Rosemary, 2003). George and Mallery (2003) provide the following rules of thumb: — > .9 Excellent, > .8 – Good, > .7 Acceptable, > .6 Questionable, _ > .5 Poor, and < .5 Unacceptable p.231 (as cited in Gleam & Rosemary, 2003). If item correlations are too low, it's likely that they're testing distinct attributes and shouldn't all be included in a test that's designed to measure just one. The SPSS application calculated Cronbach's alpha for each result and compared them to each other at a cut-off value of 0.7, which Cooper and Schindler consider acceptable (2008). The values were Factors affecting the Stakeholder management (0.9721), Significance of stakeholder management practice (0.886), Evaluating the attributes of stakeholder's management in the ICT project based on different assessment (0.958) and project performance indicators (0.812). All the values were above 0.7 which concludes that the data collection instrument is reliable.

Table 3.1 Cronbach's alpha

Measurement	Number of items	Cronbach's Alpha
Factors affecting the Stakeholder management (FASM)	30	0.972
Stakeholder management practice (SMP)	15	0.886
Evaluating the attributes of stakeholders management in the ICT project based on different assessment (ASM)	58	0.958
Project Management Performance Indicators (PMPI)	8	0.812
Total	**111**	**0.954**

Source: Owen survey Data, 2021

3.9.2 Correlation

The accuracy with which a method measures what it is supposed to measure is referred to as validity. When research has a high level of validity, it delivers results that correspond to real-world traits, characteristics, and variances. The amount to which a score on a scale or test predicts scores on some criterion measure is known as validity (Cronbach & Meehl, 1955; as cited in Gleam & Rosemary, 2003).

N= sample size

For these study N=60

Degree of freedom = N-2

DF= 58

Critical value at 58 = 58*(0.05)

Critical value becomes= 0.2542

And obtained value is as follow below.

DF of FASM = .331

DF of SMP = .428

DF of ASM = .428

DF of PPI = .886

Table 3.2 validity – correlation matrix

Variables		**Factors affecting Stakeholder management.**	**Stakeholder management practice**	**Attributes of stakeholder management**	**Project performance indicator**	**Project Performance**
Project Management Performance	Pearson Correlation	.331**	.428**	.428**	.886**	1
	Significance. (2-tailed)	0.01	0.01	0.01	0.019	
	N	60	60	60	60	60

Note: All correlation coefficients are significant at 1%

The full result of these is presented in Appendix – 1B

Source: Owen survey data, 2021

Correlation analysis was used to assess the instrument's validity. Table 3.2 shows the Pearson correlation coefficient between project performance and the instrument's independent variables. At the 0.01 level, all coefficients are significant, as seen in the table. The predictive validity of the variables was tested using two-tailed correlation in this study. This strategy looks for a link between all of the independent factors and the validity of the dependent variable.

Correlation is a bivariate analysis that measures the strength of association between two variables and the direction of the relationship. In terms of the strength of relationship, the value of the correlation coefficient varies between +1 and -1. A value of ± 1 indicates a perfect degree of association between the two variables. As the correlation coefficient value goes towards 0, the relationship between the two variables will be weaker. The direction of the relationship is indicated by the sign of the coefficient; a + sign indicates a positive relationship and a – sign indicates a negative relationship. Usually, in statistics (Bonett, D. G., 2008).

CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION

4.1. Descriptive Analysis

The goal of this study was to assessing the relationship between stakeholder management and project management performance on ICT project. The primary body of the research is presented in this chapter. For data analysis, coded responses were entered into Statistical Package for the Social Sciences (SPSS) version 25. The data in this study was analyzed using descriptive statistics. All data in this study was analyzed using descriptive statistics, which comprised frequency, percentages, and mean. The following is a summary of the data analysis: The goal of this study was to evaluate the difficulties of indirect distribution channels. The primary body of the research is presented in this chapter. For data analysis, coded responses were entered into Statistical Package for the Social Sciences (SPSS) version 25. The data in this study was analyzed using descriptive statistics. All data in this study was analyzed using descriptive statistics, which comprised frequency, percentages, and mean.

4.1.1. Background Characteristics

Since the general characteristics of the respondents are vital to get insights to the overall study we shall start by seeing the demographic nature of the respondents. It is believed in many extant Literatures that demographic variables like educational level, Job position and experience do have an impact on project performance. Thus, the profile of project implementer' working in Ethio Telecom Information System Division (ISD) are summarized by the following table.

Table 4.1 Respondent profiles

Variables	Category	Frequency	Percentage (%)
Age	Female	27	45%
	Male	33	55%
Education Qualification	Post graduate	24	40%
	Bachelor degree	33	55%
	Diploma/Level IV	3	5%
Job Position/Level	Project manager	6	10%
	Supervisor	24	40%
	Specialist	22	36.7%
	Engineer/Technicians	8	13.3%
Experience	0-3 years	22	36.7%
	4-6 years	25	41.7%
	7-10 years	12	20%
	Above 10 years	1	1.7

Note: The full result is presented on Appendix -1C

Source: Source Owen data, 2021

From Table 4.1, The majority of respondent are degree holder and above. 55% of the total have a bachelor degree and 40% are post graduate degree. When we see regardless of gender the males are higher than female. That means 55% of the respondents are males. And by observing the response result of their experience the higher percentage goes to 4 to 6 years and in percentage it shows 41.7%. therefore, most of them are able to examine and investigate the questions and responded properly.

From the respondent we can observe 40% are at supervisor level, that means those peoples have enough experience to understand and identify how stakeholder management practice and its significant on ICT project performance.

4.1.2. Descriptive Statistics of the Variables

To come up with the scores of the variable, items under each dimension are aggregated to one. As indicated in the table 4.2, all independent variables mean score is greater than and equal to the midpoint of the scale which is 3. Of the four independent variables Factors affecting the Stakeholder management (FASM) is the highest (5), while user involvement is the lowest (3.07). But the mean value of the dependent variable factor affecting stakeholder management is above 3. From the variables the highest range is factor affecting stakeholder management and the lowest is project performance indicator with lowest (1.88) and highest value (3.25).

Table 4.2 Descriptive characteristics of variables

Variables	Minimum	Maximum	Mean	Std. deviation
Factors affecting the Stakeholder management (FASM)	3.07	5.00	4.33	0.5526
Stakeholder management practice (SMP)	3.00	4.73	4.04	0.4882
Evaluating the attributes of stakeholders management in the ICT project based on different assessment (ASM)	2..79	4.47	3.79	0.405
Project Management Performance Indicators (PMPI)	1.88	3.25	2.52	0.4343

Table 4.3 Tests of Normality

Source: Owen survey Data, 2021

Tests of Normality						
	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
FASM	.219	60	.000	.884	60	.000
SMP	.214	60	.000	.912	60	.000
ASM	.225	60	.000	.896	60	.000
PPI	.184	60	.000	.920	60	.001
a. Lilliefors Significance Correction						

Source: Owen survey Data, 2021

Factors affecting Stakeholder Management

Descriptives of factors affecting stakeholder management (**FASM**)

Table 4.4 Descriptive of factors affecting stakeholder management

Descriptives				
			Statistic	Std. Error
FASM	Mean		4.3300	.07135
	95% Confidence Interval for Mean	Lower Bound	4.1872	
		Upper Bound	4.4728	
	5% Trimmed Mean		4.3630	
	Median		4.4000	
	Variance		.305	
	Std. Deviation		.55268	
	Minimum		3.07	
	Maximum		5.00	
	Range		1.93	
	Interquartile Range		.99	
	Skewness		-.664	.309
	Kurtosis		-.148	.608

FASM					
		Frequency	**Percent**	**Valid Percent**	**Cumulative Percent**
Valid	3.07	3	5.0	5.0	5.0
	3.30	3	5.0	5.0	10.0
	3.73	4	6.7	6.7	16.7

	3.77	3	5.0	5.0	21.7
	3.90	3	5.0	5.0	26.7
	4.10	1	1.7	1.7	28.3
	4.33	3	5.0	5.0	33.3
	4.37	3	5.0	5.0	38.3
	4.40	15	25.0	25.0	63.3
	4.43	3	5.0	5.0	68.3
	4.57	4	6.7	6.7	75.0
	Strongly Agree	15	25.0	25.0	100.0
	Total	**60**	**100.0**	**100.0**	

Source: Owen Survey Data. 2021.

The study sought to find whether factors affecting the stakeholder management would affect to project performance and significantly improved the performance of ICT projects. From the findings the study revealed that majority (71.7%) of the respondent agreed strongly, 23.3% of the respondents agreed and 5% of the respondents neither agreed nor disagreed that factors affecting stakeholder management also affect the project performance.

Stakeholder Management Practice

Table 4.5 Descriptive of Stakeholder Management Practice

			Statistic
SMP	Mean		4.0367
	95% Confidence Interval for Mean	Lower Bound	3.9105
		Upper Bound	4.1628
	5% Trimmed Mean		4.0556
	Median		4.2000
	Variance		.238
	Std. Deviation		.48827
	Minimum		3.00
	Maximum		4.73
	Range		1.73
	Interquartile Range		.67
	Skewness		-.524
	Kurtosis		-.321
SMP (Stakeholder management practice)			

		Frequency	Percent	Valid Percent
Valid	Neither Disagree nor Agree	3	5.0	5.0
	3.07	3	5.0	5.0
	3.53	3	5.0	5.0
	3.73	15	25.0	25.0
	3.93	1	1.7	1.7
	4.20	18	30.0	30.0
	4.40	3	5.0	5.0
	4.47	6	10.0	10.0
	4.73	8	13.3	13.3
	Total	60	100.0	100.0

Source: Survey Owen Data, 2021.

The study sought to find stakeholder management practice would have positive relationship with project performance. And significantly improved the performance of ICT projects. From the findings the study revealed that majority (58.3%) of the respondent agreed strongly, 36.7% of the respondents agreed and 5% of the respondents neither agreed nor disagreed that stakeholder management practice significantly improved the performance of ICT projects and does have positive relationship.

Attributes of stakeholder management

Table 4.6 Descriptive Attributes of stakeholder management

			Statistic
ASM	Mean		3.7868
	95% Confidence Interval for Mean	Lower Bound	3.6822
		Upper Bound	3.8915
	5% Trimmed Mean		3.8050
	Median		3.6897
	Variance		.164
	Std. Deviation		.40502
	Minimum		2.79
	Maximum		4.47
	Range		1.67
	Interquartile Range		.42
	Skewness		-.354
	Kurtosis		.437

ASM (Attributes of Stakeholder management)				
		Frequency	Percent	Valid Percent
Valid	2.79	3	5.0	5.0
	3.09	1	1.7	1.7
	3.10	1	1.7	1.7
	3.12	1	1.7	1.7
	3.60	7	11.7	11.7
	3.62	8	13.3	13.3
	3.67	6	10.0	10.0
	3.69	7	11.7	11.7
	3.71	2	3.3	3.3
	3.86	3	5.0	5.0
	3.88	2	3.3	3.3
	3.91	1	1.7	1.7
	3.95	1	1.7	1.7
	3.97	2	3.3	3.3
	4.07	1	1.7	1.7
	4.19	1	1.7	1.7
	4.21	2	3.3	3.3
	4.34	3	5.0	5.0
	4.36	3	5.0	5.0
	4.38	2	3.3	3.3
	4.45	2	3.3	3.3
	4.47	1	1.7	1.7
	Total	60	100.0	100.0

Source: Owen Survey data, 2021

The study sought to find attributes of stakeholder management would have positive relationship with project performance. And significantly improved the performance of ICT projects. From the findings the study revealed that majority (25%) of the respondent agreed strongly, 70% of the respondents agreed and 5% of the respondents neither agreed nor disagreed that attributes of stakeholder management significantly improved the performance of ICT projects and does have positive relationship.

Project performance Indicators (PMI)

Table 4.7 Descriptive of Project performance Indicators

			Statistic
PPI	Mean		2.5220
	95% Confidence Interval for Mean	Lower Bound	2.4098
		Upper Bound	2.6342
	5% Trimmed Mean		2.5175
	Median		2.6250
	Variance		.189
	Std. Deviation		.43438
	Minimum		1.88
	Maximum		3.25
	Range		1.38
	Interquartile Range		.50
	Skewness		.082
	Kurtosis		-1.005

		Frequency	Percent	Valid Percent
Valid	1.88	9	15.0	15.0
	Disagree	2	3.3	3.3
	2.25	16	26.7	26.7
	2.57	1	1.7	1.7
	2.63	8	13.3	13.3
	2.75	11	18.3	18.3
	2.88	1	1.7	1.7
	Neither Disagree nor Agree	5	8.3	8.3
	3.25	7	11.7	11.7
	Total	60	100.0	100.0

Source: Owen Survey data, 2021.

The study sought to find project performance indicator for stakeholder management would have negative relationship with project performance. And slightly improved the performance of ICT projects. From the findings the study revealed that majority (15%) of the respondent disagreed strongly, 3.3% of the respondents disagree and the remaining 81.7% of the respondents neither agreed nor disagreed that project performance indicator doesn't significantly improve the performance of ICT projects and does have negative relationship.

4.2. Regression Analysis

In addition, the researcher conducted a linear multiple regression analysis so as to test the relationship among independent variables and dependent variable. The researcher applied the statistical package for social sciences (SPSS) to code, enter and compute the measurements of the multiple regressions for the study. Because Regression analysis is a reliable method of identifying which variables have impact on a topic of interest. The process of performing a regression allows you to confidently determine which factors matter most, which factors can be ignored, and how these factors influence each other.

Model Summary

Table 4.8 Model summary

Model Summary[b]						
					Change Statistics	
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Sig. F Change
1	.954[a]	.910	.91	4.22970	.910	.000
a. Predictors: (Constant), PPI, SMP, FASM, ASM						
b. Dependent Variable: PMP						

Note: The full result for is presented in Appendix - 1E

Source: Owen survey data, 2021.

The coefficient of determination is the adjusted R square. This value describes how ICT project success varies depending on factors such as stakeholder management practices, stakeholder management attributes, and project performance metrics (project monitoring). According to the R square, the four independent variables analyzed explain 91% of the factors affecting ICT project effectiveness. As a result, more research is needed to look into the other factors (9%) that affect the performance of ICT projects in Ethio Telecom.

ANOVA

Table 4.9: ANOVA

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	66652.463	4	16663.116	931.402	.000[b]
	Residual	966.079	54	17.890		
	Total	67618.542	58			
a. Dependent Variable: PMP						
b. Predictors: (Constant), PPI, SMP, FASM, ASM						

Source: Owen Survey data, 2021

ANOVA is a data analysis process used to assess whether there are significant differences between two or more groups or samples at a given probability level, according to (Mugenda, 2003). 'If the absolute t-value of the regression coefficient associated with an independent variable is greater than the absolute critical t-value, that independent variable is considered to be a significant predictor of the dependent variable.' The model is statistically significant in predicting factors impacting stakeholder management, stakeholder management practice, stakeholder management traits, and project performance indicators in this study since the significance value is .000, which is less than 0.05. (project monitoring). Project Management Practices, Top Management Support, User Involvement and Project Monitoring.

Coefficients

Table 4.10 Coefficients

Coefficients[a]					
		Unstandardized Coefficients		Standardized Coefficients	
Model		B	Std. Error	Beta	Sig.
1	(Constant)	32.265	8.260		.000
	FASM	30.813	1.002	.502	.000
	SMP	18.822	1.968	.271	.000
	ASM	52.371	2.430	.624	.000
	PPI	-.525	1.328	-.007	.694
a. Dependent Variable: PMP					

Source: Owen Survey data, 2021

The researcher conducted a multiple variable regression analysis so as to determine the relationship between Stakeholder Management and ICT project performance via the four variables. As per the SPSS generated table above, the equation **($Y = \beta 0 + \beta 1X1 + \beta 2X2 + \beta 3X3 + \beta 4X4 + \varepsilon$)** becomes:

As per the SPSS generated the established regression equation yield:

$$Y = \beta 0 + \beta 1X1 + \beta 2X2 + \beta 3X3 + \beta 4X4 + \varepsilon$$

$$Y= 32.265 + 30.813X1 + 18.822X2 + 52.371X3 + (-0.525)X4+ \varepsilon$$

$$Y= 30.813X1 + 18.822X2 + 52.371X3 - 0.525X4+ \varepsilon$$

Where:

Y = Dependent Variable

$\beta 0$ = Intercept (value of Y when X= 0)

$\beta 1$ = Slope

X1= factor affecting stakeholder management

X2= stakeholder management practice

X3= attributes of stakeholder management

X4= Project performance indicator

ε = the error

According to the regression equation established, taking all factors into account (Factors affecting stakeholder management, stakeholder management practice, attributes of stakeholder management and project performance indicators) constant at zero, at these point Ethio telecom ICT Project Management Performance will be 32.265. The data findings analyzed also show that taking all other independent variables at zero, a unit increase in significance of stakeholder management will lead to a 30.813 increase in ICT project management; a unit increase in stakeholder management practice will lead to an 18.822 increase in ICT project management performance, a unit increase in attributes of stakeholder management in ICT project will lead to a 52.371 increase in ICT project performance, a unit increase in project performance indicator will lead to a 0.525 decrease in ICT project management performance.

At 5% level of significance and 95% level of confidence, factors affecting stakeholder management, stakeholder management practice and attributes of stakeholder management in ICT project had 0.000 level of significance; whereas project performance indicator (project monitoring) had a 0.694 level of significant. And excluding project performance indicator the other three predictors are the most significant.

4.3. Aggregate mean of Independent variable

Aggregate mean was calculated for the 4 components of stakeholder engagement in order to see where the major problem. And as seen below on table (4.11) all the means of the 4 components range (from 2.52 to 4.33) and when giving a rank or computing the means of these four variables with each other grievance management has the least mean value of 2.522 among the others meaning this variable practice was not given much attention like the others, following this

reporting to attributes stakeholders management and stakeholder management practice also have mean values of 3.78 and 4.03 respectively, indicating this two variables also lack attention. Next to factor affecting stakeholder management holds the highest mean value of (4.33) respectively which means on the ICT project this stakeholder component has a lot of focus and attention compared to other components. The researcher assesses that factors affecting stakeholder management directly affect project performance of ICT project. Therefore, the result shows that the relationship between them is very high.

Table 4.11 Aggregate mean of independent variable

Aggregate Mean of Independent variables					
		FASM	SMP	ASM	PPI
N	Valid	60	60	60	60
	Missing	0	0	0	0
Mean		4.3300	4.0367	3.7868	2.5220
Minimum		3.07	3.00	2.79	1.88
Maximum		5.00	4.73	4.47	3.25

Source: Survey Owen Data, 2021.

4.4. Correlation Analysis

As represented in Table 4.12 below the correlation between the independent and dependent variables were not high. This indicates absence of Multi – Co-linearity problems among the variables. However, there were strong correlations between the dependent variable; project management performance (PMP) and all the independent variables except project performance indicator of project monitoring (PPI). Level of significance showed a strong relationship for factor affecting stakeholder management, stakeholder management practice, attributes of stakeholder management. However, there were no significant correlations between the project management performance (PMP) and project performance indicator (PPI) and also has negative relation.

Table 4.12 SPSS output of correlational analysis

Correlations						
		FASM	SMP	ASM	PPI	PMP
FASM	Pearson Correlation	1	.016	-.021	-.066	.497**
	Sig. (2-tailed)		.901	.876	.614	.000
	N		60	60	60	59
SMP	Pearson Correlation		1	.803**	-.041	.784**
	Sig. (2-tailed)			.000	.756	.000
	N			60	60	59
ASM	Pearson Correlation			1	-.198	.837**
	Sig. (2-tailed)				.130	.000
	N				60	59
PPI	Pearson Correlation				1	-.176
	Sig. (2-tailed)					.183
	N					59
PMP	Pearson Correlation					1
	Sig. (2-tailed)					
	N					

Source: Survey Owen Data, 2021

CHAPTER FIVE

SUMMARY CONCLUSIONS AND RECOMMENDATIONS

5.1. Summary

The main objective of this study was to assessing the relationship between stakeholder management and project performance on ICT project by studying factors affecting stakeholder management, practice and others indicator. From finding result the following factors are the most significant, factors affecting the stakeholder management, stakeholder management practice and attributes of stakeholder management in ICT project. The study found out that there is 98.6% of corresponding change in determining the performance of the ICT projects in Ethio telecom for every change in all predictor variables jointly. Test of overall significance of all the four variables jointly, factors affecting stakeholder management, stakeholder management practice, evaluating the attributes of stakeholder management on ICT project and Project performance indicator using ANOVA, at 0.05 level of significance found the model to be significant.

5.2. Conclusion

From the analysis of the data collected, it can be concluded that:

In terms of their performance, there is no significant relationship between the descriptive factors; distinct educational qualifications, experience level groups, Service Level groups, and Departments. Male or female, project manager or supervisor, specialist or employee, or staying on PMO for a short or long length of time has no statistically significant evidence to alter the performance level of the ICT project in Ethio telecom.

However, from the finding there were strong correlations between the dependent variable; project performance and all the independent variables except project performance indicator in project performance indicator. Level of significance showed a strong relationship for factor affecting stakeholder management, stakeholder management practice (Stakeholder identification and analysis, Information disclosure, reporting to stakeholders). However, there were no significant correlations between the project performance and Stakeholder involvement in project performance indicator and also has negative relation as done on the analysis part the aggregate mean done for the four variables.

This means, factors affecting stakeholder management also affect the performance of ICT project at Ethio telecom. Because factor affecting the stakeholder management positively and

significantly related with project performance. Furthermore, factor affecting stakeholder management is the highest predictor of factors affecting the ICT performance, though they are correlational.

The finding indicates that one of the factors that affect performance of ICT project is stakeholder management practice.

- ✓ From the analysis on the relationship between the study variables, the study concluded that; stakeholder management in project life cycle is positive and significantly related to project performance.
- ✓ Secondly, the study concluded that; involvement of stakeholder's management practice in project planning is also positively and significantly related to project performance at Ethio telecom. From the findings, it was established that, this kind of relationship is highly influenced by involving stakeholders in decision making and communication.
- ✓ The finding also indicates that there is positive and statistically significant relationship between stakeholder management Practices and performance. This result shows that stakeholder management Practices is one of the factors affecting project performance in ICT project of Ethio telecom.

5.3. Recommendation

Based on the findings of the study, the researcher would like to recommend the following in order to assist the relationship of stakeholder management on the performance of ICT projects on Ethio telecom. For successful stakeholder's engagement which in turn will result better project performance all the components of stakeholder management should be focused but the more focus should be given on the practices that are not well implemented in this paper based on the aggregate mean table done the following recommendation given.

- ✓ The study found that stakeholder management have a positive and strong correlation with project performance. From the four variables project performance indicator has the lowest aggregate mean, indicating it was neglected, the study therefore recommends that the higher officials should communicate all the concerned stakeholder regularly to rise the mutual trust and respect between them, and let them too aware the project monitoring and how the performance of the project would be decrease and that affect the whole ICT project.

- ✓ The study found that higher management functions has positive correlation with project performance but have low aggregate mean value. Therefore, the study recommends higher management officials of the company to be involved on stakeholder management engagement, progress to be reported to higher officials and commitment of stakeholders to be kept tracked.
- ✓ Effective communication aids stakeholders in comprehending the goals and makes them more accountable for their job. Ethio Telecom should keep in mind that a successful project requires effective communication between project sponsors and project managers, as well as between project managers and their teams.
- ✓ Furthermore, according to the researcher study, a clear and adequate plan for communication between stakeholders and Ethio telecom should be in place. As a result, the time it takes to settle issues or disagreements during project implementation will be reduced. Ethio Telecom Project managers should adopt good stakeholder management practices in their ICT project work. They need to get acquainted with project management tools and techniques, know which phase their projects are, plan, monitor and evaluate their projects regularly for stakeholder management. This will ensure their projects perform better and when they don't, they can make changes that will yield positive results to the projects performance.

5.4. Limitation and Implications for Further Research

While these findings are useful, the study's limitations must also be addressed. Because of the specific telecom industry analysed, one major weakness of this study is that the findings may not be generalizable. Because the Likert rating scale was used in the questionnaire survey instrument, some of the dependent variables, such as project performance statements, replied according to the respondent's perception. Although the sample was limited to ICT project implementers, it is possible that the relationships between these factors are significantly different for project implementers in other domains, such as construction or engineering projects. As a result, the results must be evaluated in light of this limitation. Future research can look into the potential links by adding certain contextual variables and other dimensions to the model to fill the gap that has been discovered.

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APPENDIX

APPENDIX 1: RESULT OF SPSS

Appendix 1A: Cronbach's Alpha Reliability

Scale: Stakeholder Management

Case Processing Summary

		N	%
Cases	Valid	59	98.3
	Excluded[a]	1	1.7
	Total	60	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.953	.952	114

Reliability

Scale: Factors Affecting Stakeholder Management

Case Processing Summary

		N	%
Cases	Valid	60	100.0
	Excluded[a]	0	.0
	Total	60	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.972	.972	30

Reliability

Scale: Stakeholder Management Practice

Case Processing Summary			
		N	%
Cases	Valid	60	100.0
	Excluded[a]	0	.0
	Total	60	100.0
a. Listwise deletion based on all variables in the procedure.			

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.882	.886	15

Reliability

Scale: Attributes of Stakeholder Management

Case Processing Summary			
		N	%
Cases	Valid	59	98.3
	Excluded[a]	1	1.7
	Total	60	100.0
a. Listwise deletion based on all variables in the procedure.			

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.958	.958	58

Reliability

Scale: Project Performance Indicator

Case Processing Summary			
		N	%
Cases	Valid	59	98.3
	Excluded[a]	1	1.7
	Total	60	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.812	.807	8

Appendix 1B: Correlation

Correlations						
		FASM	SMP	ASM	PPI	PMP
FASM	Pearson Correlation	1	.016	-.021	-.066	.497**
	Sig. (2-tailed)		.901	.876	.614	.000
	N	60	60	60	60	59
SMP	Pearson Correlation	.016	1	.803**	-.041	.784**
	Sig. (2-tailed)	.901		.000	.756	.000
	N	60	60	60	60	59
ASM	Pearson Correlation	-.021	.803**	1	-.198	.837**
	Sig. (2-tailed)	.876	.000		.130	.000
	N	60	60	60	60	59
PPI	Pearson Correlation	-.066	-.041	-.198	1	-.176
	Sig. (2-tailed)	.614	.756	.130		.183
	N	60	60	60	60	59
PMP	Pearson Correlation	.497**	.784**	.837**	-.176	1
	Sig. (2-tailed)	.000	.000	.000	.183	
	N	59	59	59	59	59

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

Appendix 1C: Respondent Profile

Frequency Table

Gender					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	27	45.0	45.0	45.0
	Male	33	55.0	55.0	100.0
	Total	60	100.0	100.0	

Education					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Post graduate	33	55.0	55.0	55.0
	Bachilor Degree	24	40.0	40.0	95.0
	Diploma or Level IV	3	5.0	5.0	100.0
	Total	60	100.0	100.0	

Position					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Project Manager	6	10.0	10.0	10.0
	Supervisor	24	40.0	40.0	50.0
	Specialist	22	36.7	36.7	86.7
	Technicians	8	13.3	13.3	100.0
	Total	60	100.0	100.0	

Experiance					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0-3	22	36.7	36.7	36.7
	4-6	25	41.7	41.7	78.3
	7-10	12	20.0	20.0	98.3
	>10	1	1.7	1.7	100.0
	Total	60	100.0	100.0	

Appendix 1D: Descriptive

Descriptive Characteristics

Descriptive Statistics									
	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
FASM	60	3.07	5.00	4.3300	.55268	-.664	.309	-.148	.608
SMP	60	3.00	4.73	4.0367	.48827	-.524	.309	-.321	.608
ASM	60	2.79	4.47	3.7868	.40502	-.354	.309	.437	.608
PPI	60	1.88	3.25	2.5220	.43438	.082	.309	-1.005	.608
Valid N (listwise)	60								

Appendix 1E: Linear Regression Analysis

Regression

Variables Entered/Removed[a]			
Model	Variables Entered	Variables Removed	Method
1	PPI, SMP, FASM, ASM[b]	.	Enter
a. Dependent Variable: PMP			
b. All requested variables entered.			

Regression: Model Summary

Model Summary[b]									
					Change Statistics				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.993[a]	.986	.985	4.22970	.986	931.402	4	54	.000
a. Predictors: (Constant), PPI, SMP, FASM, ASM									
b. Dependent Variable: PMP									

Regression: ANOVA

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	66652.463	4	16663.116	931.402	.000[b]
	Residual	966.079	54	17.890		
	Total	67618.542	58			
a. Dependent Variable: PMP						
b. Predictors: (Constant), PPI, SMP, FASM, ASM						

Regression: Coefficients

Coefficients[a]								
		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B	
Model		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
1	(Constant)	32.265	8.260		3.906	.000	15.705	48.825
	FASM	30.813	1.002	.502	30.738	.000	28.803	32.822
	SMP	18.822	1.968	.271	9.565	.000	14.877	22.767
	ASM	52.371	2.430	.624	21.555	.000	47.500	57.242
	PPI	-.525	1.328	-.007	-.395	.694	-3.188	2.138
a. Dependent Variable: PMP								

APPENDIX 2: QUESTIONERIE ITEMS

St. Mary's University

School of Graduates

Master of Project Management

Dear staff member/Respondents,

I am inviting you to participate by filling up this questionnaire. I kindly request you to spend your Precious time to fill the questionnaire as frank as and responsible as possible. I inform you that the information you provide will be consumed for academic purposes only. Your accurate response makes the paper very much valuable. So, please read it carefully and give your conscious opinion. Thank you for your participation and contribution to the completion of this research. In order to identify the performance of ICT projects in ethio telecom regarding to significance of stakeholder management coordination in ICT project, the researcher prepared the following questions with regard to ICT development projects, please click on the provided circle bullet ( ) for each questions. On the appropriate question number to indicate the extent to which you agree or disagree with each statement. I ask you again to answer all questions. Thank you for your participation.

The item has five-point Likert type scales, the scales have the following meaning

1 = Strongly disagree, 4 = Agree,

2 = Disagree, 5 = Strongly Agree.

3 = Neither Agree nor Disagree,

General Instructions

- There is no need to write your name and email address.
- Where answer options are available please click on the provided circle bullet ( ) in the appropriate box.

Contact Address

If you have any query, please do not hesitate to contact me and I am available as per your convenience at (Mobile: 0929-917-052 or e-mail: tigabu654@gmail.com.)

The aim of this questionaries' is for Academy Purpose Only for Masters of Project Management.

St. Mary's University

Part I. Demographic Information

1. Educational Qualification:

- ☐ Certificate/Diploma/Levels
- ☐ Bachelor's Degree
- ☐ Post Graduate Degree
- ☐ Doctorate Degree
- ☐ Other: _____

2. Gender /Sex
   - ☐ Female
   - ☐ Male

3. Employee Level/Work Positions

- ☐ Director
- ☐ General Manager
- ☐ Project Manager
- ☐ Supervisor
- ☐
- ☐
- ☐

Specialist Technicians

Other:

4. Years stayed at the PMO (Project Management Office) ----------Years:

5. Your Department/Section Currently working on.

PART II. Factors affecting the stakeholder management in the ICT project

To what extent do you think that the following factors are significant in managing the stakeholders?

2.1 How do you give a value for top management support for managing stakeholder with corporate social responsibilities?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

2.2 How do you give a value for top management support significant for Flexible project organization?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

2.3 How do you give a value for top management support significant for Project manager competences?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

2.4 Significance of Information Input for Setting common goal and objective of the project?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

2.5 Significance of Information Input for Identifying stakeholders?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

2.6 The significance of Information Input for Exploring the stakeholder need and expectation?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

2.7 The significance of Stakeholder Assessment for Assessing stakeholders' attitude?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

2.8 The significance of stakeholder Assessment for Understanding area of stakeholders' interests?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

2.9 The significance of stakeholder Assessment for Predicting the influence of stakeholders?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

2.10 Significance of Stakeholder Assessment for Analyzing conflicts and coalitions among stakeholders?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

2.11 Significance of Stakeholder Assessment for Evaluate the stakeholder power?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

2.12 Significance of Stakeholder Assessment for Evaluating the stakeholder legitimacy?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

2.13 Significance of Stakeholder Assessment for Understand the stakeholder urgency?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

2.14 Significance of Stakeholder Assessment for determining the stakeholder proximity?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

2.15 Significance of Stakeholder Assessment for determining the stakeholder Knowledge?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

2.16 Significance of decision making for transparent evaluation of the alternative solution?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

2.17 Significance of decision making for Ensuring effective communication between the project and its stakeholder?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

2.18 Significance of decision making for formulate appreciate strategy to deal with stakeholder?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

2.19 Significance of Action and Evaluations for Implementing the strategy based on schedule plans?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

2.20 Significance of Action and Evaluations for Flexibility in the implementing strategy to deal with stakeholder' reaction?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

2.21 Significance of Action and Evaluations for Evaluation the stakeholder satisfaction in terms of achievement of the stakeholder pre - project expectation?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Disagree

2.22 Significance of continuous support for Communication with the engaging stakeholder properly and frequently?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

2.23 Significance of continuous support for Stakeholder involvement in decision-making?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

2.24 Significance of continuous support for Keeping and promoting an ongoing relationship with stakeholder?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

2.25 Significance of Continuous support for Analyzing the change of multiple stakeholder engagement and the relation?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

2.26 Significance of Continuous support for Obtain support assistant from higher authorities?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

2.27 Significance of Continuous support for mutual trust and respect amongst the stakeholder?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

2.28 Significance of Continuous support to Reduce the uncertainty?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

2.29 Significance of Continuous support to maintain alignment between or among the stakeholder?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

2.30 Significance of Continuous support for access to resource and knowledge?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

Part III. Significance of Stakeholder management practice.

Significance of Stakeholder management practice.

3.1 Does the personal past experience are effective to analyze stakeholders' concern and need?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

3.2 Does Interviews are effective to analyze stakeholders' concern and need?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

3.3 Does Questionnaires and surveys are effective to analyze stakeholders' concern and need?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

3.4 Do professional services are effective to analyze stakeholders' concern and need?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

3.5 Do workshops are effective to analyze stakeholders' concern and need?

Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

3.6 Does Meetings are significant to engage with stakeholders?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

3.7 Does Social contacts are significant to engage with stakeholders?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

3.8 Does Negotiations are significant to engage with stakeholders?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

3.9 Do workshops are significant to engage with stakeholders?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

3.10 Do interviews are significant to engage with stakeholders?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

3.11 Does the Adaptation strategy response type significant strategy to deal with the stakeholder claims?

1 2 3 4 5

3.12 Does the Avoidance strategy response type significant strategy to deal with the stakeholder claims?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

3.13 Does the Compromising strategy response type significant strategy to deal with the stakeholder claims?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

3.14 Does the Dismissal strategy response type significant strategy to deal with the stakeholder claims? *

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

3.15 Does the Influence strategy response type significant strategy to deal with the stakeholder claims?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

Part IV. Evaluate the Attributes of the Stakeholders Management in the ICT

Based on your experience in the field of project management, please give feedback to the following questions

4.1 In the field of project management Attitude of client has an effect on ICT Project management?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

4.2 In the field of project management Attitude of Consultant has an effect on ICT Project management?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

4.3 In the field of project management Attitude of Contractor has an effect on ICT Project management?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

4.4 In the field of project management Attitude of Donor has an effect on ICT Project management?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

4.5 In the field of project management Attitude of INGO/NGO has an effect on ICT Project management?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

4.6 In the field of project management Attitude of Government Authorities has an effect on ICT Project management?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

4.7 In the field of project management Attitude of End user/Beneficiary has an effect on ICT Project management?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

4.8 In the field of project management Attitude of General Public has an effect on ICT Project management?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

4.9 In the field of project management Attitude of landowner has an effect on ICT Project management?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

4.10 Does vested interest of Client has an impact on ICT project management?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

4.11 Does vested interest of Consultant has a impact on ICT project management?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

4.12 Does vested interest of Contractor has a impact on ICT project management?

	2	3	4	5		
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

4.13 Does vested interest of Donor has a impact on ICT project management?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

4.14 Does vested interest of INGO/NGO has a impact on ICT project management?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

4.15 Does vested interest of Government Authorities has a impact on ICT project management?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

4.16 Does vested (deep) interest of End user/Beneficiary has an impact on ICT project management?

1	2	3	4	5

Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

4.17 Does vested interest of General public has an impact on ICT project management?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

4.18 Does vested interest of End Landowner has an impact on ICT project management?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

he following questions are evaluated based on the power of stakeholder to make a change in project.

4.19 Does client have a power to make a change in a ICT project?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

4.20 Does consultant have a power to make a change in a ICT project?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

4.21 Does contractor have a power to make a change in a ICT project?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

4.22 Does Donor have a power to make a change in a ICT project?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

4.23 Does INGO/NGO have a power to make a change in a ICT project?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

4.24 Does Government Authorities have a power to make a change in a ICT project?

1	2	3	4	5

4.25 Does End User have a power to make a change in a ICT project?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

4.26 Does General Public have a power to make a change in a ICT project?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

The following questions are evaluated based on the proximity. That means the relationship between stakeholder and projects.

4.27 Does the relationship between client and projects has an impact on ICT projects?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

4.28 Does the relationship between consultant and projects has an impact on ICT projects?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

4.29 Does the relationship between contractor and projects has an impact on ICT projects?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

4.30 Does the relationship between Donor and projects has an impact on ICT projects?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

4.31 Does the relationship between INGO/NGO and projects has an impact on ICT projects?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

4.32 Does the relationship between Government Authorities and projects has an impact on ICT projects?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

4.33 Does the relationship between End user and projects has an impact on ICT projects? *

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

4.34 Does the relationship between General Public and projects has an impact on

ICT projects?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

The following questions are evaluated based on the Legitimacy of the stakeholder. That means the relevance of stakeholder on projects.

4.35 Does clients are categorized as relevant stakeholders in projects? *

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

4.36 Does consultants are categorized as relevant stakeholders in projects? *

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

4.37 Does contractors are categorized as relevant stakeholders in projects? *

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

4.38 Does Donors are categorized as relevant stakeholders in projects? *

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

4.39 Does INGO/NGOs are categorized as relevant stakeholders in projects?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

4.40 Does Government Authorities are categorized as relevant stakeholders in projects?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

4.41 Does End User are categorized as relevant stakeholders in projects?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

4.42 Does General Public are categorized as relevant stakeholders in projects? *

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

The following questions are evaluated based on the Urgency of the stakeholder. That means the level of response to claims made by each stakeholder on projects.

4.43 Does the fast response of clients for each stakeholder has an impact on ICT project performance?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

4.44 Does the fast response of consultant for each stakeholder has an impact on ICT project performance?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

4.45 Does the fast response of contractors for each stakeholder has an impact on ICT project performance?

1	2	3	4	5

Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

4.46 Does the fast response of Donor for each stakeholder has an impact on ICT project performance?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

4.47 Does the fast response of NGO for each stakeholder has an impact on ICT project performance?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

4.48 Does the fast response of governments for each stakeholder has an impact on ICT project performance?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

4.49 Does the fast response of end users for each stakeholder has an impact on ICT project performance?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

4.50 Does the fast response of for each stakeholder has an impact on ICT project performance?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

The following questions are evaluated based on the knowledge of the stakeholder. That means the practical understanding of the project?

4.51 Does the knowledge of clients on projects have an impact on ICT project performance?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

4.52 Does the knowledge of consultant on projects have an impact on ICT project performance?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

4.53 Does the knowledge of contractor on projects have an impact on ICT project performance?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

4.54 oes the knowledge of donor on projects have an impact on ICT project performance?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

4.55 Does the knowledge of NGO on projects have an impact on ICT project performance? *

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

4.56 Does the knowledge of Governments on projects have an impact on ICT project performance?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

4.57 Does the knowledge of End users on projects have an impact on ICT project performance?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

PART V: Project Performance Indicators

How do you evaluate the attributes of the following Performance indicators?

5.1 Does the ICT Projects meets the expected objectives of the projects? *

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

5.2 Does the ICT projects delivered within the planned time (schedule)? *

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

5.3 Does the ICT projects completed with planned budget?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

5.4 Does the ICT projects meets the required specifications?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

5.5 Does ICT projects delivered as per the setting requirement and standard?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

5.6 Does the ICT Projects delivered based on the scope?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

5.7 Does the end users satisfied after completion of the ICT Projects?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree

5.8 Does the ICT Project completed and delivered with expected quality?

	1	2	3	4	5	
Strongly Disagree	◯	◯	◯	◯	◯	Strongly Agree