The Role of Stakeholder Management on Project Success
(The case of ICT Incubation Center Building Project)

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Declaration

I Agegnehu Abebe Shege declare that this thesis is my original work and it is the result of my effort prepared under the advice of Mohammed Seid (Ph.D.). The entire sources of material used for the study were duly acknowledged. This research has not been submitted for any degree in part or full in this university or any other higher institutions, rather it is presented for the partial fulfillment of the degree of Master of Science in International Business.

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Certification

This is to certify that the thesis conducted by Agegnehu Abebe with a title called The Role of Stakeholder Management on Project Success with the case of ICT Incubation Center Building Project. The thesis was submitted in partial fulfillment of the requirements for the Master of Science in International Business and complies with the regulations of the university. Further, the thesis meets the accepted standard with respect to originality and quality.

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Chair of Department or Graduate Program Coordinator

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Abstract

The aim of this study was to investigate the role of stakeholder management on project success with the case of the ICT Incubation Center Building Project. A descriptive and explanatory research design approach was used to conduct the study. Fifty-two self-administered questionnaires were distributed to employees of ECWC who were participated in the selected project. Based on the 48 returned questionnaires the response rate was 92.3% and enables the researcher to conduct the data analysis using the SPSS version 23 statistical tool. Therefore, descriptive, correlation, and multiple regression analyses were conducted. The correlation analysis shows that stakeholder identification, plan stakeholder engagement, manage stakeholder engagement, and monitor stakeholder engagement are positively and moderately associated with project success. However, relative to other practices of SM there is a lower correlation between manage stakeholder engagement and project success. The multiple regression analysis revealed that stakeholder identification (β=0.271), plan stakeholder engagement (β=0.227), manage stakeholder engagement (β =0.238), and monitor stakeholder engagement (β =0.209) has a significant effect on project success. Additionally the regression analysis shows (adjusted R square =0.645, p<0.05) which means 64.5 % variation in project success s explained through a change in all independent variables of stakeholder management. Generally, this study indicated that there is a positive and significant relationship between stakeholder management and project success in ECWC. The study recommends ECWC to prepare a more suitablestakeholder engagement strategic plan that provides an actionable plan to interact effectively withstakeholders and answer stakeholder interests and constraints, and to take corrective and preventive actions to improve the level of stakeholder engagement to secure project success.

Keywords: *Stakeholders, Project, Project Success, Stakeholder management*

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Acronyms and List of Abbreviations

SM=Stakeholder Management

PS=Project Success

SI= Stakeholder Identification

PSE=Plan Stakeholder Identification

MSE=Manage Stakeholder Engagement

MOSE=Monitor Stakeholder Engagement

HR= Human Resource

ICT= Information Communication Technology

PMBOK= Project Management Body of Knowledge

SPSS= Statistical Package for Social Science

AAU= Addis Ababa University

ECWC=Ethiopian Construction Works Corporation

ANOVA= Analysis of Variance

VIF= Variance Inflation Factor

Std. D. = Standard Deviation

Sig. = Significance

Chapter One

1. Introduction

1.1.Background of the study

Over the years, the eye of construction project management has been on the courses that are directing to the effective planning and management of the complex series of activities involved in delivering successful projects (Morris, 1994). In line with Takim (2008), during a construction project, the complex interaction and interrelationships among the parties participating could determine the general successful accomplishment of the project. Moreover, project success has been associated with the effective management of all stakeholders throughout the project life cycle (Bourne and Walker, 2005; Aaltonen et al., 2008; Ward and Chapman, 2008; Chinyio and Akintoye, 2008; Olander, 2007). Cost, quality, and time, which are the normal measurement of project success, has changed from time to time and includes micro and macro viewpoints, fewer conflicts and disputes, friendliness of environment, and stakeholder satisfaction (Cookie-Davies, 2002; Low and Chuan, 2006; Bryde and Robinson, 2005; Toor and Ogunlana, 2010; Lim and Mohamed, 1999). Research conducted by (Olander and Landin, 2008; Bourne, 2005; Akintoye et al., 2003) concludes project failures due to either absence of or inadequate stakeholder management throughout the project. Hence, it is important to engage/manage stakeholders effectively in the project activities to realize project success.

Poor scope and work definition, inadequate resources assigned to the project, unforeseen regulatory changes; and negative community reaction to the project identified by (Black, 1995) as the reasons for project failure. Many of them are linked to unaware or ineffective stakeholder management on the project; for instance, involving stakeholders at the beginning and considerations of the interests of stakeholders is significant to clearly define and design project scope and goals, which could also help to avoid negative community response to the project. It is not possible to achieve project success with fewer stakeholders' involvement unless performed properly.

Project success or failure is not only affected by the expectations and perceptions of stakeholders, but failure to balance and solve the issues of stakeholders will also contribute to project failure (Bourne, 2005; Chinyio, 2010).

The constraints also (Jergeas et al., 2000; Karlsen, 2002; Olander and Landin, 2005; Yang et al., 2011) could come up in the form of conflicts and controversies that can impede the project execution process and subsequently lead to delays, cost overruns, dissatisfaction, and claims. Due to lack of stakeholders' involvement in the project, the projects could be negatively affected Jeargeas et al (2000). The project failure associated with stakeholders can be reduced through participating stakeholders at the beginning of and throughout the project. Therefore, the fruitful accomplishment of projects requires a good skill from the construction project team on managing stakeholders since it is influenced by on among other things, securing a smooth administration of the project, and fulfilling the expectations of the stakeholders (Cleland, 1995; Vinten, 2000; Newcombe, 2003; Bourne, 2005; Aaltonen et al., 2008).

(Olander, 2007) tell us there is an implication of changing relations between stakeholders as well as among the project and stakeholders which also displays that activities and events are dependent on each other. To secure the successful completion of the project, satisfying the expectations of stakeholders is required mainly those stakeholders who were involved may have different expectations from the project throughout the project (Skitmore and Atkin, 2008). Because stakeholders can act in numerous ways for fulfilling their interests and expectations from the project, a stakeholder management process should be carried out at every stage of the project (PMI, 2017, Yang et al., 2011). However, Landin and Olander (2008) said, "If there is lack of stakeholder management in the project execution process, the project manager will find himself in reargued action and ignoring of claims from stakeholders".

Even if, there are other organizations involved in different projects, this study only considered Ethiopian Construction Works Corporation due to the organization have been implementing many projects throughout the country in four direction. It means the company is experienced in carrying out different projects and enables the researcher to evaluate well the relationships between project stakeholder management and project success on the contractor side.

This thesis, therefore, studied the role of stakeholder management on project success with a case of the ICT B+G+7 Incubation Center Building Project Completed by Ethiopian Construction Works Corporation as a contractor**.**

1.2.Problem Statement

Projects are organizational strategic methods that direct innovation and create value. However, their failures and challenges incur costs for international businesses, governments, and organizations' fortune each year. The recent studies conducted by the academia and industry including studies by McKinsey in collaboration with the University of Oxford and KPMG New Zealand multi-industrial survey as well as the 2000–2011 CHAOS report by Standish Group confirm high rates of project challenges and failures.

Research conducted by (Olander and Landin, 2008; Bourne, 2005; Black, 1995; Akintoye et al., 2008) concludes project failures due to either absence of or inadequate stakeholder management throughout the project. Hence, it is important to engage/manage stakeholders effectively in the project activities to realize project success.

The project failure associated with stakeholders can be reduced through participating stakeholders at the beginning of and throughout the project. Therefore, the fruitful accomplishment of projects requires a good skill from the construction project team on managing stakeholders since it is influenced by on among other things, securing a smooth administration of the project, and fulfilling the expectations of the stakeholders (Cleland, 1995; Vinten, 2000; Newcombe, 2003; Bourne, 2005; Aaltonen et al., 2008).

(Olander, 2007) tell us there is an implication of changing relations between stakeholders as well as among the project and stakeholders which also displays that activities and events are dependent on each other. To secure the successful completion of the project, satisfying the expectations of stakeholders is required mainly those stakeholders who were involved may have different expectations from the project throughout the project (Skitmore and Atkin, 2008).

Findings of (Fraz et al., 2016; Tero, 2014; Macahria, 2013; 2016; Bourne and Walker, 2005; Aaltonen et al., 2008; Ward and Chapman, 2008, and Olander, 2007) showed that there is a positive correlation between stakeholder management and project success.

However, the above studies have overlooked how a contactor firm manages its stakeholders like the owner, subcontractors, suppliers, project team, and other internal stakeholders through its stakeholder management practice. Most of the research conducted in Ethiopia also focused on the assessment of stakeholder management practices rather than to see the relationship between

stakeholders management and project success. In addition to this, even if the issue of stakeholder management is a rising current phenomenon, there are no substantial studies in the country, particularly on the building construction sector.

Therefore, this study tried to address the gap by studying the cause and effect relationship between stakeholder management and project success with a case of the ICT B+G+7 Incubation Center Building Project Completed by Ethiopian Construction Works Corporation as a contractor through the below developed research questions.

1.3. Research Questions

The research attempted to answer the below questions;

- Does stakeholder identification affect project success?
- To what extent does plan stakeholder engagement affect project success?
- How does managing stakeholder engagement affect project success?
- What is the effect of monitoring stakeholder engagement on project success?

1.4. Objectives of the Study

1.4.1 General Objective

The general objective of the study is to examine the role of stakeholder management on project success.

1.4.2 Specific Objectives

- To analyze the effect of stakeholders identification on project success;
- To investigate the effect of plan stakeholders engagement on project success;
- To examine the effect of managing stakeholders engagement on project success, and
- To evaluate the effect of monitoring stakeholder engagement on project success.

1.5.Significance of the Study

The findings of the study are important for the following issues. One, more importantly, the study will support the project team to evaluate how stakeholder management affects project success, and provide a possible solution for identified challenges and problems. It will also help the company policymakers to design appropriate project stakeholder management policies. Additionally, the study will use as a reference for other research, which may focus on similar topics and issues related to the role of stakeholder management on project success.

1.6.Scope of the Study

Even if, there are other organizations involved in different projects, this study only considered Ethiopian Construction Works Corporation due to the organization have been implementing many projects throughout the country in four direction. It means the company is experienced in carrying out different projects and enables the researcher to evaluate well the relationships between project stakeholder management and project success on the contractor side. Additionally, the study limited itself to the concept of project stakeholder management as a process to see the link between independent and dependent variables through testing formulated hypotheses.

1.7.Limitations of the Study

It is an acceptance that there are limitations on this study as others including bounding itself on the construction sector specifically to building construction. Additionally, due to time and there are many criteria for project success the researcher used time, cost, quality, and stakeholder satisfaction as project success criteria.

1.8.Definition of Terms

Project Stakeholders: stakeholder is an individual, group, or organization that may affect, be affected by, or perceive itself to be affected by a decision, activity, or outcome of a project. (PMI, 2017).

Project Stakeholder Management: project stakeholder management is the process that has the steps essential to identify the people, groups, or organizations that could impact or be impacted by the project, to evaluate stakeholder expectations and their impact on the project, and to create appropriate management strategies for effectively engaging stakeholders in project decisions and implementation (PMI, 2017).

Project: a project is a short-term work taken on to produce a unique product, service, or result (PMI, 2017).

Project Management: project management is a process of planning, organizing, directing, and controlling the organization's resources for a brief time to accomplish specific goals and objectives (Kerzner, 2017).

Project Success: For this study, project success is the completion of a project within the schedule, allocated cost, required quality, and through meeting stakeholder satisfaction (Yang et. al., 2011).

1.9. Organization of the Study

The study is organized with five chapters starting from introduction; literature reviews; research methods; result of the study, interpretation and discussion, and ends with a summary, conclusion, recommendations and future research direction.

Chapter Two

2. Literature Reviews

2.1 Introduction

This section discussed the conceptual literatures and definition of stakeholder management, theoretical review, the practical guide of stakeholder management, the relation between SM and PS, empirical review, conceptual framework and research hypotheses. This study was conducted based on stakeholder management process adopted from Project Management Body of Knowledge Guide sixth edition published in 2017 by Project Management Institute as a standard.

2.2 Concepts and Definition of Stakeholder Management

2.2.1 Stakeholders

Some stakeholders can be more crucial than others can at different project stages. Giving enoughtime to the stakeholder identification and mapping process help us to determine who these stakeholders are and what they expect from the project. Before thinking to participate and influence stakeholders, it is vital to seek to understand the people; you will be working with and dependent on at all stages of the project. Exchanging information with stakeholders is vital, but it is equally critical initially to collect information regarding your stakeholders (Walt, 2016).

Once identified, stakeholders must be mapped based on their power and interest in the project. This stakeholder map will deliver a way to involve the project stakeholders. Four key categories of project stakeholders for any project are (Walt, 2016):

1. Internal stakeholders;
2. External stakeholders.
3. Project team members;
4. Contractors and suppliers

2.2.2 Project Stakeholders Management

Table 2.1: Stakeholder management process models in construction projects. Scholars Stakeholder management processes definitions.

Karlsen (2002); Selection of stakeholders; examining the behaviors of stakeholders; communicating and exchanging information with stakeholders; creating methods, following up.
Young (2006); Identifying stakeholders; collecting information related to stakeholders; analyzing the effect of stakeholders.
Elias et al. (2002); Making a stakeholder map of the project; arranging a chart of particular stakeholders; identifying the interest of stakeholders; formulating a power versus stake grid; performing a transactional level stakeholder analysis; making a process level stakeholder analysis; evaluating the changes of stakeholder relations; and deciding the stakeholder management competence of the R&D projects.
Bourne and Walker (2006); Selecting of stakeholders; ranking stakeholders; preparing a stakeholder engagement strategy.
Olander (2006) adopted Cleland (1999); Identification of stakeholders; collecting information about stakeholders; Identifying stakeholder mission; Defining stakeholder strengths and weaknesses; Identifying stakeholder strategy; Forecasting stakeholder behavior; Performing stakeholder management strategy.
Jepsen and Eskerod (2009); Selecting of the significant stakeholders; classification of the stakeholders pointing out their needed contributions, expectations regarding rewards for contributions, power in connection to the project; and decision about which strategy to apply to influence every stakeholder.
Walker et al. (2008); Identifying stakeholders; Ranking stakeholders; Imagining stakeholders; Engaging stakeholders; Monitoring the success of communication.

2.2.3 Project

It is confirmed that there are many common definitions to the word project; we must aware that in the beginning, projects are different from other organizational courses. As a rule, a process is considered as an organization's day-to-day operations to produce goods and services. The organization applies present systems, properties, and capabilities in a constant way. However, the project takes place differently from the normal, process-oriented domain of the organization. Nevertheless, for many firms, project management activities continue being distinctive and separate from how repetitive, process-driven work is performed. Project work is continuously evolving, creates its work procedures, and is the antithesis of recurrence in the workplace. As a result, it characterizes as an exciting substitute to "business as usual" for various organizations (Pinto, 2019).

Consider the following definitions of a project that give us a clear understanding of the properties that make project and project management is different (Pinto, 2019):

> A project is a unique endeavor with a starting and finishing, implemented by people to achieve stated goals within considerations of cost, schedule, and quality.
>
> Projects are goal-oriented, contain the coordinated responsibility of interconnected activities, are of a finite period, and are all, to a degree, unique.
>
> A project can be considered as a course of activities and tasks that:
>
> - Have a precise objective to be completed within definite specifications
> - Have defined beginning and completing dates
> - Have cost limits, if applicable
> - Use human and nonhuman resources, such as money, people, equipment
> - Are multifunctional (i.e., cut across several functional lines)
>
> A project is planned work toward a pre-stated goal or objective that needs resources and effort, a unique (and therefore risky) venture having a budget and schedule.

It is also better to see the Project Management Body of Knowledge (PMBOK, 2017) guide of the Project Management Institute (PMI) definition. The PMI is an international project management association, with more than 680,000 members worldwide as of Sep 30, 2021. In the PMBOK Guide

(PMI, 2017), a project is defined as "a temporary endeavor undertaken to create a unique product, service, or result"

2.2.4 Project Management

Project management is the planning, organizing, directing, and controlling of firm resources for a moderately short-lived objective that has been set to accomplish listed goals and objectives. Furthermore, a systems approach to management will be applied to project management by assigning functional employees to a specific project (Kerzner, 2017).

Similar to the above (PMI, 2017) defines project management as the application of knowledge, skills, tools, and techniques to project activities to meet the project requirements. Through selected suitable applications and integration of the project management process, the project management will be accomplished. Project management allows firms to accomplish projects effectively and efficiently.

Due to specific project needs, it may call for additional knowledge areas including project stakeholders management. The below are identified Ten Knowledge Areas by PMI (PMI, 2017):

- **Project Schedule Management:** a combination of processes essential to manage the timely completion of the project.
- **Project Cost Management:** it is the combination of planning, estimating, budgeting, financing, funding, managing, and controlling costs processes to complete the project within the allocated budget.
- **Project Quality Management:** it is the process to meet stakeholders' expectations through incorporating the organization's quality policy regarding planning, managing, and controlling project and product quality requirements.
- **Project Stakeholder Management:** is the steps essential to identify the people, groups, or organizations that could impact or be impacted by the project, to evaluate stakeholder expectations and their impact on the project, and to create appropriate management strategies for effectively engaging stakeholders in project decisions and implementation.
- **Project Integration Management:** contains the processes and activities to identify, define, combine, unify, and coordinate numerous processes and project management activities within the Project Management Process Groups.

- **Project Scope Management:** it is a required process essential to warrant that the project includes all the work required, and only the work required, to complete the project successfully.
- **Project Resource Management:** it is the required process to achieve the successful completion of the project through identifying, acquiring, and managing the needed resources.
- **Project Communications Management:** contains the processes required to ensure timely and appropriate planning, collection, creation, distribution, storage, retrieval, management, control, monitoring, and ultimate disposition of project information.
- **Project Risk Management:** it is the course of conducting risk management planning, identification, analysis, response planning, response implementation, and monitoring risk on a project.
- **Project Procurement Management:** it is a required process beyond the project team to purchase or acquire products, services, or results.

2.2.5 Project Success

Criteria for project success had well identified including time, budget, and performance goals (Shenhar et al., 2001). The PMBOK measures project success in terms of cost, time, scope, and customer satisfaction (PMI, 2004).

Project success is determined based on finalizing the project objectives within the constraints of time, cost, and quality, plus other project accomplishments, for example, meeting the strategic objectives of the client firm and business success, client satisfaction, advantages for stakeholders and project employees and - other business value accomplishments (Ika, 2013). In addition to the traditional criteria of time, cost, and quality (Yang et. al, 2011) proposed stakeholder satisfaction as project success criteria.

Stakeholders have different views of success, and these might change over different periods (Turner, 2007). Shenhar et al. (2001) stretched the idea of project success by adding criteria, such as primary commercial/business success of the products and prospective for future business growth. Hence, for this study, time, cost, quality, and stakeholder satisfaction were used as project success criteria.

2.3 Theories of Stakeholder Management

This study center on examining the effect stakeholder management on project success by emphasizing on the process of SM that are stakeholder identification, plan stakeholder engagement, manage stakeholder engagement and monitor stakeholder engagement. Consequently, it is important to review the supporting or underpinning theories of stakeholder including the instrumental, descriptive and normative views of stakeholder theory as conceptualized by Donaldson and Preston (1995).

2.3.1 Instrumental Stakeholder Theory

The instrumental stakeholder theory proposes that the organization pay attention only to the stakeholders who can affect the value of the organization. This implies that from a stakeholder management or governance point of view, only those stakeholders with power will be given a voice to secure their contribution to the success of the organization (Spitzeck & Hansen, 2010).

2.3.2 Descriptive Stakeholder Theory

The descriptive view identifies and classifies the different constituents (stakeholders) of an organization without consideration of their legitimacy of their power (Spitzeck & Hansen, 2010). Descriptive/empirical formulations of this view of the stakeholder theory describe and/or explain how organizations or their managers in actual fact behave (Friedman & Miles, 2006) and set out how the organization operates in terms of stakeholder management (Pesqueux & Damak-Ayadi, 2005; Mainardes et al., 2011).

2.3.3 Normative Stakeholder Theory

The normative view considers the value and moral rights of stakeholders being affected by organizational behavior and highlights the rights and duties of the actors involved. It also considers how a balance of concerns of different stakeholders can be achieved (Spitzeck & Hansen, 2010). Normative stakeholder theory is concerned with the moral propriety of the behavior of organizations and/or their managers (Friedman & Miles, 2006), which defines how management should operate in terms of moral principles (Pesqueux & Damak-Ayadi, 2005; Mainardes et al., 2011).

2.4 Theme of Stakeholder Theory

Overall, a central and original purpose of stakeholder theory is to enable managers to understand stakeholders and strategically manage them (Freeman, 1999). The managerial significance of stakeholder management has been emphasized in various studies (Jawahar & McLaughlin, 2001; Mitchell et al., 1997; Rowley & Moldoveanu, 2003) that demonstrate as just a treatment of stakeholders is related to the long-term survival of the organization.

Stakeholder theory has been applied to a number of fields such as research management (Bunn, Savage & Holloway 2002; Elias, Cavana & Jackson 2002), water utilities (Ogden & Watson 1999), and construction project management (Bourne & Walker, 2005). Construction management, as a field of research, has tended to focus on planning and managing the complex array of activities required to deliver a construction project, such as a road or building (Morris, 1994).

Being able to manage construction stakeholders expectations and concerns is a crucial skill for managers of construction projects (Vinten, 2000), as failure to address these has resulted in countless project failures (Bourne & Walker, 2005), primarily because construction stakeholders tend to have the resources and capability to stop construction projects (Lim et al., 2005). Successful completion of construction projects is therefore dependent on meeting the expectation of stakeholders (Cleland, 1995).

Stakeholders, include clients, project managers, designers, subcontractors, suppliers, funding bodies, users, owners, employees and local communities (Newcombe, 2003). As a consequence a robust construction management literature has developed on how to identify and manage stakeholder interests and relationships.

2.5 Practical Guide of Stakeholder Management

Project Management Institute in its Project Management Body of Knowledge Guide define project stakeholder management, stipulates the process of stakeholder management and other issues related to SM. These all were discussed in this subsection of practical guide of stakeholder management.

2.5.1 Stakeholder Management

Project stakeholder management are the steps essential to identify the people, groups, or organizations that could impact or be impacted by the project, to evaluate stakeholder expectations and their impact on the project, and to create appropriate management strategies for effectively engaging stakeholders in project decisions and implementation.

The courses support the work of the project team to examine stakeholder expectations, measure the degree to which they impact or are impacted by the project, and develop strategies to effectively engage stakeholders in assistance of project decisions and the planning and implementation of thework of the project.

2.5.2 Project Stakeholder Management Process

1. Identify Stakeholders

It is the first step in the process and the course of identifying project stakeholders repeatedly and analyzing and recording relevant information about their interests, involvement, interdependencies, influence, and prospective impact on project success. It will contribute to helping the project team to identify the proper considerations for engagement of every stakeholderor group of stakeholders. This process is carried out periodically on every phase of the project as required (PMI, 2017).

2. Plan Stakeholder Engagement

After identification of the stakeholders, the course of developing procedures to participate projectstakeholders based on their needs, expectation, interests, and potential influence on the project willbe performed at the step called plan stakeholder engagement. It is resulted in offering an actionable plan to cooperate effectively with stakeholders. This processhas to be carried out

periodically on every phase of the project as required (PMI, 2017).

3. Manage Stakeholder Engagement

It is the third step in the process and the course of communicating, working with stakeholders to meet their requirements and expectations, solve issues, and apply appropriate stakeholder engagement. The project manager will get benefit from this step by enhancing support and reducing resistance from stakeholders. This process has to be carried out periodically on every phase of the project as required (PMI, 2017).

4. Monitor Stakeholder Engagement

The last step in the process is the course of monitoring stakeholder engagement. It is the monitoring of stakeholders' interactions and modifying strategies for engaging stakeholders through the revision of engagement strategies and plans. This step maintains or increases the efficiency and effectiveness of stakeholder engagement activities as the project grows and its environment alterations. The process has to be carried out periodically on every phase of the project as required (PMI, 2017).

2.5.3 Key Concepts for Project Stakeholder Management

Naturally, all project has stakeholders who are impacted by or can impact the project positively or negatively. Some stakeholders may have some degree of ability to influence the project's work or outcomes; others may have a substantial influence on the project and its expected outcomes. Academic research and analyses of high-profile project disasters highlight the significance of a structured approach to the identification, prioritization, and engagement of every stakeholder. The capacity of the project manager and team to properly identify and engage every stakeholder in a proper way means the difference between project success and failure (PMI, 2017).

To increase the probabilities of success, the course of stakeholder identification and engagement should start shortly next to the project charter has been approved, the project manager has been assigned and the team starts to form (PMI, 2017).

As a projective objective, stakeholder satisfaction has to be identified and managed. The key to effective stakeholder engagement is a focus on constant communication with all stakeholders, including team members, to realize their needs and expectations, address issues as they happen.

For effective stakeholder management, it is critical to manage contradictory interests and foster proper stakeholder engagement in project decisions and actions (PMI, 2017).

The course of identifying and engaging stakeholders for the advantage of the project is iterative. Although the processes in project stakeholder management are described, only once, the activities of identification, prioritization, and engagement should be revised and updated consistently and at least at the times when (PMI, 2017):

- The project moves through different stages in its life cycle,
- Current stakeholders have no longer participated in the task of the project or new stakeholders become members of the project's stakeholder community, or
- There are considerable changes in the organization or the broader stakeholder community.

2.5.4 Trends and Emerging Practices in Project Stakeholder Engagement

Wider definitions of stakeholders are being developed that enhance the traditional classifications of employees, suppliers, and shareholders to include groups such as regulators, lobby groups, environmentalists, financial establishments, and the media. There are others who simply consider themselves as stakeholders—they see they will be affected by the results of the project (PMI, 2017)

The following are the trends and emerging practices for project stakeholder management but are not limited to (PMI, 2017)

- Identifying every stakeholder, not just a limited set;
- Ensuring that all team members have participated in stakeholder engagement activities;
- Revising the stakeholder community recurrently, often in parallel with evaluations of single project risks;
- Consulting with stakeholders who are most suffering from the results of the project through the concept of co-creation. Co-creation places greater importance on including affected stakeholders in the team as partners; and
- Taking the importance of effective stakeholder engagement, both positive and negative. A positive value will be on consideration of gain resulting from higher levels of active support from stakeholders' predominantly powerful stakeholders. A negative value can be

generated by measuring the true costs of not participating stakeholders effectively, directing to product loss of organizational or project reputation.

2.5.5 Tailoring Considerations

Because every project is unique, the project manager may need to modify the method project stakeholder management processes are applied. Considerations for adapting include but are not limited to (PMI, 2017)

- Stakeholder diversity. How many stakeholders are there? How dissimilar is the culture within the stakeholder community?
- Complexity of stakeholder interactions. How complex are the relations within the stakeholder community? The high the number of stakeholders or stakeholder groups take part in, the more complex the networks of information and misinformation the stakeholder may receive.
- Communication technology. What communication technology is on hand? Are there active methods are in place that will be achieved from the technology?

2.5.6 Considerations for Agile/Adaptive Environments

Since projects encounter a high rate of change, require active engagement and participation with project stakeholders. To enable early, fruitful discussion and decision-making, adaptive teams engage with stakeholders directly instead of going through the structure of management. Most of the time client, user, and developer exchange information in a changing co-creative process that leads to more stakeholder involvement and higher satisfaction. Consistent relations with the stakeholder community on every phase of the project lessen the risk, build trust, and support changes earlier in the project cycle, thus decreasing costs and increasing the chance of success for the project. Agile techniques promote aggressive transparency by speeding up the exchange of information throughout the organization. Applying an immediate misalignment, dependency, or other issue linked to the changing project requires inviting any stakeholders to project meetings and reviews or posting project artifacts in public spaces (PMI, 2017).

2.6 Empirical Review

In this section, the previously conducted studies by (Fraz et al., 2016; Kelbessa, 2016; Macharia, 2013; El-Naway, Mahdi, Badwy, and Al-Deen, 2015) regarding the correlation between stakeholder management and project success are discussed. Most authors' findings revealed that stakeholder management is directly correlated to project success.

Macharia (2013) conducted a study to determine the effect of stakeholders' engagement in project identification, project planning, project execution, and project review on project outcome. The findings tell us that stakeholders' engagement in project execution contributed most to project outcome.

Fraz et al., (2016) also conducted a study entitled "the effect of project management practices on project success in make-to-order manufacturing organizations". From the collected data using a questionnaire, they found out that stakeholder management as one of the ten project management practices knowledge areas under the study had significantly correlated with project success. Stakeholder management had significantly correlated with project success.

The main project stakeholder management input factors that affected the performance of the project stakeholder management process from the findings of Kelbessa (2016) were Information Inputs Groups, Management Factor Groups, and Stakeholder Estimation. Her study was the role of project stakeholder management process on public project performance in Ethiopia. The findings also identified the main problem areas in the project stakeholder management process. Stakeholder identification and project stakeholder management plan development were inadequately performed according to the studied projects.

Nauman and Piracha (2016) aimed to identify the most significant project stakeholders and investigate the relationship between them. The critical success factors (CSFs) approach had used to identify the essentials of project stakeholder management for effectively managing construction projects. Results reveal that the client's end-users had ranked as the most important project stakeholders. Moreover, exploring stakeholders' needs and constraints to projects was found to be the most critical factor for successful project stakeholder management, whereas keeping and promoting a good relationship by building trust and commitment among stakeholders stood second.

According to El-Naway, Mahdi, Badwy, and Al-Deen (2015), implementing effective stakeholders' management in construction project delivery has an extreme impact on the successful outcome of the project. The capability to manage heterogeneous individuals with an interest in the project leads to the success of building construction. Since stakeholders in a construction project have substantial interests and needs, their requirements must be understood during the course of the construction process.

El-Naway, Mahdi, Badwy, and Al-Deen (2015) provided an approach for effective management of stakeholders in the construction projects.

1. Exploring stakeholders' needs and constraints in projects,
2. Ensuring effective communication for all project stakeholders,
3. Identifying stakeholders,
4. Managing Stakeholders with social responsibilities,
5. Defining and formulating a clear statement of Project Missions,
6. Promoting a good relationship with stakeholders,
7. Understanding the areas of stakeholders' interests and
8. Prioritizing stakeholders by their power and influence on the project.
9. Formulating appropriate strategies to manage stakeholders,
10. Building trust between project top management and the most engaged stakeholders in the project.

2.7 Conceptual Framework

Project stakeholder management contains the steps essential to identify the people, groups, or organizations that could impact or be impacted by the project, to evaluate stakeholder expectations and their impact on the project, and to create appropriate management strategies for effectively engaging stakeholders in the project decisions and implementation. The courses support the work of the project team to examine stakeholder expectations, measure the degree to which they impact or are impacted by the project, and develop strategies to effectively engage stakeholders in assistance of project decisions and the planning and implementation of the work of the project (PMI, 2017).

The concept according to Li et al. (2011) stakeholder management is the effective management of interactions among project stakeholders. As Karlsen (2002) and Bourne and Walker (2006) defined stakeholder management with diverse statements, the concept comprises the management of activities linked to project stakeholders. The latter however implicit that the management process encourages the use of active project managers to lessen the negative effect of stakeholder activities and assure stakeholder contribution to accomplish project goals.

According to El-Naway, Mahdi, Badwy, and Al-Deen (2015), implementing effective stakeholders' management in construction project delivery has an extreme impact on the successful outcome of the project. The capability to manage heterogeneous individuals with an interest in the project leads to the success of building construction. Since stakeholders in a construction project have substantial interests and needs, their requirements must be understood during the course of the construction process.

The existing research recommends that project success includes not only the triangle factors i.e. cost, time, and quality, but also the effective management of the stakeholders engaged (Jepsen & Eskerod, 2013). Creating the relationship between a project and stakeholders through stakeholder management is important to the success of projects (Scolobig and Späth, 2017). In addition, Späth and Scolobig (2017), stress that the drive of a project is to offer benefit to its stakeholders.

As per the research published in the international journal of project management by (Kevin Ogonji Muluka et al., 2021) project success was considered as a dependent variable while stakeholder management processes were considered as independent variables.

According to Tero (2014) study, stakeholders' identification, engagement, and empowerment in project review, outcome, and stakeholders' engagement in project execution are stakeholder management processes that influence project success. Macharia (2013) also conducted a study to determine the effect of stakeholders' engagement in project identification, project planning, project execution, and project review on project outcome. The findings tell us that stakeholders' engagement in project execution contributed most to project outcome. Macharia (2013) in his study implies that the project is successful when meets the constraints of schedule requirements, stakeholders satisfaction, and cost constraints.

Based on the above theories and conducted studies including Project Management Institute PMBOK guide sixth edition 2017, a conceptual framework has been proposed as the below. The research mainly emphasized on process of project stakeholder management based on (PMI, 2017).

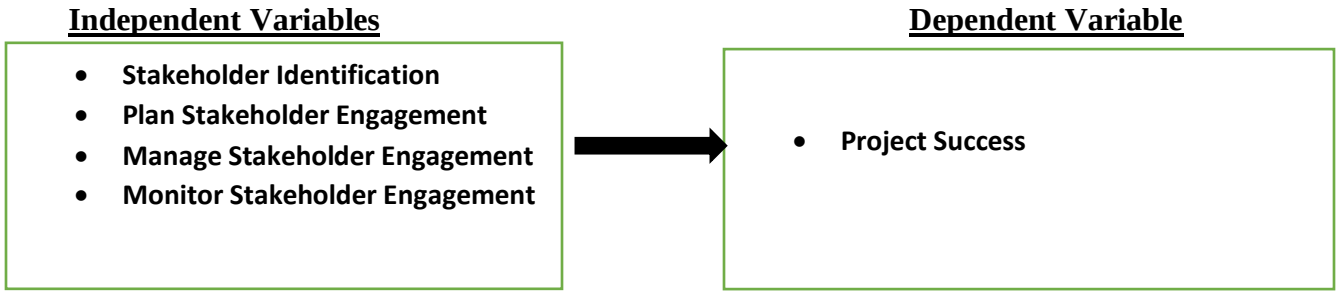

Figure 2.1: Conceptual framework adopted from (Atamba, 2016).

2.8 Research Hypotheses

Based on the reviewing theoretical, empirical pieces of literature and practical guides the following research hypotheses developed.

H1: There is a positive relationship between stakeholder identification and project success.

H2: Plan stakeholder engagement and project success has a positive relationship

H3: There is a positive relationship between manage stakeholder project success.

H4: Monitor stakeholder engagement and project success has a positive relationship

Chapter Three

3. Research Methods

3.1 Research Approach

The researcher uses a quantitative research approach through a structured questionnaire method in evaluating the role of project stakeholder management on project success.

3.2 Research Design

The main purpose of this study is to examine and analyze the effect of stakeholder management on project success with the case of Ethiopian Construction Works Corporation. In doing so, the thesis has described, and critically evaluate the identification of stakeholders, plan stakeholder engagement, manage stakeholder engagement, and monitor stakeholder engagement and its impact on the project success of the organization.

Therefore, the study has been conducted through a joint of descriptive and explanatory research design to examine the effect of stakeholder management on project success. Because both designs still support the researcher to describe and explain the stakeholder management relation to project success.

As a descriptive study, it describes the existing ongoing practices of stakeholder management and provides meanings to establish a conclusion based on the data. As explanatory research, explains, understands predict the cause and effect relationship between stakeholder management and project success.

3.3 Population and Data Collecting Procedure

3.3.1 Target Population

Table 3.1. The Nature of Target Population

S. No.	Position	Population Size
1	Project Manager	1
2	Project Engineering Service Team Leaders	2
3	Project Support Team Leaders (HR and Finance)	2
4	Support Team Leaders at Head Office (HR, Finance, Plan and Construction, Contract and Others)	4

5	Project Team Professionals (Engineer, HR Officer, Accountant and Others)	22
6	Project Support Professionals (Engineer, HR Officer, Accountant and Others at Head Office)	21
	Total Population	52

3.3.2 Data Collecting Procedure

The researcher applied census because the population at the project and head office is a manageable size of the population. To collect the data, the questionnaires had distributed to all of the target population. Accordingly, the researcher has distributed 52 questionnaires.

3.4 Data Collection Methods

To conduct the research, both primary and secondary data sources were applied properly. The primary data were collected from the target population using a self-administered and structured questionnaire, which was adapted from Marta Worku (2018), and Jackson M. and Dr. Patrick M. (2018) with some modifications for the suitability of this study. This quantitatively designed questionnaire was measured through five points Likert scale to understand the response of respondents. The five-point Likert scale questionnaire is structured through one dependent variable (project success) to be measured by four independent variables (stakeholder identification, plan stakeholder engagement, manage stakeholder engagement, and monitor stakeholder engagement). Each independent variable and dependent variable has its items on the questionnaires.

3.5 Validity and Reliability

3.5.1 Validity

Validity refers to how accurate an instrument is at measuring what it is trying to measure. To this end, the content or validity of the data collection instrument was determined through discussion with the research advisor.

3.5.2 Reliability of the Measurement

Reliability is all about consistency. It measures the consistency of responses across either all the questions or a sub-group of the questions from your questionnaire (Saunders, 2009). The coefficient of reliability was measured through Cronbach's Alpha. The value of the test lay

between zero and one. The higher value indicates high internal consistency in the items. According to George and Mallery (2003) reliability test scale Excellent (1-0.9), Good (greater than 0.8), Acceptable (greater than 0.7), Questionable (greater than 0.6), Poor (greater than 0.5) & Unacceptable (less than 0.5). Below is the reliability analysis of the study. The overall Cronbach Alpha's coefficient for all items of this study is 0.809. Hence, the expected scales used in this study are beyond the acceptable scale.

Table 3.2. Reliability Statistics

Variables	**No. of Items**	**Cronbach's Alpha**
Stakeholders Identification	5	0.797
Plan Stakeholders Engagement	5	0.749
Manage Stakeholders Engagement	5	0.811
Monitor Stakeholders Engagement	5	0.786
Project Success	4	0.714
Overall	24	0.809

3.6 Method of Data Analysis

The study was conducted based on a quantitative research approach. Therefore quantitative data analysis techniques were used in the study. The collected data were analyzed through the SPSS version 23 software package. In doing the quantitative analysis, the researcher conducted descriptive data analysis such as frequencies, percentages, the mean, and standard deviation to assess the effect of project stakeholder management on project success. Moreover, Pearson correlation and multiple regression analysis were applied to test the hypothesis of the research, to quantify the magnitude and direction of each independent variable (stakeholders identification, plan stakeholders engagement, manage stakeholder engagement, and monitor stakeholders engagement), and measure the effects on measured variable (project success).

3.7 Time Horizon of the Study

The study limit itself to a single period time scope. The study is a one-time or cross-sectional one in which data are accumulated only a single time, maybe over a time of days or weeks, or months, to respond to the research question (Sekaran & Bougie (2016).

3.8 Research Model

In this study, the project success is the dependent variable, which is measured by the predictor variables: stakeholder identification, plans stakeholders engagement, manage stakeholder engagement, and monitor stakeholder engagement.

For this study the below regression model was used.

$PS=\beta o+\beta 1SI+\beta 2PSE+\beta 3MSE+\beta 4MOSE+ei$

PS=Project Success PSE=Plan Stakeholder Engagement

MSE=Manage Stakeholder Engagement SI=Stakeholder Identification

MOSE=Monitor Stakeholder Engagement ei= error terms

Chapter Four

4. Result of the Study, Interpretation, and Discussion

4.1. Introduction

Out of the total 52 questionnaires that were distributed to respondents, 48 (92.3%) questionnaires were properly filled and returned. Only 4 (7.7%) questionnaires were unreturned and the analysis was conducted based on returned 48 questionnaires, which has a 92.3 % response rate. The response rate is enough for further analysis.

4.2. Demographic Information of Respondents

Table 4.1. Demographic Information

Demographic Items	**Category**	**Frequency**	**Percentage**	**Total**
Gender	Male Female	32 16	66.7 33.3 100	48
Age Category	26-30 31-35 36-40	35 12 1	72.9 25.0 2.1 100	48
Education	Undergraduate Postgraduate	39 9	81.2 18.8 100	48

Current Position	Project Manager Project Engineering Service Team Leader Project Support Team Leader Project Team Professional at Project Support Team Leader at Head Office Support Professional at Head Office	1 2 2 22 2 19	2.1 4.2 4.2 45.8 4.2 39.5 100	48
Work Experience	1-5 Years 6-10 Years 11-15 Years	35 10 3	72.9 20.8 6.3 100	48

Source: Own survey, 2022

Relying on table 4.1, 66.7% (32) of employees who were participated in the project were males compared to females who accounted for 33.3% (16) out of the total and less in ratio. In line with demographic items, the next item is age. Only 1 respondent or 2.1% of the total was under the age range of 36-40 preceding the age range of 31-35, they were 12 in number comprising 25% of the total. The majority of the respondents accounted for 72.9% (35) were under the age range of 26-30. This indicates that the respondents under this category were young.

When we come to the level of education, 81.2% (39) of the respondents have completed their first degree and the rest of 18.8% (9) have earned their second or postgraduate degree. It implies that the respondents were professionals who can read and understand the questionnaire.

The current position of the respondents are classified as project manager taking 2.1% (1), project engineering service team leader 4.2% (2), project support team leader 4.2% (2), Support team leader at head office accounted 4.2% (2). Support team professionals including Engineering, HR, Finance, Cost Estimation, Procurement and other professionals at the head office take 39.5% (19) next to the majority of project team professionals at the project. Project team professionals include

Engineering, HR, Finance, Procurement and other professionals who are the majority of the participants on the project accounts for 45.8% (22).

The last demographic item is work experience. The majority of respondents fall under the work experience category of 1-5 years comprising 72.9% (35). The respondents who were under the category of 6-10 years of work of experience share 20.8% (10) out of the total and the least in number but most experienced employees who were participated in the project accounted for 6.3% (3). Most respondents were under the work experience category of 1-5 years; this is because they are younger. This also implies that most of the respondents were mature and the data collected can be trusted.

4.3. Descriptive Analysis of Measurement Items

Every decision regarding the mean value in descriptive analyses is made based on the mean scope measurement remarked by (Zaidatol, 2009). A mean score less than 3.39 is taken as low, a mean score ranges from 3.40 to 3.79 is taken as moderate and finally, 3.80 and the more mean score is considered as high.

To make a decision on the value of standard deviation, Joshka's decision rule for standard deviation was applied. Based on Joshka (2014), 'estimate the coefficient of variation (CV=standard deviation / Mean), a CV >= 1 shows a relatively high variation, while a CV < 1 indicates low variation. Hence, distributions with a coefficient of variation higher than 1 are considered being high variance whereas those with a CV lower than 1 are considered to be low-variance.

Table 4.2. Description of Items in Project Success

Item Code	Description of Items
PSQ1	The project was completed as scheduled
PSQ2	The project cost was incurred as allocated
PSQ3	The project was meet the set standard/quality
PSQ4	The project was satisfied stakeholders

Table 4.3. Descriptive Statistics: Project Success

Item Code	PSQ1	PSQ2	PSQ3	PSQ4
Valid N	48	48	48	48
Mean	3.90	4.33	4.65	4.56
Std. Deviation	1.207	1.098	.601	.649
Minimum	1	1	3	3
Maximum	5	5	5	5
Average Mean Value = 4.3594				
Overall Std. Deviation =.46100				

Source: Own survey, 2022

Relying table 4.3, item PSQ3 has the highest mean value (4.65) followed by PSQ4 (4.56) and the remaining item PSQ1 and PSQ2 has a mean value of 3.90 and 4.33 respectively. The total mean value of project success is 4.3594. This implies that the selected project was successful, it meets the success criteria of schedule, budget, quality, and, stakeholder satisfaction. An overall standard deviation of the items is 0.46100 representing uniform responses for each item.

Table 4.4. Description of Items in Stakeholder Identification

Item Code	Description of Items
SIQ1	Needs and expectations of stakeholders were explored
SIQ2	Stakeholders area of interest was identified at the beginning of the project
SIQ3	Stakeholders influences were predicted at the beginning of the project
SIQ4	Key stakeholders were properly identified
SIQ5	Identification of stakeholders at the beginning of the project will lay the foundation for the project's success

Table 4.5. Descriptive Statistics: Stakeholder Identification

Item Code	SIQ1	SIQ2	SIQ3	SIQ4	SIQ5
Valid N	48	48	48	48	48
Mean	3.71	3.75	3.27	3.58	3.90
Std. Deviation	1.071	.978	1.086	1.088	1.077
Minimum	1	2	1	1	1
Maximum	5	5	5	5	5
Average Mean Value = 3.6417 **Overall Std. Deviation =.53944**					

Source: Own survey, 2022

The respondents agreed to the statements of SIQ1, SIQ2, SIQ3, and SIQ4 moderately as shown by a mean score of 3.71, 3.75, 3.27, and 3.58. This implies there was a moderate practice of stakeholders' identification. The respondents again confirmed that the identification of stakeholders at the beginning of the project would lay a foundation for project success with a mean value of 3.90. The average mean value of 3.6417 indicates that the overall stakeholder identification practice is somehow good. There was also the consistency of responses by participants of the project since the standard deviation is 0.53944.

Table 4.6. Description of Items in Plan Stakeholder Engagement

Item Code	Description of Items
PSEQ1	Stakeholder engagement plan provides an actionable plan to interact effectively with stakeholders
PSEQ2	There is a developed strategy that answers any stakeholders' interests and constraints
PSEQ3	Plan stakeholder engagement identifies how the project will affect stakeholders

PSEQ4	Plan stakeholder engagement enables the project manager to prepare different mechanisms to effectively engage stakeholders in the project and manage their expectations
PSEQ5	Plan stakeholder engagement leads to achieving project objectives

Table 4.7. Descriptive Statistics: Plan Stakeholder Identification

Item Code	**PSEQ1**	**PSEQ2**	**PSEQ3**	**PSEQ4**	**PSEQ5**
Valid N	48	48	48	48	48
Mean	3.65	3.50	3.63	3.77	4.04
Std. Deviation	.934	1.031	1.104	1.036	1.010
Minimum	2	2	1	1	1
Maximum	5	5	5	5	5
Average Mean Value = 3.7167					
Overall Std. Deviation =.50501					

Source: Own survey, 2022

Based on the response of the participants regarding the presence of a developed strategy that answers any stakeholder interests and constraints, the mean value shows 3.50. As presented in the above table, item PSEQ5 has the highest mean value of 4.04 followed by 3.77, 3.65, 3.63 mean values of item PSEQ4, PSEQ1, and PSEQ3 respectively. The mean value of 4.04 shows that plan stakeholder engagement leads to achieving project objectives. Except for item PSEQ5, all items of the variable are laid on moderate value. The overall mean value of the variable is 3.7167 with a standard deviation of 0.50501. This indicates plan stakeholder engagement somehow provides an actionable plan to interact effectively with stakeholders, identifies how the project will affect stakeholders, and enables the project manager to prepare different mechanisms to effectively engage stakeholders in the project and manage their expectations. The standard deviation shows

there is not much difference in responses. Therefore, the company needs to make some improvements regarding plan stakeholder engagement.

Table 4.8. Description of Items in Manage Stakeholder Engagement

Item Code	Description of Items
MSEQ1	You were encouraging communication with stakeholders
MSEQ2	Stakeholders were engaged on the selected project workshops, events and demos
MSEQ3	Building partnership is a good approach for involving stakeholders
MSEQ4	Stakeholder engagement is considered vital for project success
MSEQ5	Stakeholder engagement in identifying, mitigating, and reassessing risks contributes to project success

Table 4.9. Descriptive Statistics: Manage Stakeholder Engagement

Item Code	MSEQ1	MSEQ2	MSEQ3	MSEQ4	MSEQ5
Valid N	48	48	48	48	48
Mean	3.58	3.54	3.56	3.63	3.60
Std. Deviation	1.108	1.031	1.183	.959	1.144
Minimum	1	2	1	2	1
Maximum	5	5	5	5	5
Average Mean Value = 3.5833					
Overall Std. Deviation =.54082					

Source: Own survey, 2022.

The respondents were asked if there was stakeholder engagement on the project demos, workshops, and events and they moderately agreed with a mean value of 3.54. Respondents who were participated in the project somehow confirmed with a mean value of 3.58 that they were encouraging communication with stakeholders. The remaining items of MSEQ3, MSEQ4, and MSEQ5 shows a mean value of 3.56, 3.63, and 3.60. The overall average mean value is 3.5833 and the value is considered as a moderate mean value. This implies that there was a moderate stakeholder engagement on the project and the respondents averagely believe that building partnership is a good approach for involving stakeholders and they considered stakeholder engagement as vital for project success. They also somehow confirmed that engaging stakeholders in identifying, mitigating, and reassessing risk contribute to project success. The standard deviation is 0.54082. Which indicates uniformity between employee responses.

Table 4.10. Description of Items in Monitor Stakeholder Engagement

Item Code	**Description of Items**
MOSEQ1	You have had information about the status of stakeholders' engagement
MOSEQ2	You included corrective and preventive actions to improve the level of stakeholder engagement
MOSEQ3	Updating of information about stakeholder community is necessary
MOSEQ4	The stakeholders' register was updated with information as a result of monitoring stakeholders engagement
MOSEQ5	Monitoring stakeholders' engagement maintain or increase the effectiveness of stakeholders engagement activities through the life cycle of the project

Table 4.11.Descriptive Statistics: Monitor Stakeholder Engagement

Item Code	**MOSEQ1**	**MOSEQ2**	**MOSEQ3**	**MOSEQ4**	**MOSEQ5**
Valid N	48	48	48	48	48
Mean	3.56	3.27	3.52	3.69	3.83
Std. Deviation	.897	1.125	1.130	1.075	1.059
Minimum	2	1	2	2	2
Maximum	5	5	5	5	5
Average Mean Value = 3.5750 **Overall Std. Deviation =.60723**					

Source: Own survey, 2022

As presented in the above table 4.11, item MOSEQ5 has the highest mean value of 3.83 followed by 3.69, 3.56 and 3.52 mean values of item MOSEQ4, MOSEQ1, and MOSEQ3 respectively. Item MOSEQ2 has the lowest mean value of 3.27. This shows the company has to include corrective and preventive actions to improve the current level of stakeholder engagement. However, the total mean value is 3.5750 and implied that the company is good at monitoring stakeholder engagement practices. The standard deviation of 0.60723 indicates the small difference in responses of the project participants.

Table 4.12. Summary of Descriptive Statistics of All Variables

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Stakeholders Identification	48	2.80	4.60	3.6417	.53944
Plan Stakeholders Engagement	48	2.40	4.40	3.7167	.50501
Manage Stakeholders Engagement	48	2.40	4.40	3.5833	.54082
Monitor Stakeholders Engagement	48	2.20	4.60	3.5750	.60723
Project Success	48	2.75	5.00	4.3594	.46100
Valid N (listwise)	48				

Source: Own survey, 2022

The above table 4.12 shows the summary of the mean and standard deviation of each variable concerning the minimum and maximum values. Accordingly stakeholders identification has (Mean=3.6417, Std. D=0.53944), plan stakeholders engagement (Mean=3.7167, Std. D=0.50501), manage stakeholder engagement (Mean=3.5833, Std. D=0.54082) monitor stakeholder engagement (Mean=3.5750, Std. D=0.60723), and project success has (Mean=4.3594, Std. D=0.46100).

The above statistics show that monitor stakeholder engagement has the lowest mean value relative to other independent variables. Based on Zaidatol (2009), it is greater than the value of 3.39, which is taken as low. However, the company has to give more concern to it to be successful on other projects. The descriptive statistics show project success has the highest mean value (M=4.3594). It shows the project was successful in terms of schedule, budget, quality, and stakeholder satisfaction.

Generally, the mean value of the variables was found between 3.5833 and 4.3594. This shows the total stakeholder management process practice of ECWC was good concerning the selected project and contribute to the successful accomplishment of the ICT B+G+7 Incubation Center Building.

Therefore, ECWC should continue implementing stakeholder management practices and be encouraged to apply the practice to other projects beyond this level.

4.4. Correlation Analysis of the Data

Table 4.13: Conventional Approach to Interpreting a Correlation Coefficient

Absolute Magnitude of the Observed Correlation Coefficient	Interpretation
0.00–0.10	Negligible correlation
0.10–0.39	Weak correlation
0.40–0.69	Moderate correlation
0.70–0.89	Strong correlation
0.90–1.00	Very strong correlation

Source: Schober, P., Boer, C., & Schwarte, L. A. (2018, p.1765)

Table 4.14: Correlations Analysis

Correlations						
		Stakeholders Identification	Plan Stakeholders Engagement	Manage Stakeholders Engagement	Monitor Stakeholders Engagement	Project Success
Stakeholders Identification	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	48				
Plan Stakeholders Engagement	Pearson Correlation	.438**	1			
	Sig. (2-tailed)	.002				
	N	48	48			
Manage Stakeholders Engagement	Pearson Correlation	.329*	.366*	1		
	Sig. (2-tailed)	.022	.011			
	N	48	48	48		
Monitor Stakeholders Engagement	Pearson Correlation	.305*	.606**	.286*	1	
	Sig. (2-tailed)	.035	.000	.048		
	N	48	48	48	48	
Project Success	Pearson Correlation	.602**	.657**	.554**	.603**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	48	48	48	48	48
**. Correlation is significant at the 0.01 level (2-tailed).						

Source: Own survey, 2022

The above correlation analysis was made to determine whether there is a positive correlation between independent variables and a dependent variable or not. Basing the above table one can infer that there is a significant positive association between independent variables of stakeholder identification, plan stakeholder engagement, manage stakeholder engagement, monitor stakeholder engagement, and project success.

A Person correlation between plan stakeholder engagement and project success is the strongest and positive relation relative to all variables. Plan stakeholder engagement is significantly and positively correlated with project success ($r=.657$, $n=48$, $P<0.01$) at a significant level of 0.000, 2 tailed. Referring to Schober, Boer & Schwarte (2018) a correlation coefficient lays between 0.40 and 0.69 is a moderate correlation.

Following plan stakeholder engagement, monitor stakeholder engagement, stakeholder identification, and manage stakeholder engagement have an r-value of .603, .602, .554 respectively. Here, indicates there is a positive and significant association with project success at p-value less than 0.01, $p=0.000$, 2 tailed.

According to Schober, Boer & Schwarte (2018), a Pearson correlation coefficient lays in the range from 0.40 to 0.69 is taken as moderate. Therefore, there is a moderate correlation between stakeholder management and project success. This also implies the basic precondition is met to check underlying assumptions of regression.

4.5. Regression Analyses

Since the main objective is to determine the effect of stakeholder management on project success, the researcher has run multiple regression analyses on whether the formulated hypotheses have an impact on project success or not.

4.5.1. Linearity

Besides the below linearity test, the linear association between variables is determined through correlation analysis. Therefore, here in this study, the relationship between project stakeholder management and project success is linear.

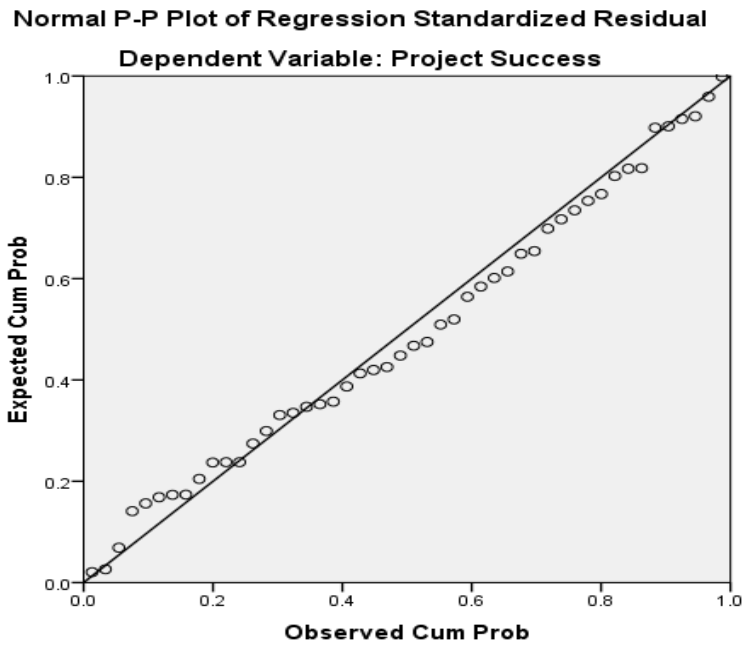

Figure 4.1: Linearity test

4.5.2 Normality

The researcher can understand the distribution of any value of a dependent variable in relation to the independent variables in the model through a normality test. Therefore, a normality test was conducted in order to know the error term distribution is normal. As per the below histogram figure, the assumption of normality is not completely violated and it is a bell-shaped one.

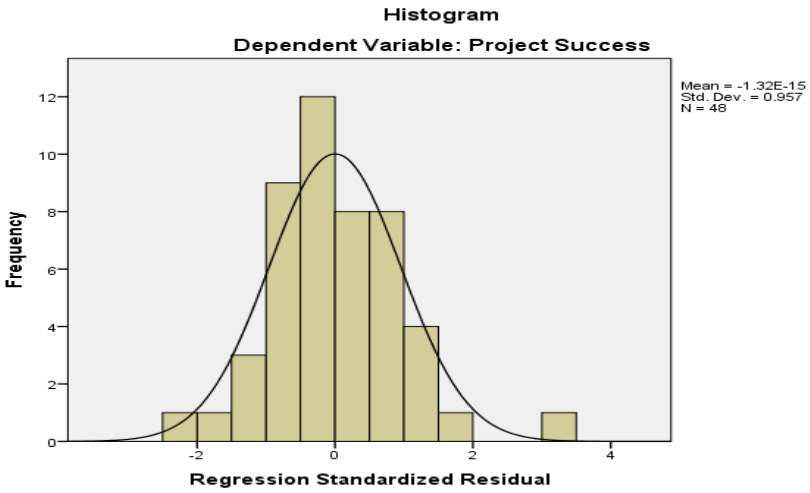

Figure 4.2: Normality test

4.5.3. No Perfect Multi-collinearity

To determine the absence of a multi-collinearity problem, a collinearity diagnostic test was made and the result shows tolerance ranges from 0.543 to 0.826 that is none of them were below 0.2. Variance Inflation Factor (VIF) lays from 1.211 to 1.840, it is below 10. Therefore, there is no perfect multi-collinearity and one of the underlying assumptions of regression is fulfilled.

Table 4.15: Collinearity Statistics

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Stakeholders Identification	.774	1.292
	Plan Stakeholders Engagement	.543	1.840
	Manage Stakeholders Engagement	.826	1.211
	Monitor Stakeholders Engagement	.627	1.596

Source: Own survey, 2022

4.5.4. Homoscedasticity

The other underlying assumption of regression is homoscedasticity. The presence of homoscedasticity is determined through the Breusch-Pagan test and the p-value is ($p>0.05$). According to Samerkhanova & Kadochnikova (2015), if the value of p is greater than 0.05 looking into ANOVA implies the absence of heteroscedasticity problem.

Table 4.16: Breusch-Pagan Test for Homoscedasticity

ANOVA						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.048	4	.012	.886	.480[b]
	Residual	.585	43	.014		
	Total	.633	47			

Source: Own survey, 2022

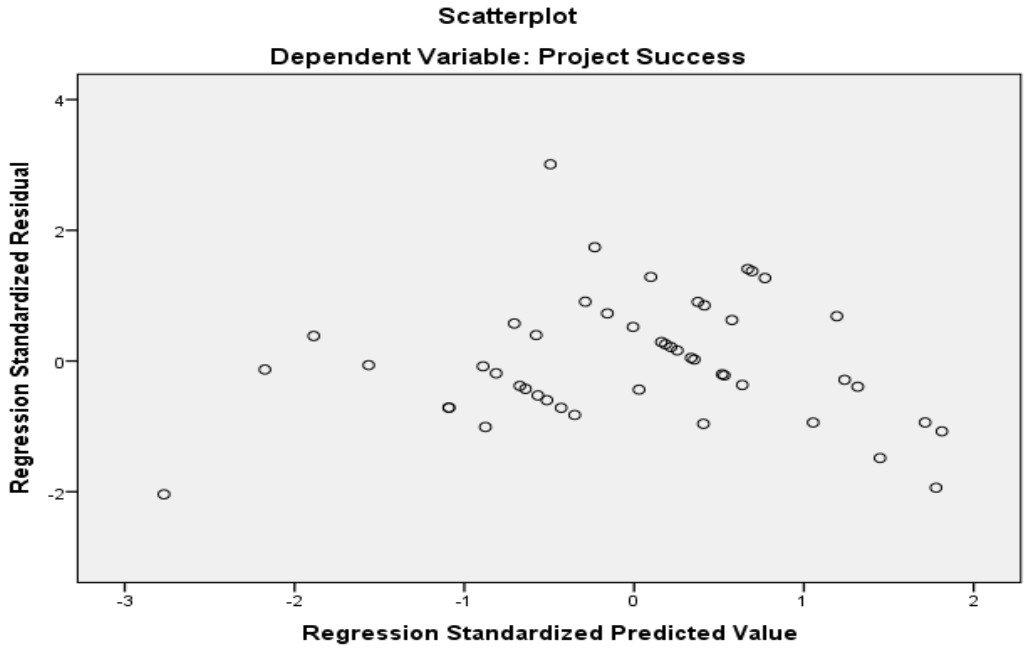

Figure 4.3: Test for homoscedasticity

4.5.5. Model Summary

Table 4.17 for model summary indicates that adjusted R square is 0.645 or 64.5% which means 64.5 % variation in project success is explained through a change in all independent variables of stakeholder identification, plan stakeholder engagement, manage stakeholder engagement, and monitor stakeholder engagement included in the model. However, the remaining 35.5% variation in project success can be explained by other or unobserved variables than the independent variables in this model.

Table 4.17: 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	Durbin-Watson
1	.821[a]	.675	.645	.27484	.675	22.308	4	43	.000	1.192

a. Predictors: (Constant), Monitor Stakeholders Engagement, Manage Stakeholders Engagement, Stakeholders Identification, Plan Stakeholders Engagement

b. Dependent Variable: Project Success

Source: Own survey, 2022

4.5.6. Summary of ANOVA

Through tested ANOA, the model is significance in explaining the relationship between independent and dependent variables. As presented in the below table, the significance value is less than 0.05. Therefore, we can conclude that there is a linear relationship between independent variables and project success, where the model is fit and acceptable.

Table 4.18: Summary of ANOVA

ANOVA[a]						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	6.740	4	1.685	22.308	.000[b]
	Residual	3.248	43	.076		
	Total	9.988	47			

a. Dependent Variable: Project Success

b. Predictors: (Constant), Monitor Stakeholders Engagement, Manage Stakeholders Engagement, Stakeholders Identification, Plan Stakeholders Engagement

Source: Own survey, 2022

4.5.7. Multiple Regression Coefficients

Table 4.19 indicates the Beta coefficient and p-value of all independent variables with their respective standard error. The Beta value measure how strongly each predictor or independent variable (stakeholder identification, plan stakeholder engagement, manage stakeholder engagement and monitor stakeholder engagement) affects the dependent variable (project success) in the model. The independent variables are stakeholder identification, plan stakeholder engagement, manage stakeholder engagement, and monitor stakeholder engagement with their beta value of 0.271, 0.227, 0.238, and 0.209 respectively.

Table 4.19: Multiple Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.928	.369		2.517	.016
	Stakeholders Identification	.271	.084	.317	3.204	.003
	Plan Stakeholders Engagement	.227	.108	.249	2.112	.041
	Manage Stakeholders Engagement	.238	.082	.280	2.921	.006
	Monitor Stakeholders Engagement	.209	.083	.275	2.506	.016

a. Dependent Variable: Project Success

Source: Own survey, 2022

4.5.8. Hypothesis Testing

Based on the above multiple regression coefficients, previously formulated hypotheses results discussed below.

H1: There is a positive relationship between stakeholder identification and project success.

As it is indicated in the above coefficient table 4.19 stakeholder identification has a beta value of 0.271 and it is significant at ($p<0.05$) This means 27.1% change in project success is due to a change in stakeholder identification holding the other independent variables constant. It shows that stakeholder identification significantly affects the selected project's success. Hence, the hypothesis is accepted.

H2: Plan stakeholder engagement and project success has positive relationship

Table 4.19 shows that plan stakeholder engagement has a beta value of 0.227 at a significant value of ($p<0.05$). This implies that a 22.7% change in project success is due to a change in plan stakeholder engagement remaining other variables constant and it shows that plan stakeholder engagement affects the selected project's success. Hence, the hypothesis is accepted.

H3: There is a positive relationship between manage stakeholder project success.

As per the above table, manage stakeholder engagement has a beta value of 0.238 at a significant value of ($p<0.05$). This implies that a 23.8 % change in project success is due to a change in manage stakeholder engagement remaining other variables constant and it shows that manage stakeholder engagement affects the selected project's success. Hence, the hypothesis is accepted.

H4: Monitor stakeholder engagement and project success has positive relationship

Table 4.19 shows that monitor stakeholder engagement has a beta value of 0.209 at a significant value of ($p<0.05$). This implies that 20.9% change in project success is due to a change in monitor stakeholder engagement remaining other variables constant and it shows that monitor stakeholder engagement affects the selected project's success. Hence, the hypothesis is accepted.

The overall regression model is write down as:

$$\boldsymbol{PS = 0.271SI + 0.227PSE + 0.238MSE + 0.209MOSE + \mathcal{E}}$$

Where:

PS - Project Success
SI - Stakeholder Identification
PSE - Plan Stakeholder Engagement
MSE - Manage Stakeholder Engagement
MOSE - Monitor Stakeholder Engagement
$\mathcal{E}$ - Stochastic Error term

Table 4.20: Summary of Research Questions, Hypothesis, and Research Findings

RQ NO.	Research Question (RQ)	Hypothesis	Research Findings
1	Does stakeholder identification affect project success?	H1: There is a positive relationship between stakeholder identification and project success.	Supported
2	To what extent does plan stakeholder engagement affect project success?	H2: Plan stakeholder engagement and project success has positive relationship	Supported

3	How does managing stakeholder engagement affect project success?	H3: There is a positive relationship between manage stakeholder project success.	Supported
4	What is the effect of monitoring stakeholder engagement on project success?	H4: Monitor stakeholder engagement and project success has positive relationship.	Supported

4.6. Discussion of Results

The main objective of this study was to examine the role of stakeholder management on project success with the case of Ethiopian Construction Works Corporation. The questionnaires had distributed to the staff of ECWC who were participated in the ICT B+G+7 Incubation Center Building Projec**t**. Out of 52, 48 questionnaires were filled and returned properly. The response rate was 92.3% and enough to make the data analysis.

From the descriptive statistics, we can see that the standard deviation of each variable ranges from 0.46 to 0.60. This means there is a high rate of consistency of responses between participants of the project. The mean value of the variables ranges from 3.57 to 4.35. This implies that the participants of the project or employees somewhat agree on the items of the variables. Moreover, the corporation's stakeholder management practice is a moderate one and needs some improvements.

According to El-Naway, Mahdi, Badwy, and Al-Deen (2015), implementing effective stakeholders' management in construction project delivery has an extreme impact on the successful outcome of the project. The capability to manage heterogeneous individuals with an interest in the project leads to the success of building construction. Since stakeholders in a construction project have substantial interests and needs, their requirements must be understood during the course of the construction process. Creating the relationship between a project and stakeholders through stakeholder management is important to the success of projects (Scolobig and Späth, 2017). In addition, Späth and Scolobig (2017), stress that the drive of a project is to offer benefit to its stakeholders.

The correlation analysis result showed that there is a positive association between stakeholder management and project success. The result has similarities with previous research findings (Fraz et al., Tero, 2014; Macharia, 2013; 2016; Bourne and Walker, 2005; Aaltonen et al., 2008; Ward and Chapman, 2008, and Olander, 2007). Their findings showed that there is a positive correlation between stakeholder management and project success.

The first objective of the study was to examine the effect of stakeholder identification on project success. The result of hypothesis one revealed that stakeholder identification significantly affects project success. This means any increment in stakeholder identification level will enhance the project's success. The finding is consistent with (Tero, 2014). According to Tero (2014), one of the stakeholder management processes that influence project success in his study was stakeholders' identification. In addition to this, the project management body of knowledge guide (PMI, 2017) also supports that stakeholder identification affects project success.

The capacity of the project manager and team to properly identify and engage every stakeholder in a proper way means the difference between project success and failure (PMI, 2017). To increase the probabilities of success, the course of stakeholder identification and engagement should start shortly next to the project charter has been approved, the project manager has been assigned and the team starts to form (PMI, 2017).

The second objective of the study was to investigate the effect of plan stakeholder engagement on project success. As it is shown in hypothesis two output, plan stakeholder engagement significantly affects project success. Table 4.19 shows that plan stakeholder engagement has a beta value of 0.227 at a significant valueof ($p<0.05$). This implies that a 22.7% change in project success is due to a change in plan stakeholder engagement remaining other variables constant and it shows that plan stakeholder engagement affects project's success.

The third significant variable that affects project success is manage stakeholder engagement. It was one of the research objectives that intended to explain the effect of manage stakeholder engagement on project success. The result of the hypothesis proved that manage stakeholder engagement significantly affects project success. This finding is similar with the previously conducted studies by Fraz et al. (2016) and Macharia (2013). Fraz et al., (2016) conducted a study entitled "the effect of project management practices on project success in make-to-order manufacturing organizations". From the collected data using a questionnaire, they found out that

stakeholder management as one of the ten project management practices knowledge areas under the study had significantly correlated with project success. Stakeholder management had significantly correlated with project success.

Macharia (2013) also conducted a study to determine the effect of stakeholders' engagement in project identification, project planning, project execution, and project review on project outcome. The findings tell us that stakeholders' engagement in project execution contributed most to project outcome.

The last objective of the study was to examine the effect of monitor stakeholder engagement on project success. As it is shown in hypothesis four output, monitor stakeholder engagement significantly affects project success. Table 4.19 shows that monitor stakeholder engagement has a beta value of 0.209 at a significant value of ($p<0.05$). This implies that a 20.9% change in project success is due to a change in monitor stakeholder engagement remaining other variables constant and it shows that monitor stakeholder engagement affects project's success.

In line with Takim (2008), during a construction project, the complex interaction and interrelationships among the parties participating could determine the general successful accomplishment of the project. Moreover, project success has been associated with the effective management of all stakeholders throughout the project life cycle (Bourne and Walker, 2005; Cleland, 1999; Aaltonen et al., 2008; Ward and Chapman, 2008; Chinyio and Akintoye, 2008; Olander, 2007).

Chapter Five

5. Summary, Conclusions, Recommendations, and Future Research Direction

5.1. Summary

This study examines the effect of stakeholder management system on project success with the case of the ICT B+G+7 Incubation Center Building Project completed by Ethiopian Construction Works Corporation as a contractor. Investigating the effect of stakeholder management on project success was the main objective of the study. The variables (stakeholder identification, plan stakeholder engagement, manage stakeholder engagement, and monitor stakeholder engagement) are expressed as stakeholder management process theory. Many researchers in the field use the theory.

Out of the total 52 questionnaires that were distributed to respondents, 48 (92.3%) questionnaires were properly filled and returned. Only 4 (7.7%) questionnaires were unreturned and the analysis is conducted based on returned 48 questionnaires, which has a 92.3 % response rate. The response rate is enough for further analysis.

Through employing a statistical tool called SPSS version 23 (Statistical Package for Social Science) the analysis was conducted on returned questionnaires. During the analysis, combined mean and standard deviation values were used for the descriptive analysis part, and in order to examine the effect relationship, a Pearson correlation and a multiple regression analysis with one-way ANOVA were conducted. Finally, the pre-formulated hypotheses were tested by running predictors against the dependent variable.

The study includes demographic information of the respondents. 66.7% (32) of employees who were participated in the project were males compared to females who accounted for 33.3% (16). In line with demographic items, the next item is age. The majority of the respondents accounted for 72.9% (35) were under the age range of 26-30. When we come to the level of education, 81.2% (39) of the respondents have completed their first degree. The majority of the respondents are project team professionals including Engineering, HR, Finance, Procurement, and other professionals, and take the percentage of 45.8% (22). The last demographic item is work

experience. The majority of respondents fall under the work experience category of 1-5 years comprising 72.9% (35).

The description analysis shows the mean and standard deviation of each variable concerning the minimum and maximum values. Accordingly stakeholders identification has (Mean=3.6417, Std. D=0.53944), plan stakeholders engagement (Mean=3.7167, Std. D=0.50501), manage stakeholder engagement (Mean=3.5833, Std. D=0.54082) monitor stakeholder engagement (Mean=3.5750, Std. D=0.60723), and project success has (Mean=4.3594, Std. D=0.46100). Monitor stakeholder engagement has the lowest mean value relative to other independent variables. The descriptive statistics show project success has the highest mean value (M=4.3594). It shows the project was successful in terms of schedule, budget, quality, and stakeholder satisfaction. Generally, the mean value of the variables was found between 3.5833 and 4.3594, and the standard deviation lays in the range of 0.4610 to 0.60723. This indicates there is a moderate agreement on the company's practices of stakeholder management between employees and a low variation of responses.

A Pearson correlation analysis was made to determine whether there is a positive correlation between independent variables and a dependent variable or not. Basing the correlation analysis, there is a significant positive association between independent variables of stakeholder identification, plan stakeholder engagement, manage stakeholder engagement, monitor stakeholder engagement, and project success. A Person correlation between plan stakeholder engagement and project success is the strongest and positive relation relative to all variables. Plan stakeholder engagement is significantly and positively correlated with project success ($r=0.657$, $n=48$, $P<0.01$) at a significant level of 0.000, 2 tailed. Following plan stakeholder engagement, monitor stakeholder engagement, stakeholder identification, and manage stakeholder engagement have an R-value of 0.603, 0.602, 0.554 respectively. Here, indicates there is a positive and significant association with project success at p-value less than 0.01, $p=0.000$, 2 tailed.

The model summary shows that an adjusted R square is 0.645 or 64.5% which means 64.5 % variation in project success is explained through a change in all independent variables of stakeholder identification, plan stakeholder engagement, manage stakeholder engagement, and monitor stakeholder engagement included in the model. However, the remaining 35.5% variation in project success can be explained by other or unobserved variables than the independent variables in this model.

Moreover, the significance of the model in explaining the relationship between independent and dependent variables tested through ANOVA. As presented in table 4.18, the significance value is less than 0.05. Therefore, we can conclude that there is a linear relationship between independent variables and project success, where the model is fit and acceptable.

The regression output of SPSS also shows stakeholder management practices performed by Ethiopian Construction Works Corporation (ECWC) is significantly and positively influence the success of the project. Based on the finding the major contribution for the variation caused by the model is going to stakeholder identification in that its beta=0.271 which is interpreted as if all the variation explained by other predictors is controlled, a unit increment in stakeholder identification will improve project success by 27.1%. Other predictors called plan stakeholder engagement, manage stakeholder engagement, and monitor stakeholder engagement accounts for 0.227, 0.238, and 0.209 and contribute to the total variation respectively.

5.2. Conclusions

The main objective of this research was to examine the effect stakeholder management has on the project success of the ICT B+G+7 Incubation Center Building Project completed by ECWC as a contractor. As we have reviewed different studies, stakeholder management is the major issue that determines the success of the project and in fact, it is the main concern for organizations to accomplish the project successfully. Hence, this research has achieved its objectives and the researcher has made the following conclusions based on the findings of the research.

Examining the effect of stakeholder identification, plan stakeholder engagement, manage stakeholder engagement, and monitor stakeholder engagement on project success were specific objectives of the study. The descriptive analysis of the study revealed all independent variables have a moderate mean value. This showed that ECWC has a good stakeholder management practice, but needs some improvements. Monitor stakeholder engagement has the lowest mean value relative to other independent variables. Hence, the company has to give more concern to it to be successful on other projects also.

Based on the empirical results discussed in chapter four, it is concluded that there is a positive and significant relationship between stakeholder management and project success. The multiple regression analysis results revealed that stakeholder management could affect project success.

This study concludes that stakeholder identification, plan stakeholder engagement, manage stakeholder engagement, and monitor stakeholder engagement have a positive and significant effect on project success.

5.3 Recommendations

Upon the completion of the study, the researcher provides the following recommendations to ECWC. All variables such as stakeholder identification, plan stakeholder engagement, manage stakeholder engagement, and monitor stakeholder engagement have a positive correlation and significant impact on project success. The company has completed the ICT B+G+7 Incubation Center Building Project successfully. From other variables, stakeholder identification is the highest contributor to the project's success. The company's overall stakeholder management practice is a good one and needs some improvements.

The result of the study revealed that plan stakeholder engagement is the lowest contributor to the project's success and there is the lower corrective and preventive action to improve the current level of stakeholder engagement at the monitoring stakeholder engagement phase. The company's stakeholder management practice is a moderate one. However, relative to other practices of SM, ECWC has homework in managing stakeholder engagement, and there is a lower correlation between manage stakeholder engagement and project success.

Therefore, ECWC has to prepare a more suitable stakeholder engagement strategic plan that provides an actionable plan to interact effectively with stakeholders and answer stakeholder interests and constraints. A stakeholder engagement plan enables the project manager to prepare different mechanisms to effectively engage stakeholders in the project, manage their expectations, and leads to achieving project objectives. Since stakeholder engagement is vital for project success, the company has to manage stakeholder engagement through communicating with stakeholders, involving stakeholders in the project demos, workshops, and events, and building partnerships.

Monitoring stakeholders' engagement maintains or increases the effectiveness of stakeholder engagement activities throughout the project lifecycle. Hence, ECWC should also take corrective and preventive actions to improve the level of stakeholder engagement.

Generally, ECWC has a good stakeholder management practice at the selected project, but this is not a guarantee to be successful at other projects and the company should take stakeholder management seriously, especially for an overseas project of 80-km Daguru-Dikhill road rehabilitation construction found in the Ethio-Djibouti trade corridor.

5.4 Future Research Direction

Like any other research, this study has some limitations regarding the research approach, project success criteria, scope of the study, and other unobserved variables. Due to time and other uncontrolled personal incidents, the researcher cannot address these limitations.

Regarding the research approach, future researchers are suggested to include other research approaches for instance focus group discussions and interviews to obtain data that are more accurate and a depth in explanation.

There are many success criteria others researchers can use in addition to time, cost, quality, and stakeholder satisfaction, which are not used in this study like meeting the strategic objectives of the client firm and business success, client satisfaction, advantages for project employees, and other business value accomplishments.

In terms of the scope, this study has limited itself to the building construction sector, so future studies are advised to include other construction sectors including the transport and water infrastructure construction projects.

Finally, the researcher recommends that future researchers can include other unobserved variables because project success can be affected by other variables in addition to project stakeholders' management like the ten project management knowledge areas.

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Appendix

Appendix A: Questionnaire

Questionnaire to Examine **The Role of Project Stakeholders Management on Project Success** **The Case of ICT B+G+7 Incubation Center Building Project** **Completed by Ethiopian Construction Works Corporation**	

Addis Ababa University

College of Business and Economics

Department of Management

Program of International Business (M.Sc.)

This questionnaire solely intended to examine the **Role of Project Stakeholders Management on Project Success** with a case study of the **ICT B+G+7 Incubation Center Building Project Completed by Ethiopian Construction Works Corporation.** As a postgraduate student of Addis Ababa University, I assure you that your response will be treated for academic purposes only and there is no wrong and right response. Respecting your time and willingness, I politely request you to share your experience by filling in the below few important questions.

Your response is expected to be regarding ICT B+G+7 Incubation Center Building only.

With respect,

Agegnehu Abebe

Please do not hesitate to contact me if you need some clarification via

Mob: 0921698798

Email: agegnehu.aa@gmail.com

Overview

Project Stakeholders Management

Project Stakeholder Management is the process essential to identify the people, groups, or organizations that could impact or be impacted by the project, to evaluate stakeholder expectations and their impact on the project, and to create appropriate management strategies for effectively engaging stakeholders in project decisions and implementation (PMBOK, 2017).

List of project Stakeholders (Van der Walt, D., 2020)

- **Please kindly note that all the below stakeholders may not be stakeholders to the selected project.**

Internal Stakeholders	**External Stakeholders**	**Project Team Members**	**Contractors and Suppliers**
The project sponsor	Government(national, local, international)	Any permanent or part-time workers assigned to the project team. It will include the project, business, and technical project team staff assigned to the project, and any functions, professionals, or experts supporting the project on specific issues.	Technology suppliers
The project management office	Local communities		Design engineers
Company directors and all other employees and officers of the organization who own the project	External investors		Engineering consultants
Centralized company functions	Non-government organizations		Managing and engineering contractors
Affected members' firms by the project in the holding company	Any other interest group or pressure group		
	Media		Equipment fabricators
	Organized labor, such as unions		Constructors
	Industry peers		Equipment and raw material suppliers
	Local businesses		
	Potential partners		
	External business competitors		
	Any other interested and affected parties		

Part I

Please kindly indicate (√) the below;

1. Gender

   Female ☐ Male ☐

2. Age

   18-25 ☐

   26-30 ☐

   31-35 ☐

   36-40 ☐

   41+ ☐

3. Level of Education

   Degree ☐ Masters ☐ PhD ☐

4. Current Position

   Project Manager ☐

   Project Engineering Team Leader ☐

   Project Support Team Leader ☐

   Project Team Professional ☐

   (Including Engineering, HR, Finance, Procurement, and Others Professionals at the Project)

   Support Team Leader ☐

   (Including HR, Plan and Construction, Cost Estimation, Contract, and Others at Head Office)

   Support Team Professional ☐

   (Including Engineering, HR, Finance, Cost Estimation, Procurement, and Others Professionals at Head Office)

5. Work Experience

   1-5 years ☐

   6-10 years ☐

   11-15 years ☐

   Above 15 years ☐

Part II

Please kindly indicate (√) your level of agreement or disagreement.

If you strongly agree with the statement, choose no. 5.

If you agree with the statement, choose no. 4.

If you are neutral with the statement, choose no. 3.

If you disagree with the statement, choose no. 2.

If you strongly disagree with the statement, choose no. 1.

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

Statement	5	4	3	2	1
Stakeholders identification					
1. Needs and expectations of stakeholders were explored					
2. Stakeholders area of interest was identified at the beginning of the project					
3. Stakeholders influences were predicted at the beginning of the project					
4. Key stakeholders were properly identified					
5. Identification of stakeholders at the beginning of the project will lay the foundation for the project success					
Plan Stakeholder Engagement					
6. Stakeholders engagement plan provides an actionable plan to interact effectively with stakeholders					
7. There is a developed strategy that answers any stakeholders interests and constraints					
8. Plan stakeholders engagement identifies how the project will affect stakeholders					
9. Plan stakeholder engagement enables the project manager to prepare different mechanisms to effectively engage stakeholders in the project and manage their expectations.					
10. Plan stakeholders engagement leads to achieving project objectives					

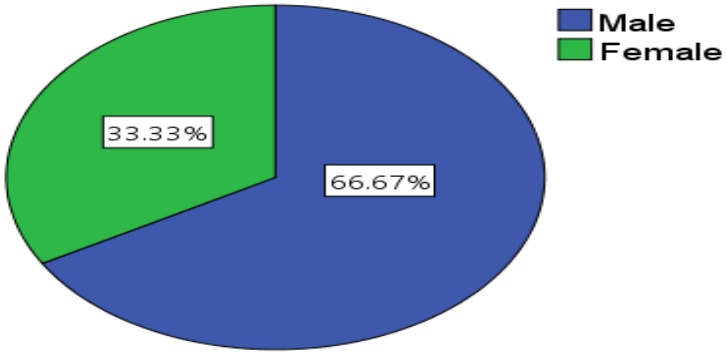
Manage Stakeholder Engagement					
11. You were encouraging communication with stakeholders					
12. There was an engagement of stakeholders on the project demos, workshops, and events					
13. Building partnership is a good approach for involving stakeholders					
14. Stakeholder engagement is considered vital for project success					
15. Stakeholder engagement in identifying, mitigating, and reassessing risks contributes to project success.					
Monitor Stakeholder Engagement					
16. You have had information about the status of stakeholders engagement					
17. You included corrective and preventive actions to improve the level of stakeholders engagement					
18. Updating of information about stakeholder community is necessary					
19. The stakeholders' register was updated with information as a result of monitoring stakeholders engagement					
20. Monitoring stakeholders engagement maintain or increase the effectiveness of stakeholders engagement activities through the life cycle of the project					
Project Success					
21. The project was completed as scheduled					
22. The project cost was incurred as allocated					
23. The project was meet the set standard/quality					
24. The project was satisfied stakeholders					

Thank You for Your Support!

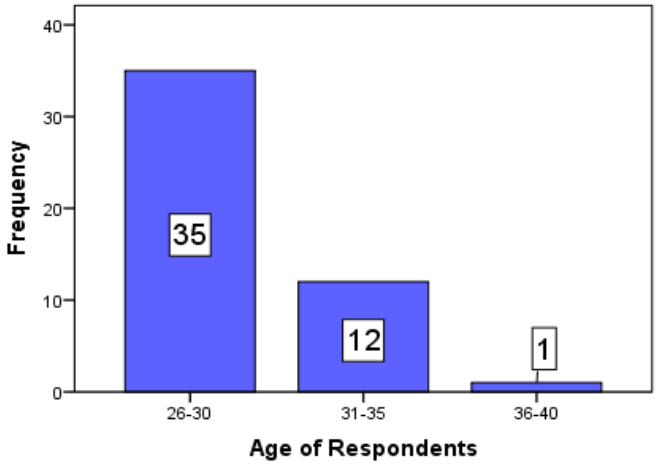
Appendix B: Reliability Statistics

Variables	No. of Items	Cronbach's Alpha
Stakeholders Identification	5	0.797
Plan Stakeholders Engagement	5	0.749
Manage Stakeholders Engagement	5	0.811
Monitor Stakeholders Engagement	5	0.786
Project Success	4	0.714
Overall	24	0.809

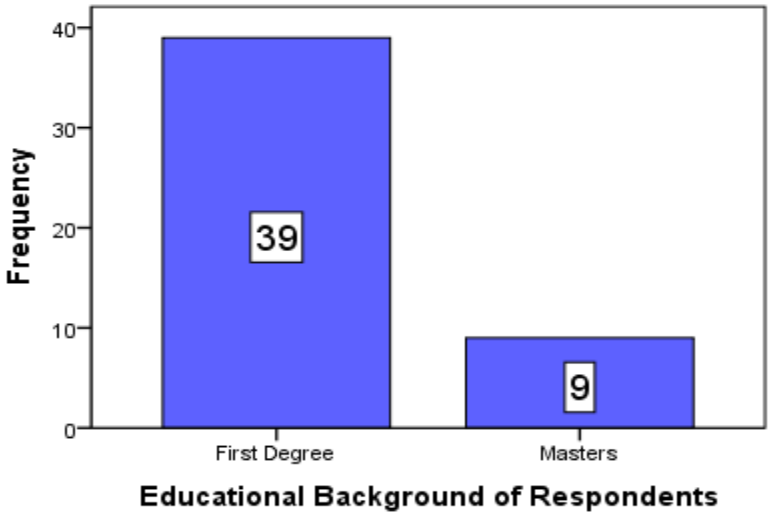
Appendix C: Gender of Respondents



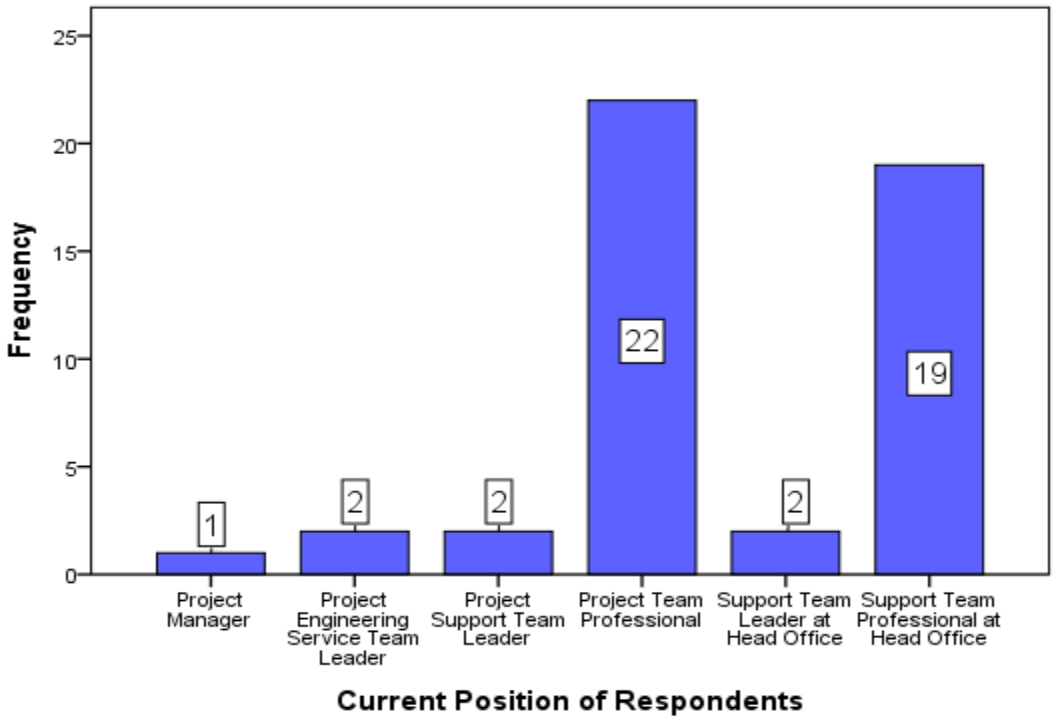
Appendix D: Age Category of Respondents



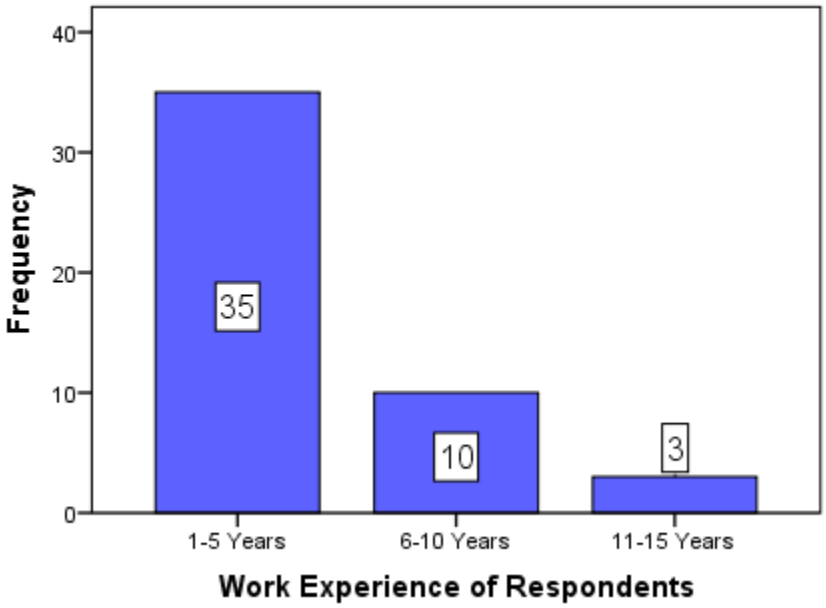
Appendix E: Education Background of Respondents



Appendix F: Current Job Position of Respondents



Appendix G: Work Experience of Respondents



Appendix H: Descriptive Statistics of Project Success

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
The project was completed as scheduled	48	1	5	3.90	1.207
The project cost was incurred as allocated	48	1	5	4.33	1.098
The project was meet the set standard/quality	48	3	5	4.65	.601
The project was satisfied stakeholders	48	3	5	4.56	.649
Valid N (listwise)	48				

Appendix I: Descriptive Statistics of Stakeholder Identification

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Needs and expectations of stakeholders were explored	48	1	5	3.71	1.071
Stakeholders area of interest was identified at the beginning of the project	48	2	5	3.75	.978
Stakeholders influences were predicted at the beginning of the project	48	1	5	3.27	1.086
Key stakeholders were properly identified	48	1	5	3.58	1.088
Identification of stakeholders at the beginning of the project will lay the foundation for the project success	48	1	5	3.90	1.077
Valid N (listwise)	48				

Appendix J: Descriptive Statistics of Plan Stakeholder Engagement

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Stakeholders engagement plan provides an actionable plan to interact effectively with stakeholders	48	2	5	3.65	.934
There is a developed strategy that answers any stakeholders interests and constraints	48	2	5	3.50	1.031
Plan stakeholders engagement identifies how the project will affect stakeholders	48	1	5	3.63	1.104
Plan stakeholder engagement enables the project manager to prepare different mechanisms to effectively engage stakeholders in the project and manage their expectations.	48	1	5	3.77	1.036
Plan stakeholders engagement leads to achieving project objectives	48	1	5	4.04	1.010
Valid N (listwise)	48				

s

Appendix K: Descriptive Statistics Manage Stakeholder Engagement

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
You were encouraging communication with stakeholders	48	1	5	3.58	1.108
There was an engagement of stakeholders on the project demos, workshops, and events	48	2	5	3.54	1.031
Building partnership is a good approach for involving stakeholders	48	1	5	3.56	1.183
Stakeholder engagement is considered vital for project success	48	2	5	3.63	.959
Stakeholder engagement in identifying, mitigating, and reassessing risks contributes to project success.	48	1	5	3.60	1.144
Valid N (listwise)	48				

Appendix L: Descriptive Statistics of Monitor Stakeholder Engagement

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
You have had information about the status of stakeholders engagement	48	2	5	3.56	.897
You included corrective and preventive actions to improve the level of stakeholders engagement	48	1	5	3.27	1.125
Updating of information about stakeholder community is necessary	48	2	5	3.52	1.130
The stakeholders' register was updated with information as a result of monitoring stakeholders engagement	48	2	5	3.69	1.075
Monitoring stakeholders engagement maintain or increase the effectiveness of stakeholders engagement activities through the life cycle of the project	48	2	5	3.83	1.059
Valid N (listwise)	48				

Appendix M: Summary of Descriptive Statistics of All Variables

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Stakeholders Identification	48	2.80	4.60	3.6417	.53944
Plan Stakeholders Engagement	48	2.40	4.40	3.7167	.50501
Manage Stakeholders Engagement	48	2.40	4.40	3.5833	.54082
Monitor Stakeholders Engagement	48	2.20	4.60	3.5750	.60723
Project Success	48	2.75	5.00	4.3594	.46100
Valid N (listwise)	48				

Appendix N: Correlations Analysis

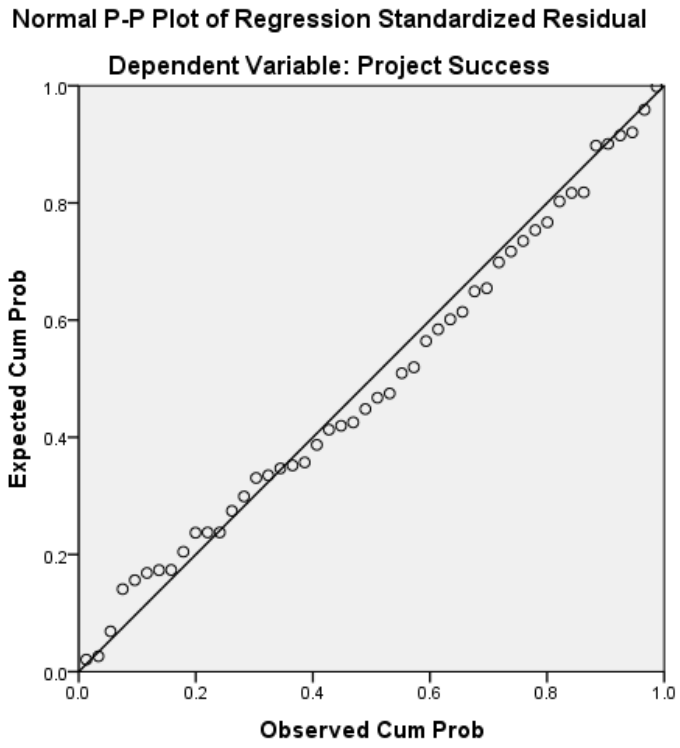
Correlations

		Stakeholders Identification	Plan Stakeholders Engagement	Manage Stakeholders Engagement	Monitor Stakeholders Engagement	Project Success
Stakeholders Identification	Pearson Correlation	1	.438**	.329*	.305*	.602**
	Sig. (2-tailed)		.002	.022	.035	.000
	N	48	48	48	48	48
Plan Stakeholders Engagement	Pearson Correlation	.438**	1	.366*	.606**	.657**
	Sig. (2-tailed)	.002		.011	.000	.000
	N	48	48	48	48	48
Manage Stakeholders Engagement	Pearson Correlation	.329*	.366*	1	.286*	.554**
	Sig. (2-tailed)	.022	.011		.048	.000
	N	48	48	48	48	48
Monitor Stakeholders Engagement	Pearson Correlation	.305*	.606**	.286*	1	.603**
	Sig. (2-tailed)	.035	.000	.048		.000
	N	48	48	48	48	48
Project Success	Pearson Correlation	.602**	.657**	.554**	.603**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	48	48	48	48	48

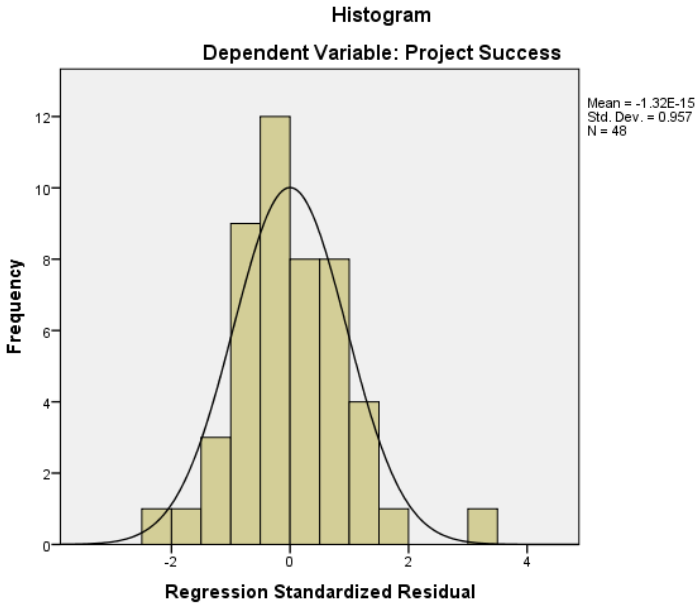
**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Appendix O: Linearity



Appendix P: Normality



Appendix Q: Coefficients

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	.928	.369		2.517	.016	.184	1.671		
	Stakeholders Identification	.271	.084	.317	3.204	.003	.100	.441	.774	1.292
	Plan Stakeholders Engagement	.227	.108	.249	2.112	.041	.010	.445	.543	1.840
	Manage Stakeholders Engagement	.238	.082	.280	2.921	.006	.074	.403	.826	1.211
	Monitor Stakeholders Engagement	.209	.083	.275	2.506	.016	.041	.377	.627	1.596

a. Dependent Variable: Project Success

Appendix R: Collinearity Diagnostics

Collinearity Diagnostics[a]

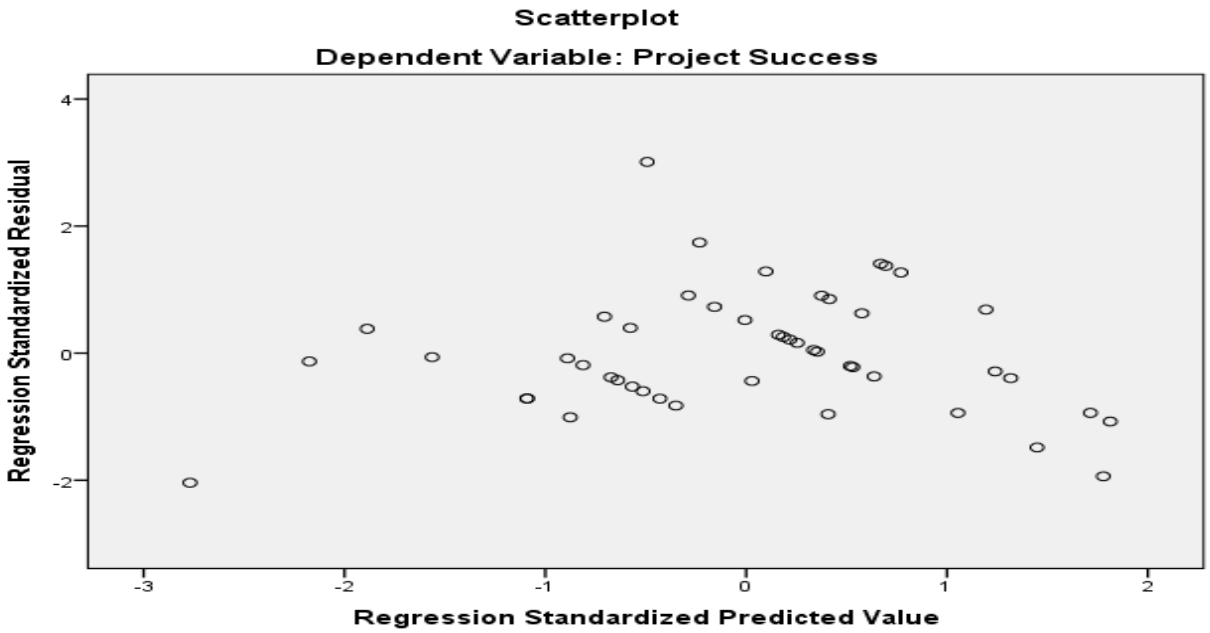
Model	Dimension	Eigenvalue	Condition Index	Variance Proportions				
				(Constant)	Stakeholders Identification	Plan Stakeholders Engagement	Manage Stakeholders Engagement	Monitor Stakeholders Engagement
1	1	4.950	1.000	.00	.00	.00	.00	.00
	2	.019	15.992	.02	.08	.03	.22	.51
	3	.014	18.547	.00	.59	.00	.57	.03
	4	.009	23.062	.85	.28	.01	.21	.08
	5	.007	25.960	.13	.05	.96	.00	.39

a. Dependent Variable: Project Success

Appendix S: Breush-Pegan Test for Homoscedasticity

ANOVA						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.048	4	.012	.886	.480[b]
	Residual	.585	43	.014		
	Total	.633	47			

Appendix T: Homoscedasticity



Appendix U: Model Summary

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.821[a]	.675	.645	.27484	.675	22.308	4	43	.000	1.192

a. Predictors: (Constant), Monitor Stakeholders Engagement, Manage Stakeholders Engagement, Stakeholders Identification, Plan Stakeholders Engagement

b. Dependent Variable: Project Success

Appendix V: Summary of ANOVA

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.740	4	1.685	22.308	.000[b]
	Residual	3.248	43	.076		
	Total	9.988	47			

a. Dependent Variable: Project Success

b. Predictors: (Constant), Monitor Stakeholders Engagement, Manage Stakeholders Engagement, Stakeholders Identification, Plan Stakeholders Engagement