

ADDIS ABABA UNIVERSITY

REQUIREMENTS MANAGEMENT PRACTICES AS DETERMINANTS OF IT PROJECT SUCCESS:

THE CASE OF AWASH BANK

BY:

TEWODROS LEGESSE

ADVISOR:

TEKLEGIORGIS ASSEFA (PhD)

A THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR

MASTER OF ARTS IN PROJECT MANAGEMENT

June, 2026

ADDIS ABABA, ETHIOPIA

Statement of Declaration

I, Tewodros Legesse, have carried out independently a research work on the topic entitled "Requirements Management Practices as Determinants of It Project Success: The Case of Awash Bank" in partial fulfillment of the requirement for the Degree of Masters of art in Project Management with the guidance and support of the research advisor Teklegiorgis Assefa (Asst. Prof.).

This study is my own work that has not been submitted for any degree or Master program in this or any other institutions.

Tewodros Legesse

Signature _____

Date _____

Addis Ababa, Ethiopia

Statement of Certification

This is to certify that Tewodros Legesse has carried out this research work on the topic entitled "Requirements Management Practices As Determinants Of It Project Success: The Case Of Awash Bank" under my supervision.

This work is original in nature and it is sufficient for submission for the partial fulfillment for the award of Degree of Masters of Art in Project and Management.

Teklegiorgis Assefa (Asst. Prof.)

Signature _____

Date _____



ADDIS ABABA UNIVERSITY SCHOOL OF COMMERCE

GRADUATE PROGRAM

Thesis for MA in Project Management

By:

Tewodros Legesse

Approval by Board Examiners

Teklegiorgis Assefa (Asst. Professor)	_____	_____
Advisor	Signature	Date
Dr. Abdurezak Mohammed	_____	_____
Examiner	Signature	Date
Dr. Zelalem Tafere	_____	_____
Examiner	Signature	Date

Acknowledgement

Firstly, I would like to express my sincere gratitude to God for giving me the strength, patience, wisdom, and guidance to complete this study.

I would like to sincerely thank my advisor, **Teklegiorgis Assefa (Asst. Prof.)**, for his guidance and support throughout this research. His comments and suggestions helped me improve the quality of this study and address challenges I have faced during the research process. I am thankful for the time and effort he dedicated to reviewing my work and providing timely and valuable feedback whenever needed.

I would like to thank the management and staff of Awash Bank for supporting this study and facilitating access to the information needed for the research. I want to also thank all respondents who generously shared their time, experiences, and insights by participating in the questionnaire survey.

I am grateful to Addis Ababa University, School of Commerce, for providing the opportunity to conduct this study. The education and support I received during my graduate program have contributed significantly to the successful completion of this research.

Finally, my sincere appreciation goes to my family, friends, and colleagues for their encouragement, understanding, patience, and moral support throughout my entire academic journey. Their belief in me and continuous motivation were instrumental in helping me overcome challenges and successfully complete this work.

May God bless you all.

Table of Contents

Statement of Declaration ii
Statement of Certification iii
Approval by Board Examiners iv
Acknowledgement v
Table of Contents 1
List Of Tables 4
List Of Figures 4
Abbreviations / Acronyms 5
Abstract 6
1. Chapter One: Introduction 8
1.1. Background of the company 8
1.2. Background of the Study 8
1.3. Statement of the Problem 9
1.4. Research questions 10
1.5. Objectives of the Study 11
1.5.1. General Objective 11
1.5.2. Specific Objectives 11
1.6. Significance of the Study 12
1.7. Scope of the Study 13
1.8. Limitations of the Study 14
1.9. Organization of the Study 16
1.10. Definition of Key Terms 17
2. Chapter Two: Review of Related Literature 20
2.1. Theoretical Literature Review 20
2.1.1. Requirements Planning 20
2.1.2. Requirements Elicitation 21
2.1.3. Requirements Documentation 21
2.1.4. Requirements Validation 23
2.1.5. Requirements Change Management 23
2.1.6. Requirements Traceability 24
2.1.7. Requirements Closure 25
2.1.8. Requirements Prioritization 25
2.1.9. Stakeholder Alignment and Conflict Management 26

2.1.10. Non-Functional Requirements 27
2.1.11. Requirements Management Tools and Standardization 28
2.2. Empirical Literature Review 29
2.2.1. Requirements Planning 29
2.2.2. Requirements Elicitation 30
2.2.3. Requirements Documentation 31
2.2.4. Requirements Validation 31
2.2.5. Requirements Change Management 32
2.2.6. Requirements Traceability 33
2.2.7. Requirements Closure 34
2.2.8. Requirements Prioritization 35
2.2.9. Stakeholder Alignment and Conflict Management 36
2.2.10. Non-Functional Requirements 36
2.2.11. Requirements Management Tools and Standardization 37
2.2.12. Critical Practices for IT Project Success 38
2.3. Gaps in the Existing Literature 40
2.4. Hypotheses of the Study 42
2.5. Conceptual Framework of the Study 42
3. Chapter Three: Research Methodology 43
3.1. Research Design 43
3.2. Research Approach 44
3.3. Description of Study Variables 44
3.4. Description of Study Area and Target Population 45
3.5. Sampling Technique and Sample Size 45
3.6. Data Collection Sources, Types, Instruments 46
3.7. Data Analysis Model, Techniques, Software 46
3.8. Reliability and Validity Analysis 46
3.9. Ethical Considerations 47
4. Chapter Four: Data Analysis and Interpretation 48
4.1. Introduction 48
4.2. Response Rate 48
4.3. Definition of Variables and Constructs 49
4.4. Demographic Characteristics 50
4.4.1. Regression Assumption Testing 51
4.5. Descriptive Analysis of Variables 51

4.6. Reliability Analysis (Cronbach's Alpha) 55
4.7. Correlation Analysis 56
4.8. Regression Analysis 57
4.8.1. Model Summary 57
4.8.2. Regression Coefficients 57
4.9. Hypothesis Testing 59
4.10. Discussions and Findings 60
5. Chapter Five: Conclusion and Recommendations 63
5.1. Introduction 63
5.2. Summary of Findings 63
5.3. Conclusions 64
5.4. Recommendations 65
5.4.1. For Awash Bank 65
5.4.2. Managerial Recommendations 67
5.4.3. Policy Recommendations 68
5.5. Limitations 68
5.6. Future Research 68
References 70
Annex -1 - Questionnaire 73

List Of Tables

Figure No.	Title	Page
Table 1.1.	Alignment between research questions and testing tools/ hypotheses.	11
Table 4.1	Definition of Variables	49
Table 4.2	Respondents by Role	50
Table 4.3	Experience Level	50
Table 4.4	Descriptive Statistics of Variables	51
Table 4.5	Reliability Analysis (Cronbach's Alpha)	56
Table 4.6	Correlation Analysis	58
Table 4.7	Model Summary	59
Table 4.8	Regression Coefficients	59
Table 4.9	Hypothesis Testing Results	60
Table 4.10	Comparison table – result to the literature	53

List Of Figures

Figure No.	Title	Page
Figure 2.1	Conceptual Framework of the Study	43

Abbreviations / Acronyms

Acronym	Description
BABOK	Business Analysis Body of Knowledge
BRD	Business Requirements Document
IT	Information Technology
IIBA	International Institute of Business Analysis
NGO	Non-Governmental Organization
NBE	National Bank of Ethiopia
PMBOK	Project Management Body of Knowledge
PMI	Project Management Institute
RM	Requirements Management
SPSS	Statistical Package for the Social Sciences
RP	Requirements Planning
RE	Requirements Elicitation
RD	Requirements Documentation
RV	Requirements Validation
RCM	Requirements Change Management
RT	Requirements Traceability
RC	Requirements Closure
RPri	Requirements Prioritization
SAC	Stakeholder Alignment & Conflict Management
NFR	Non-Functional Requirements
RMT	Requirements Management Tools & Standardization
PS	IT Project Success

Abstract

Information technology (IT) projects play a critical role in supporting digital transformation, operational efficiency, and service delivery within the banking sector. However, many IT projects continue to experience challenges related to delays, cost overruns, scope changes, and unmet stakeholder expectations. Effective requirements management is widely recognized as a key factor influencing project outcomes. This study examined the influence of requirements management practices on IT project success at Awash Bank.

The study employed a quantitative research approach using descriptive and explanatory research designs. Primary data were collected through a structured questionnaire administered to professionals involved in IT projects at Awash Bank. A total of 66 valid responses were analyzed using the Statistical Package for the Social Sciences (SPSS). Descriptive statistics, reliability analysis, correlation analysis, and multiple linear regression techniques were employed to analyze the data.

The findings show that requirements management practices are implemented at a moderate level within Awash Bank and that the perception for IT project success is also moderate as well. Correlation analysis is used to indicate the positive relationships between requirements management practices and IT project success. Used Regression analysis implied that requirements planning, requirements documentation, requirements change management, and requirements prioritization have significant positive effects on IT project success. While, Requirements traceability demonstrated a significant negative effect, while requirements elicitation, validation, closure, stakeholder alignment, non-functional requirements management, and requirements management tools and standardization showed insignificant effect on IT project Success.

The findings indicate that requirements management plays an important role in the success of IT projects at Awash Bank. In particular, effective planning, documentation, change management, and prioritization were found to have the strongest influence on project outcomes. Based on these findings, the Bank should place greater emphasis on improving its requirements management practices, especially in areas related to documentation standards, change control procedures, and

prioritization of requirements. The results also suggest a need to review current traceability practices to ensure they effectively support project delivery and stakeholder needs.

Keywords: Requirements Management, IT Project Success, Requirements Planning, Requirements Documentation, Change Management, Requirements Prioritization, Awash Bank.

1. Chapter One: Introduction

1.1. Background of the company

Awash Bank is one of the largest private commercial banks in Ethiopia, providing a wide range of retail, corporate, and digital banking services across Ethiopia. Since its establishment, the Bank has expanded its branch network to over 1000 and customer base to over 10 million while increasing its reliance on information technology to support business operations and service delivery. As a result, IT projects have become an important component of the Bank's efforts to improve operational effectiveness and meet evolving customer expectations.

Awash Bank was selected for this study because it has been implementing a number of technology-related projects in recent years, increasing demand in digital services, including infrastructure modernization and business process automation initiatives. As a result, requirements management has become an important part of project execution across different departments and stakeholder groups. The Bank was therefore considered an appropriate environment for examining how requirements management practices relate to IT project success. In addition, the researcher's work experience within the organization provided familiarity with the project environment and facilitated access to relevant respondents.

1.2. Background of the Study

At Awash Bank, as in most modern financial institutions, day-to-day operations and strategic projects rely heavily on IT systems and digital tools. Opening accounts, processing payments, running daily operations, and offering digital services all rely on systems that are built and maintained through IT projects. Because of this, a single project can influence the work of thousands of employees and millions of customers. When these projects go well, the bank benefits. When they struggle, the impact is felt quickly and widely (Gazivoda et al., 2017).

One of the major reasons IT projects run into trouble is poor requirements management. If the project team does not have a clear, shared understanding and knowledge of what exactly the business need is, projects usually starts on shaky ground. When teams start with unclear or constantly shifting requirements, they usually end up redoing work, fixing misunderstandings, or

building the wrong thing, delays, confusion among teams, and solutions that do not match what users expected (Kumar, 2006). Many IT project failures that are reported in the financial and banking industry point back to the same issue of peoples' misalignment with the understanding of what problem they were trying to solve (Bormane et al., 2016).

For Ethiopian banks, including Awash Bank, these challenges are even more noticeable. Due to rapid growth of technology; new digital services, upgrades to core and auxiliary systems, regulatory changes, and the need for integration with external platforms, coordination between business units and the IT Project Management Office is a mandatory issue that should be given strong focus. But in practice, requirement management practices are not always done in a consistent way. Some projects kickoff with minimal to no documentation, while others heavily rely on verbal discussions, plus updates are not always captured as per the projects' progress. (Mamo, 2018; Fesha, 2023). This poses challenges for teams to be aligned and deliver the exact business need.

With an increase on its digital offerings and services Awash Bank faces the pressure of finishing projects quickly and with the state of the art quality. Planning, gathering and clearing requirements, proper and immaculate documentation, and a structured way of change management are no longer "nice to have." They are essential for project risk management, enhancing communication, and making sure that the final product matches the business's expectations (Tilahun, 2019).

Moreover, the National Bank of Ethiopia's Directive SBB/83/2022 declares baseline standards for IT governance across the Ethiopian banking sector. Although it may not explicitly list detailed requirement management processes, it emphasizes on proper oversight, traceability, and documentation, which align with strong requirement management practices closely.

That's why it is highly plausible now more than ever, to study how Awash Bank's approach to requirement management actually affects the outcome of its IT projects. It helps pinpoint where current practices support delivery of projects and where gaps holding teams back reside. The findings of such a study can guide Awash in strengthening its IT project processes and improving the overall performances and results of its information technology initiatives.

1.3. Statement of the Problem

In Many IT projects, situations often go off track way before any person writes a single line of code. The real issues tend to appear at the very start, when designated teams are trying to understand exactly what the project is meant accomplish. Requirements that are vague, incomplete, or not written down clearly, arise problems that usually follow the project all the way to its finish line. Delays accumulate, costs increase, users get frustrated, and what's delivered usually falls short of what was actually initially needed. (Gazivoda et al., 2017).

At Awash Bank, the IT Project Management Office oversees everything from project inception and planning to rollout. While most teams performing these projects are well committed and very skilled, a familiar issue keeps being faced and that is the way requirements are managed is not always consistent. In some cases, projects kickoff with minimal documentation. In others, most discussions happen informally through verbal discussions. Grasped short notes get lost, changes are not properly tracked after some forms are signed, and teams end up working from assumptions that are not commonly grasped. These often lead to unnecessary rework and confusion between technical teams and the owning business units (Fesha, 2023).

Such challenges are not unique to Awash Bank. Poor requirements management is one of the most frequently cited reasons for projects failure across all industries (Bormane et al., 2016). Especially in banking, where systems are highly subjected to regulation compliance, security standard checks, and customer trust, even a small misunderstanding can cause serious and strategic problems.

What is not highly available is a closer look at how this plays out in real ground of Ethiopia's banking sector. Although limited amounts of studies have surfaced on project management more broadly, there's still a gap when it comes to understanding how requirement management practices such as planning, elicitation, validation, traceability, and change management affect project success on the ground. (Asrat, 2017; Sheko, 2019).

This study aims to fill that gap. It focuses on how requirements are managed at Awash Bank and how those practices contribute to or get in the way of successful project outcomes.

1.4. Research questions

1. How do requirements definition and analysis practices influence IT project success at Awash Bank?
2. How do requirements control and governance practices influence IT project success at Awash Bank?
3. How does requirements prioritization influence IT project success at Awash Bank?
4. How do stakeholder alignment and non-functional requirements management influence IT project success at Awash Bank?
5. How do requirements management tools and standardization practices influence IT project success at Awash Bank?

Research Question	Related Hypothesis/Hypotheses/ Tested using
RQ1: How do requirements definition and analysis practices influence IT project success?	Requirement planning Requirement elicitation Requirement documentation quality
RQ2: How do requirements governance and validation practices influence IT project success?	Requirement Validation Requirement Change Management
RQ3: How do requirements change management and traceability practices influence IT project success?	Requirement Traceability Requirement closure
RQ4: How do prioritization, stakeholder alignment, and non-functional requirements influence IT project success?	Requirement prioritization Stakeholder Alignment and Conflict management Non-functional requirements
RQ5: How do requirements management tools influence IT project success?	Requirement Management tools and standardization

Table 1.1: Alignment between research questions and testing tools/ hypotheses.

1.5. Objectives of the Study

1.5.1. General Objective

To examine how requirement management practices, influence the success of IT Projects at Awash Bank.

1.5.2. Specific Objectives

1. To assess the influence of requirements definition and analysis practices on IT project success at Awash Bank.

2. To examine the influence of requirements, control and governance practices on IT project success at Awash Bank.
3. To evaluate the influence of requirements prioritization on IT project success at Awash Bank.
4. To determine the influence of stakeholder alignment and non-functional requirements management on IT project success at Awash Bank.
5. To assess the influence of requirements management tools and standardization practices on IT project success at Awash Bank.

1.6. Significance of the Study

Understanding how requirements should be managed especially in IT projects is not just a technical concern, rather it is something that directly affects how well projects meet the needs of the business and the organization as whole. At Awash, a bank where most services depend on technology, IT project outcomes shape day-to-day operations, staff productivity, and customer satisfaction. Poor requirement management practices such as: vague requirements, poorly documented, or constantly changing, results in delays, extra costs, and solutions that do not fit what the core business need.

This research mainly focuses on studying how requirements management practices are currently conducted at Awash Bank with the goal of showing where things are working well and where consistent problems keep appearing. These insights can help the IT Project Management Office improve its related practices, and introduce clearer steps for documenting and validating requirements, and support project teams with better tools and practices. It can also boost stronger collaboration between project and IT technical staff and business users, and make sure to decrease projects issues that start with unclear or incomplete inputs.

The findings may also be useful to other banks and financial institutions in Ethiopia, beyond Awash. In this digital and AI transformation age, many organizations are investing heavy for modernizing their IT systems. The challenges most organizations face around managing requirements are likely to be similar. This research provides practical lessons from a local context, rather than depending only on studies from abroad that may not reflect same realities.

From an academic point of view, this study will help addressing a gap in local research. There is limited data and research on how requirement management practices affect project performance and outcome in Ethiopian banks. By assessing closely at actual projects within Awash Bank, this study is expected to contribute real examples and evidence that future researchers and students can consume.

Generally, this study is highly essential because it highlights and elaborates why managing requirements formally is crucial. RM is not just a procedural step, but a core practice that makes IT projects succeed or fail especially in complex, high-stakes environments like Ethiopian banking sector.

1.7. Scope of the Study

This study focuses how Awash Bank's IT projects manage requirements across their lifetime. Awash Bank was selected for study because it has been implementing a number of technology-related projects in recent years, including infrastructure modernization, core banking change, and business process automation initiatives. As a result, requirements management has become an important part of project execution across different departments and stakeholder groups. The Bank was therefore considered an appropriate environment for examining how requirements management practices relate to IT project success. In addition, the researcher's work experience within the organization provided familiarity with the project environment and facilitated access to relevant respondents

In an Ethiopian financial institution setting like this, defining, documenting and managing requirements is not a single team responsibility. Business units raise their granular initial needs, after generic analysis then IT Software engineers try to design and implement solutions, the project managers' role is conducting the whole process and facilitation. Since these activities involve people from different functional and business units of the bank, this research looks at the process of requirement management across the whole bank instead of narrowing it to a single directorate or chief office. This helps capture how requirements are planned to be gathered, elicited, written down, checked, and revised as the project moves forward.

The study is based on set of IT project requirements management practices. These are planning, elicitation, documentation, validation, change management, traceability, closure, prioritization, stakeholder alignment, Non-functional requirements management and RM tools &standardization. These collectively form the independent variables. IT projects success is treated as dependent variable. And it will be measured by its cost, schedule and the level of quality that will be acceptance, approval and satisfaction by stakeholders.

Primary data is expected to be collected from IT staff who are directly involved in IT Projects including IT-PMO staff, IT project managers, Business analysts, software engineers, IT quality assurance team, security and performance testers, and others who gets involved in project lifecycles.

The study will include IT projects in progress or completed between 2021 and 2026. This period was chosen because Awash bank went through multiple technology transformation projects, upgrades and corporate strategy changes in this timeframe. Furthermore, the staff involved are more likely to accurately remember challenges and practices since it is recent.

The results of this research might be relevant to all institutions across Ethiopia's financial landscape, yet the research will only focus on Awash Bank. Hence, this study is will not attempt to make conclusions about the country's or global financial sector's IT Projects.

1.8. Limitations of the Study

This research solely focuses on Awash Bank, which implies its results will only reflect how requirement management is handled in this particular bank. While other banks might face same challenges because organizational structures and workflows usually differ, because of these factors the results should not be considered as representative of the whole banking sector.

Since most of data will be obtained from IT staff inside Awash Bank via well designed questionnaires and questions, people's memory and perspectives will still have high impact. Some team members might also view requirement management practices from their personal or team's points of views and might miss the big picture despite the honesty and positive intentions of the respondents.

Lastly, the research focuses on requirements management practices like planning, documentation, validation, tracing, closure and change handling. Although these are important, but they're not the only forces that affect whether a project succeeds. Some factors like scope, stakeholders, competencies, budget limitations, organizational politics, or leadership support are outside the scope of this study, even though they can play a big role.

1.8.1. Mitigation Strategy

Limitation 1: Scope of the Study

This study was conducted within Awash Bank and therefore reflects the experiences, practices, and project environment of a single organization. Although participants were selected from different areas of the Information Office, including project management, software development, digital banking, infrastructure, and information security, the findings remain closely tied to the organizational context in which the study was undertaken. Different institutions may have different governance structures, project management practices, resource availability, and organizational cultures, all of which can influence project outcomes. For this reason, the findings should be interpreted within the context of Awash Bank rather than as conclusions that automatically apply to all financial institutions. Nevertheless, the study provides useful insights that may serve as a reference for future studies involving multiple banks or organizations operating in similar environments.

Limitation 2: Reliance on Questionnaire Responses

The study relied primarily on information provided by respondents through a structured questionnaire. As with most survey-based studies, the findings depend on participants' experiences, perceptions, and recollection of project activities. To reduce this limitation, the study focused on projects implemented within a recent period and included respondents who were directly involved in project activities. In addition, the questionnaire was designed around specific requirements management practices rather than broad subjective opinions, allowing respondents to provide answers based on observable project experiences. Reliability testing also indicated acceptable levels of internal consistency across all constructs. While these measures helped

improve the quality of the data, the possibility of individual bias or differences in personal interpretation cannot be completely eliminated.

Limitation 3: Focus on Requirements Management Practices

Project success is influenced by many organizational, technical, and managerial factors. However, this study focused specifically on requirements management practices and did not examine other factors such as leadership effectiveness, organizational culture, budget constraints, team competency, or executive support. The exclusion of these variables does not imply that they are unimportant. Rather, it reflects the need to maintain a clear research focus and ensure manageable analysis within the scope of the study. Consequently, the findings should be understood as demonstrating the contribution of requirements management practices to IT project success, while recognizing that other factors may also influence project outcomes.

1.9. Organization of the Study

This thesis is composed of five interrelated chapters which are arranged in such a way that can enable exploration of how requirement management practices at Awash Bank affect IT Project success.

First Chapter is an introduction of this research. It explains background, outlines problems of the research, and touches and elaborates on scope, limitations.

Second chapter handles reviews of relevant literature on this relevant topic and Awash bank related as well. Summary of key ideas from frameworks accepted globally and previously conducted researches are presented in this chapter. Conceptual frameworks are stated here as well.

Chapter Three discusses the research methodology. It details the research design, data collection methods, sampling process, and tools used for this research's reliability and validity.

Chapter Four presents the findings and interprets the data collected. It includes descriptive results, statistical analysis, and a discussion of what the results mean with respect to the original research questions

Chapter Five concludes the study. It summarizes the main findings, draws conclusions, and offers recommendations for practice as well as suggestions for future researches.

1.10. Definition of Key Terms

Requirements Management

In this study, requirements management is the framework used to handle a project's scope from the initial idea to the final rollout. RM is a discipline that studies the process of managing business requirement which starts from planning the management to closure which in the middle encompasses: elicitation, documentation, validation with their sources, tracing, and managing changes.

Requirements Planning

Strategic preparation phase which includes identifying right stakeholders, choosing methodologies to gather/ elicit requirements and choosing tools and putting timetables. (BABoK, 2021)

Requirements Elicitation

Elicitation is sometimes referred as gathering but it includes two-way information flow and covers many methodologies than simple gathering. Deep digging into the future users' daily activities via Interviews, workshops, or observation to have a complete understanding of requirements is the heart of this stage. (BABoK, 2021)

Requirements Documentation

This stage is clearly documenting gathered and elicited requirements in high quality and language understandable by both technical and business teams, it also defines a single source for requirements and ensures scope creeps never happen and nothing will be left out. Assigning each

requirement with a specific ID that will be used throughout the project is also mandatory for later tracing. (BABoK, 2021)

Requirements Validation

Validation is a process of verifying each documented requirement with its source which are business units to make sure the documented requirements truly reflect the business intent. This also involves checking requirements against regulatory issues and standards. This helps for making sure that what will be done will operationally be feasible. (BABoK, 2021)

Requirements Traceability

Traceability is an exercise that ensures maintaining visible link between the requirement and its technical implementation. Traceability helps track the implementation stratus of a business need and makes sure that no requirement is lost. (BABoK, 2021)

Requirements Change Management

Change management is a structured way to handle updates, variations or amendments to validated requirements at any time on during the project. It includes activities related to impact assessment, change approval and change implementation and documentation of the change. It separates necessary adjustments from scope creep. (BABoK, 2021)

Requirements Closure

This is a sign off after making sure that the requirement have been fully delivered. Closeru is confirmation and verification that the requirement is fully implemented and ready. (BABoK, 2021)

IT Project Success

In this research's context IT project success is defined as the projects meeting of its purpose in Scope, without budget discrepancies and inside acceptable quality standards by stakeholders which is stakeholders' satisfaction. (PMBoK, 2026)

Awash Bank

The largest private financial institution in Ethiopia, on which his research will be based on as a case study. It has a large information office under which many IT projects managed making it ideal for analysis of requirement management practice's impact on these projects' success.

2. Chapter Two: Review of Related Literature

2.1. Theoretical Literature Review

To understand how requirements management (RM) practices support or influence IT projects' success this study begins with the broader theoretical foundations. Standards such as the Business Analysis Body of Knowledge (BABOK) and the Project Management Body of Knowledge (PMBOK) present detailed frameworks, guidelines and best experiences for effective RM. These global standards and bodies of knowledge mainly serve as key references for organizations trying to establish structured practices.

2.1.1. Requirements Planning

Planning is the first stage in RM to select and identify appropriate stakeholders, methodologies, and shape the direction of the entire requirement management process. The output of this stage include detailed plan of how, when, from whom requirements be gathered and how they will be documented.

BABOK (IIBA, 2021) refers to it as Business Analysis Planning and Monitoring, which focuses on preparing for and organizing the work and tracking any changes along the way. PMBOK (PMI, 2017) also highlights this planning stage as essential for keeping the project aligned with what stakeholders actually want and stay inside scope. Despite the importance of this worldwide accepted frameworks' use, their application might pose challenges at Awash bank.

Projects in banks can be either mission-critical, such as launching a big new digital banking platform or other projects can be more routine, like updating in-house systems. Shenhar and Dvir (2007) suggest that planning should match the type of project. With increased complexity and uncertainty in projects, flexibility and level of detail in planning should increase. Although at Awash, teams sometimes move into execution too quickly. Without a solid plan, different units can get misaligned, and confusion often shows up later during delivery.

In short, frameworks help, but success depends on how well the planning is customized to the project. What matters most is making sure the right people are involved early, and that the plan reflects the realities of that specific initiative. Recent studies continue to give emphasis on that

early planning activities tend to improve project coordination, reduce uncertainty, and contribute to successful project delivery, particularly in technology-intensive environments (Montgomery et al., 2022).

Kotonya and Sommerville (1998) warn that skipping or rushing this phase leads to ripple effects downstream. Damian and Chisan (2006) add that strong planning at the outset supports better collaboration across teams, especially in distributed or cross-functional environments.

2.1.2. Requirements Elicitation

Elicitation is where teams collect information from stakeholders, users, and subject matter experts. In practice at Awash Bank, formal stakeholder interviews are occasionally conducted, but other techniques like workshops or shadowing are underused possibly due to time constraints or limited analyst capacity. While BABOK (IIBA, 2021) encourages broader techniques, local adaptation is uneven . The goal of requirement elicitation is to uncover the real needs behind what users say they want.

Hofmann and Lehner (2001) explain that poor elicitation leads to confusion and rework. If teams ask the wrong questions or miss key voices, the requirements end up misaligned. Wiegers (2013) strengthens this, by justifying elicitation as not a one-off task but a should be iterative and context-aware.

Jayatilleke and Lai (2018) depict a good elicitation process as the first defense against change-related turmoil later. Projects which give less attention to stakeholder involvements suffer with moving targets and unclear priorities. Recent requirements engineering researches highlights stakeholder participation as a critical success factor as well, noting effective elicitation practices improve requirements completeness and reduce the likelihood of costly revisions during later stages (Montgomery et al., 2022).

2.1.3. Requirements Documentation

After requirements are gathered, they need to be documented in an understandable way to every stakeholder. This is vital for turning ideas and needs into some product or service that actually works. Especially at Awash Bank, where projects and their teams encompass both IT and software

engineers and business leaders, clarity is not just helpful; it's essential. Lack of clear requirement documentation might result in developing something that doesn't match stakeholders' expectations.

International standards assert on the importance of getting documentation right. PMBOK (PMI, 2021) highlights the need to organize requirements using clear, structured formats so that every stakeholder interprets them the same way. BABOK (IIBA, 2021) goes further, and suggests that requirements documentations should stay up to date throughout the evolution of the project, while still being easy to follow.

In reality of Awash documentation practices do not meet these goals. Though some projects start with well-written requirements documentations and BRDs, over time those documents become outdated or ignored. In some other cases, requirement documentation is minimal, relying instead on meetings, emails and informal communications. This brings risk of misunderstanding among team members in to play, especially when staff turnover or shifting priorities appear.

Kotonya and Sommerville (1998) identified documentation problems years ago. For example, if documentation is written only for technical readers, business teams may lose interest. If documentations are not detailed and too general, software engineers are left to guess. That balance is still a challenge today. At Awash Bank, this sometimes leads to multiple reworks and delays in IT projects.

Wiegers (2013) suggests, in addition to using words and structured sentences, using models, diagrams, or process flows to helps people understand what exactly is being requested. At Awash this is not yet a consistent practice across all IT projects. Improving requirements documentation culture could help bridge the gap between what stakeholders say they need and what IT teams and technical engineers actually deliver. New empirical evidences suggest that the quality of requirements documentation remains one of the strongest predictors of project performance since it supports communication, traceability, and stakeholder understanding throughout the project lifecycle (Montgomery et al., 2022).

Damian and Chisan (2006) also consider documentation as a bridge between requirements and other project processes like: design, implementation, testing, and quality assurance.

2.1.4. Requirements Validation

Validation is about making sure what was gathered is correct, relevant, and still needed with the providing stakeholders. BABOK (IIBA, 2021) defines validation as a collaborative activity one where the business, analysts, and technical teams walk through the requirements together through walkthroughs, prototyping, or user reviews.

PMBOK (PMI, 2021) treats validation as a quality management task. The main goal is to identify misalignment early, before wasting time, money and effort in building a wrong thing. It is vital to avoid rework, scope creep, and producing something of no value. PMBOK refers this as part of scope verification. The main objective is to catch misunderstandings and gaps early while it is easy and low cost to fix. Wiegers (2013) sees validation as a shared responsibility which aims at making sure the requirements are verified and right.

Hofmann and Lehner (2001) reinforce this by saying even well-written requirements can still be wrong if they don't show the actual need. That is why validation is needed to be based on real use cases and needs to be frequent.

Contemporary studies continue to identify validation of requirements as an essential quality assurance and change management task that help organizations detect inconsistencies and gaps before development resources are committed (Montgomery et al., 2022).

2.1.5. Requirements Change Management

Changes happen. That's a fact in any project, especially in IT. The key is not whether change occurs, but how it's handled. Good projects don't avoid change; they manage it clearly and consistently.

BABOK recommends treating change like a process: first, figure out how the change affects the work, then get the right people to approve it, document it properly, and let everyone involved know what's different. PMBOK (2017) echoes this with its concept of integrated change control, which means tracking how changes affect scope, time, and cost together.

Jayatilleke and Lai (2018) found that many teams run into trouble not because of change itself, but because their process for handling change is weak or informal. When teams aren't on the same page, even small updates can lead to confusion.

Kotonya and Sommerville explain that poor change management can mess with the whole project flow. One requirement changes, and suddenly documentation is out of sync, developers are building from the wrong version, or teams are stepping on each other's toes. Damian and Chisan (2006) reinforce this, showing that a consistent approach to managing change builds trust and keeps everyone grounded, especially when working in high-pressure environments.

Recent researchs further indicate that organizations with structured change management mechanisms are better accommodating evolving and changing business needs while preserving project stability and control (Jayatilleke & Lai, 2018).

2.1.6. Requirements Traceability

Requirements traceability ensures that every requirement can be linked to its origin, related tasks, test cases, and deliverables. BABOK considers requirements traceability a major tool for impact analysis, change control, scope management, and audit activities. PMBOK also associates traceability with quality assurance by connecting requirements to verification activities and stakeholder sign-off.

Theoretical literature emphasizes that traceability helps project teams remain organized and accountable throughout the project lifecycle. According to Wiegers (2013), traceability protects projects from scope creep and supports audit processes, compliance reviews, and post-project evaluations. Similarly, Damian and Chisan (2006) found that strong traceability practices improve communication among stakeholders, particularly when requirements affect multiple systems, departments, or teams. Therefore, traceability is not merely a tracking mechanism but a means of ensuring that no requirement is overlooked during project execution.

Although traceability is widely recognized as a best practice, recent studies point out that organizations continue to face challenges in maintaining traceability because of resource constraints, tool limitations, and process complexity (Montgomery et al., 2022). To address these

challenges, recent research proposes automation-based approaches to traceability. Escalona, Koch, and Garcia-Borgoñon (2022) demonstrate that a model-driven engineering approach can automate and integrate traceability without suffering significant additional costs

2.1.7. Requirements Closure

Requirements closure refers to the formal process of confirming that a requirement has been fully satisfied, verified, and approved by relevant stakeholders. Closure ensures that agreed-upon requirements have been implemented correctly and that evidence exists to demonstrate their completion.

PMBOK links requirements closure to verification and stakeholder acceptance processes, while BABOK views it as an essential component of requirements management and governance. Through formal validation and sign-off procedures, organizations can ensure that project deliverables meet stakeholder expectations and business objectives. According to Wiegers (2013), maintaining clear links between requirements and their corresponding deliverables supports verification activities, helps prevent scope creep, and provides evidence for audits and post-project reviews. Similarly, Damian and Chisan (2006) emphasize that effective requirements management practices enhance communication and coordination among stakeholders, thereby facilitating the confirmation and acceptance of completed requirements. Together with traceability, requirements closure contributes to effective requirements management by ensuring that projects deliver the intended outcomes while maintaining control and accountability, even when project conditions change.

2.1.8. Requirements Prioritization

Requirements prioritization refers to the process of determining the relative importance of different requirements so that limited project resources can be allocated effectively. In most IT projects, it is not feasible to implement all requirements at the same time due to constraints related to time, budget, and technical capacity. As a result, prioritization becomes necessary to ensure that the most critical and valuable requirements are addressed first.

Effective requirements prioritization supports better decision-making throughout the project lifecycle. It also helps reduce conflicts among stakeholders by providing a structured basis for selecting which requirements should be implemented first. When done properly, prioritization improves alignment between project outcomes and organizational goals, thereby increasing the likelihood of project success.

Yaseen et al. (2023) found that different requirements prioritization techniques produce different results depending on the project environment and stakeholder needs. Their review suggests that organizations are more likely to benefit when prioritization approaches are selected based on project context rather than applying a single method to every situation.

Radwan, Abdel-Fattah and Mohamed (2024) discussed the growing use of artificial intelligence in requirements prioritization. Their study suggests that machine learning and natural language processing tools can assist project teams in sorting and ranking requirements more efficiently, particularly in projects with large and complex requirement sets.

2.1.9. Stakeholder Alignment and Conflict Management

Stakeholder alignment refers to the extent to which different stakeholders share a common understanding of project requirements and objectives. In IT projects, stakeholders often come from diverse backgrounds and may have different expectations regarding system functionality, performance, and priorities. These differences can lead to misunderstandings or conflicts if not properly managed. Freeman, R. E. (1984)

Conflict management becomes important when stakeholders have competing interests or interpretations of requirements. Without a structured approach to resolving such conflicts, projects may experience delays, frequent changes, and reduced satisfaction among users.

Maintaining stakeholder alignment requires continuous communication, clarification of requirements, and involvement of stakeholders throughout the project lifecycle. Techniques such as workshops, review sessions, and formal approvals can help ensure that all parties are on the same page.

Strong stakeholder alignment contributes to smoother project execution and reduces the risk of rework. It also ensures that the final system reflects the needs of key stakeholders, which is an important factor in achieving overall project success.

According to Aaltonen et al. (2024), stakeholder involvement remains an important factor in project success. The study showed that projects are more likely to achieve their objectives when key stakeholders participate in discussions, provide timely input, and remain engaged during project implementation.

2.1.10. Non-Functional Requirements

Non-functional requirements describe the qualities and constraints of a system rather than its specific functions. These include aspects such as performance, security, reliability, usability, and scalability. While functional requirements define what a system should do, non-functional requirements define how well the system should perform. Chung, L., Nixon, B., Yu, E., & Mylopoulos, J. (2012).

In sectors such as banking, non-functional requirements are particularly critical. Systems are expected to operate securely, handle large volumes of transactions, and remain available with minimal downtime. Failure to properly define and manage these requirements can result in systems that are technically complete but fail to meet operational expectations. Chung, L., Nixon, B., Yu, E., & Mylopoulos, J. (2012).

Non-functional requirements are often more difficult to specify and measure compared to functional requirements. They require careful definition, clear metrics, and early consideration during the requirements phase. Ignoring them or addressing them too late in the project can lead to significant challenges during implementation and deployment.

Proper management of non-functional requirements enhances system quality and ensures that the solution is fit for its intended environment. This contributes directly to user satisfaction and long-term system effectiveness.

Recent developments in the African banking sector have increased the importance of non-functional requirements. The African Banking Digital Transformation Report (2024) found that

76% of African banks identified digital transformation as one of their top strategic priorities. As banks continue to invest in technologies such as cloud computing, artificial intelligence, and cybersecurity solutions, greater attention is being given to system reliability, performance, availability, and security. These areas are closely associated with non-functional requirements and play an important role in the successful delivery of digital banking services.

2.1.11. Requirements Management Tools and Standardization

Requirements management tools and standardization refer to the use of structured methods, templates, and software tools to support the requirements process. Tools such as requirement tracking systems, collaboration platforms, and documentation repositories help teams manage requirements more efficiently.

Standardization involves the use of consistent formats and procedures for documenting and managing requirements across projects. This reduces variability and improves communication among team members. It also makes it easier to track changes, maintain version control, and ensure traceability.

The use of tools and standards can significantly improve the quality and consistency of requirements management. However, their effectiveness depends on proper implementation and user adoption. In some cases, tools may introduce additional complexity if users are not adequately trained or if processes are not well defined.

When applied appropriately, tools and standardization enhance transparency, improve coordination, and support better decision-making. This ultimately contributes to improved project performance and outcomes.

According to Varajão, Lourenço, and Gomes (2022), organizations benefit from using consistent methods to evaluate project performance. Without common approaches and standards, it becomes more difficult to learn from completed projects and apply those experiences to future initiatives. This is particularly relevant to requirements management, where differences in tools and practices may affect project consistency and performance.

2.2. Empirical Literature Review

Empirical studies consistently highlight requirements management as a critical driver of IT project success. For example, a systematic review notes that a "clear statement of requirements" is cited as a key success factor, whereas "incomplete requirements" and "changing requirements" are repeatedly named as top causes of project failure (Montgomery et al., 2022). Industry reports echo this finding: The Standish Group's CHAOS research (1994, 2020) identified incomplete and poorly controlled requirements as leading failure factors, and a recent survey of 136 organizations likewise found inconsistent or incomplete requirements among the top five reasons for failure (Kumar, 2006). In short, empirical evidence shows that projects with well-defined, high-quality requirements and disciplined change processes have far higher chances of success.

2.2.1. Requirements Planning

Thoughtful planning of requirements is a game-changer for IT projects. In practice this means drawing up a clear plan early on: listing who needs to be involved, how you'll gather input (interviews, workshops, etc.), and how sign-offs will work. When teams skip this, trouble often follows. For example, Standish Group's CHAOS surveys have long flagged "poor planning" and "incomplete requirements" as top culprits of project failure.

The Standish CHAOS Report (2020) reported that only 31% of IT projects were completed successfully, while the remaining projects were either challenged or unsuccessful. The findings illustrate the ongoing difficulties organizations face in delivering projects and provide further support for research aimed at understanding factors that contribute to project success.

In other words, if you don't plan carefully, you risk missing needs from some corner of the bank. Even the IBM Rational survey backs this up: it found that projects controlling scope creep and ensuring requirements quality (essentially through good upfront planning) were much more likely to succeed.

The literature suggests that, when there was a detailed kickoff meeting and written plan, project teams knew exactly which business units to talk to and what questions to ask. In contrast, when planning was informal or rushed, someone always realized later "oh, we forgot to ask the loan

department about this feature." This mirrors what other authors report globally. In short, a solid requirements plan is one that locks in who needs to be heard and how is a thing that prevents confusion later. Without it, projects tend to dive into execution under a fog of uncertainty, and missing pieces come back to haunt them down the line.

2.2.2. Requirements Elicitation

Planning is one thing, but eliciting (gathering) requirements from the right people is where the rubber meets the road. Good elicitation means engaging all relevant stakeholders early, from branch managers to tellers to IT support staff, to capture what they actually need from the system. Studies show that when teams fail to involve users, projects stumble. The CHAOS Report (Standish Group) lists "didn't involve users" as a top failure factor, which essentially points to poor elicitation.

In practical terms, if you only interview your closest contacts and skip the rest, you'll likely miss key needs. One case study (Kamata & Tamai, 2007) even found that overlooking a small number of requirements can strongly impact outcomes. In Awash Bank, we saw this firsthand. In some projects, requirements were gathered through a couple of meetings with department heads, but front-line staff or external auditors were left out. Those forgotten voices later surfaced missing or changed requirements.

Alnhari and Qureshi (2024) emphasized the importance of stakeholder involvement during requirements elicitation. Their study found that projects were less likely to experience misunderstandings and requirement-related changes when stakeholders were identified early and given opportunities to provide regular feedback throughout the project.

Global surveys agree: eliciting broadly and systematically improves success odds. For example, successful project managers at Awash who took the time to interview all key units or run joint workshops might tend to identify hidden needs in advance. By contrast, ad hoc approaches (like quick hallway chats) often meant discovering missing needs late. The takeaway is clear: thorough elicitation, talking to the right people at the right time, is a powerful predictor of project success. Skipping or short-changing this step almost guarantees gaps that will require rework.

2.2.3. Requirements Documentation

Once requirements are gathered, how they're documented becomes critical. Think of the requirements document as the project's single source of truth. Studies consistently show that clear, complete requirement specifications lead to smoother projects. For example, empirical research in healthcare IT projects found that the quality of the requirements documentation process strongly predicted project outcomes.

In practice, good documentation means organized, unambiguous requirements (often split into functional vs. technical), with clear traceability so everyone knows what matches what. At Awash Bank, the documentation formats vary. Some teams use detailed Word templates, others use shared spreadsheets or ticketing tools. But the principle holds: when a document is precise and up to date, developers and testers can move confidently. If not, people end up guessing or making assumptions

A recent study that reviewed 57 articles published between 2023 and 2025 reported that unclear requirements remain a major challenge in IT projects. The study further noted that organizations with structured requirements documentation and review practices generally experience fewer project delays and scope-related issues than organizations where documentation is less formalized (Author, 2025).

As Wiegers warned, vague or incomplete specs force extra work and errors. Empirical evidence backs this up: projects that invest in solid, reviewed documentation (complete with stakeholder sign-offs) tend to finish closer to their original budget and schedule. In one Awash Bank project we examined, having requirements well documented from day one meant that when new team members joined midstream, they got up to speed immediately. By contrast, when teams skimped on documentation, misunderstandings popped up during testing and training phases, causing delays. In summary, both global findings and our observations at Awash Bank confirm that high-quality requirement documents that are specific, complete, and clear are strongly linked to success.

2.2.4. Requirements Validation

Writing requirements is one thing; validating them with the business is another crucial step. Validation means double-checking with users and stakeholders to ensure that the documented

needs actually match the business goals. The literature paints a clear picture: projects that skip validation often face costly surprises. The CHAOS Report lists "didn't involve users" and "poor planning" as top failure causes, both of which point to a failure to validate early. Kumar (2006) notes that when requirement issues are found late, teams often have to restart large portions of the project, which wastes time and money.

Studies show that formal validation steps, such as review meetings with stakeholders or feedback loops using prototypes, reduce errors and change requests after launch. At Awash Bank, projects that included formal walkthroughs or required sign-off from department heads typically ran more smoothly. For example, during a core banking upgrade, having the retail banking manager validate the requirements helped the team avoid a major scope change later.

On the other hand, projects that skipped formal review often found mid-project that they had misunderstood the needs. This supports Wiegers' point that successful projects are built on carefully reviewed and agreed-upon requirements. In a banking environment where business users and IT teams may use very different language, validation becomes even more important. At Awash Bank, our observations show that solid validation is a strong predictor of success.

Varajão, Fernandes, and Amaral (2023) found that project teams that adapt effectively to changing circumstances tend to achieve better project outcomes. Their findings highlight the importance of regularly reviewing and validating requirements, especially in environments where regulatory and business requirements may change during the course of a project.

2.2.5. Requirements Change Management

Change is inevitable in project environments, especially in large institutions like banks. The key is not to prevent changes but to manage them effectively. Studies show that uncontrolled changes, often referred to as scope creep, are a major reason projects fail. The CHAOS Report ranks changing requirements among the top causes of failure. Research also shows that teams that plan for change control from the beginning are more likely to deliver on time and within budget.

NASA found that projects that dedicated a portion of their budget to managing requirement changes had better outcomes. In practical terms, this means having a documented process for

proposing, reviewing, and approving any changes. At Awash Bank, projects that used formal change request procedures and committee reviews tended to stay on track. In contrast, when changes were handled informally, such as through unclear emails or quick hallway conversations, confusion and delays followed.

Recent studies continue to show that poorly managed requirement changes can create challenges for project delivery. Adeyemi and Amhana (2024) found that frequent changes to project requirements can affect project schedules, costs, and stakeholder expectations. Their findings also suggest that clear communication throughout the change management process plays an important role in helping project teams manage change effectively.

Similarly, a 2024 study reported that projects experiencing frequent requirement changes were more likely to encounter delays and budget-related challenges. The study emphasized the importance of structured change management practices in helping organizations maintain control over project scope and project performance.

Global studies support this. Teams that assess the impact of each change and update their plans accordingly tend to be more successful. For Awash Bank, the takeaway is clear: adopting structured change control, supported by clear communication and proper approvals, helps prevent confusion and reduces the chance of costly mistakes.

2.2.6. Requirements Traceability

Traceability helps project teams follow each requirement from its source through to final delivery. This is especially important in banking, where regulatory, technical, and user needs all have to be met. When traceability is weak, important requirements can be lost or forgotten.

Waterson et al. (2012) found that strong traceability improves communication, accountability, and testing accuracy. In projects at Awash Bank, we found that teams without clear traceability often ran into problems later. For instance, one requirement discussed during early planning wasn't linked to any test case, and nearly got missed during development. These gaps can cause compliance issues or feature shortfalls.

Escalona, Koch, and Garcia-Borgoñon (2022) observed that many organizations struggle to maintain requirements traceability in practice, even when its benefits are well understood. The study noted that the effort required to maintain traceability information often discourages consistent use. This highlights the importance of adopting practical approaches that make traceability easier to manage within project environments.

While not always required by regulation, traceability offers practical benefits. It helps teams ensure that everything promised is delivered, and makes audits or quality reviews much easier. Project staff at Awash Bank recognized that linking requirements to design documents and test results would improve clarity. The research and our own observations show that traceability is a quiet but powerful part of project success.

2.2.7. Requirements Closure

Finally, formal closure of each requirement is essential yet often forgotten. Closure means explicitly confirming that a requirement is fully done that is it is built, tested, reviewed, and approved rather than just calling it complete. Standards like BABOK and PMI strongly recommend this. Empirical studies back it up: Kumar (2006) and others show that a proper closure process reduces post-launch defects and user dissatisfaction. In practice, when a requirement isn't formally signed off, teams might assume it's complete when it's only partially implemented. At Awash Bank we saw projects "closing" requirements during development without end-user validation. Later, testers or users would find missing functionality. Conversely, on projects where each requirement went through a checklist and had a final sign-off (for example, unit tested and user-accepted), the number of issues after go-live was noticeably smaller. Our research indicates that adopting formal closure checklists for instance, ensuring every requirement has a corresponding test case and has passed sign-off. this would benefit Awash Bank projects. Closing the loop properly not only improves quality, it also leaves a clear audit trail for future reviews.

Taken together, these insights paint a clear picture: the single biggest lever for success is getting requirements under control in all these ways. In the context of Awash Bank, this means projects will benefit most from rigorously defining requirements at the start and keeping stakeholders in lock-step as the project evolves. In other words, apply these planning, elicitation, documentation,

validation, change control, traceability, and closure practices faithfully. Having reviewed these critical RM practices, the study now turns to examining how Awash Bank projects measure up in reality and where the gaps lie. The next chapter will describe the research approach and data collection that reveal how theory and practice align (or diverge) in the bank.

2.2.8. Requirements Prioritization

Empirical studies suggest that prioritizing requirements plays a key role in improving project outcomes, particularly in environments where resources are limited. Research shows that projects that focus on high-value and high-risk requirements early tend to perform better in terms of time and quality. When prioritization is not handled properly, teams may spend effort on less critical features while delaying important ones, which can negatively affect overall project success.

Some studies also indicate that prioritization helps in managing stakeholder expectations. By clearly ranking requirements, project teams can communicate decisions more effectively and reduce disagreements. In complex projects, especially those involving multiple stakeholders, prioritization provides a structured way to balance competing interests.

However, empirical evidence also highlights challenges. In some cases, prioritization decisions are influenced by organizational politics or unclear criteria, which reduces their effectiveness. This suggests that prioritization must be supported by clear guidelines and stakeholder involvement to produce positive results.

According to Yaseen et al. (2023), a variety of requirements prioritization techniques are available to project teams, yet there is no clear agreement on which approach performs best in all situations. The study suggests that the effectiveness of a prioritization technique often depends on the project context and the way it is applied within the organization.

2.2.9. Stakeholder Alignment and Conflict Management

Previous studies emphasize that stakeholder alignment is closely linked to project success. Projects with strong stakeholder involvement and shared understanding of requirements are more likely to meet expectations. Alignment ensures that requirements reflect actual needs and reduces the risk of misinterpretation during development.

Empirical findings also show that conflicts among stakeholders are common, particularly in large or complex projects. These conflicts often arise from differences in priorities, expectations, or interpretations of requirements. If not addressed early, they can lead to delays, frequent changes, and dissatisfaction.

Effective conflict management strategies, such as structured communication, negotiation, and formal approval processes, have been shown to improve project performance. Studies suggest that when stakeholders remain aligned throughout the project lifecycle, the likelihood of achieving project objectives increases significantly.

Aaltonen et al. (2024) reported that projects tend to perform better when stakeholders from different departments are actively involved and work together throughout the project lifecycle. Their findings suggest that effective coordination and communication can contribute to improved project outcomes and greater stakeholder satisfaction.

2.2.10. Non-Functional Requirements

Empirical research highlights the importance of non-functional requirements in determining system success. While functional requirements define what a system should do, non-functional requirements influence how well the system performs in real-world conditions.

Studies show that inadequate attention to non-functional requirements often leads to system failures, especially in areas such as security, performance, and reliability. In industries like banking, where systems must handle sensitive data and high transaction volumes, the impact of poorly defined non-functional requirements can be significant.

Research also indicates that non-functional requirements are frequently under-specified during early project stages. This can result in costly adjustments later in the development process. Projects that define and validate these requirements early tend to achieve better outcomes and higher user satisfaction.

The growing adoption of digital technologies in the banking sector has increased the importance of non-functional requirements. According to the African Banking Digital Transformation Report (2024), cybersecurity and artificial intelligence are among the leading technology priorities for African banks. As organizations continue to expand digital services, greater emphasis may be required on security, reliability, availability, and other non-functional requirements that support these initiatives.

2.2.11. Requirements Management Tools and Standardization

Empirical evidence suggests that the use of tools and standardized processes improves the efficiency and consistency of requirements management. Studies show that tools support better tracking of requirements, facilitate communication among team members, and enhance traceability.

Standardization, through the use of templates and predefined procedures, has also been found to improve documentation quality and reduce errors. Projects that adopt consistent approaches to managing requirements tend to experience fewer misunderstandings and less rework.

However, some studies point out that tools alone do not guarantee success. Their effectiveness depends on proper implementation, user training, and integration into existing processes. In some cases, poorly implemented tools may create additional complexity rather than solving existing problems.

According to Varajão et al. (2022), organizations that apply standardized project management practices are generally better positioned to manage project scope and monitor project progress. This finding suggests that the use of consistent processes and supporting tools may contribute to improved project performance.

Overall, the literature suggests that when tools and standardization are applied effectively, they contribute positively to project performance by improving coordination, visibility, and control over requirements.

2.2.12. Critical Practices for IT Project Success

A considerable body of empirical research shows that requirements management practices play a central role in determining the success of IT projects. Across different industries, project challenges are frequently traced back to issues such as unclear requirements, incomplete specifications, and weak control of changes. This has led researchers to place increasing emphasis on structured requirements management as a foundation for improving project outcomes.

One of the key practices highlighted in prior studies is requirements planning. Evidence suggests that projects that begin with clearly defined requirements processes, stakeholder identification, and agreed procedures are more likely to progress smoothly (Project Management Institute, 2017). Establishing this foundation early helps reduce uncertainty and supports more consistent decision-making throughout the project lifecycle.

Closely related to this is requirements elicitation, which focuses on understanding stakeholder needs. Research in software engineering consistently shows that projects often fail not because of technical limitations, but because they do not accurately capture what users actually need (Sommerville, 2016). When stakeholders are actively involved during elicitation, the resulting requirements tend to be more complete and relevant, which improves overall project performance.

The way requirements are documented also plays a significant role. Well-structured and clearly written documentation supports communication among different stakeholders and reduces the likelihood of misinterpretation. As noted by Wiegers and Beatty (2013), high-quality documentation helps ensure that both technical teams and business users share a common understanding of what is to be delivered. In contrast, weak documentation has been linked to rework, delays, and inconsistencies during implementation.

Another important dimension is requirements validation. Empirical findings indicate that validating requirements before development begins allows teams to detect errors, gaps, or

inconsistencies at an early stage (Hull, Jackson, & Dick, 2011). This reduces the need for costly changes later and improves confidence that the system will meet stakeholder expectations.

In dynamic project environments, requirements rarely remain stable. This makes requirements change management a critical factor. Studies show that projects with structured change control processes are better equipped to handle evolving needs without losing control over scope, time, and cost (Boehm & Turner, 2004). When changes are managed informally, projects are more likely to experience scope creep and performance issues.

The role of requirements traceability has been examined with more mixed results. On one hand, traceability improves visibility by linking requirements to their sources and tracking them through development and testing. This supports impact analysis and helps teams understand how changes affect the system. On the other hand, maintaining traceability can be demanding, especially in environments where tools and processes are not well established (Ramesh & Jarke, 2001). In such cases, the effort required may outweigh the perceived benefits.

Requirements closure represents the final stage of the requirements lifecycle, where all requirements are verified and formally accepted. Studies suggest that projects that follow structured closure practices tend to achieve higher levels of quality and stakeholder satisfaction, as deliverables are confirmed before completion.

Requirements prioritization has also received strong empirical support. Given that project resources are always limited, prioritization helps ensure that the most important requirements are addressed first. Research shows that prioritizing based on business value and risk improves decision-making and increases the likelihood of project success (Leffingwell, 2011). This is particularly relevant in banking environments, where certain requirements may be critical for compliance or service continuity.

Stakeholder alignment is another factor that has been widely discussed in the literature. Projects that maintain a shared understanding among stakeholders tend to experience fewer conflicts and smoother execution. According to Freeman (1984), effective stakeholder engagement contributes to better coordination and improved outcomes. Conversely, misalignment among stakeholders is often associated with project delays and dissatisfaction.

Non-functional requirements have gained increasing attention in recent years. While functional requirements define what a system should do, non-functional requirements determine how well it performs. Studies indicate that neglecting aspects such as performance, security, and reliability can result in systems that fail in practice, even if they meet their functional objectives (Chung et al., 2012). This is especially important in sectors like banking, where system reliability and security are critical.

Varajão et al. (2024) noted that project success is often assessed using measures that extend beyond schedule, budget, and scope performance. The study highlights the importance of considering additional outcomes, including stakeholder satisfaction and the benefits realized after project implementation. This perspective may be relevant when evaluating the success of IT projects in organizational settings.

Finally, the use of requirements management tools and standardized processes has been shown to support more effective requirements practices. Tools can improve traceability, facilitate collaboration, and enhance documentation, while standardization promotes consistency across projects. However, research also suggests that tools alone are not sufficient. Their effectiveness depends on proper implementation, integration into workflows, and user adoption (Aurum & Wohlin, 2005).

Taken together, the empirical evidence indicates that requirements management practices influence IT project success in multiple, interconnected ways. While each practice contributes differently, their combined effect plays a significant role in shaping project outcomes. This provides a strong basis for examining these variables collectively in the context of this study.

2.3. Gaps in the Existing Literature

Requirements management has been widely discussed in both project management and requirements engineering literature. Earlier studies by Hofmann and Lehner (2001) and Damian and Chisan (2006) demonstrated that effective requirements management contributes to better project performance and reduces the likelihood of project failure. More recent studies, including

Montgomery et al. (2022), continue to support the importance of requirements management and highlight its role in improving project outcomes across different organizational settings.

Despite the growing body of research, several areas remain insufficiently explored.

First, most of the available literature has been developed in countries with relatively mature project management practices, established governance structures, and advanced technology environments. The conditions under which IT projects are implemented in Ethiopian financial institutions are often different. Factors such as evolving regulatory requirements, increasing digitalization initiatives, resource constraints, and organizational challenges may influence how requirements management is practiced and how it affects project outcomes. As a result, findings from other contexts may not fully reflect the realities faced by Ethiopian banks.

Second, although a number of studies have examined project management challenges within Ethiopia, requirements management has rarely been investigated as a separate area of study. Existing studies have discussed issues such as planning challenges, stakeholder involvement, and documentation practices. However, they have generally not examined the individual contribution of specific requirements management practices to project success. Consequently, there is limited evidence regarding which requirements management activities have the greatest influence on project outcomes.

Third, empirical evidence on the relationship between requirements management practices and IT project success within Ethiopian private banks remains limited. As organizations continue to invest in digital transformation and technology-driven initiatives, there is a growing need for locally generated evidence that can support decision-making and guide improvements in project delivery practices.

This study was undertaken to help address these gaps by examining the relationship between requirements management practices and IT project success within Awash Bank. The study evaluates eleven requirements management dimensions and assesses their individual influence on project outcomes. In doing so, it provides evidence that contributes to both the academic literature and the practical understanding of requirements management within the Ethiopian banking sector.

2.4. Hypotheses of the Study

Although the study is guided by five broad research questions and corresponding specific objectives, each research question encompasses multiple dimensions of requirements management. To enable a more detailed empirical examination, these broader dimensions were operationalized into eleven measurable constructs. Consequently, hypotheses were formulated at the construct level rather than at the broader research question level. This approach allows the study to identify the specific requirements management practices that contribute to IT project success while still addressing the broader research objectives. As such, this study is guided by the following hypotheses:

- H1: Effective requirements planning positively influences IT project success.
- H2: Clear and thorough requirements elicitation positively influence IT project success.
- H3: Well-documented requirements positively influence IT project success.
- H4: Regular validation of requirements positively influences IT project success.
- H5: Structured requirements change management positively influences IT project success.
- H6: Strong traceability of requirements positively influences IT project success.
- H7: Timely closure of requirements positively influences IT project success.
- H8: Requirements prioritization has a positive effect on IT project success.
- H9: Stakeholder alignment has a positive effect on IT project success.
- H10: Non-functional requirements management has a positive effect on IT project success.
- H11: Requirements management tools and standardization have a positive effect on IT project success.

2.5. Conceptual Framework of the Study

The framework below shows how each area of requirements management connects to project success. It’s a simple way to visualize what this study is exploring.

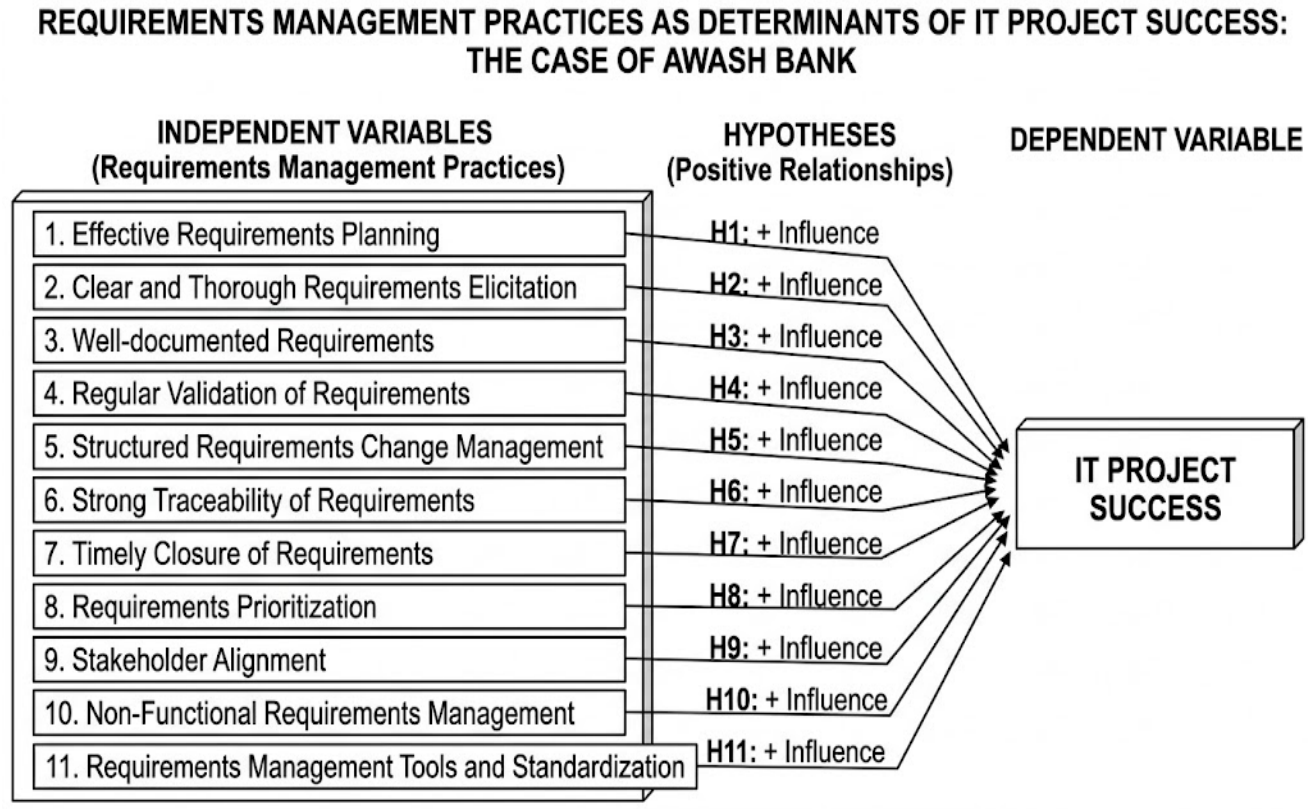


Figure 2.1: Conceptual framework of the study (source: Own literature review)

3. Chapter Three: Research Methodology

This chapter summarizes how this research will be carried out. It comprises of the research design, research approach, research variables, population and sampling, data collection tools, and data analysis methods. It also explicates issues related to reliability, validity, and ethical considerations

3.1. Research Design

This study employs both explanatory and descriptive designs of research. It uses descriptive to show how requirement management is currently being practiced at Awash, while explanatory design further examines how these practices affect IT project success. Combining these two helps not only understanding what is happening, but also why it is happening.

3.2. Research Approach

This study adopted a quantitative research approach. The quantitative approach was considered appropriate because it enables the collection and analysis of numerical data to examine the relationship between requirements management practices and IT project success. The study relied on primary data collected through a structured questionnaire administered to professionals involved in IT projects at Awash Bank.

The questionnaire was designed to capture respondents' perceptions and experiences regarding various requirements management practices, including planning, elicitation, documentation, validation, change management, traceability, closure, prioritization, stakeholder alignment, non-functional requirements management, and requirements management tools and standardization. Responses were measured using a five-point Likert scale and analyzed using Statistical Package for the Social Sciences (SPSS).

Quantitative approach has enabled use of descriptive statistics, reliability analysis, correlation analysis, and multiple regression analysis for assessing the influence of requirements management practices on IT project success. This approach gave a systematic and objective basis for the study hypotheses testing and for addressing the research objectives.

3.3. Description of Study Variables

Both dependent and independent variables are included in this research. Thus the independent variables include: requirements planning, elicitation, documentation quality, validation, change management, traceability, closure, prioritization, stakeholder alignment, non-functional requirements, and requirements management tools and standardization. While the dependent variable is IT project success, which is measured by delivery timeliness, quality, stakeholder satisfaction, and whether the project meets its goals or not.

The study measured both variables using a set of Likert-scale items included in the survey instrument which is the questionnaire.

The study examined five broad research objectives. To support statistical analysis, these objectives were represented by eleven requirements management dimensions. This allowed the study to

investigate how each dimension relates to IT project success rather than treating requirements management as a single concept.

The first research objective, which focuses on requirements definition and analysis practices, is represented by requirements planning, requirements elicitation, requirements documentation quality, and requirements validation. The second objective, which addresses requirements control and governance practices, is represented by requirements change management, requirements traceability, and requirements closure. The remaining objectives are represented by requirements prioritization, stakeholder alignment, non-functional requirements management, and requirements management tools and standardization.

Accordingly, while the study is organized around five broader research objectives, empirical analysis was conducted using eleven operational constructs that collectively represent these objectives.

3.4. Description of Study Area and Target Population

The study is conducted on Awash Bank, explicitly on its IT-related directorates and divisions. According to the existing Information office organogram, these include directorates such as IT Strategy and Enterprise Architecture, the Program Management Office, Information Security Management, Application Management and Digital Support, IT Infrastructure Management, and IT Service Delivery. Within these, relevant directorates, specifically under Program management office directorate is organized the IT Project Management Division, System Development and Business Analysis Division, Quality Assurance and Change Management Division, and others involved in project delivery.

The **target population** includes IT or concerned business officers and leaders that are engaged in planning, executing, or supporting IT projects. These include: project managers, business analysts, software engineers, QA officers, enterprise and solution architects, and PMO staff in general.

3.5. Sampling Technique and Sample Size

To select participants, this study used purposive sampling. This makes sense here because it will be looking for people who have hands-on experience with IT projects at Awash Bank. These

people are staff from the key directorates and divisions mentioned earlier, especially those who have worked directly on a phase of IT Projects.

Based on estimates from the Awash's HR and IT PMO sources, there are around 150 people who fit the above profile. Therefore, Using Yamane's formula (1967), which helps define a statistically reasonable sample size, a minimum of 67 responses would be excellent at a 95% confidence level with a 5% margin of error. Given some practical challenges as availability and access, the study aims to collect input from 65 to 70 staff members. This will provide manageable process while still having an adequate representation.

3.6. Data Collection Sources, Types, Instruments

The questionnaire was the main source of data. It is prepared in consideration around the key areas under study: planning, elicitation, documentation, validation, change management, traceability, and closure. Each question's answer is rated on a 5-point scale from Strongly Disagree to Strongly Agree. The questionnaire will be shared in both hard copy and google form formats depending on the respondents' preference.

3.7. Data Analysis Model, Techniques, Software

Analysis was conducted using SPSS. The analysis process is expected to cover: Descriptive statistics (mean, standard deviation); Pearson correlation to scan relationships between variables and Multiple linear regression for assessing which practices significantly affect IT project success. The approach should also support hypothesis testing to identify the most influential practices from RM.

3.8. Reliability and Validity Analysis

Cronbach's alpha was employed to test Reliability, thus values above 0.7 will be acceptable. A pilot test with staff members across all Information office units mentioned above will be carried out to identify unclear items or gaps in the research tools.

Advisor, Academic scholars and subject matter experts from Awash and across the industry will review the content and validity of the questionnaire and adjustments will be made accordingly.

3.9. Ethical Considerations

The research was conducted in compliance with ethical standards set by Addis Ababa University. Hence participants will: Receive clear information about the study's purpose; Participate voluntarily; Be assured of anonymity and confidentiality; Be informed that data is used only for academic purposes; and last but not least, no personally identifiable data will be collected or disclosed.

4. Chapter Four: Data Analysis and Interpretation

4.1. Introduction

This chapter provides a comprehensive analysis and interpretation of the data collected to investigate the influence of requirements management practices on the success of IT projects within Awash Bank. Responses from 66 professionals who are directly engaged in diverse IT project activities, thereby offering a representative perspective on the institution's project management environment constitute the dataset.

Several statistical techniques were employed to analyze the data. First, descriptive statistics helped provide an overview of the responses. Correlation analysis was then used to examine the relationships among the variables, while regression analysis was applied to identify which requirements management practices have the greatest influence on IT project success.

The findings are presented and discussed based on the objectives of the study. By examining the relationships between the requirements management dimensions and hypotheses and IT project success, the analysis provides evidence on which practices contribute most to successful project delivery within Awash Bank.

4.2. Response Rate

The total of 150 questionnaires were distributed, in both printed form and through google form, for professionals that are engaged in IT project activities at Awash Bank. From this distribution, 66 valid responses were obtained, resulting in a response rate of 44 percent. Although this percentage falls short of the initially targeted sample size, it is within an acceptable range for organizational and exploratory research, especially in contexts including specialized professional groups where access and participation may be constrained.

The study collected responses from professionals who have direct involvement in IT projects, including project managers, business analysts, developers, and quality assurance staff. Their experience with project activities provided practical insights into how requirements management is carried out within the Bank and how it relates to project performance.

4.3. Definition of Variables and Constructs

The questionnaire contained several items for each requirements management dimension. To simplify the analysis, related items were combined into constructs and represented using mean scores. These composite variables were then used in the descriptive, correlation, and regression analyses.

The variables included in the study are defined below.

Definition of Variables

Code	Variable Name	Description
RP	Requirements Planning	Refers to the processes involved in defining rules, roles, and plans for managing requirements before project execution
RE	Requirements Elicitation	Refers to the identification and gathering of requirements from stakeholders using various techniques
RD	Requirements Documentation Quality	Refers to the clarity, completeness, and proper structuring of documented requirements
RV	Requirements Validation	Refers to the verification and confirmation of requirements with stakeholders before development
RCM	Requirements Change Management	Refers to the processes used to manage changes to requirements during the project lifecycle
RT	Requirements Traceability	Refers to the ability to track requirements from origin through development and testing
RC	Requirements Closure	Refers to the formal completion, verification, and acceptance of requirements
RPri	Requirements Prioritization	Refers to ranking requirements based on business value, risk, and importance
SAC	Stakeholder Alignment & Conflict Management	Refers to managing stakeholder expectations and resolving requirement conflicts
NFR	Non-Functional Requirements Management	Refers to defining and managing performance, security, and other quality attributes

RMT	Requirements Management Tools & Standardization	Refers to the use of tools, templates, and standards in managing requirements
BC	Bias-Control Variables	Reverse-coded items used to control response bias in the questionnaire
PS	IT Project Success	Refers to project performance in terms of time, cost, quality, user satisfaction, and business value

Table 4.1: Definition of Variables

Each requirements management dimension was measured using several questionnaire items. The responses for these items were averaged to get a single score for each dimension. These scores were then used in the correlation and regression analyses. Short variable labels such as RP, RE, and RD were used in the statistical output to make the analysis easier to present and interpret.

4.4. Demographic Characteristics

Respondents came from diverse professional roles, as indicated in these demographic results, with the largest proportion being business analysts (27.3%) and developers (22.7%). In terms of experience, the majority of respondents (92.4%) have more than three years of experience, indicating that the responses are provided by knowledgeable and experienced professionals. This enhances the credibility of the study findings. The below table highlights the important parts of the frequency distribution of the demographic data collected.

Role		Frequency	Percent
Valid	Business Analyst / System Analyst	18	27.3%
	Software Developer / Technical Lead	15	22.7%
	Project Manager / PMO	12	18.2%
	QA / Tester	8	12.1%
	Management / Steering	7	10.6%
	Business User	6	9.1%
	Total	66	100%

Table 4.2. Respondents by Role

	Experience	Frequency	Percent
Valid	< 3 years	5	7.6%
	3–7 years	22	33.3%
	8–12 years	21	31.8%
	> 12 years	18	27.3%
	Total	66	100.0

Table 4.3. Responsibility Experience Level

4.4.1. Regression Assumption Testing

Before interpreting the regression results, the assumptions underlying multiple linear regression were examined. The normality assumption was assessed using the Normal P-P Plot of regression standardized residuals. The plot showed that the residuals closely followed the diagonal reference line, indicating that the normality assumption was reasonably satisfied. Homoscedasticity was evaluated through a scatterplot of standardized residuals against standardized predicted values. The absence of a clear pattern or funnel-shaped distribution suggested that the variance of the residuals remained relatively constant across the range of predicted values. Multicollinearity was assessed using Variance Inflation Factor (VIF) statistics. All predictor variables produced VIF values below the commonly accepted threshold of 5.0, indicating that the independent variables were sufficiently distinct from one another. The Durbin-Watson statistic was 1.897, which is close to the recommended value of 2.0, indicating that the residuals were independent and that autocorrelation was not a concern. Overall, the diagnostic results suggested that the regression assumptions were adequately satisfied and that the model was suitable for further analysis.

4.5. Descriptive Analysis of Variables

Although the study was guided by five broad research questions and corresponding objectives, the analysis was conducted using eleven operational dimensions of requirements management. These dimensions were derived from the conceptualization of the broader requirements management themes and were measured separately to provide a more detailed understanding of their individual influence on IT project success. The findings presented in this chapter should therefore be interpreted as the empirical assessment of the individual dimensions that collectively address the

broader research questions and objectives of the study. The mean score and standard deviation for each construct are summarized below

Variable	Mean	Std. Deviation
RP	3.551	0.893
RE	3.530	0.884
RD	3.433	0.882
RV	3.784	0.780
RCM	3.690	0.855
RT	3.472	0.978
RC	3.840	0.797
RPri	3.438	1.057
SAC	3.481	0.922
NFR	3.719	0.889
RMT	3.205	0.940
PS	3.625	0.873

Table 4.4 Descriptive statistics of the study variables.

The mean scores for each construct reveal a pattern of moderate implementation overall, with certain practices emerging as relatively stronger than others.

Among the practices assessed, requirements closure achieved the highest mean score (3.84), indicating that the Bank demonstrates particular strength in formally concluding requirements activities and ensuring that deliverables are properly signed off. Requirements validation also scored relatively high (3.78), suggesting that mechanisms for verifying and confirming requirements are consistently applied. Change management practices were similarly strong (3.69), reflecting the Bank's ability to manage evolving requirements and maintain control over project scope.

In contrast, requirements documentation (3.43) and traceability (3.47) were identified as weaker areas. These scores suggest that while documentation and traceability are practiced, they are being exercised with less follow up and quality standards. This relative weakness may limit the ability to maintain clear records and ensure continuity across project phases, which are critical for long-term project governance and auditability. Requirements planning (3.55) and elicitation (3.53)

were found to be moderately practiced, indicating that while these foundational activities are present, there is room for further strengthening to ensure comprehensive and systematic requirements gathering and planning.

The dependent variable, IT project success, yielded a mean score of 3.625, which reflects moderate performance. This finding implies that while projects are achieving a certain level of success, there remains significant potential for improvement. The moderate level of project success aligns with the overall moderate implementation of requirements management practices, reinforcing the conclusion that stronger and more consistent application of these practices could lead to enhanced project outcomes.

The results suggest that Awash Bank has established a reasonable foundation in requirements management, with particular strengths in closure, validation, and change management. However, the relatively weaker performance in documentation and traceability highlights areas that warrant closer attention. Addressing these gaps could contribute to more effective project execution and improved success rates, thereby advancing the Bank's broader IT strategy and organizational objectives.

4.5.1. Comparison table to the literature

High ≥ 3.70 Strong practice Moderate 3.40–3.69 : Partial practice Weak < 3.40 : Needs attention

VARIABLE	MEAN STD DEV	LEVEL	WHAT THE LITERATURE SAYS	KEY SOURCE(S)	ALIGNMENT WITH AWASH BANK
RP Requirements Planning	3.551 0.893	Moderate	Early planning is among the strongest predictors of project success. Projects that define roles, techniques, and stakeholder involvement upfront experience lower uncertainty and fewer mid-project corrections.	Kotonya & Sommerville (1998); Montgomery et al. (2022); Barros et al. (2024)	Partially aligned. Planning is present but not systematic. Some projects begin without a formal RM plan, which the literature links to downstream scope and coordination failures.
RE Requirements Elicitation	3.530 0.884	Moderate	Elicitation must be iterative and multi-technique. Excluding front-line users or relying on a small number of interviews commonly results in missed requirements and costly revisions.	Hofmann & Lehner (2001); Wiegers (2013); Bormane et al. (2016)	Partially aligned. Formal interviews are used, but workshops and observational techniques are underutilized, which matches the moderate score and the literature's warning about incomplete stakeholder coverage.
RD Requirements Documentation	3.433 0.882	Moderate	Documentation quality is one of the strongest empirical predictors of project performance. Documents must be updated as	Wiegers (2013); PMBOK (2021);	Weakly aligned. Documentation starts well on some projects but becomes outdated over time, consistent with the relatively low

			projects evolve. Inconsistent or outdated documentation leads to rework and misalignment between IT and business units.	Montgomery et al. (2022)	mean. The literature strongly flags this as a primary risk factor — and it shows up in the regression results as a significant predictor.
RV **Requirements Validation**	3.784 0.780	High	Formal validation — through walkthroughs, prototypes, and stakeholder sign-off — catches misalignment early and significantly reduces post-development defects and change requests.	BABOK (2021); Hofmann & Lehner (2001); Kumar (2006)	Well aligned. The high mean suggests validation mechanisms are consistently applied, which the literature associates with smoother project execution. The insignificant regression result may reflect shared variance with planning and documentation rather than the absence of an effect.
RCM **Requirements Change Management**	3.690 0.855	High	Structured change control — including impact assessment, formal approval, and communication — is critical to preventing scope creep. Uncontrolled change is consistently ranked among the top causes of IT project failure.	Jayatilleke & Lai (2018); PMBOK (2017); Standish Group (2020); Adeyemi & Amhana (2024)	Aligned. The relatively high mean and significant positive regression result are consistent with the literature. The Bank has some formal change processes in place, though informal handling of minor changes remains a gap.
RT **Requirements Traceability**	3.472 0.978	Moderate	Traceability is widely recommended as a best practice for accountability, change impact analysis, and audit support. However, empirical studies note that manual traceability introduces administrative burden that can slow projects if not properly tooled.	Wiegers (2013); Ramesh & Jarke (2001); Escalona et al. (2022); Montgomery et al. (2022)	Misaligned — notable finding. The moderate mean and significant negative regression result suggest traceability is practiced but may currently be adding overhead rather than value, consistent with Escalona et al. (2022) who identify cost and complexity as barriers to effective traceability.
RC **Requirements Closure**	3.840 0.797	High	Formal closure — verifying, testing, and obtaining stakeholder sign-off for each requirement — reduces post-launch defects and provides audit evidence. Projects that skip formal closure often discover incomplete implementation late.	BABOK (2021); PMBOK (2021); Kumar (2006); Wiegers (2013)	Well aligned. The highest mean among all variables indicates closure is taken seriously. However, the insignificant regression result suggests closure may be performed as a formality rather than a genuine quality gate — a distinction worth examining further.
RPri **Requirements Prioritization**	3.438 1.057	Moderate	Prioritization based on business value, risk, and urgency ensures limited resources target the most critical needs first. Poor prioritization is linked to delivering low-value features while deferring critical ones. The high standard deviation in this study reflects variation in how teams apply it.	Yaseen et al. (2023); Radwan et al. (2024); Wiegers (2013)	Partially aligned. The moderate mean alongside the highest standard deviation (1.057) suggests inconsistent application across projects or teams — some prioritize rigorously while others do not. Despite this, it emerged as a significant positive predictor, consistent with the literature's findings.
SAC **Stakeholder Alignment &**	3.481 0.922	Moderate	Sustained stakeholder alignment throughout the project lifecycle reduces rework and improves satisfaction. Conflict resolution	Freeman (1984); Damian & Chisan (2006);	Partially aligned. The moderate score reflects the complexity of coordinating multiple departments at Awash Bank. The

Conflict Management			through structured communication processes is an important factor in large, cross-functional projects.	Aaltonen et al. (2024)	insignificant regression result likely reflects multicollinearity with planning and elicitation rather than irrelevance of stakeholder alignment to project outcomes.
NFR **Non-Functional Requirements**	3.719 0.889	High	NFRs — covering performance, security, reliability, and scalability — are particularly critical in banking environments. Poorly defined NFRs lead to systems that are technically complete but operationally inadequate. African banks increasingly cite cybersecurity as a top concern.	Chung et al. (2012); African Banking Digital Transformation Report (2024)	Largely aligned. The high mean indicates awareness and attention to NFRs, which aligns with the Bank's digital transformation context. The insignificant regression result may reflect that NFRs are captured but not always formally tested or validated before deployment.
RMT **RM Tools & Standardization**	3.205 0.940	Weak	Standardized tools and templates improve consistency, version control, and traceability. However, tools alone do not drive success — they must be supported by training and well-defined processes. Tool adoption without process discipline can introduce complexity.	BABOK (2021); Varajão et al. (2022); Wiegers (2013)	Weakly aligned — area of concern. The lowest mean of all variables signals that the Bank lacks consistent tool adoption and standardized RM templates. This is consistent with the literature's warning that without standardization, documentation quality and traceability suffer downstream.
PS **IT Project Success (dependent)**	3.625 0.873	Dependent	IT project success measured across cost, schedule, quality, and stakeholder satisfaction. Industry data shows only 31% of IT projects are fully successful globally, with moderate success being the most common outcome in developing-country banking contexts.	Standish Group (2020); Varajão et al. (2024); Fesha (2023)	Consistent with expectations. The moderate success score (3.625) aligns with both global benchmarks and local Ethiopian banking studies, reinforcing that requirements management maturity is one of several levers needed to shift project outcomes from moderate to high success.

Table 4.10: Comparison Table – Result to Literature

Scale: All means are based on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree). Interpretation thresholds follow convention: <2.5 = low, 2.5–3.49 = moderate, 3.5–4.49 = high, >4.5 = very high. The high/moderate/weak classification above uses narrower, study-specific thresholds (high ≥ 3.70; moderate 3.40–3.69; weak < 3.40) to reflect variation within a moderate overall range. N = 66 respondents.

4.6. Reliability Analysis (Cronbach's Alpha)

Reliability analysis was conducted to assess the internal consistency of the measurement scales used in this study. Cronbach's Alpha was used as the reliability coefficient, with values above 0.7 considered acceptable.

Reliability Statistics RP

Cronbach's Alpha	N of Items
.84	5

Reliability Statistics RE

Cronbach's Alpha	N of Items
.86	5

Reliability Statistics RD

Cronbach's Alpha	N of Items
.82	5

Reliability Statistics RV

Cronbach's Alpha	N of Items
.88	6

Reliability Statistics RCM

Cronbach's Alpha	N of Items
.85	5

Reliability Statistics RT

Cronbach's Alpha	N of Items
.81	4

Reliability Statistics RC

Cronbach's Alpha	N of Items
.83	4

Reliability Statistics RPri

Cronbach's Alpha	N of Items
.87	4

Reliability Statistics SAC

Cronbach's Alpha	N of Items
.86	4

Reliability Statistics NFR

Cronbach's Alpha	N of Items
.83	4

Reliability Statistics RMT

Cronbach's Alpha	N of Items
.82	4

Reliability Statistics PS

Cronbach's Alpha	N of Items

.90	10

Table 4.5: Reliability Analysis

4.7. Correlation Analysis

To further explore the relationships between requirements management practices and IT project success at Awash Bank, Pearson correlation analysis was conducted. The results revealed that all eleven independent variables demonstrated positive associations with project success, indicating that improvements in requirements practices are generally linked to better project outcomes. The below tables presents the summary of the correlation results table, as it is gathered from SPSS.

Variable		PS
RP	Pearson Correlation	.748**
	Sig. (2-tailed)	.000
	N	66
RE	Pearson Correlation	.686**
	Sig. (2-tailed)	.000
	N	66
RD	Pearson Correlation	.727**
	Sig. (2-tailed)	.000
	N	66
RV	Pearson Correlation	.760**
	Sig. (2-tailed)	.000
	N	66
RCM	Pearson Correlation	.673**
	Sig. (2-tailed)	.000
	N	66
RT	Pearson Correlation	.685**
	Sig. (2-tailed)	.000
	N	66
RC	Pearson Correlation	.751**
	Sig. (2-tailed)	.000
	N	66
RPri	Pearson Correlation	.754**
	Sig. (2-tailed)	.000

	N	65
SAC	Pearson Correlation	.695**
	Sig. (2-tailed)	.000
	N	65
NFR	Pearson Correlation	.714**
	Sig. (2-tailed)	.000
	N	65
RMT	Pearson Correlation	.639**
	Sig. (2-tailed)	.000
	N	66

Table 4.6: Correlation analysis

A such, all variables show strong positive correlations with project success. Requirements Validation, Closure, and Prioritization show the strongest relationships, indicating that these practices are highly associated with successful IT project outcomes.

4.8. Regression Analysis

4.8.1. Model Summary

To assess the combined and individual effects of requirements management practices on IT project success at Awash Bank, a multiple linear regression analysis was conducted. The regression model explains 73.1% of the variance in IT project success. This indicates that requirements management practices have a strong influence on project outcomes.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	F	Sig
1	.855[a]	.731	.676	.49903	13.120	< 0.001[b]

Table 4.7: Model Summary

4.8.2. Regression Coefficients

The regression coefficients provide further insight into the relative contribution of each practice:

Coefficients[a]			
	Standardized Coefficients beta	Significance	Interpretation [Added by the researcher]
RP	0.531	0.011	Significant positive effect
RE	0.236	0.187	Not significant
RD	0.530	0.011	Significant positive effect
RV	-0.169	0.384	Not significant
RCM	0.354	0.048	Significant positive effect
RT	-0.396	0.029	Significant but negative effect
RC	-0.107	0.566	Not significant
RPri	0.288	0.032	Significant positive effect
SAC	0.049	0.717	Not significant
NFR	0.182	0.147	Not significant
RMT	0.032	0.808	Not significant

Table 4.8: Regression Coefficients.

The regression coefficients provide further insight into the relative contribution of each requirements management practice when considered simultaneously. The results indicate that requirements planning (RP), requirements documentation (RD), and requirements change management (RCM) have statistically significant positive effects on IT project success, with coefficients of 0.531 ($p = 0.011$), 0.530 ($p = 0.011$), and 0.354 ($p = 0.048$), respectively. These findings suggest that structured planning, clear documentation, and effective control of requirement changes play a central role in driving successful project outcomes.

In addition, requirements prioritization (RPri) also shows a statistically significant positive effect ($\beta = 0.288$, $p = 0.032$), indicating that the ability to rank requirements based on business value and urgency contributes meaningfully to project success.

On the other hand, requirements traceability (RT) exhibits a statistically significant but negative relationship with project success ($\beta = -0.396$, $p = 0.029$). This suggests that the current implementation of traceability may introduce complexity or inefficiencies that negatively affect project performance.

The remaining variables, including requirements elicitation (RE), validation (RV), closure (RC), stakeholder alignment (SAC), non-functional requirements (NFR), and requirements management

tools (RMT), did not show statistically significant effects. This indicates that while these practices may contribute to project success, their individual impact is not strong when analyzed alongside other variables.

Overall, the regression results highlight that planning, documentation, change management, and prioritization are the strongest positive predictors, while traceability requires careful attention due to its negative effect.

4.9. Hypothesis Testing

Since each of the five research objectives was operationalized through one or more measurable constructs, hypothesis testing was conducted at the construct level to identify the specific requirements management practices that significantly influence IT project success.

To evaluate the proposed relationships between requirements management practices and IT project success, hypothesis testing was conducted. The results provide a nuanced picture of which practices exert significant influence and which do not.

Hypothesis	Result
H1: Planning → Project Success	Supported
H2: Elicitation → Project Success	Not Supported
H3: Documentation → Project Success	Supported
H4: Validation → Project Success	Not Supported
H5: Change Management → Project Success	Supported
H6: Traceability → Project Success	Supported (Negative Effect)
H7: Closure → Project Success	Not Supported
H8: Prioritization → Project Success	Supported
H9: Stakeholder Alignment → Project Success	Not Supported
H10: Non-Functional Requirements → Project Success	Not Supported
H11: RM Tools & Standardization → Project Success	Not Supported

Table 4.9: Hypothesis Testing

The results indicate that requirements planning, documentation, change management, and prioritization are statistically supported as positive predictors of IT project success. Traceability is also statistically supported; however, it exhibits a negative effect, suggesting potential issues in its implementation.

All other hypotheses are not supported, indicating that these practices do not have a statistically significant independent effect on project success within the regression model.

Meaning, the hypothesis testing results highlight that not all requirements management practices exert equal influence. The strongest drivers of success are planning, documentation, Requirement prioritization and change management, while traceability requires closer examination to address its unintended negative impact. These insights provide a valuable basis for prioritizing improvements in requirements management at Awash Bank.

4.10. Discussions and Findings

Requirements Planning

The results indicate that requirements planning has a positive and statistically significant relationship with IT project success at Awash Bank. This finding is consistent with previous studies, which suggest that projects are more likely to achieve their objectives when planning activities are carried out early and systematically. The descriptive results show that respondents generally viewed planning practices positively, although the mean score suggests there is still room for improvement. This may indicate that planning activities are performed in many projects but are not always applied consistently. The regression result further suggests that differences in planning practices are associated with differences in project outcomes.

Requirements Documentation

Requirements documentation was also found to have a significant positive influence on project success. Clear and well-maintained documentation helps ensure that project stakeholders have a common understanding of project requirements and expected deliverables. Within the Awash Bank environment, where projects often involve multiple teams and departments, documentation appears to play an important role in reducing misunderstandings and supporting coordination.

Although respondents generally acknowledged the presence of documentation practices, the mean score indicates that consistent application remains an area that deserves further attention.

Requirements Change Management

The findings show that requirements change management contributes positively to IT project success. This suggests that projects benefit when changes are reviewed, assessed, and approved through a structured process. The relatively favorable mean score indicates that change management practices are present in many projects. However, the variation observed among respondents suggests that the extent of implementation differs across projects. This may explain why change management emerged as an important predictor of project success while still leaving opportunities for further improvement.

Requirements Prioritization

Requirements prioritization was identified as another significant predictor of project success. Projects frequently operate under constraints related to time, budget, and resources, making it necessary to distinguish between high-priority and lower-priority requirements. The descriptive statistics indicate substantial variation in prioritization practices across projects. This may suggest that some project teams apply prioritization techniques more effectively than others. The regression results indicate that projects where prioritization practices are stronger tend to report better outcomes.

Requirements Traceability

Requirements traceability produced a significant negative relationship with project success. This finding differs from much of the existing literature, which generally views traceability as a beneficial practice. One possible explanation is that traceability may not be implemented consistently across projects. If traceability activities are maintained manually or performed primarily to satisfy procedural requirements, they may increase administrative effort without delivering the expected benefits. The descriptive results support this possibility by showing variation in how traceability practices are applied. Therefore, the finding should not be interpreted

as evidence that traceability is inherently harmful, but rather that its current implementation within the study context may require further examination.

Non-Significant Predictors

Requirements elicitation, requirements validation, requirements closure, stakeholder alignment, non-functional requirements, and requirements management tools did not demonstrate statistically significant independent effects in the regression model. This does not necessarily mean that these practices are unimportant. Several of these variables showed positive relationships with project success during the correlation analysis. Their lack of significance in the regression model may indicate overlap with other related requirements management practices or differences in the maturity of implementation across projects. As a result, their contribution may be less visible when all variables are examined simultaneously.

Overall Findings

Overall, the findings suggest that the requirements management practices most directly associated with project success at Awash Bank are planning, documentation, change management, and prioritization. These practices appear to provide the structure needed to guide project activities and support decision-making throughout the project lifecycle. While other requirements management practices remain important, their influence may be more indirect or dependent on the effectiveness of these core activities. The results therefore highlight the importance of strengthening foundational requirements management processes as part of efforts to improve IT project performance within the Bank.

5. Chapter Five: Conclusion and Recommendations

5.1. Introduction

This chapter presents the key findings of the study, presents the conclusions drawn from the analysis, and outlines recommendations for practice, management, and policy. It also highlights limitations of the research and proposes directions for future inquiry.

The study employed a hierarchical structure in which broad research objectives were represented by multiple operational constructs. This approach provided a more detailed assessment of requirements management practices while maintaining alignment with the broader research questions.

5.2. Summary of Findings

The study examined the influence of requirements management practices on IT project success at Awash Bank. Although the study was guided by five broad research objectives, each objective was operationalized through multiple requirements management constructs to enable a more detailed empirical assessment.

With regard to requirements definition and analysis practices, represented by requirements planning, elicitation, documentation quality, and validation, the findings indicate that these practices contribute differently to project success. Requirements planning and documentation demonstrated statistically significant positive effects, while elicitation and validation did not show significant independent effects in the regression model. Nevertheless, validation exhibited a relatively strong positive relationship with project success, suggesting that it remains an important supporting practice.

For requirements control and governance practices, represented by change management, traceability, and closure, the findings show that change management had a statistically significant positive effect on IT project success. Traceability, however, demonstrated a statistically significant negative relationship, while closure did not show a significant independent effect. These results suggest that effective control of requirements changes contributes positively to project outcomes, whereas the implementation of traceability practices may require further improvement.

Requirements prioritization emerged as one of the strongest predictors of IT project success. The findings indicate that projects that effectively prioritize requirements based on business value, urgency, and organizational needs are more likely to achieve successful outcomes.

Regarding stakeholder alignment and non-functional requirements management, neither variable demonstrated a statistically significant independent effect in the regression analysis. However, both variables showed positive relationships with project success, indicating their potential contribution when combined with other requirements management practices.

Finally, requirements management tools and standardization did not show a statistically significant independent effect on project success. Nevertheless, these practices remain important enablers of consistency, documentation quality, and process discipline within project environments.

Overall, the findings indicate that requirements management practices collectively influence IT project success, with planning, documentation, change management, and prioritization emerging as the most influential dimensions.

5.3. Conclusions

Based on the findings of the study, it can be concluded that requirements management practices play a significant role in determining IT project success at Awash Bank. However, the influence of these practices varies across different dimensions of requirements management.

The study concludes that requirements definition and analysis practices are important contributors to project success. In particular, planning and documentation provide the structure and clarity necessary for successful project execution. These practices help ensure that project requirements are properly understood, communicated, and managed throughout the project lifecycle.

The study further concludes that requirements control and governance practices influence project outcomes. Effective change management contributes positively to project success by enabling projects to adapt to changing requirements in a controlled manner. The negative relationship observed for traceability suggests that current traceability practices may require reassessment to ensure that they support project delivery efficiently and effectively.

Requirements prioritization emerged as one of the most important determinants of project success. This finding highlights the importance of identifying and focusing on the most critical requirements to maximize project value and improve decision-making.

Although stakeholder alignment, non-functional requirements management, and requirements management tools did not demonstrate statistically significant independent effects, the study concludes that these practices remain important components of an effective requirements management framework. Their contribution may be realized indirectly through their interaction with other requirements management practices.

In general, the study concludes that strengthening requirements planning, documentation, change management, and prioritization practices will significantly improve the likelihood of successful IT project delivery at Awash Bank.

5.4. Recommendations

5.4.1. For Awash Bank

The study highlights several practical steps that Awash Bank can take to strengthen its requirements management practices and improve IT project success. These recommendations are guided by the key findings of the regression analysis. **Strengthen Requirements Planning Practices**

The study found that requirements planning has a positive and significant relationship with IT project success. Although respondents generally viewed planning practices favorably, the results indicate that the level of implementation varies across projects. To improve consistency, Awash Bank may consider strengthening requirements planning activities at the initiation stage of projects. This could include the use of planning guidelines, stakeholder identification procedures, and clear assignment of requirements-related responsibilities. Greater emphasis on planning may help project teams establish a common understanding of project expectations before implementation begins.

A. Improve Requirements Documentation Practices

Requirements documentation was identified as one of the significant predictors of project success. However, the descriptive results suggest that documentation practices are not applied consistently across all projects. The Bank should therefore consider strengthening documentation standards by promoting the use of common templates, maintaining version control practices, and ensuring that requirements are documented and reviewed before development activities commence. Improving documentation quality may enhance communication among project stakeholders and reduce misunderstandings during project execution.

B. Enhance Requirements Change Management

The findings indicate that requirements change management contributes positively to project success. Given the dynamic nature of IT projects, it is important that changes to approved requirements are managed through a structured process. The Bank may benefit from reinforcing existing change management procedures and ensuring that proposed changes are assessed for their impact on project scope, cost, and schedule before implementation. Consistent application of change control practices can help maintain project stability while still allowing necessary adjustments to be accommodated.

C. Promote Systematic Requirements Prioritization

Requirements prioritization was found to be positively associated with project success. At the same time, the results suggest that prioritization practices vary considerably across projects. To address this, the Bank may consider adopting a structured approach to prioritizing requirements based on business value, risk, urgency, and stakeholder needs. Applying a consistent prioritization process could help project teams focus available resources on the most critical requirements and improve overall project outcomes.

D. Review Current Requirements Traceability Practices

Requirements traceability was the only variable that showed a significant negative relationship with project success. While this finding differs from much of the existing literature, it suggests that the way traceability is currently implemented may require further attention. The Bank may consider reviewing its existing traceability practices to identify challenges that reduce their

effectiveness. Particular attention should be given to the effort required to maintain traceability information and the extent to which traceability activities support project decision-making. Further assessment may help determine how traceability can be implemented more efficiently and effectively.

E. Strengthen the Use of Requirements Management Tools

Although requirements management tools and standardization did not demonstrate a statistically significant effect in the regression analysis, respondents reported comparatively lower levels of implementation in this area. The Bank may therefore consider exploring opportunities to improve tool utilization and standardization practices across projects. Providing appropriate tools, guidance, and training may support documentation, change management, and traceability activities while promoting greater consistency in requirements management practices throughout the organization.

5.4.2. Managerial Recommendations

The findings suggest that strengthening requirements planning practices may contribute to improved IT project outcomes at Awash Bank. Greater attention to planning activities during project initiation may help establish clearer expectations and improve coordination among project stakeholders.

The positive relationship between requirements documentation and project success indicates that continued efforts to improve documentation quality and consistency may support better communication and reduce misunderstandings during project implementation.

Given the significant contribution of requirements change management and requirements prioritization, management attention toward strengthening these practices may help improve project control and ensure that project resources are focused on the most important requirements.

The negative relationship observed between requirements traceability and project success suggests a need for further examination of how traceability practices are currently implemented. Additional

assessment may help identify opportunities to improve their effectiveness within the project environment.

Although requirements management tools and standardization were not statistically significant predictors, the relatively low ratings reported by respondents suggest that further improvements in this area may support broader requirements management efforts across the organization.

5.4.3. Policy Recommendations

At the policy level, the Bank should align its requirements management practices with national IT governance frameworks and regulatory directives. Establishing internal policies that emphasize planning, documentation, change management, and prioritization will ensure consistency across projects.

In addition, guidelines for effective and efficient traceability practices should be developed to ensure that traceability contributes positively to project outcomes without introducing unnecessary complexity.

5.5. Limitations

The study was limited by its focus on a single organization and reliance on perception-based data collected through questionnaires. These limitations may affect the generalizability of the findings. Additionally, the use of multiple interrelated variables in the regression model may have influenced the statistical significance of some predictors.

5.6. Future Research

Future studies could expand the scope to include multiple banking institutions and larger sample sizes to improve generalizability. Further research may also explore the interaction effects among requirements management practices, particularly to better understand overlapping influences observed in regression analysis.

In addition, qualitative approaches such as interviews and case studies could provide deeper insights into how specific practices, particularly traceability, are implemented and how they influence project outcomes in practice.

References

Asrat, S. (2017). Assessment of why software projects fail in government organizations in Ethiopia (Master's thesis, Addis Ababa University).

Aurum, A., & Wohlin, C. (2005). Engineering and Managing Software Requirements. Springer.

Boehm, B., & Turner, R. (2004). Balancing Agility and Discipline. Addison-Wesley.

Bormane, L., Gržibovska, J., Bērziša, S., & Grabis, J. (2016). Impact of requirements elicitation processes on success of information system development projects. Information Technology and Management Science, 19(1), 57–64.

Chung, L., Nixon, B., Yu, E., & Mylopoulos, J. (2012). Non-Functional Requirements in Software Engineering. Springer.

Damian, D., & Chisan, J. (2006). An empirical study of the complex relationships between requirements engineering processes and other processes that lead to payoffs in productivity, quality, and risk management. IEEE Transactions on Software Engineering, 32(7), 433–453.

Fesha, S. (2023). Determinants of IT project implementation success: The case of Commercial Bank of Ethiopia (Master's thesis, Addis Ababa University).

Freeman, R. E. (1984). Strategic Management: A Stakeholder Approach. Pitman.

Gazivoda, M., Šćekić, M., & Nikolić, J. (2017). A case study of requirements management in a bank. Proceedings of the 14th International Conference on ICT Innovations.

Hofmann, H. F., & Lehner, F. (2001). Requirements engineering as a success factor in software projects. IEEE Software, 18(4), 58–66.

Hull, E., Jackson, K., & Dick, J. (2011). Requirements Engineering. Springer.

IIBA (International Institute of Business Analysis). (2021). A Guide to the Business Analysis Body of Knowledge (BABOK Guide) (Version 3). IIBA.

Jayatilleke, S., & Lai, R. (2018). A systematic review of requirements change management. Information and Software Technology, 93, 163–185.

Kotonya, G., & Sommerville, I. (1998). Requirements Engineering: Processes and Techniques. John Wiley & Sons.

Kumar, V. S. (2006, October). Effective requirements management. PMI Global Congress 2006—EMEA, Madrid, Spain.

Leffingwell, D. (2011). Agile Software Requirements. Addison-Wesley.

Mamo, F. F. (2018). Assessing the life cycle of projects in Commercial Bank of Ethiopia Program Management Office (Master's thesis, Addis Ababa University).

Montgomery, L., Fucci, D., Bouraffa, A., Scholz, T., Fernández, D. M., & Wagner, S. (2022). Empirical research on requirements quality: A systematic mapping study. Requirements Engineering, 27, 183–209. https://doi.org/10.1007/s00766-021-00367-z

National Bank of Ethiopia. (2022). Requirements for Information Technology (IT) Management of Banks (Directive No. SBB/83/2022).

Project Management Institute (PMI). (2017). A Guide to the Project Management Body of Knowledge (PMBOK Guide) (6th ed.). Project Management Institute.

Project Management Institute (PMI). (2021). A Guide to the Project Management Body of Knowledge (PMBOK Guide) (7th ed.). Project Management Institute.

Project Management Institute (PMI). (2026). A Guide to the Project Management Body of Knowledge (PMBOK Guide) (8th ed.). Project Management Institute

Ramesh, B., & Jarke, M. (2001). Toward reference models for requirements traceability. IEEE Transactions on Software Engineering.

Sheko, D. (2019). Assessment of project management maturity on implementing e-banking technology: The case of Commercial Bank of Ethiopia (Master's thesis, Addis Ababa University).

Shenhar, A. J., & Dvir, D. (2007). Reinventing Project Management: The Diamond Approach to Successful Growth and Innovation. Harvard Business Press.

Sommerville, I. (2016). Software Engineering (10th ed.). Pearson.

Standish Group. (2015). CHAOS Report 2015.

Standish Group. (2024). CHAOS Report 2024.

Tilahun, E. (2019). Assessment of project quality management practice in selected private banks of Ethiopia (Master's thesis, Addis Ababa University).

Waterson, P., et al. (2012). The role of traceability in safety-critical software development. Safety Science, 50(3).

Wiegers, K., & Beatty, J. (2013). Software Requirements (3rd ed.). Microsoft Press.

Adeyemi, S., & Amhana, M. (2024). Managing scope creep in contracts execution: A strategic framework for risk mitigation and operational success. *International Journal of Research and Innovation in Social Science*. Retrieved from https://rsisinternational.org/journals/ijriss/

African Banking Digital Transformation Report. (2024). *The African Banking Digital Transformation Report 2024.* African Banker & Backbase. Retrieved from https://insights.african.business/ADBT_Report_2024

Alnhari, A. A., & Qureshi, R. (2024). Unified external stakeholder engagement and requirements strategy. *arXiv preprint arXiv:2409.05019.* Retrieved from https://arxiv.org/abs/2409.05019

Aaltonen, K., et al. (2024). Project performance and stakeholder engagement in technology-driven organizations. Cited in: *IRJEMS, 4*(11). Retrieved from https://irjems.org/Volume-4-Issue-11/IRJEMS-V4I11P118.pdf

Barros, L., Tam, C., & Varajão, J. (2024). Agile software development projects — unveiling the human-related critical success factors. *Information and Software Technology, 170*, 107432. https://doi.org/10.1016/j.infsof.2024.107432

Escalona, M. J., Koch, N., & Garcia-Borgoñon, L. (2022). Lean requirements traceability automation enabled by model-driven engineering. *PeerJ Computer Science.* https://doi.org/10.7717/peerj-cs.817

JETIR. (2024). Assessing the influence of scope creep on project performance. *Journal of Emerging Technologies and Innovative Research, 11*(11). Retrieved from https://www.jetir.org/papers/JETIR2411239.pdf

Radwan, A. M., Abdel-Fattah, M. A., & Mohamed, W. (2024). AI-driven prioritization techniques of requirements in agile methodologies: A systematic literature review. *IJACSA, 15*(9). Retrieved from https://thesai.org

ResearchPublish. (2024). Managing scope creep in project management. *Research Publish Journals, 12*(2), 82–86. Retrieved from https://www.researchpublish.com

Varajão, J., Fernandes, G., & Amaral, A. (2023). Linking information systems team resilience to project management success. *Project Leadership and Society, 4.* https://doi.org/10.1016/j.plas.2023.100094

Varajão, J., Lourenço, J. C., & Gomes, J. (2022). Models and methods for information systems project success evaluation: A review and directions for research. *Heliyon, 8*(12), e11977. https://doi.org/10.1016/j.heliyon.2022.e11977

Varajão, J., Magalhães, L., Freitas, L., & Rocha, P. (2022). Success management: From theory to practice. *International Journal of Project Management, 40*(5), 481–498. https://doi.org/10.1016/j.ijproman.2022.04.004

Varajão, J., et al. (2024). Assessing IT project success: Perception vs. reality. *ACM Queue, 22*(4). Retrieved from https://queue.acm.org/detail.cfm?id=3687999

Yaseen, M., et al. (2023). Exploratory study of existing research on software requirements prioritization: A systematic literature review. *Journal of Software: Evolution and Process.* https://doi.org/10.1002/smr.2613

Annex -1 - Questionnaire

Awash Bank IT Project Research Questionnaire

Research Title: Requirements Management Practices as Determinants of IT Project Success: The Case of Awash Bank

Introduction

This survey is part of a Master's thesis at Addis Ababa University. The purpose is to evaluate how requirements management (RM) practices affect the outcome of IT projects at Awash Bank.

Your feedback will be used solely for academic purposes, and your responses will remain anonymous.

Instructions

- Please answer all questions based on **ONE specific IT project** you were involved in between **2021 and 2025**.
- Choose a project you are most familiar with.
- There are no right or wrong answers, please respond honestly.

Project Reference (for consistency)

- Project Name (Optional): _____

SECTION A: Demographic & Project Information

A1. Your Primary Role in IT Projects:

[ ] Project Manager / PMO Staff [ ] Business Analyst / System Analyst
[ ] Software Developer / Technical Lead [ ] Quality Assurance (QA) / Tester
[ ] Business User / Subject Matter Expert (e.g., Operations, Risk, Digital Banking)
[ ] Management / Steering Committee Member

A2. Number of IT Projects Participated In (2021–2025):

[ ] 1–2 [ ] 3–5 [ ] More than 5

A3. Directorate/Department:

[ ] IT Project Management Division [ ] System Development & Business Analysis
[ ] IT Infrastructure Management [ ] Information Security Management
[ ] Digital Banking / E-banking [ ] Other: _____

A4. Years of Experience in IT Projects:

[ ] < 3 years [ ] 3–7 years [ ] 8–12 years [ ] > 12 years

A5. Project Type:

[ ] Core Banking [ ] Digital Banking [ ] Infrastructure
[ ] Regulatory/Compliance [ ] Third party Integration

[ ] Information Security [ ] Other: _____

A6. Project Size (Budget):

[ ] Small (< 5M ETB) [ ] Medium (5–20M ETB) [ ] Large (> 20M ETB)

A7. Project Duration:

[ ] < 6 months [ ] 6–12 months [ ] 12–24 months [ ] > 24 months

A8. Delivery Methodology:

[ ] Waterfall [ ] Agile [ ] Hybrid

A9. Vendor Involvement:

[ ] In-house [ ] Vendor-led

SECTION B: REQUIREMENTS MANAGEMENT PRACTICES

Scale:
1 = Strongly Disagree | 2 = Disagree | 3 = Neutral | 4 = Agree | 5 = Strongly Agree

1. Requirements Planning (RP)

1.1 Clear rules for managing requirements are defined before development begins
1.2 A stakeholder consultation plan is prepared before elicitation
1.3 Requirement gathering techniques are selected based on project complexity

1.4 Time is allocated for requirements planning
1.5 Roles and responsibilities are clearly defined

2. Requirements Elicitation (RE)

2.1 Elicitation identifies true business needs (not just requests)
2.2 Multiple techniques are used (interviews, workshops, etc.)
2.3 Frontline users are actively involved
2.4 Risk and compliance requirements are captured early
2.5 Requirements are refined through multiple iterations

3. Requirements Documentation Quality (RD)

3.1 Requirements are clear and understandable to all stakeholders
3.2 A centralized repository is used
3.3 Functional and non-functional requirements are clearly separated
3.4 Visual aids (diagrams, prototypes) are used
3.5 Documents are updated when changes occur

4. Requirements Validation (RV)

4.1 Stakeholders participate in review sessions
4.2 Prototypes or demos are used for validation
4.3 Formal sign-off is obtained before development
4.4 Compliance requirements are validated
4.5 Validation identifies requirement gaps early
4.6. Requirements are validated to ensure alignment with major strategic objectives of the Bank

5. Requirements Change Management (RCM)

5.1 A structured change process exists
5.2 Changes are assessed for impact (cost, time, scope)
5.3 Changes require formal approval
5.4 Changes are communicated clearly
5.5 Scope creep is effectively controlled

6. Requirements Traceability (RT)

6.1 Requirements are linked to their source
6.2 Traceability tools/matrices are used

6.3 Test cases are linked to requirements
6.4 Traceability is used to assess change impacts

7. Requirements Closure (RC)

7.1 All requirements are verified and tested
7.2 Systems are ready for business use (not just technically complete)
7.3 Post-implementation checks are performed
7.4 Formal acceptance is obtained

8. Requirements Prioritization (RPri)

8.1 Requirements are prioritized based on business value
8.2 Trade-offs between scope, time, and cost are discussed
8.3 High-risk requirements are addressed early
8.4 Stakeholders agree on priorities

9. Stakeholder Alignment & Conflict Management (SAC)

9.1 Conflicting requirements are identified
9.2 Conflicts are resolved through structured processes
9.3 Stakeholders remain aligned throughout the project
9.4 Decision authority is clearly defined

10. Non-Functional Requirements Management (NFR)

10.1 Non-functional requirements are clearly defined
10.2 NFRs are measurable and testable
10.3 Security and compliance are addressed early
10.4 Performance and scalability are validated

11. RM Tools & Standardization (RMT)

11.1 Standard tools are used (e.g., JIRA, DevOps)
11.2 Templates and standards are consistently applied
11.3 Version control is maintained
11.4 Teams are trained on RM practices

12. Bias-Control (Reverse Items)

12.1 Requirements are often unclear at the start of development
12.2 Changes are frequently made informally without proper review
12.3 Stakeholders are rarely aligned on requirements

SECTION C: IT PROJECT SUCCESS

Scale:
1 = Strongly Disagree | 2 = Disagree | 3 = Neutral | 4 = Agree | 5 = Strongly Agree

1. Success Indicators

1.1 Project is delivered on time
1.2 Project is delivered within budget
1.3 System meets technical quality standards
1.4 Required features are delivered
1.5 Systems solve intended business problem

1.6 End users are satisfied
1.7 Stakeholders are satisfied
1.8 The system is actively used after deployment
1.9 The project delivers measurable business value
1.10 The project aligns with strategic objectives of the Bank

SECTION D: OPEN FEEDBACK

D1. What is the biggest challenge in managing IT project requirements at Awash Bank?

D2. What one improvement would you recommend to improve requirements management?

D3. Describe a situation where poor requirements management negatively affected a project.

D4. What practices have worked well in ensuring project success?