

ADDIS ABABA UNIVERSITY
SCHOOL OF COMMERCE
DEPARTMENT OF PROJECT MANAGEMENT

The effect of project cost management and project scheduling practices on IT projects performance: The case of Ahadu bank S.C

By: Yohannes Melesse Erkyihun

GSD/4574/16

Advisor: Seifu Mamo (PhD)

A research project submitted to Addis Ababa University School of Commerce in partial fulfillment of the requirement of Master of Arts in project management

Addis Ababa University
School of commerce
June, 2026

Statement of declaration

I Yohannes Melesse Erkyihun declare that this thesis entitled “The effect of project cost management and project scheduling practices on IT projects performance: The case of Ahadu bank S.C” is my original work. I also confirms that any part or the entire part of this thesis has not been submitted to any other higher learning institution for the purpose of getting a degree.

Signature:_____

Date:_____

Statement of certification

This certifies that the project work, “The effect of project cost management and project scheduling practices on IT projects performance: The case of Ahadu bank S.C” undertaken by Yohannes Melesse Erkyihun in Partial fulfillment of the award of Master‘s degree in Project Management at Addis Ababa University college of commerce, is an original work and not submitted earlier for any degree either at this University or any other University.

_____

Seifu Mamo (PhD)

Project work Advisor

Addis Ababa University

School of Graduate studies

This is to certify that the Project Work prepared by Yohannes Melesse Erkyihun entitled: "The effect of project cost management and project scheduling on IT projects performance: The case of Ahadu bank S.C" submitted in partial fulfillment of the requirements for Degree of Masters of Arts in Project management (MAPM) complies with the regulation of the University and meets standards with respect to originality and quality.

Signed by Examining Committee:

Examiner: _____ Signature:_____
Date:_____

Examiner: _____ Signature:_____
Date:_____

Examiner: _____ Signature:_____
Date:_____

Advisor: Seifu Mamo (PhD) Signature:_____
Date:_____

Acknowledgement

I would like to thank my God for his support in realizing this goal of mine. Next I would like to extend my gratitude for my project advisor Seifu Mamo (PhD) for his support and professional advisory service.

My family support in this project is immeasurable. I would like to thank all of them in their support and understanding. Finally, I need to thank all those who contribute to this project work in different ways.

Table of contents

Contents

1. Introduction 1
1.1. Background of the study 1
1.2. IT Project cost management 2
1.3. Project schedule management 2
1.4. IT Project performance management 3
1.5. The link between project cost management, project scheduling practices and project performance 4
1.6. Problem statement 5
1.7. Research hypotheses 8
1.8. Research objectives 8
1.9. Significance of the study 9
1.10. Scope and limitation 10
1.10.1. Scope of the study 10
1.11. Limitations of the study 11
1.12. Definition of terms 11
1.13. Organization of the study 13
2. Literature review 15
2.1. Introduction 15
2.2. Theoretical foundation of project management 16
2.2.1. Systems theory 16
2.2.2. Contingency theory 16
2.2.3. Resource-Based View (RBV) 16
2.2.4. Project success frameworks 17
2.3. Project scheduling 17
2.3.1. Scheduling dimensions and indicators 17
2.3.2. Empirical evidences on project scheduling 18
2.4. Project cost management 20
2.4.1. Dimensions and indicators of cost management 20
2.4.2. Empirical evidence on project cost management 21
2.5. Project performance 23
2.5.1. Theoretical foundations of project performance 24
2.5.2. Empirical evidence on project performance 25

2.6. Relationship between Scheduling, Cost Management, and Project Performance 26
2.6.1. Theoretical perspectives 26
2.6.2. Empirical evidence 27
2.7. Conceptual framework 29
3. Methodology 30
3.1. Back ground of the company 30
3.2. Research approach 32
3.3. Research design 32
3.4. Target population 33
3.5. Population Size 33
3.6. Data Collection Method 33
3.7. Model specification 35
3.8. Method of data analysis 36
3.9. Variables of the Study 37
3.10. Ethical Considerations 40
4. Data presentation, analysis, and discussion 41
4.1. Introduction 41
4.2. Response rate 41
4.3. Profile of respondents 41
4.4. Results of descriptive statistics 44
4.5. Correlations statistics 45
4.6. Regression analysis outputs 46
4.7. Normality test 47
4.8. Multiple regression analysis Coefficients 49
5. Summary of findings, conclusion, and recommendation 51
5.1. Conclusion 51
5.2. Recommendations and suggestion 52
6. References 55

List of tables

Table 1:demographic description of respondents 42
Table 2: result of descriptive statstics 44
Table 3: correlation statistics 45
Table 4: Multi collinearity statistics 46
Table 5: Model fit 48
Table 6: Multiple regression analysis coefficients 49
Table 7:Hypothesis test 50

List of figures

Figure 1:Normality test 47
Figure 2: Normality test 47

Abstract

Project performance has been measured using the triple constraints of time, cost, and quality . Though these constraints remain the same, recent scholars argue that additional criteria must be included to measure project performance. This research aims to study the effect of project cost management and project scheduling practices on IT projects performance in the case of Ahadu banks S.C. Data has been collected using standard questionnaire from 70 respondents using census. The study uses a quantitative, descriptive and explanatory research design. the descriptive part discusses the current project performance while the explanatory part shows cause and effect relationships of project cost management and project scheduling practices with IT projects performance. Reliability test result confirm the consistency of questionnaire items with cronbach's alpha value greater than 0.7 which is considered a threshold value. Also validity of items checked using expert review and face validity technique. Data analyzed by means of descriptive statistics using mean and standard deviation. Mean result was around two in five point likert scale used in the questionnaire that implies there is a tendency of disagreement on good project cost management, project scheduling practices, and project performance. Standard deviation result for all variables is around 0.5, that indicates there is low variability in responses. Analysis of correlation and regression performed to identify the relationship and effect between the variables of the study. Accordingly, the findings shows that project cost management and project scheduling practices have a significant impact on project performance in Ahadu bank. 36.2 % of project performance is predicated by project cost management and project scheduling practices. However, project scheduling practice that have a (β=0.462) value found to be more impactful

relative to project cost management which have a (β=0.311) value. The study draw a conclusion from the findings that IT projects performance in Ahadu bank is strongly challenged by poor time and cost management. Specially project time management poses a relatively greater challenge towards improved IT project performance than project cost management. Finally the research recommends various stakeholders to give a due attention for project cost and time management to improve timely project completion rate, to decrease the number of rescheduling practices, to minimize cost overruns, and ultimately to improve IT projects' performance.

CHAPTER ONE

1. Introduction

1.1.Background of the study

The role of information technology in organizational competitiveness is critical especially in recent times. Importance of Information technology in customer satisfaction, efficiency, effectiveness, compliance to legal requirements, and organizational competitiveness to an organization become tough.

According to the World Bank (2025), in the recent 20 years, there is a dynamic change in information technology application in Ethiopia banking sector. Core banking systems has begun connect hundreds of branches of banks via network, Resource management tools like Enterprise Resource Planning (ERP) have begun implemented and contribute to organizational efficiency, and electronic data management systems are playing a vital role in customer satisfaction and process efficiency (Hailu & Belachew, 2023) . However, Following (NBE Directive SBB/83/2022), which changed the pace, all commercial banks forced to automate their business process, adopt interoperable system across institutions, conduct quarterly IT risk assessment, design disaster recovery sites, and report incidents regularly. The directive led banks to engage in extensive IT project implementation.

Despite the effort, Ineffective project cost management and scheduling practices have become obstacles to IT projects success in Ethiopian banking sector. Cost overruns, frequent rescheduling, and poor performance delivery are some of the results of poor cost and time management (Desta, 2019; Ebissa, 2020; Abrham, 2021).

1.2.IT Project cost management

Project cost management is a basic knowledge area in project management, encompassing the processes that make sure the project is completed within the planned budget. Kerzner (2017) underscores that cost management is the integration of estimation, budgeting, and monitoring project costs to support organizational efficiency rather than a simple cost monitoring.

Empirical evidence from Addis Ababa university demonstrates that in Ethiopian banking sector IT projects often face a significant challenge from poor cost estimation practices, insufficient monitoring, and inadequate resource allocation. Desta (2019) found that inadequate financial planning and poor cost control practices were major reasons for cost overrun in IT projects in Ethiopian banks. Similarly, Ebissa (2020) found that lack of standard in cost management frameworks has led to inefficiencies, lower success rate and organizational ineffectiveness.

Dimensions of cost management

- **Cost estimation**: Forecasting project financial and non-financial requirements.
- **Budgeting**: Identify project activities and allocating costs.
- **Cost control**: Monitoring expenses and take corrective measures on time.

1.3. Project schedule management

Project schedule management is a process required to ensure timely completion of project activities through planning, sequencing and monitoring. Turner (2014) underlines that

time is among the most critical constraints of project management and delays often related to cost overruns and reduced customer satisfaction.

IT projects in Ethiopia banking sector often suffer from unrealistic timelines and frequent rescheduling practices. Ebissa (2020) found that weak scheduling practices and poor monitoring mechanisms have normalized repeated time overrun in Ethiopian commercial banks. In addition, Dube (2021) revealed that ineffective scheduling frameworks and failure to adhere project timelines significantly affect project performance in banking sector where customer demand for efficiency is high.

Dimensions of Schedule management:

- **Defining activities and sequencing:** List activities of a project and develop sequence based on their relationship.
- **Estimating duration for activities:** Assign a time line for each activity.
- **Schedule controlling:** Control progress according to the developed schedule.

1.4.IT Project performance management

Project performance typically measured using indicators like cost variance (CV), schedule variance (SV), deliverable quality, and customer satisfaction. Kerzner (2017) argues that, to ensure accountability, performance management of projects must integrate time and cost dimensions. Meredith and Mantel (2017) also underline that performance management of projects should be systematic and using methodologies such as Earned value management (EVM) to provide objective insights into project performance measurement.

However, Ethiopian commercial banks often lack standard frameworks to measure their project performance. Ebissa (2020) revealed that instead of rely on structured methodologies, banks measure the performance of their IT projects based on ad hoc assessments. This practice weakens accountability and makes it difficult to evaluate project performance.

1.5. The link between project cost management, project scheduling practices and project performance

Effective project cost management and project scheduling practices are widely recognized project performance determinants. Kerzner (2017) underlines that project cost management integrating estimation, budgeting, and controlling into the project framework and ensures financial discipline while Turner (2014) emphasizes that project schedule management determines the timely delivery of projects. Pinto (2016) further notes that when both project cost management and project scheduling practices executed ineffectively, projects are more likely to experience cost overrun, delay, and less customer satisfaction.

Desta (2019) revealed that unrealistic scheduling practices in commercial banks significantly reduced effective delivery of IT projects, demonstrating poor time management effect on IT project performance. Ebissa (2020) found absence of standardized frameworks to manage project time and cost led to poor accountability and recurring underperformance in IT projects. Similarly, Dube (2021) showed that ineffective budgeting and failure to address project timelines were significant factors for IT projects poor performance in Ethiopian financial institutions.

Collectively, these empirical evidences confirm that project cost management and scheduling practices are determinant factors for project performance. Improvements in these areas enhance effectiveness, efficiency, customer satisfaction, and organizational competitiveness.

Despite a significant amount of investment in IT projects, Ethiopian banking sector challenged by frequent cost and time overruns due to ineffective project cost and time management. Empirical evidences confirms that poor planning, weak monitoring practices, and unrealistic scheduling causes overruns while theoretical perspectives ascertains that cost management and scheduling are critical for project success (Desta, 2019; Ebissa, 2020; Abrham, 2021).

1.6.Problem statement

Ahadu bank as a new entrant in the Ethiopian banking sector, has invested significantly in information technology projects to improve customer satisfaction, compliance to legal and regulatory requirements, support digital transformations, and enhance process efficiency. However, preliminary assessments reveal that despite these efforts, there is a persistent challenge in project execution. According to internal reports, over 80% of IT projects have experienced cost overrun, with average overruns between 15 – 25% of the total approved budget (Ahadu bank IT department, 2023). Similarly, nearly 75% of projects have missed their original deadline, with three to six months period per project. These figures imply that there is a weakness in project cost management and project scheduling practices.

Project cost management

Except one IT project which is electronic document management system (EDMS), all of 21 IT projects including the major core banking system (CBS) were finalized with significant cost overruns. Repeated change requests from the project staff coupled with extra vendor fees have caused financial inefficiencies.

Project scheduling

Rescheduling has become a common feature of IT projects in Ahadu bank. Internal progress reports show that all of the 21 projects since the establishment of the bank have missed deadline, with frequent extension undermining on-time delivery of projects.

Project performance

As a result of poor project cost management and weak scheduling practices, project performance indicators remain low. On time completion rates are below 30% within budget completion rates remain below 20%, and projects meeting expected performance standards are below 40% (Ahadu bank IT department, 2023)

Research gap

Managerial approach for recurring time and cost overruns remains reactive rather than preventive regardless of recurring cost and time overruns in IT projects executed in Ahadu bank.

There is also an empirical gap in previous studies. Though various studies have studied IT project challenges in Ethiopian banks, no research has specifically study the effect of project cost management and scheduling practices on IT projects performance in the case of new entrant banks like Ahadu.

Contextual gap of related studies justifies this research. Existing studies focus on commercial banks that have been in the sector for relatively longer period of time. There is a contextual gap in understanding how new entrants like Ahadu bank handle IT project management under regulatory and competitive pressures.

There is also a methodological gap in existing studies. Previous studies have often used descriptive case studies. Use of quantitative studies was limited to measure the effect of project cost management and scheduling practices on IT projects performance in Ethiopian banking sector.

Theoretical perspectives underlines that cost and schedule management are critical factors for project success. Kerzner (2017) argues that cost and time management are the most determinant factors of project success. Turner (2014) also emphasizes weak scheduling practice leads to cost inefficiencies. Meredith and Mantel (2017) further argue that cost and time dimensions must be included in performance measurement to ensure accountability.

Empirical evidences reinforce these theoretical claims. Desta (2019) revealed that unrealistic scheduling practices reduced IT projects performance in Ethiopian commercial banks. Ebissa (2020) found that weak cost management and scheduling practices led to poor accountability and lower performance.

1.7.Research hypotheses

- **H1**: Project cost management has a positive and significant effect on the performance of IT projects at Ahadu Bank S.C.
- **H2**: Project scheduling practice has a positive and significant effect on the performance of IT projects at Ahadu Bank S.C.

1.8.Research objectives

- **General objective**

The general objective of this research is to investigate the effect of project cost management and scheduling practices on IT projects performance in the case of Ahadu bank S.C.

- **Specific objectives**

1. To identify the effect of project cost management on the performance of IT projects in the case of Ahadu bank S.C.

2. To identify the effect of project scheduling practices on the performance of IT projects in the case of Ahadu bank S.C.

1.9. Significance of the study

This study enriches project management theory by investigating how weak cost and time management influence IT project performance in the Ethiopian banking sector. While cost and scheduling are considered as critical aspects of IT project performance, there is a limited insight in the context of newly entrant banks to the sector. By focusing on Ahadu bank, the study adds contextual depth to project management literature.

The findings will provide practical guide to address root causes for poor project cost management and weak scheduling practices to project managers so that IT project performance will be improved. Insights from the study can enable project managers to adopt practical cost estimation methods, better monitoring tools, and scheduling frameworks, enabling them to deliver improved performance delivery.

This study contributes the broader project management literature by locating cost and time management challenges within the context of IT projects in banking sector of developing countries. This study also adds to the project management literature by presenting cost and time management effects on IT project performance that will be used for future sector specific research.

The findings and recommendation of this research will support Ahadu bank in its effort to improve IT project performance. It also provides project managers insight into the relationship between management practices and IT project performance. The research contributes to the body of knowledge by contextualize project management practices in the banking sector of Ethiopia.

1.10. Scope and limitation

1.10.1. Scope of the study

This study is geographically limited to Addis Ababa, where Ahadu bank's head office is located. Although the bank has branches in other regions, the research focuses on projects executed in head office and some pilot branches where most if IT projects planning, coordination, and monitoring activity take place. However, the findings can be relevant for other banks that operate under similar competitive environment.

Conceptually, the research is limited to two knowledge areas of project management: project cost management and project scheduling practices. These areas were selected because they pose a significant challenge in IT projects performance in Ethiopian banks. Other project management aspects such as risk, stakeholder management, and scope are acknowledged but excluded to maintain a focused investigation.

Methodologically, the research uses a quantitative approach, relying on structured questionnaires administered to employees involved in IT projects. This design is suitable to conduct statistical analysis of relationships between project cost management, scheduling, and project performance. Though qualitative design could have provided richer contextual understanding, they were excluded to ensure objectivity, measure cause and effect relationships, and generalizability of findings.

The time scope of the study is between 2021 and 2025, a period marked by changes in regulatory requirement such as the release of National bank of Ethiopia (NBE) directive SBB/83/2022 followed by rapid digital transformation in the sector. This period was

chosen because it represents the beginning of Ahadu bank IT project implementation and related cost and time overruns.

Finally, the study focuses on IT projects only rather than encompassing all projects. This decision was made based on the centrality of IT projects to competitiveness, customer satisfaction, and regulatory compliance in the sector. Additionally, IT projects are prone to inefficiencies due to their complex nature, reliance on external vendors, and rapid growth in technological environment. By focusing only to IT projects, the study provides deeper insights into the most critical area of project management affecting IT projects performance in Ethiopian banking sector.

1.11. Limitations of the study

Methodologically the study is limited to quantitative research approach that collects data using structured questionnaire. This approach limits the flexibility of responses that are collected from respondents. Also quantitative data focuses on statistical relationships which may forget the contextual factors.

The technique employed in the study is census which might face administrative challenge to address all respondents. Non- response risk is another limitation of the technique that some might refuse to participate in the study.

1.12. Definition of terms

- **Project cost management:** Refers to the processes involved in estimations, budgeting, and controlling project costs to ensure that the

project is completed within the approved financial resource. It includes cost estimation, cost budgeting, and cost controlling (Kerzner, 2017)

- **Project schedule management:** involves the process of planning, estimating, and controlling project activities to make sure the project is completed within the approved time frame. It involves defining project activities, estimating their duration, scheduling, and monitoring progress against the plan (Turner, 2014)
- **IT Projects:** are projects that involves design, development, and implementation or upgrading of information technology systems.
- **Project performance:** the measurement of effectiveness of a project in addressing its objectives usually assessed using the triple constraints of time, cost, and delivered quality. In this study project performance is measured by timely completion, within budget completion, and delivery of expected quality (Meredith & Mantel, 2017)
- **Cost overrun:** refers to the situation where project expenditures are greater than the planned budget for the project.
- **Schedule overrun:** refers to the delay in project completion time beyond the planned timeline.
- **Triple constraints:** a concept in project management that identifies time, cost and quality as the three main dimensions that determines project success. Any imbalance in these three constraints affects the overall project performance.

- **Earned value management (EVM):** Refers to a methodology to measure project performance that integrates cost, schedule, and scope to provide objective insights into project performance (Kerzner, 2017)
- **Critical path method (CPM):** is a technique used to identify sequence of the critical activities of a project that determines the minimum project timelines. Any delay in these activities results in delay in the project deadline.
- **Program Evaluation and Review Technique (PERT):** is a project scheduling tool that uses probabilistic time estimates to analyze and forecast project timelines, specifically useful in complex projects within uncertain activity durations.
- **National bank of Ethiopia directive SBB/83/2022:** a regulatory directive that enforces all commercial banks to automate business processes, adopt interoperable systems, conduct IT risk assessment regularly, and establish disaster recovery mechanisms.

1.13. Organization of the study

This study is organized into five chapters, each addressing a specific section of the research.

Chapter One illustrates an introduction of the study. It contains the background of the study and the organization, problem statement, research questions, and research

objectives. It also covers the significance of the study, as well as the scope and limitations.

Chapter Two focuses on the literature review. It shows a detail discussion of relevant concepts, theories, and empirical studies related to project cost management, project scheduling, and project performance. The chapter also examines the relationship between project cost management, project scheduling and project performance and identifies gaps in existing literature. Finally, it presents the conceptual framework of the study.

Chapter Three describes the research methodology. It explains the research design, target population, sampling technique, and sample size. It also indicates the methods of data collection, variables of the study, and ethical considerations followed during the research process.

Chapter Four presents the data analysis and discussion of findings. The collected data are analyzed using appropriate statistical tool SPSS, and the results are interpreted in relation to the research objectives and literature review.

Chapter Five provides the summary of findings, conclusions, and recommendations. It summarizes the key findings of the study, draws conclusions based on the findings, and insight practical recommendations for improving project cost management and scheduling practices that leads to improve project performance. It also suggests areas for future research.

CHAPTER TWO

2. Literature review

2.1. Introduction

Project management literature underlines the importance of project cost management and project schedule management as critical factors that determines project performance. Cost, time, and quality has long been used to measure project success (Kerzner, 2022; Atkinson, 1999). However, scholars increasingly argue that these constraints must be examined in relation to stakeholder satisfaction and project efficiency (Serrador &Turner, 2015).

In Ethiopian banking sector IT projects implementation often challenged by cost overruns and schedule delays because of technological complexity, urgent regulatory requirements, and limited managerial capacity. Studies reveal that weak cost estimation, insufficient budgeting, and poor scheduling practices undermine project performance significantly (Desta, 2019; Ebissa, 2020; Abrham,2021)

This chapter reviews both theoretical foundations and empirical evidence on the relationship between project cost management, project scheduling, and project performance. It compares and contrasts perspectives across industries and countries and develops conceptual frame work for the present study.

2.2.Theoretical foundation of project management

2.2.1. Systems theory

Systems theory views project management as a collection of subsystems that are interdependent where a change in one dimension affects others. Kerzner (2022) underlines that the triple constraint of time, cost, and quality must be managed holistically to prevent systemic failure. In contrast, Nicholas & Steyn (2020) argues that systems theory must be adaptive to rigid cost and schedule controls that may fail in dynamic IT environments.

2.2.2. Contingency theory

Contingency theory suggests that project management practices must adopt contextual realities. Turner (2014) highlights that project scheduling approaches effectiveness in more predictable industries may fail in volatile IT sectors. Morris et al.(2021) highlights that developing countries must adopt contingency approach due to weaker institutional frameworks they have compared to developed countries.

2.2.3. Resource-Based View (RBV)

Barney (1991) argues that financial, human, and technological resources of an organization are sources of competitive advantage. Effective cost and schedule management improves resource utilization. Serrador & Turner (2015) further reveal this by showing that efficiency in resource allocation is positively related to project success.

2.2.4. Project success frameworks

Kerzner (2022) underlines that project success is measured using the three constraints of time, cost, and quality. However, Atkinson (1999) critiques this approach mentioning, stake holder satisfaction and organizational impact must be taken into account. Pinto (2020) and Meredith, Mantel & Shafer (2021) also suggest that project must also achieve strategic objective additional to the triple constraints of time, cost, and quality.

2.3.Project scheduling

2.3.1. Scheduling dimensions and indicators

Project scheduling involves defining project activities sequencing tasks, estimating durations for each task, developing schedules, and controlling progress.

- **Defining activities and sequencing:** List activities of a project and develop sequence based on their relationship.
- **Estimating duration for activities:** Assign a time line for each activity.
- **Developing schedule:** Develop activity sequence with their timeline.
- **Schedule controlling:** Control progress according to the developed schedule.

Schedule variance (SV) and Schedule Performance Index (SPI) are indicators of any deviation from planned timelines.

- **Critical Path Method (CPM)**

CPM identifies the longest sequence of tasks that determines the total project duration. Kerzner (2022) underlines that CPM supports project managers in focusing on critical activities that determines the timely completion of the project. However, Osadare (2022) criticizes CPM because of its rigidity and failure to address uncertainty in complex projects such as nuclear construction.

- **Program Evaluation and Review Technique (PERT)**

PERT introduces time estimates under probabilistic setting that makes it more suitable for projects that have unpredictable nature like information technology. Nicholas & Steyn (2020) argue that PERT improve realism while Pinto (2020) highlight that its reliance on subjective probability can lead to reduced accuracy in estimation.

2.3.2. Empirical evidences on project scheduling

Empirical evidences consistently reveals that project scheduling is one of the most challenging area of project management especially in IT and infrastructure projects. Abrham (2021) studied IT projects in Ethio telecom and found that overly optimistic schedules were frequent issues in the institution. Managers usually underestimate time durations. This led to repeated rescheduling practices and project quality compromises. Findings of the study align with Admassu (2024), who studied UNICEF projects in Ethiopia and found poor sequencing and overly optimistic schedules were the primary causes of project delays. The findings of the study shows that project delays in Ethiopia occurred due to weak organizational frameworks and

managerial capacity while the primary reasons for project delay in developed country often stem from contractor coordination or financial disputes.

Beyond Ethiopia, African research findings also conclude that there is same pattern in underline causes of project delay. Dube (2021) investigated IT projects scheduling practice in Zimbabwean financial institutions. Dube's findings reveal that the primary reasons for project delay are poor technical expertise and limited monitoring systems which reverberate findings of Abrham (2021).

International evidence provides that even highly resourced projects are vulnerable to time overrun. However, underlying causes for delay vary from African context. Osadare (2022), in a study of nuclear construction projects in UK, reveal that poor coordination between contractors and financial disputes were the primary reason for project delay. This shows that though schedule overrun is a universal phenomenon, causes for delay vary across continents.

Comparing these studies reveals an important geographical contrast. In Ethiopia and African countries lack of using systematic application like CPM and PERT is poor. This usually led to schedule overrun. Managers usually rely on ad hoc methods, leading to overly optimistic timelines and subsequent rescheduling. In contrast, developed countries like UK employ these systematic applications. But project complexity and coordination challenge led to project delays in these countries.

Taken together, the empirical evidence shows the theoretical significance of scheduling to project success. CPM and PERT ensures structural approach to estimating duration and sequencing activities. However, their effectiveness depends

on their adaptation to the contextual factor. Ethiopian and African studies demonstrate the need for improved managerial capacity and structured framework for schedule management while studies in developed countries suggest for the importance of coordination and stakeholder management.

2.4.Project cost management

Project cost management is a basic knowledge area in project management, encompassing the processes that make sure the project is completed within the planned budget. Kerzner (2017) underlines that cost management is the integration of estimation, budgeting, and monitoring project costs to support organizational efficiency rather than performing a simple cost monitoring. Meredith, Mantel, & Shafer (2021) similarly underlines that effective cost management ensures financial discipline and accountability, enabling organizations to achieve effectiveness and efficiency.

In IT projects where vendor dependency and frequent scope changes are common, cost management becomes more critical to avoid financial inefficiencies and customer dissatisfaction.

2.4.1. Dimensions and indicators of cost management

Cost management is generally divided into four major dimensions;

- **Cost estimation:** involves forecasting financial requirements of a project. Indicators of estimation accuracy involve variance between forecasted and actual expenditures.

- **Cost budgeting**: Cascading financial resources for specific activities and establishing a cost baseline. Indicators include analysis of variance.
- **Cost control:** monitoring expenditures to make sure that actual cost aligned with forecasted cost and implementing corrective measures. Cost variance (CV) and cost performance index (CPI) are among the indicators.
- **Earned value management:** A methodology that integrates scope, schedule, and cost to provide objective measurement methods of project success (Fleming Koppelman, 2016). Key indicators include Cost variance (CV) and Cost performance index (CPI).

The above dimensions and indicators provide a structured framework to measure effectiveness of cost management.

2.4.2. Empirical evidence on project cost management

Empirical studies provide consistent findings that demonstrate project cost management is one of the most challenging aspects of project. The challenges are stronger in IT projects where scope changes, technological uncertainties, and vendor dependencies are relatively higher. Desta (2019) studied cost estimation practices in Ethiopian commercial banks and found that most banks base their estimation based on subjective judgment rather than structured framework. Reliance on subjective judgment led to frequent underestimation of financial resources requirement and related cost overrun. Ebissa (2020) reinforced this finding by reveal that Ethiopian banks lacked formal frameworks for budgeting that led to poor accountability and transparency. Managers struggle to take corrective action when there is cost overrun without a specified cost baseline. These

studies collectively concluded that Ethiopian IT projects faces challenge from weak systematic approach to cost management. Ethiopian banks remain dependent on subjective approaches compared to international contexts where earned value techniques are widely applied. This practice led many IT projects in Ethiopian banks to risk of inefficiency and cost overruns.

Further studies from Ethiopia reinforce the recurrence of these problems. Dube (2021) studied IT projects performance in Ethiopian financial institutions and found that poor budgeting practice was a major contributor for lower project performance. Abrham (2021), focusing on Ethio telecom, found that not only cost overrun is a recurrent problem but it also compounded by frequent rescheduling that led to inefficiency. These studies underline that IT projects in Ethiopian institutions suffer from weak cost estimation, poor budgeting practice, and ineffective control mechanism. Lack of integration between cost and schedule management also contributes to poor performance as overrun in one dimension led to same effect to the other.

African studies found same challenges but with nuanced differences. Admassu (2024), studied UNICEF projects in Ethiopia, found that in donor-funded projects where accountability structures are decentralized, weak cost control mechanisms are recurring issue. In South Africa, Mouton and Martiz (2015) found that cost overrun in public infrastructure projects are caused by corruption and misallocation of resources, highlighting governance as a critical factor. In Nigeria Olatunji (2010) revealed that poor cost estimation and budgeting resulted in poor project performance.

These African studies suggest that while poor technical capacity is a common problem, governance and integrity also plays a significant role in cost management outcomes.

Compared to Ethiopia, where application of institutional frameworks are weak, countries like South Africa face challenges related to governance and institutional integrity.

International evidence also further insights the universal presence of cost management challenges. Flyvbjerg (2014) found that there was 28% average cost overrun, in the global study of mega projects. The main contributing factors were optimism bias and strategic misinterpretation, where project sponsors deliberately lower project costs to get approval. Fleming and Koppelman (2016) emphasized that EVM adoption is inconsistent across industries. In the IT sector, Boehm (2000) revealed that inaccurate cost estimation models resulted in cost and schedule overruns. Compared to Ethiopian IT projects, which are challenged by weak structural frameworks and limited expertise, international projects, suffer from optimism bias and stakeholder manipulation.

Comparison across industries shows important contrast. Scope changes, vendor related issues, and weak estimation models poses a challenge for IT projects (Boehm, 2000; Desta, 2019). In construction and infrastructure sector governance failures, corruption, and optimism bias contributes to overruns (Flyvbjerg, 2014; Olatunji, 2010). These findings reveal that though cost overrun is a universal issue, its cause is different from country to country and across industries. In Ethiopia dominant issues are related to poor estimation, weak budgeting, and lack of integration with scheduling.

2.5. Project performance

Project performance is the ultimate measure of whether the intended objective of project management practices are achieved or not. Traditionally performance has been measured using the triple constraints of time, cost, and quality (Kerzner, 2022). However, scholars

increasingly argue that the complexity of project success cannot be addressed by these constraints only. (Atkinson 1999) criticize the triple constraints model in its failure to address stakeholder satisfaction and organizational impact. Pinto (2020) and Meredith, Mantel, & Shafer (2021) also argue that project performance must be measured in terms of strategic alignment and long term value creation.

2.5.1. Theoretical foundations of project performance

Several frameworks have been developed to measure project performance.

Triple constraint Model: focuses on time, cost, and quality. A project performance measured in its effectiveness to adhere these constraints. A project considered successful if it is completed within the given timeline, within the approved budget, and delivering the expected quality.

Earned Value Management (EVM): Provides objective measurement by integrating cost, schedule, and scope. It uses key performance indicators include Cost variance (CV), Schedule Variance (SV), Cost performance Index (CPI), and Schedule performance index (SPI) to reflect variances (Fleming & Koppelman, 2016)

Stakeholder satisfaction Frameworks: Atkinson (1999) argues that strategic alignment and stakeholder satisfaction must complement efficiencies in cost and schedule.

Systems Theory: Kerzner (2022) notes that project performance must be seen as a dynamic system that changes in cost and schedule affect project performance and stakeholder satisfaction.

2.5.2. Empirical evidence on project performance

Empirical studies in Ethiopia show that IT projects in Ethiopia face challenges to deliver expected performance expectations. Desta (2019) found that unrealistic scheduling practices in Ethiopian commercial banks led to poor project performance. Ebissa (2020) reveal that IT projects finalized with poor accountability and underperformance due to lack of standard frameworks to manage time and cost. Abrham (2021), underlines that IT projects from Ethio telecom suffer from cost and time overrun that led to customer dissatisfaction and organizational competitiveness.

African studies reinforce these findings from Ethiopian studies. Mouton and Martiz (2015) reported that, in South Africa projects suffer from cost and time overruns because of corruption and resource misallocation. Olatunji (2010) found that disagreements in cost estimation and budgeting resulted in schedule delay and poor quality delivery.

International evidence also aligns with Ethiopian and African studies in the presence of cost and time overrun. But there is a difference in locating causes for overruns. Flyvbjerg (2014) revealed that strategic misrepresentation and optimism bias are main contributors for cost and schedule overrun. Serrador & Turner (2015) found that projects that ignore stakeholder satisfaction failed to deliver long term value though they meet time and cost efficiency.

2.6. Relationship between Scheduling, Cost Management, and Project Performance

Project performance is traditionally measured using the three constraints of time, cost, and quality. However, scholars increasingly argue that these constraints should not be used in isolation. Rather they should be understood in relation to one another. Kerzner (2022) underlines that cost management and schedule management are interdependent processes. Scheduling problem resulted in cost inefficiencies while poor cost management undermines timely delivery.

Atkinson (1999) critique the three constraints approach in its narrow focus on time and cost, suggesting stakeholder satisfaction and organizational impact must be included. Pinto (2020) and Meredith, Mantel, & Shafer (2021) also argues that project success must be measured from broader strategic objectives angle and should balance schedule and cost efficiency.

2.6.1. Theoretical perspectives

From a systems perspective, projects are dynamic systems where changes in one dimension resulted in change in other dimensions. Effective scheduling practice cannot be realized without effective cost management and vice versa. Turner (2014) argues that contingency theory explains the reason for the variance in the relationship between cost and scheduling across contexts. In uncertain IT projects rigid scheduling frameworks leads to cost overrun rather than cost efficiency. Serrador & Turner (2015) further demonstrate that cost and schedule efficiency strongly correlates with project performance.

2.6.2. Empirical evidence

Empirical studies support the theoretical interdependence of cost and scheduling practices. Desta (2019) reveal that overly optimistic scheduling practices led to delivery ineffectiveness and related cost overrun. Ebissa (2020) found that using subjective judgments instead of standardized frameworks led to poor accountability and frequent underperformance in IT projects. Dube (2021) found that ineffective budgeting and failure to meet deadlines resulted in poor IT projects performance in Ethiopian financial institutions. These findings collectively show that weak cost management leads to cost overrun and failure to meet timelines leads cost overrun.

African studies also provide similar insights. In South Africa, Mouton and Martiz (2015) found that corruption and misallocation of resources led to cost and time overrun in public infrastructure projects. In Nigeria Olatunji (2010) revealed that disputes over cost estimation and budgeting resulted in schedule overrun.

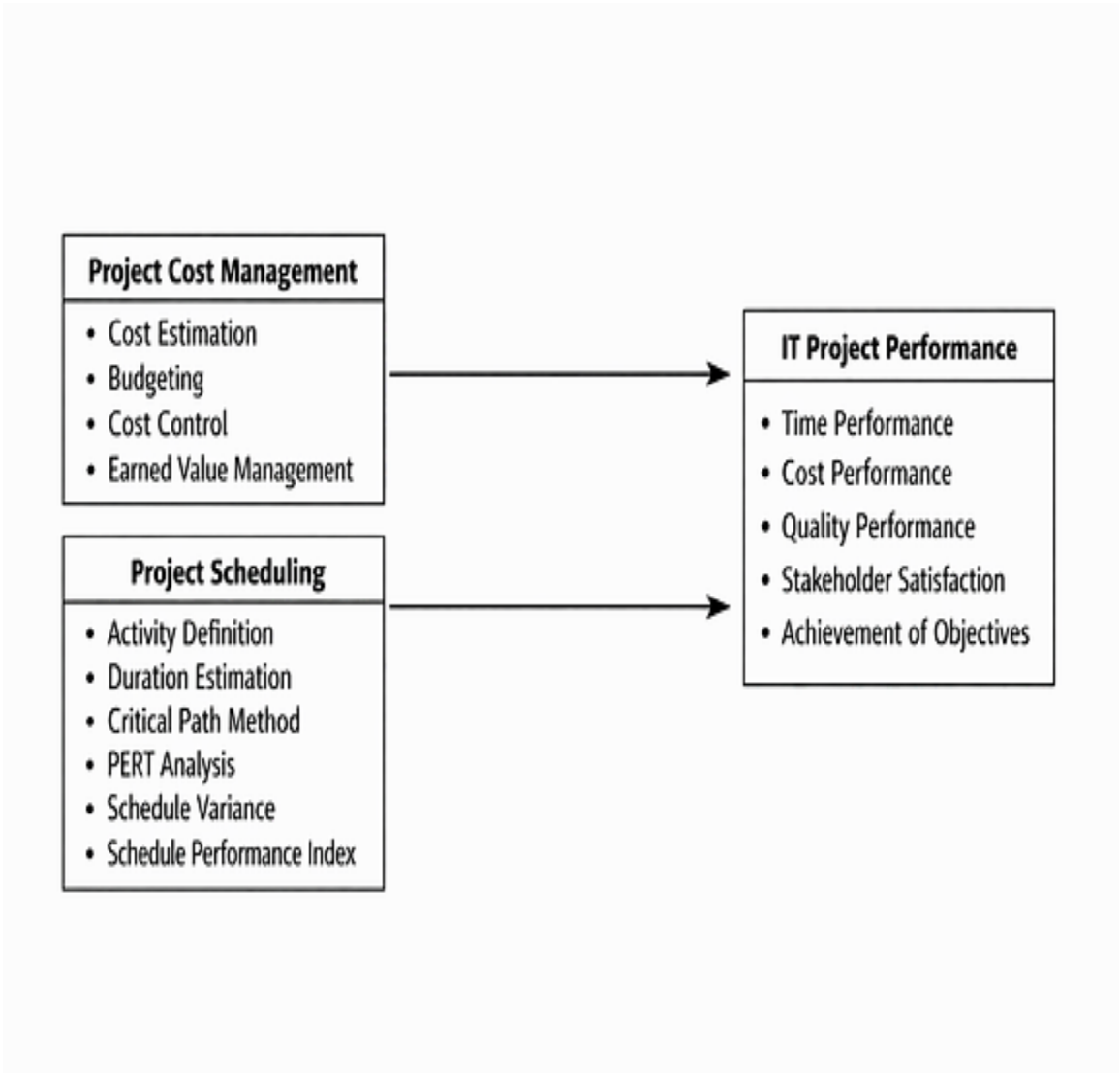
International evidence confirms that though there is a contextual difference, relationship between cost and time management remains the same. Flyvbjerg (2014) found that global mega projects challenged by optimism bias and strategic misrepresentation that led to cost and time overrun. Osadare(2022), studying UK Nuclear projects found that poor coordination between contractors resulted in both cost overrun and schedule delay.

Comparing across countries and industries demonstrate that both time and cost overrun are common across the universe. However, their causes vary. In Ethiopia and African countries, weak framework and limited managerial capacity dominate while

complexity, coordination, and optimism bias are more significant in developed countries. Despite this variability, cost and schedule management remains inseparable determinants of project performance.

In Ethiopian IT project, specifically in younger generation banks like Ahadu, the challenge is blended by regulatory pressures and limited managerial capacity. Existing studies have not examined how project cost management and scheduling practices affect project performance in such kind of context. The gap justifies this study which aims to examine the effect of project cost management and scheduling practice on project performance in the case of Ahadu bank.

2.7.Conceptual framework



CHAPTER THREE

3. Methodology

3.1.Back ground of the company

Ahadu bank is a new entrant to the banking sector of Ethiopia, officially starting operations on July 16, 2022. As of 2026, the bank has been in active operation for nearly four years positioning itself as one of the youngest banks in the sector.

Vision and Mission

- **Vision**: To take a lead role in the financial sector, in 2025 E.C., supporting the aspirations of the citizenry and the country.
- **Mission**: To Pioneer avant-garde financial services for promoting the economic welfare of Ethiopians.

Since its establishment, Ahadu bank has expanded its geographical presence through growing number of branches. According to internal organizational report (Annual report 2024/2025), Ahadu bank operationalize 102 branches and employed 959 permanent, 5 contract, and 881 outsourced staff members.

To remain competitive in the sector , that is technologically evolved and highly regulated, Ahadu bank has involved in digital transformation projects including Core banking system, electronic data management system, customer relationship management system, and internet banking platforms. These initiatives are designed to enhance process

efficiency, build strong cyber security, and meet customer expectation for digital banking products. (Ahadu bank IT department, 2023)

Ahadu bank IT projects implementation is also driven by both legal and regulatory compliance. According to NBE Directive No., SBB/83/2022, integrating specific modules like Anti-money Laundering (AML) in the core banking system for scrutinizing financial transactions is a mandatory requirement. Additionally, compliance with international frameworks like Financial Action Task Force (FATF) indirectly influences domestic banks, as foreign banks set requirements for international transactions. These make IT applications mandatory for new entrant banks like Ahadu in the banking sector.

However, despite significant investment, Ahadu bank has faced challenges in IT projects performance. Delayed milestones and repeated rescheduling, below minimum performance delivery, and cost overruns are among the challenges in IT project implementation of the bank.

Internal project performance reviews (Ahadu bank IT department, 2023) highlight that problems in cost management and scheduling are among the primary causes of low performance delivery.

Research Gap

Though IT projects implementation has expanded in Ahadu bank, the impact of project cost management and project scheduling practices on IT projects performance has not been systematically studied. Moreover, there is lack of empirical evidence in newly entrant banks to the Ethiopian banking sector. This study aims to search for the relationship between these variables in the context of Ahadu bank.

3.2.Research approach

The study uses a quantitative approach, which is appropriate to numerically measure variables and testing hypotheses through statistical analysis. In this case, the study sought to examine the effect of project cost management and scheduling practices on IT project performance at Ahadu bank.

This approach was chosen due to its suitability to generalize findings and ensure objectivity. Also variables in the research were operationalized into measurable indicators like cost estimation, schedule variance, and timely completion. The research is guided by the assumption that there is causal relationship between cost management, scheduling practices, and project performance. Quantitative approach is suitable to test such kind of assumptions.

3.3.Research design

This research employs a quantitative approach with both descriptive and explanatory designs. The descriptive aspect used to assess the current state of project cost management, scheduling practices, and project performance in Ahadu bank. This allows the researcher to describe the existing states and present patterns in managerial areas. The explanatory part focuses on the cause and effect relationship of independent variables and the dependent variable.

Quantitative design is applied to align the research design and research objectives which required statistical analysis of variables and testing of hypotheses. Quantitative methods

provide an objective result, allow for generalization of findings, and are appropriate to use correlation and regression techniques (PMI, 2021)

3.4.Target population

The target population of the study includes employees who are directly involved in IT projects of the bank. Participated employees include Project managers, team leaders, IT staff, system administrators, vendor coordination officers, and operations staffs. These groups of employees are selected because they are actively participating in project cost and schedule management activities.

3.5.Population Size

Number of employees directly involved in IT projects is relatively small in Ahadu bank compared to banks which have a large scale of operation and experience in the sector. Project operations are centralized in the head office and branches around the head office which are convenient to conduct pilot test due to their geographical proximity. Therefore, the researcher used census and include all members of the population into the study. Accordingly, the questionnaire distributed to all the 70 staff members.

3.6.Data Collection Method

Primary data was collected using a structured questionnaire distributed to respondents. The questionnaire designed to measure project cost management, project scheduling practices, and project performance in Ahadu bank. The questionnaire has four main sections. The first section designed to collect demographic information while the remain

three sections designed to collect information on IT projects cost management, scheduling practices, and project performance in Ahadu bank.

The questionnaire was developed according to established project management literature. Items measuring variables of the study which are project cost management, project scheduling, and project performance were initially drawn from project management institute (PMI, 2021) and adopted to Ethiopian banking sector context.

Questions on cost estimation, budgeting, and control, were rephrased to reflect common practices in Ethiopian banks. Also questions on scheduling were adjusted to focus on regular scheduling practices familiar with Ethiopian banking sector. The researcher tried to avoid technical jargons for clarity purpose. A small group of Ahadu bank employees consisted of 24 staff requested to review the questionnaire to confirm clarity, appropriateness of questions, and technical jargons.

After adaptation of the questionnaire, Cronbach's Alpha was calculated for each variable. All variables confirmed that they maintain above threshold value of Cronbach's alpha which is 0.7.

Reliability measurement involves measuring the internal consistency of a tool. Reliability measured by a statistical tool called alpha Cronbach developed by lee Cronbach in 1951. It employed in this research to measure the internal consistency of survey questions. Cronbach's alpha value is considered as acceptable if the result is greater than or equals 0.7. (Hair et al., 2010)

Validity refers to how accurately the questions measure the subject matter. Project managers of Ahadu bank which have a project management background have been

consulted for the validity of questionnaire items. Also face validity was also conducted as respondents in the pilot test confirmed that items were clear and relevant to their experience.

No	Variables	Cronbach's alpha	Number of items
1	Project cost management	0.857	8
2	Project schedule management	0.749	8
3	Project performance	0.781	8

3.7.Model specification

The study used a multiple regression model to examine the effect of project cost management and scheduling practices on IT projects performance. The model is specified as :

$Y=\beta 0+\beta 1X1+\beta 2X2+\varepsilon$

where ;

Y *represents IT project performance,*

X1 *represents project cost management, and*

X2 *represents project scheduling practices.*

The coefficients β1 *and* β2 measure the magnitude and direction of the effect of independent variables in the dependent variable. The model assumes causal relationship in which improvements in cost management and scheduling practices resulted in better project performance. The specification tests both hypotheses using correlation and regression analysis in SPSS

3.8.Method of data analysis

The data collected from respondents were analyzed using quantitative statistical techniques by SPSS software. The analysis process involved various stages to secure accuracy, reliability, and proper interpretation.

First data coding and cleaning were performed to ensure completeness and accuracy of responses. Each questionnaire items assigned a numerical code on the Likert scale (1 = Strongly disagree to 5 = strongly agree).

Second, descriptive analyses performed and mean, standard deviation, and frequency distributions generated to summarize characteristics of respondents and insight project cost management, scheduling practices, and project performance.

Third, statistical analysis was performed to test hypotheses of the study. Correlation analysis was performed to find the strength and direction of relationships between variables. Then, multiple linear regression analysis was applied to determine the effect of project cost management and scheduling on the performance of IT projects. The model was specified as;

$Y=\beta 0+\beta 1X1+\beta 2X2+\varepsilon$

where ;

Y *represents IT project performance,*

X1 *represents project cost management, and*

X2 *represents project scheduling practices.*

The significance of relationships was tested at the 95% confidence level ($\alpha = 0.05$). Finally, to ascertain the strength of the instrument used in the study, Cronbach's alpha used to test the reliability while face validity and expert review applied to test validity.

3.9. Variables of the Study

Project cost management (Independent Variable)

Project cost management has four dimensions commonly recognized in project management literature (PMI, 2021; Kerzner, 2022):

- **Cost estimation:** Accuracy and reliability of forecasted project costs.
- **Cost budgeting:** allocation of financial resources to project activities.
- **Cost control:** monitoring project expenditures against planned budget.
- **Earned Value Management (EVM):** Integration of cost and schedule performance to measure efficiency.

Project scheduling practice (Independent Variable)

Project scheduling was operationalized through the following dimensions according to (Fleming & Koppelman, 2016; Meredith et al., 2021):

- **Activity definition and sequencing:** make comprehensive list of activities and develop logical ordering.
- **Estimating duration:** accuracy of timeline prediction for activities.

- **Critical Path Method (CPM):** Use CPM to identify critical activities that determine project completion time.
- **PERT Analysis:** Application of PERT to manage uncertainty.
- **Schedule variance:** deviation measurement against planned schedule.
- **Schedule performance index (SPI):** Ratio of earned value against planned schedule

IT project performance (Dependent variable)

Project performance can be operationalized using five indicators (Atkinson,1999 ; Serrador & Turner, 2015)

- **Time performance:** Ability to complete projects on time.
- **Cost performance:** Ability to finalize projects as per the originally approved budget.
- **Quality performance:** Meeting the intended technical and functional requirements.
- **Stakeholder satisfaction:** meeting stakeholder expectations.
- **Achievement of objectives:** Alignment of project objectives with organizational goals.

Variable	Dimensions	Indicators	Measurement Scale
Project Cost Management (Independent)	• Cost Estimation • Cost Budgeting • Cost Control • Earned Value Management (EVM)	• Accuracy of cost predictions • Allocation of financial resources • Monitoring expenditures against budget • Integration of cost & schedule performance	Five-point Likert scale (1 = strongly disagree, 5 = strongly agree)
Project Scheduling (Independent)	• Activity Definition & Sequencing • Duration Estimation • Critical Path Method (CPM) • PERT Analysis • Schedule Variance (SV) • Schedule Performance Index (SPI)	• Identification & logical ordering of tasks • Accuracy of time predictions • Use of CPM for key tasks • Application of PERT for uncertainty • Measurement of deviation from planned schedule • Ratio of earned value to planned progress	Five-point Likert scale (1 = strongly disagree, 5 = strongly agree)
IT Project Performance (Dependent)	• Time Performance • Cost Performance • Quality Performance • Stakeholder Satisfaction • Achievement of Objectives	• Completion within planned schedule • Delivery within allocated budget • Meeting technical & functional requirements • Fulfillment of stakeholder expectations • Alignment of outcomes with organizational goals	Five-point Likert scale (1 = strongly disagree, 5 = strongly agree)

Table 3-2: Measurement indicators

3.10. Ethical Considerations

The researcher tried to maintain ethical approach while collecting information from respondents. Participation was voluntary across all respondents. Confidentiality of responses were assured for respondents and maintained classified after the collection of questionnaires. Collected data was used only for academic purpose and official permission was granted from Ahadu bank officials prior to distributing the instrument.

CHAPTER FOUR

4. Data presentation, analysis, and discussion

4.1. Introduction

In this section of the study, the findings of the study presented. The chapter is structured to provide descriptive statistics, correlation results, regression outputs, and their subsequent interpretation in relation to existing literature. The objective is to present how project cost management and scheduling affects project performance.

4.2.Response rate

70 questionnaires were distributed to Project managers, Team leaders, IT staff, System administrators, Vendor coordination officers, and Operations staff. Among the 70 questionnaires all of them were responded. So there is a 100 % response rate. Approval and endorsement of top management coupled with availability of respondents in a feasible distance contributes to the highest response rate.

4.3.Profile of respondents

The relevant data for this research collected from 70 respondents comprised of project managers, team leaders, IT staff, system administrators, vendor coordination officers, and operations staffs. Their demographic characteristics presented as follows

No.	Respondents' characteristics	Categories	Frequency	%age
1	Gender	Male	32	45.7%
		Female	38	54.3%
2	Age	20 - 30	3	4.3%
		31 - 40	49	70%
		41 - 50	13	18.6%
		Above 51	5	7.1%
3	Educational level	Diploma	9	12.9%
		First degree	47	67.1%
		Masters degree	14	20%
4	Job position	Officer	4	5.8%
		Senior officer	36	52.2%
		Principal officer	21	29%
		Manager	9	13%
5	Years of experience in Banking sector	Less than 2 years	1	1.4 %
		2 – 5 Years	28	40.6 %
		6 – 10 Years	30	42 %
		Above 10 Years	11	15.9 %

Table 4-1:demographic description of respondents

The demographic profile of respondents provides context for interpretation of the research findings. The composition of the population shows different backgrounds, educational level, experiences, and roles which reflect wide range of perspectives.

The age distribution shows different level of respondents' age. Younger, mid-level and seniors are included the distribution. Younger respondents bring perspective based on their adaptability to new technology, while the dominant middle age group (31 – 40) represents actively engaged individuals in the area of budgeting and scheduling. Senior respondents contribute to historical and sectorial information.

Gender composition is balanced which contributed to diverse dataset. Technical and managerial roles are shared equally among respondents though share of males is slightly higher.

Most respondents hold bachelor's degree. Also significant portion of the population hold master's degree. This revealed that most of the respondents are academically qualified and familiar with project management concepts. Degree holders provide educated response that ensures the reliability of the data.

Nearly half of the respondents have a project management exposure. Their career path makes the findings of the study grounded in experience. Also senior staff adds depth by identifying recurring challenges, while newer staff highlights issues of adaptation.

The demographic profile represents diversified and credible data set. This diversified set of respondents enhances the validity of the study and ensures that conclusions are reliable.

4.4.Results of descriptive statistics

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
IV1_Mean	70	1.00	3.25	2.0786	.48723
IV2_Mean	70	1.25	3.75	2.2393	.59120
DV_Mean	70	1.00	2.88	1.8161	.50033
Valid N (listwise)	70				

Table 4-2: result of descriptive statstics

The descriptive statistics show that the mean value for project cost management, scheduling and project performance were around two on a five point Likert scale. Standard deviation score for all variables is close to 0.5. This implies that respondents inclined to disagree with statements that suggest improved project cost management, scheduling practices, and enhanced project performance. Similarly there is low variability across responses which indicate majority of the respondents agree with poor project scheduling, weak cost management, and undermined project performance.

This finding aligns with empirical evidence in Ethiopian banking. Desta (2019) reveal that poor cost estimation and controlling practices are major contributors for project cost overruns in IT projects. Similarly Ebissa (2020) show that lack of structured frameworks and poor monitoring mechanisms led to repeated project delays in commercial banks.

Kerzner (2017) argument also supports this finding mentioning, Cost estimation, budgeting, and monitoring are determinant of organizational efficiency. Turner (2014)

also emphasizes time is the most critical factor in project performance, with time overrun always leads to cost overrun.

The relative low variability suggests that perception of respondents remains consistent across individuals. This agreed with Abrham (20210), who found that both cost and time overrun are systemic in Ethiopian banks, across technical and managerial units.

4.5. Correlations statistics

		IV1_Mean	IV2_Mean	DV_Mean
IV1_Mean	Pearson Correlation	1	.182	.395**
	Sig. (2-tailed)		.131	.001
	N	70	70	70
IV2_Mean	Pearson Correlation	.182	1	.518**
	Sig. (2-tailed)	.131		.000
	N	70	70	70
DV_Mean	Pearson Correlation	.395**	.518**	1
	Sig. (2-tailed)	.001	.000	
	N	70	70	70
**. Correlation is significant at the 0.01 level (2-tailed).				

Table 4-3: correlation statistics

Table 3 Demonstrates that both project cost management and scheduling practice have a positive and significant relationship with IT project performance. This indicates that improvements in scheduling, cost estimation, budgeting, and controlling leads to better project performance.

This finding is consistent with empirical evidences in the Ethiopian banking industry. Desta (2019) revealed that overly optimistic scheduling practices resulted in poor IT project performance, while Ebissa (2020) found that lack of strong cost management frameworks led to poor accountability and lower project performance.

Abrham (2021) found that inefficiency in time and cost management across Ethiopian banks is systemic that recurred across technical, managerial, and operational units. Internationally, Kerzner (2017) emphasize that cost and schedule management are determinant factors for project success.

4.6.Regression analysis outputs

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Project cost management	.967	1.034
	Project schedule management	.967	1.034
a. Dependent Variable: Project performance			

Table 4-4: Multi collinearity statistics

The variance inflation factor (VIF) was calculated to assess if there is multi collinearity among the independent variables. The results for both independent variables were below the common threshold of 10, with tolerance values above 0.1 (Hair et al.). This indicates both project cost management and scheduling practice are not overly interrelated, and each contributes identical explanatory power to the regression model. In this study context, both project cost management and scheduling practices are separate yet complimentary aspects of IT project performance.

4.7.Normality test

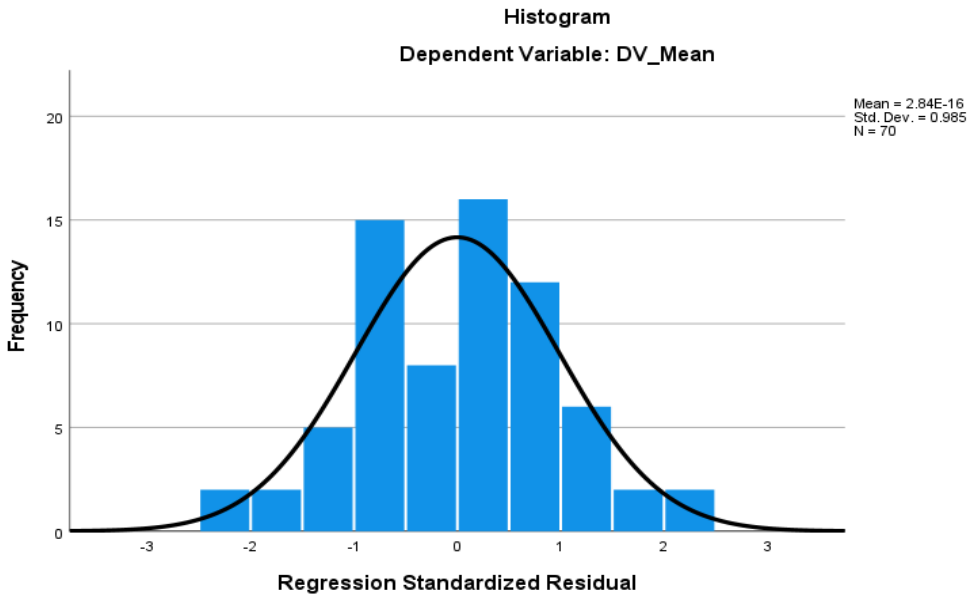


Figure 1:Normality test

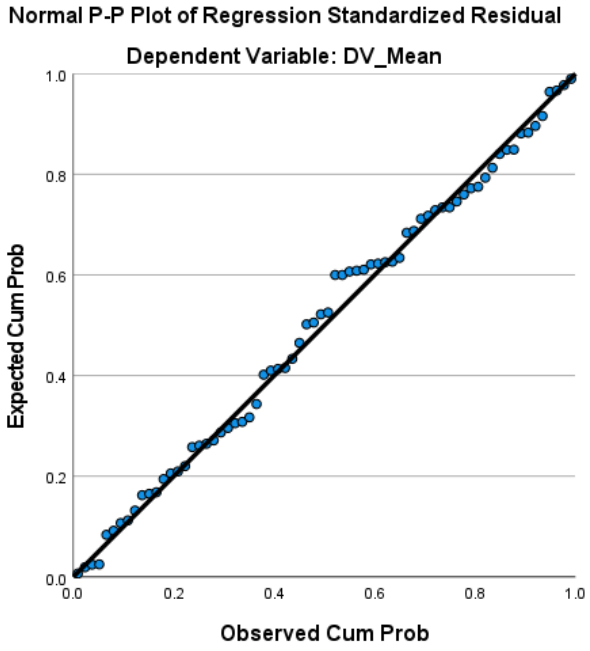


Figure 2: Normality test

As shown in figure 1 and 2 the distribution is normal. Normal distribution (bell shaped graph) implies that there are rare responses that deviate from the average responses or the mean. Most responses lies around the mean or majority of the respondents agreed on the same range. (Hair et al., 2010)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.602[a]	.362	.343	.40540

a. Predictors: (Constant), IV2_Mean, IV1_Mean

Table 4-5: Model fit

The regression output show that 36.2% of IT project performance is explained by project cost management and scheduling practices. Project scheduling which holds a β value of 0.462 was found to have relatively stronger effect on IT project performance than project cost management which holds a β value of 0.311.

The result aligns with Dube (2021) finding that highlights recurred rescheduling practices and weak scheduling frameworks were major contributors for poor IT project success in Ethiopia financial institutions. It also resonates Pinto (2016), who asserts weak cost and time management practices leads to cost overrun, delay, and undermined customer satisfaction. The regression analysis therefore aligned with both theoretical perspectives and empirical evidence which highlights project scheduling practices have greater impact on IT projects performance, although cost management is still a critical factor.

4.8.Multiple regression analysis Coefficients

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.277	.261		1.060	.293
	Project cost management_Mean	.320	.102	.311	3.139	.003
	Project scheduling _Mean	.391	.084	.462	4.654	.000
a. Dependent Variable: DV_Mean						

Table 4-6: Multiple regression analysis coefficients

Table 4-6 illustrates that if project scheduling remains constant, then the effect of project cost management in project performance would be 0.32. Similarly, if the project cost management remains constant, the effect of project scheduling on project performance would be 0.391.

As the beta value helps to compare the two independent Variables effect, 0.462 beta value of project scheduling that is greater than 0.311 beta value of project cost management shows that project scheduling practice has a stronger effect on project performance.

Summary of hypothesis test

No.	Hypotesis	Result	Decision
	H1: Project cost management has a positive and significant impact on the performance of IT projects at Ahadu Bank S.C.	Significant and positive	Hypothesis Supported
	H1: Project scheduling practice has a positive and significant impact on the performance of IT projects at Ahadu Bank S.C.	Significant and positive	Hypothesis Supported

Table 4-7:Hypothesis test

Regression model

PP = 0.277 + (0.32 PCM) + (0.391 PS)

Where;

PP = Project performance

PCM = Project cost management

PS = Project scheduling

CHAPTER FIVE

5. Summary of findings, conclusion, and recommendation

In the previous chapter data collected from respondents have been analyzed, discussed and presented. A thorough analysis made to study the effect of project cost management and project scheduling practices on project performance in case of Ahadu bank S.C. In this chapter, based on the analysis made, conclusion and recommendation are drawn and suggested.

5.1. Conclusion

This study set out to understand the effect of project cost management and scheduling practices on IT projects performance in the case of Ahadu bank S.C. Results of statistical analysis indicate that both project cost management and scheduling practices have a significant influence in project outcomes, with scheduling exerting a relatively stronger effect. The findings highlights that poor time management practices like setting unrealistic timelines and frequent rescheduling practices challenge IT projects performance.

Beyond statistical verification, the study contributes contextual evidence to project management literature by confirming that the effect of time and cost management in IT projects does include new entrants to the banking industry. Second, the study reinforces theoretical perspectives that highlight the effect of time and cost management in shaping project performance. The results are consistent with (Kerzner, 2017) assertion that financial discipline and time management are critical for project success. It also aligns

with Turner's (2014) emphasis on the criticality of scheduling practice in complex environments like IT projects.

The study concludes that IT project performance is not determined by project cost management and scheduling practice alone. Though these aspects of an IT project are substantial, other factors such as contract management, risk management, stakeholder management may play a critical role in improving IT project performance. This implies that IT projects performance should be managed holistically to ensure better results and customer satisfaction.

Practically, the study confirms that IT project performance in Ahadu bank is suffered from recurring cost overruns and delay which affects customer satisfaction, organizational efficiency, compliance, and competitiveness.

5.2.Recommendations and suggestion

The findings of this study highlight that poor project cost management and weak scheduling practices undermines It project performance in the case of Ahadu bank S.C. Based on the findings, the following recommendation are forwarded which includes different levels.

For Ahadu bank management

- **Structured frame works:** the bank should adopt universally recognized standards such as PMBOK. Such frameworks ensure systemic approach to manage cost and schedule rather than subjective judgments and ad hoc practices.

- **Invest in project management tools**: employ advanced software such as MS project or Earned Value Management (EVM) should be integrated to IT projects. These tools make real time reports possible and assist managers to take preventive actions rather than corrective ones.
- **Training:** continuous training programs for employees which participated in IT project areas. Skill of employees on advanced scheduling techniques like CPM and PERT must be developed to enhance technical competence.

For Project teams

- **Improve estimation practices:** to reduce the risk of underestimation and frequent delay, teams have to adopt standardized templates for cost and time estimation.
- **Improve collaboration:** Information technology, operations and project management units should be collaborated. This enhance the synergy between technical execution, organizational alignment, and managerial aspect of IT projects and reduce miscommunication and delays.
- **Contingencies:** Turner (2014) recommends contingency allowances for unforeseen circumstances. This supports especially in complex projects like IT where uncertainty is common.

For future researchers

- **Scope expansion:** future researchers should include other new entrant banks to reveal if cost management and scheduling challenges are systematic or vary across banks.

- **Mixed method approach:** inclusion of qualitative method to quantitative approach would provide additional contextual perspectives. Organizational and cultural dimensions of IT projects performance would be assessed by employing mixed method.
- **Study additional variables:** study other variables that were not studied in this research but have impacts on IT projects performance would give more insight on Project performance improvement.

6. References

1. Abrham, E. (2021). *Factors affecting IT project schedule performance: The case of Ethio Telecom* (Master's thesis). Addis Ababa University.
2. Admassu, T. (2024). *Assessing the project time and cost management practices: Case of UNICEF Ethiopia supported project* (Master's thesis). Addis Ababa University.
3. Chaudhary, A., & Meshram, S. (2025). Project scheduling challenges and their impact on project delivery. *Journal of Construction Engineering and Management.*
4. Desta, B. (2019). *Cost estimation and financial planning challenges in IT projects: Evidence from Ethiopian commercial banks* (Master's thesis). Addis Ababa University.
5. Dube, M. (2021). *Scheduling frameworks and IT project performance in Ethiopian financial institutions* (Master's thesis). Addis Ababa University.
6. Ebissa, G. (2020). *Weak cost and time management practices in Ethiopian banking IT projects* (Master's thesis). Addis Ababa University.
7. Gobeze, B. S. (2024). *Project cost and schedule management practices in Ethiopian banks* (Master's thesis). Addis Ababa University.
8. Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis* (7th ed.). Pearson.
9. Kerzner, H. (2017). *Project management: A systems approach to planning, scheduling, and controlling* (12th ed.). John Wiley & Sons.
10. Meredith, J. R., & Mantel, S. J. (2009). *Project management: A managerial approach* (7th ed.). John Wiley & Sons.
11. Morris, P. W. G., Pinto, J. K., & Söderlund, J. (Eds.). (2021). *The Oxford handbook of project management.* Oxford University Press.
12. Osadare, O. (2022). Schedule overruns and project performance: Evidence from UK nuclear construction projects. *International Journal of Project Management.*
13. Pinto, J. K. (2016). *Project management: Achieving competitive advantage* (4th ed.). Pearson.

14. Taghi Zadeh, M., & Kashef, A. (2024). The impact of IT projects' complexity on cost overruns and schedule delays. *International Journal of Information Technology Project Management.*
15. Turner, J. R. (2014). *Handbook of project management* (3rd ed.). Routledge.
16. World Bank. (2025). *Digital transformation and IT adoption in the Ethiopian banking sector*. World Bank Publications.

Annex I Questionnaire distributed to respondents

Section A: General Information					
1. Gender: ☐ Male ☐ Female					
2. Age: ☐ 20–30 ☐ 31–40 ☐ 41–50 ☐ 51+					
3. Educational Level: ☐ Diploma ☐ Bachelor's Degree ☐ Master's Degree ☐ PhD					
4. Job Position: ☐ Officer ☐ Senior Officer ☐ Principal officer ☐ Manager ☐ Senior Manager ☐ Other: _____					
5. Years of Experience in Banking Sector: ☐ Less than 2 years ☐ 2–5 years ☐ 6–10 years ☐ Above 10 years					
6. Experience in IT Projects: ☐ Yes ☐ No					
Section B: Project Cost Management (1–5 Scale)	1 (Strongly disagree)	2 (Disagree)	3 (Neutral)	4 (Agree)	5 (Strongly agree)
1.Project budgets are clearly defined before IT projects implementation.					
2.Cost estimation is done accurately in IT projects.					
3.There is effective monitoring and controlling practices of project costs.					
4. Cost overruns are properly managed as they occur.					
5. Financial resources are allocated adequately to IT projects.					
6. There are clear procedures for cost management in IT projects.					
7. Unexpected costs are handled efficiently.					
8. Cost management practices influence IT projects success positively.					
Section C: Project Scheduling (1–5 Scale)	1 (Strongly	2 (Disagree)	3 (Neutral)	4 (Agree)	5 (Strongly

	disagree)				agree)
1. Project timelines are clearly defined at the beginning of the project.					
2. Project schedules are realistic and achievable.					
3. Tasks and milestones are properly planned before the implementation.					
4. Delays in IT projects are effectively managed.					
5. There is proper monitoring of project timelines.					
6. Scheduling tools/techniques are used effectively.					
7. Resource allocation aligns with project schedules.					
8. Changes in schedule are properly communicated.					
Section D: Project Performance (1–5 Scale)	1 (Strongly disagree)	2 (Disagree)	3 (Neutral)	4 (Agree)	5 (Strongly agree)
1. IT projects are completed within the planned time.					
2. IT projects are completed within the allocated budget.					
3. Projects meet the required quality standards.					
4. User/Bank satisfaction is achieved in IT projects.					
5. Project objectives are clearly achieved.					
6. IT projects contribute to organizational performance.					
7. There is proper review after project completion.					
8. Overall, IT projects at the bank are successful.					

Section E: Challenges					
1. What are the main challenges in managing project cost? _____ _____ _____ _____ _____					
2. What are the main challenges in project scheduling? _____ _____ _____ _____ _____					
3. What improvements would you suggest? _____ _____ _____ _____ _____					
Section F: Additional Comments _____ _____ _____ _____ _____-					