ST. MARY'S UNIVERSITY

SCHOOL OF GRADUATESTUDIES

THE EFFCET OF RISK MANAGENENT PROCESS ON IT PROJECT SUCCESS; THE CASE OF IT PROJECT, COMMERCIAL BANK OF ETHIOPIA

BY: HERMELA LIULSEGED

ADVISOR: MULUADAM ALEMU (PHD)

February, 2025

Addis Ababa Ethiopia

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THE EFFECT OF RISK MANAGENENT PROCESS ON PROJECT SUCCESS: THE CASE OF COMMERCIAL BANK OF ETHIOPIA IT PROJECT

BY: HERMELA LIULSEGED APPROVED BY BOARD OF EXAMINERS

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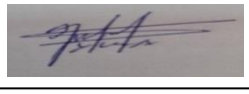
Yilkal Wassie (Asset Prof)		13/02/2025
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DECLARATION

I hereby declare that this thesis entitles "The Effect of Risk Management Process on IT Project Success; In the case of Commercial Bank of Ethiopia IT Project", is Carrie out by me under the guidance and supervision of Muluadam Alemu (Phd). The thesis is original and has not been submitted for the award of any degree or diploma to any university or institutions.

_____ _____ _____

Researcher's Name Signature Date date

CRTIFICATE

This is to certify that the thesis entitled: The Effect of Risk Management Process on IT Project Success; In the case of Commercial Bank of Ethiopia IT Project", submitted to St, Mary University for the award of the Degree of Master of Project Management (MPM) and is a record of bona fide research work carried out by Hermela Liulseged under our guidance and supervision. Therefore, we hereby declare that no part of this thesis has been submitted to any other university or institutions for the award of any degree or diploma.

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List of Abbreviation

PM	Project Management
PRM	Project Risk Management
IT	Information Technology
SPSS	Statistical Package for Social Sciences
CBE	Commercial Bank of Ethiopia

ABSTRACT

The study to Examine the Effect of Risk Management Practices on IT Project Success; in the case of Commercial Bank of Ethiopia, Therefore, project team members worked on those projects implemented in the CBE was contacted to collect data. Questionnaire survey was conducted to collect data from the respondents that consisted of IT project managers, supervisors, and other related respondents. The study used purposive or judgmental sampling to select respondents that have adequate knowledge and significant role in the Risk management and IT projects. The applications used to analyze and examine the hypotheses were the Statistical Package for Social Sciences V.27.The descriptive statistics was used to describe the general result of the variables. In addition, correlation analysis was done to check the correlation between the study dependent variable and the independent variables, while regression analysis was used to test the hypotheses developed following the conceptual framework developed from the literature. The finding of the study indicates that effective implementation of project risk management element (Risk planning, Risk Identification, Risk analysis and Risk control and Response) has significant effects on project on IT project success.

Key Word: *Risk Identification and Analysis, Risk Response and Planning and Risk Monitoring and Controlling.*

CHAPTER ONE

The Chapter Consists of Background of the study, Statement of the problem, Research question, General and Specific of the study, Significant of the study, Scope of the study, Limitation of the study, Deification of key terms and finally Organization of the study.

1.1. Background of the study

Todays, the financial, service organization, and commercial banks industry in particular are facing various changes as a result of, such as globalization, deregulation, disintermediation, technological advancements, and new competitive structures related forces. In searching for a strategic response to such these and other related changes, it is found to be critical to work day-out and day-in as a reactive strategic response or at the same time to realize advanced operational efficiency and better flexibility within the banking organizations (Fayaz, 2017).

The Effective project management serves as a crucial strategy for achieving success across all sectors. Consequently, the processes of risk management and project management are inherently aligned. Project management is the application of knowledge, skills, tools and techniques to project activities and accomplished by applying the process of initiating, planning, executing, monitoring and closing, (Heagney ,2012).

Every project has a risk and one of the most important roles of a project management is to ensure that these risks are minimized, if not eliminated. Risks can be manmade or natural and the effects of these can be very devastating, hence, the need to have in place measures to overcome these risks, however, most of these have been found to be ineffective in different ways. Over the years, there have been many tools that have been given to enable project managers to overcome risks, (Zou, Kiviniemi, and Jones, 2017). According to Credar, (2015), elaborated that every project had risk for example; resources left the organization, leadership changed and budgets got cut etc. There were many factors beyond control. However, many risks to projects can be mitigated or even eliminated with some forethought and ongoing management.

Successful Information Technology project management was the most desirable for all organizations and stakeholders. IT project success or failure had long been interesting for researchers over the past 20 years. High failure rates of IT projects were caused by completion beyond budget, behind schedule, and without meeting requirements, and could threaten the very existence of the company (Bloch, Blumberg and Laartz, 2016). The adopting various of information technology (IT) projects is being at its ever increasing situation, it is an inalienable fact that to bear the fruits of these projects outcome successfully organizations have to know or informed what are really matters most and/or considered to be a critical success factors and needs critically higher attention by project managers and other concerned stakeholders for implementation effort/activities of IT-projects doing well (Fayaz, 2017).

The banking sector has experienced the most profound changes due to advancements in information technology. This technology has emerged as an essential resource for businesses, as its absence can lead to suboptimal decision-making and, ultimately, the failure of enterprises. Innovations in technology have facilitated the emergence of new markets, products, services, and efficient delivery mechanisms within the banking industry. Examples of this include online banking, mobile banking, and internet banking. Furthermore, information technology has equipped the banking sector with the necessary tools to address the challenges presented by the evolving economy. It has served as a fundamental element in recent reforms within the financial sector, aimed at enhancing the speed and reliability of financial transactions, as well as initiatives designed to fortify the banking industry, (Dangolani, 2011).

The Commercial Bank of Ethiopia (CBE) is the largest commercial bank in Ethiopia. As of June 2021, it had about 1.1 trillion birr in assets and held approximately 67% of deposits and about 53% of all bank loans in the country. The bank has around more than 35,000 employees as of June 2022, who staffs its headquarters and its over 1000+ branches positioned in the main cities and regional towns.

CBE was legally established as a share company in 1963. Since then, it has been playing significant roles in the development of the country. Currently CBE has more than 40+ million account holders in its more than 1940+ branches and the number of Mobile and Internet Banking users also reached more than 6.6 million and 37k. Active ATM card holders reached more than 8.3 million and 17 million CBE Birr users.

IT projects in banking can be divided into projects of implementation of Front-end systems, that is, IT systems aimed at end users of banking services and projects of implementation of Back-end systems, that is, those projects related to banking IT infrastructure, which includes different processing systems banking data, risk analysis and regulatory requirements.

1.2. Statement of the Problem

Information technology project are involved in a great deal of human work and innovation and cost a lot, lasts for a long time. The development and implementation of these projects are conditioned by the knowledge involved in their realization, that is, knowledge of technologies, the degree of innovation of the organization that will use the IT products / services. If the business entities use the practice of open innovation by producing an advantage effect, entities will focus their intellectual effort on creating new high technologies, (Arsenijevič and Kastratović, 2017).

According to Otieno, (2013) stated that the banks software implementation project which is very sensitive, complex and vulnerable to fraud, risk, duration, project manager capability and vendor behavior requires high attention of top management. Therefore, before banks have to purchase the software, they must properly be analyzed the probable risk, project manager capability and the project success factor first. Kudav and Bhasin, (2013) its to provider Cognizant-software, about 25% of core banking system transformations failed without any results due to the lack of proper risk management and modern project management capabilities while 50% do not achieve the transformation objectives-cost and implementation time which may double or triple. Only 25% are successfully implemented.

According to Alshibly, (2013) explore that risk management is recognized as a crucial instrument in assessing the success of any project. However, there is a scarcity of studies that explore the dynamics of this relationship. Furthermore, investigating the connection between risk management and project success is vital, particularly as many projects operate within highly dynamic and rapidly evolving environments characterized by unpredictable conditions and uncertainty. In such contexts, the ability to adapt swiftly to changes is essential for the project's growth and survival. Consequently, the findings of this research could provide valuable insights for project managers, encouraging them to prioritize essential risk management processes.

1.3. Research Questions

Considering this research has contained the following principal questions:

1. To what extent are project risk management processes practiced in commercial bank of Ethiopia IT projects?
2. To what extent does risk management practice impact project success?
3. What are the challenges to applying project risk management processes?

1.4. Objective of the Study

The general and specific objectives of this study are listed below.

1.4.1. General Objective of the Study

The general objective of this study is to explore the practices and challenges of project risk management process in the commercial bank of Ethiopia in IT project.

1.4.2. Specific Objectives of the Study

2. To assess the practice of risk management process in Commercial bank of Ethiopia IT projects.
3. To assess the challenges of project risk management Commercial bank of Ethiopia IT projects.
4. To show the impact of project risk management on project success.
5. To assess the organization factors impact of IT project success.

1.5, Significance of the Study

This study is important to formulate useful information that can be used in risk management process for IT project success in commercial bank of Ethiopia. The result gained from the finding of this study will also be discussing the actual principle of risk management process from project management. It is used to add an input in the area of profession in relation to technical aspect. It also would be significant to the government owned entities as they would adopt the findings of this study and use them to improve the performance of their projects.

Commercial bank of Ethiopia would benefit from the study by understanding the key performance indicators and the underlying challenges facing the performance of their core banking systems. Further, the study would be useful in exploring how different commercial banks manage risk involved in core banking system projects and how this contributes to their success.

These findings could also be used to inform policy for the government owned entities. The study would also add to the body 9 of knowledge on risk management practices on core banking systems performance in the banking industry to scholars and provoke research in this area by creating a gap.

1.6, Scope of the Study

Project management is a broad field of area. In this case, researcher conducted a particular component of this profession. Risk management process is one of the ten areas of project management because project management is the heart of project as a result; the study focuses on how risk management process is exercised in project management system from project achievement perspective. The study will be undertaken in the commercial bank of Ethiopia IT projects.

1.7. Limitation of the Study

Limitation is an integral part of a study; Research on commercial bank of Ethiopian implementation IT project. And therefore, there was also a limitation in obtaining some information critical for the research, which may be considered as sensitive or confidential by the banks. Besides, the objective of the study requires using survey research design but, study adopted explanatory and descriptive design. The other limitation observed during data collection was lack of interest in filling the questionnaire by the respondents.

1.8 Organization of the Study

The research Paper includes five successive chapters. Chapter one presents the introductory section which embraces background of the study, statement of the problem, objective of the study, research questions, significance of the study, scope of the study ,limitation of the study. Chapter two, also in clouding the study theoretical and empirical of the study variables. Chapter Three it also includes research approach, research design, sampling design, target population, sampling size determination, sampling techniques, data collection instrument, data collection procedure, instrument validity and reliability, data analysis and ethical considerations are consisting in this chapter. Chapter four includes data presentation and analysis and discussion of findings. The last chapter incorporates conclusion, recommendations of the study and direction for future research.

CHAPTER TWO
RELATED LITERATURE REVIEW

This Section is designed to review relevant literatures on the area of successful project management and the effects of risk management on the project success process. Thus, both theoretical and practical findings of various researchers related to project management, project success, risk and types of risk will be reviewed. The literatures are gathered from different secondary sources such as published books, articles, and journals. Efforts were exerted to include significantly related literatures by reviewing Available documents helping to support the research.

2.1. Theoretical Literature Review of the Study

2.1.1. Concepts of Project Management

Project management is the process of planning, organization, monitoring and control of all aspects of a project, motivating all project stakeholders to achieve the project goals in a safe manner and within the agreed schedule, budget and performance criteria, (Radujkoica and Sjekavicab 2017). According to PM I, (2017), stared that project can be defined as an endeavor in which human, material and financial resources are organized in a novel way to undertake a unique scope of work, comprising a given set of specifications within cost and time constraints, seeking to achieve beneficial change defined by quantitative and qualitative objectives.

According to Siles, (2021), definition suggests that in Project Management there is a strong focus on performance and whether success is accomplished. Therefore, project management success (PMS) refers to the level of efficiency the project achieves to reach its objectives. Projects usually involve unique and transient efforts, and are undertaken to achieve planned objectives which can be defined in terms of outputs, outcomes or benefits, (International Project Management Association, 2006). The achievement of the abovementioned planned objectives depends greatly on how the project is managed, (Alias 2014). A successfully managed project is one that is completed within time, the cost of the project being within budget and meeting the initial planned performance, (Tesfaye, 2017).

Project management methods have been extensively used by many public and private entities to solve their problems, manage scarce resources and achieve important objectives, (Essilfie, 2019). PM has become a very popular and effective tool that is not only used by corporations to achieve their business

objectives, but also by public administrations to boost their developmental agenda (Ofori, 2013). According to Ofori, (2016), the policies introduced by governments are usually converted to projects and are recognized as the channels through which governmental initiatives can be implemented. The impact of government interventions is thus dependent on how these projects are managed.

2.1.2 Risk Management

Every project has certain risks; a risk is an uncertain event or condition that, if it occurs, can have a positive or negative effect on project objectives. Hence, risk management is a component of project management, (Denicol and Rehman 2020). According to the PMI (2017), risk management consists of the following steps: risk management planning, risk identification, qualitative and quantitative risk analysis, risk response planning, response implementation, and process monitoring and control. Although every risk has a certain probability of occurring and can have a certain impact on a project, high probability risks and high impact risks need to be especially monitored (Darwish and Zubari, 2020). As it is impossible to prevent some risks from happening, it is the task of project management to keep risk at a level that is acceptable to the project and its stakeholders.

Didagra, (2013), stated that Risk management that influenced the objective performance of the IT project in terms of cost, schedule and effort. Therefore, the conclusions couldn't be generalized to all IT companies due to the reduced sample size to an unacceptable error margin. Further research in this field is mandatory to formulate a solid conclusion regarding the role and effects of applying risk management in successful IT projects. Credar, (2015), elaborated that every project had risk for example; resources left the organization, leadership changed and budgets were cut etc. There were many factors beyond control. However, many risks to projects can be mitigated or even eliminated with some forethought and ongoing management.

2.1.3. Project Risk Management

Project risk management is the art and science of identifying, analyzing, and responding to risk throughout the life of a project and in the best interests of meeting project objectives (Schwalbe, 2016). Project risk management involved understanding potential problems that might occur on the project and how they might impede project success. Several research results indicated that poor risk management was a likely cause of project problems and failures.

"Risk management is an essential process for the successful delivery of IT projects" (Alhawari, Karadech and Talet, 2012). The body of research examining risk in IT projects spans over 30 years. Risk management researchers have focused on the examination of process models that provide prescriptions for risk management, typically including variations on the four processes of risk identification, assessment, response planning, and monitoring.

According to Schwalbe, (2016) expressed six processes that were involved risk management as follows: planning risk management, risk identification, qualitative risk analysis, quantitative risk analysis, risk response planning, and risk monitoring & control. The theory of project is provided by the transformation view on operations. In the transformation view, a project is conceptualized as a transformation of inputs to outputs. There are a number of principles, by means of which a project is managed. These principles suggest, for example, decomposing the total transformation hierarchically into smaller transformations, tasks, and minimizing the cost of each task independently.

2.1.4. IT Project Success

Sudhaka, (2012), suggested that the Success of IT project was an area of concern for many organizations around the world. There were a variety of approaches about the measurement of project success and six measures for information system's project success as follows;- system quality, user satisfaction, information quality, information use, organizational impact, and individual impacts. Projects should be rated as successful when they are completed within or near the estimated schedule and budget, and produce an acceptable level of performance, (Martin 2007).

Mahaney and Lederer, (2011), carried out a study using a project completed on time and within budget that worked as the measures to evaluate project success. Some studies were aware of the benefits, which were used as criteria to justify project success,(Peppard, Ward and Danie, 2007). Ward and Daniel, (2013). Used organizational impact and user satisfaction as the criteria to measure the ERP system success. Baccarini,(1999), project success involves two components, such as project management success and product success. Project performance is the degree to which the software project achieves success in the perspective of process and product.

2.2. Factors Affecting IT Project Success

2.2.1. Risk Management Practice

- **Risk identification**

Risk identification process is the initial step towards risk management and its main objective is to make

early identification of events that may occur during the project implementation phase and may cause negative impacts to the project objectives. These events must be identified and stated clearly so that the project team can move on to analysis and response planning,(Awadhi, 2022), Identified risks should be captured in a document called Risk Register that will serve as the master copy for risk planning as well, as risk monitoring and control during the project execution phase. Risk identification is measured by the extent to which an organization practices creating risk registers and risk reports, (PMI, 2013).

Standard practices that can be used to identify risks are SWOT analysis, brainstorming, analysis of other similar projects, checklist of common risks, interviews, and review the project plans or documents such as schedule, and budget for any assumptions that could manifest themselves into risks (Marinich, 2020). Risk planning begins by identifying possible risks that could impact the project. The project manager, project team, and key stakeholders should all participate in identifying possible risks for a project. Risks can include technological, economic, cultural, environmental, organizational, resources, schedule, budget and quality of deliverables (PMI, 2013)

- **Risk Analysis**

Risk analysis is the second step in risk management process. The challenge for most project managers is that there are many identified risks that cannot be addressed. Therefore, it is important in the project planning phase to prioritize the identified risks to ensure addressing the most important project risks first. For risk prioritization, identified risks must be analyzed based on their impact on the project objectives and probability of occurrence on both an inherent and residual basis using several analysis techniques such as qualitative risk analysis, sensitivity analysis, scenario analysis and stress testing, (Kinyar, 2020).

Qualitative risk analysis assesses the importance of the identified risks and develops prioritized lists of risks for further analysis to determine how to reduce their potential impacts, (Lomothey, 2018). Qualitative risk analysis is prioritizing risks by assessing their probability of occurrence and

impact to focus primarily on risks that have the highest and most immediate impacts. For this purpose, probability and impact matrix technique can be used, which is considered a grid for mapping the probability of each risk occurrence and its impact on the project objectives if that risk occurs (Awadhi, 2022)**.**

- **Risk Response Planning**

To manage project effectively, organizations have to define an appropriate risk management plan

during the start of the project. The risk management plan must include key processes such as identifying risks, performing quantitative and qualitative risk analysis, plan risk responses, and monitor and control risks. Risk management starts with risk management plan (created as early in the project) since it affects other processes such as scope, time, cost, quality, and procurement. Identifying risks forms part of the output of the risk plan, which leads to risk analysis and the generation of risk responses. Maintaining risk register is another important way of monitoring and controlling risks throughout the project life cycle, (PMI, 2021).

According to Josseph Heagney, (2012), A project that a degree of uncertainty. In project planning many assumptions are made regarding: these are, access to resources. Resource capability, Impact of environmental factors, these assumptions are not always accurate, requires project manager store assess and tradeoffs between requirements, costs, and time. Project risk management is the systematic process of identifying, quantifying, analyzing, and responding to project risk. It includes maximizing the probability and consequences of positive events and minimizing the probability and consequences of adverse events to project objective project risk management should begin early in the process and continue through the lifecycle. A key to success in dealing with risk is to start early and lay the foundation for risk management.

The Six-Step process to establishing a project risk plan includes; - making a list of potential risks; Determining the probability of risk occurrence; determining its negative impact; preventing or mitigating the risk; considering contingencies; and establishing trigger points for activating contingencies. Establishing contingency and management reserves enables you to leverage your project risk Plan to its fullest potential. Coordination points must be identified and analyzed in the multi project risk environment. A standard risk matrix is a useful tool when managing many risks across projects. The risk register can be an effective tool for organizing and prioritizing threats to the project. (Joseph Heagney(2012).

- **Risk Monitoring and Controlling**

Risk monitoring and control is the fourth and last step in risk management process. It involves

monitoring the implementation of risk response plans, where the identified risks are monitored continuously, emerged risks are identified, risk responses are reviewed and process effectiveness is evaluated throughout the life cycle to make sure it meets the project requirements (Awadhi, 2022). In this step, the risk register is significant to the identification, monitoring, and control of the risks over the life of the project and must be considered a living document in which outputs of risk management process are recorded, (PMI, 2013). Risks should be reviewed a regular basis during project execution when the project status is reviewed in order to determine what risks should be closed, what new risks may need to be opened, and how to respond to those risks (RIT, 2019). Control activities are applied all over the organization, including all its levels (operational level, technical level, and strategic level). Policies and procedures are created and implemented to ensure that risk responses are executed efficiently. Continuing changes in project and operating environments require project teams to regularly re-assess the status of identified risks and to update the plans to prevent or respond to problems associated with these risks, (Steinberg, 2004).

2.3. Empirical Literature Review

According to Građevinar(2017). Project management is defined as a collection of knowledge, skills and techniques that directs project activities toward realization of project objectives. It is a bridge between an idea/need/problem, regarded as a project instigator, and the project objectives, defined through fulfillment of a resolution of a problem, or realization of an idea as a measure of project success,

Roque and de Carvalho (2013) noted that there was a need for significant risks management and controls to reduce the occurrence of the risk factors, or minimize the impact of various project risks. The assessment of project uncertainties during the project, made use of the risk management strategies and deeply understand the business environment were critical success factors had a significant impact on project performance. However, failed to identify measures of project performance in term of timeline, profitability, costs and project schedules. The delivery of information Technology is a sensitive phenomenon in the banking industry due to digitization and technological changes. A better management of project risk strategy enables project managers to have a better look at the whole project and see what may go wrong. This will additionally enable

them to come up with a suitable plan for effective budgeting, time or individual matters, (Mills, 2011).

According to Visser, (2014) found similar result on research conducted on 20 mining projects in South Africa. The results indicate that project teams used only a few of the tools and techniques that are available for risk identification, qualitative risk analysis, and quantitative analysis. From this they stated that this is an indication that uncertainties relating to the project are not well understood or managed. They recommended that projects should use project risk management as an integrated process of project management to deal with uncertainties in the project environment.

According to Bakker and Wortmann (2010) present in their paper Does risk management, contribute to IT project success? A meta-analysis of the empirical evidence that either supports or opposes the claim that risk management contributes to IT project success. In addition, this paper also investigates the validity of the assumptions on which risk management is based. The analysis leads to remarkable conclusions. Over the last 10 years, much has become known about what causes IT projects to fail. However, there is still very little empirical evidence that this knowledge is actually used in projects for managing risks in IT projects. This paper concludes with indicating new directions for research in the relation between risk management and IT projects in commercial Bank of Ethiopia.

2.4. Conceptual Framework

Conceptual framework is an analytical tool with several variations and contexts. It is used to make conceptual distinctions and organize ideas. Strong conceptual frameworks capture something real and do this in a way that is easy to remember and apply. Based on the literature review, a conceptual framework for evaluating the impact of risk management practices on project risk management processes and identifying the relationships between project risk management processes and successful project outcomes has construct. Therefor this study particular the conceptual framework will depict independent and dependent variables. The independent a variables of the study clarified three ways such as Risk management practice three categories; (risk identification, risk analysis, risk response planning, and risk monitoring and control), The dependent variables of the study is IT Project success.

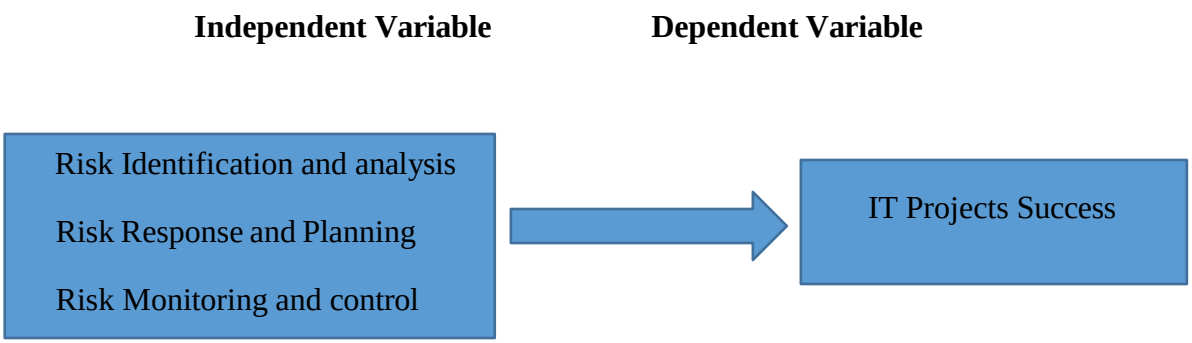

Figure 1, Conceptual Framework Source own Construction from Reviewed literature

CHAPTER THREE

METHODOLOGY

In this section, the research methodology use to answer the research question has discuss, research approach, research design, sampling design, target population, sampling size determinant, sampling techniques, data collection instrument, data collection procedure, instrument validity and reliability, data analysis and ethical considerations are consisting this chapter.

3.1. Research Approach

Generally, in research there are three ways to approach a project: quantitative, qualitative and mixed research approach. Quantitative research projects gather numeric data and analyze those data with statistical tools. Qualitative research projects gather non numeric data and analyze those data with nonmathematical tools. However, combining both types of analysis in a single research project is possible, a mixed method. For in this study use quantitative approaches because the study requires an analysis of the effect of Risk Management Process on Project Success; in the case of Commercial Bank of Ethiopian at head office. Which required a quantitative approach and uses hypothesis testing to determining for objective theories by examining the relationship among the study variables.

3.2. Research Design

A research design is the conceptual frameworks with in which research is conducted and it constitutes the blue print for the collection, measurement and analysis of data. The objective of this study is to examine the effect of Risk Management Process on Project Success; in the case of Commercial Bank of Ethiopian IT Projects to achieve this objective both descriptive and explanatory research design is uses.

The use of this Descriptive research design in this study was to describe the practice Risk Management Process and Project Success and Explanatory research design attempted to clarify on an analysis of a situation or a specific problem to explain the relationship between two aspect and variables. It helps to understand the nature of the relationship between the independent and dependent variable. The purpose of using explanatory research is to know The Cause and The Effect of the study independent variables. It is therefore justified in view of the above definitions. Descriptive and explanatory survey is the most suite and appropriate design for this study.

3.3. Sampling Design

A sampling design is a definite plan for obtaining a sample from a given population. It refers to the technique or the procedure the resource would adopt in selecting items for the sample (Kothari, 2004).

3.3.1 Target Population

The study target population consists of Information System (IS) department employees of Commercial Bank of Ethiopia at Head Office. The targeted population that the researcher wanted to generalize the result of the study. According to the company (2023 Annual report) physical and financial plan, the total number of employees of Commercial Bank of Ethiopia at Information System (IS) department reached around 360 at the end of Dec12, 2023. The study population from whom the information required to find answers to the research question is obtained. As the narrow the research problem similarly the need to decide very specifically and clearly who constitute the study population, In order to select the appropriate respondents (Kumar, 2004).

The geographical characteristics of the target need to be deliberated as well as types of units being included. The researcher conducts to target population at employees of the organization that are working in IS department at head office in Addis Ababa. The study choose the head office in Addis Ababa mainly for the reason that for the smooth condition of conducting research for easy access to data cost effectiveness and easy manageability of the study.

3.3.2. Sampling Size

According to Gerard (2010), stated Sample size estimates are based upon assumption that might not always be met in practice but the above-mentioned estimates should be adequate for most purposes. However they do not guarantee the result. The numbers of collected need to be tested statistically once the sample is completed by comparing sample variables. Determination In this study conducts are Commercial Bank of Ethiopia at Head Office in Information System (IS) department as the study area with a total number 360 employees in the determination of sample size. There arises some sampling error which can be controlled by selecting a sample of adequate size researcher will have to specific the precision that he wants in respect of his estimates concerning the population parameters (Kothari, 2004).

$$N = \frac{n}{1 + N(e)^2}$$

Where: n is the sample size, N is the population size and e is the error of the sampling.

From the total study population of 352 to maintain a 95% confident interval and the study the error of sampling is set at 0.5.

$$n = \frac{352}{1 + 352 \times (0.5)^2} = 187$$

The result above that the sample size is **187,**

3, 3, 3 Sampling Technique

This study utilized probability sampling techniques to select sample participation's specifically. The selection and distribution of questionnaires among employee are made based on simple random sampling will be uses because of the case that allowed the researcher to make statistically inference. According to Ranjit (2014), probability sampling is imperative that each element in the study population has an equal and independent chance of selection in the sample.

3.4. Data Collection Instrument

In this study, both primary and secondary sources of data is used. Kothari (2004), we collect primary data during the course of doing experiments. In an experimental research and then we can obtain primary data either through observation or through direct communication with respondent in one form or other or through performer interviews. Secondary data refer to the data which have already been collect and analyses by someone else. The study questionnaire was a major instrument for collecting primary data.

The most common approach to collecting information is to send the questionnaires to prospective respondents. Although a questionnaire has several advantages, one is that it is free from the bias of the interviewer. It is low cost even when the universe is large and respondents have more time to give well throughout answers. Respondents who are not easily approachable can also be reached conveniently, large samples can be made use of and thus the results can be made more dependable or reliable in view of the advantage and the need to gather more information. Questionnaires were administered to employees to solicit their views concerning the Practice of Risk Management Process and Project Success; in the case of Commercial Bank of Ethiopian IT Projects.

The study used close-ended questions. This is due to the fact that close-ended questions are often good for surveys. Because one can get higher responses rates besides answers to close-ended questions can be coded and analyzed easily. In this study questionnaire classified in two parts the first section consisting respondent demographic part and the second parts are dependent and independent Variables such as Risk management practice three categories; (risk identification and analysis, risk response and planning, and risk monitoring and control). The dependent variable of the study is IT Project success. the study developed in addition to uses seconder data has collect from different published material like reporter annual, book, magazine, journal, article websites research findings and other concerned bodies were used to extract any story of essential information to strengthen the study findings.

3.5.Data Collection procedure

Data is gathered according to predefined criteria using appropriate tools. In this study combination of primary and secondary data sources were utilized to develop a comprehensive understanding of the issues. The most common types in primary data collection which is questionnaires are used. Conversely, secondary data is obtained from existing resources and company insights. This dual strategy ensures a balanced dataset, combining the broad scope of secondary data with the detailed insights of primary data.

Primary Data is collect through the administration of questionnaires to employees of Commercial banks Ethiopia in Information Science Department at head office. Before the full scale survey, Pilot surveys were taken for a sample of respondents. The objective of the pilot survey is to check whether the desires result using the questionnaire is obtain or not and to identify and exclude potential problems association with content in the question and wordings.

3.6. Instrument Validity and Reliability

3.6.1. Instrument Validity

According to Kothari (2004), validity aims at establishing the results, which are linked with the condition. It is concerned with the extent that the scale accurately represents the construct of interest. In order to assure the validity of the measurement instrument of the study is conducted based on the literally accepted conceptual framework that clearly indicate the theoretical construct and associated with the measurements valid to evaluate the effect of Risk Management Process (independent variables) on IT Project Success (dependent variable) where possible.

This should be supported and consideration given to practical things. So that questionnaires were distributed to the employees to check the validity of questions to further data collection process. As per the comments and the discussion with corporation experts the question prepared to primary data collection for the research objective was found valid by the researcher.

3.6.2. Instrument Reliability

The Reliability test is a tool to measure a questionnaires internal consistency. For a researcher to be sure about the correctness of his questionnaire consistency, reliability test is very crucial. A Questioner is said to be reliable if answer of a person to questions are consistent or stabilized over time. It can be conducted by using SPSS softwareV27. Many scholars agreed that a construct of variables said to be reliable if it is providing value Cronbach Alpha value is greater than 0.70. The Cronbach alpha coefficient is an indicator of internal consistency of the scale.

Table 1 Cronbachs Alpha coefficient of variable

Scale	Cronbachs Alpha	No of Items
IT Project Success	.763	7
Risk identification and analysis	.790	7
Risk Response Planning	.805	7
Risk Monitoring and Control	.797	7

Source: SPSS Analysis Researchers Computation 2024

The survey result shown in table above, the variables have Alph a value above 0.7, which means that they are Reliable.

3.7. Method of Data Analysis

Multiple regression analysis refers to the analysis concerning relationship between the dependent and independent variables; with the multiple regressions equation describing the relationship (Kothari, 1990). This approach is used in this study to analyses the effect of Risk Management process and Project Success. The empirical model along with the estimation of the multiple regression equation to be tested is specified in this section. The dependent variable (IT Project Success) and the independent variables as follow.

□□ = B0+B1□1 + B2□2 + B3 □3 μ Where

Y = IT Project Success (Dependent variables)

B**0** = Constant Term

□1 = Risk Identification and Analysis

X2= Risk Response Planning

X3= Risk Monitoring and Control μ = Error term

Besides B0 indicates constant which shows the magnitude or the value of satisfaction when the coefficient for the above Six explanatory variables become zero. Whereas, the coefficient 1, 2 and 3 are familiar with the extent of change in the dependent variable when the explanatory variable changes by one unit, citrus paribus.

3.8. Ethical Consideration

The researcher addressed ethical considerations of confidentiality and privacy. All of the study subjects are informed of the studies objectives and their verbal agreement is obtained Prior data collection, participants are also informed of their full right to withdraw from or decline participation in the study. This is done to-ensure anonymity because the names of interviews are not listed on the question

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CHAPTER FOUR
DATA PRESENTATION AND DISCUSSION

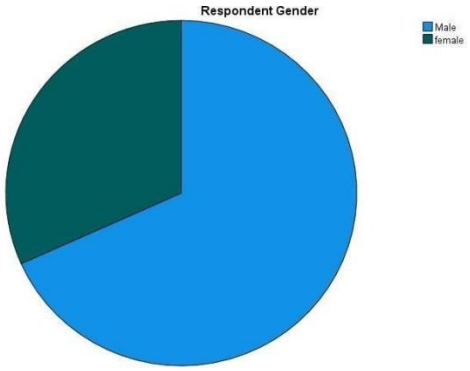
This chapter is constructed based on the standard guideline to conduct preliminary descriptive and inferential analyses. The descriptive statistics are used to rank the Practice of Risk Management Process and Project Success .and examine the gender, age, level of education, experience and position-related profiles of sample respondents given to the study. On the other hand, in Regression, inferential analysis, correlation is used to examine the degree and direction of the relationship between the covariates and the dependent variables and independent variable.

To achieve the objective of this study a total of 140 questionnaires were distributed to the employees of Commercial bank of Ethiopian at head office. From the total of 140 questionnaires distributed to sample respondents, respondents, 123 were collected. The rest 17 respondents do not returned the questionnaire.

4.1. Analysis of Respondent Demographic Data

The demographic characteristics include: gender, age, work experience, level of education and position in the corporation. This aspect of the analysis deals with the personal data on the respondents of the questionnaires given to them.

Figure 2: Gender of Respondents



Source: Researchers computation, 2024.

As indicated in the above Figure1; the gender proportion of male respondents represented 84, (63.6), on the other hand 39.(29.5), were females. The survey showed that there were more female as compared to males. the result does not have affect as the research because is not gender based.

Table 2 Respondent Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	23-28	15	11.4	12.2	12.2
	29-34	25	18.9	20.3	32.5
	35-40	50	37.9	40.7	73.2
	41-45	10	7.6	8.1	81.3
	above 46	23	17.4	18.7	100.0
	Total	123	93.2	100.0	

Source: Researchers computation, 2024.

In the above table 2; the age distribution of the respondent who participated in this study is provided. From the table we can observe that 15 (11.4%) of the respondent lies within 23 up to 28 age group.25 (18.9%) of the respondents are in the range of 29-34, 50(37.9%) of the respondents are between the ages 35-40, 10 (7.6%) of the respondents are between the ages 41-45 and the remaining 23(17.4%)) of the respondents are above 46 years. From this we can say that most of the corporation employees are very young. The result does not have affect as the research because is not age based.

Table 3 Respondent Education Level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Diploma	11	8.3	8.9	8.9
	Bachelor Degree (BA, BSc)	63	47.7	51.2	60.2
	MSc	49	37.1	39.8	100.0
	Total	123	100.0	100.0	

Source: Researchers computation, 2024

As far as composition of level of education In the above table 3 indicate that 11 (8.3%) of the respondents were Diploma, 63, (47, 7%) are in the BA or BSc level, 49,(37.1%) are master and From this, it can be understood that employees working in the corporation majority of the respondents have got at least a first degree and above. the result does not have affect as the research because is not education level based**.**

Table 4 Respondent Work Experience

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2-5	12	9.1	9.8	9.8
	6-9	32	24.2	26.0	35.8
	10-13	32	24.2	26.0	61.8
	14-17	27	20.5	22.0	83.7
	above 18	20	15.2	16.3	100.0
	Total	123	100.0	100.0	

Source: Researchers computation, 2024

The survey results table 4; with regard to experience of the respondents, those with up to 12 (9,1.8%) have got 2-5 years of experience, 32(24,2%) have got 6-9 years of experience more number of those who are covered by the questionnaire 32(24,2%) have 10-13 years, accompanied by 27 (20,5) of those with 14-17 years of experience, 20,(15,2%) those that have experience of above 18 years. the result does not have affect as the research because is not work experience based.

Table 5 Respondent work Position

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	IT Officer	72	54.5	58.5	58.5
	project Tame leader	15	11.4	12.2	70.7
	Project Manager	16	12.1	13.0	83.7
	Developer	20	15.2	16.3	100.0
	Total	123	100.0	100.0	

Source: Researchers computation, 2025

From the respondent work position the result it to shown that table 5; explain, 72(54,5%) of the respondents were worked on IT Officer level, 15 (11,4%) of the respondent were worked on project tame leader level, 16(12,1%) of the respondent were worked on project managerial level, 20(15,1%) of the respondent were worked on project managerial level the result does not affect on the research because is not respondent work position based.

4.2. Descriptive Statistics of the Study Variables

In this statistical data analysis tools such as minimum, maximum, mean, standard deviation and percentile are used to analyze the collected data. The summary of descriptive statistics of all variables that are evaluated is based on a 5-point Likert scale (5, strongly disagreed, 4 Degree, 3, Neutral, 2, Agree 1 strongly agreed. The computed summary of descriptive statistics for dependent (IT Project Success) and independent (Risk

Identification and Analysis, Risk Response and Planning, Risk Monitoring and Control, and Organizational Factors) variable that were included in the questionnaires were indicated in this part. The mean and standard deviation of all variables collected from the respondents were discussed. the mean score below 3.39 was considered as low, the mean score from 3.40 up to 3.79 was considered as moderate, and mean score above 3.8 was considered as high as illustrated by comparison bases of the mean of a score of five-point Likert scale instrument. Thus, the descriptive analysis is presented as follows:

1, Research Question One: What is the effect of Risk Identification and Analysis on IT Project Success?

Table 6: Descriptive statistics the effect of the Risk Identification and Analysis on IT Project Success.

Items	N	Minimum	Maximum	Mean	Std. Deviation
Project team members play roles to identify risk	123	2.00	5.00	3.7236	.77142
Risk register is produced as an output in risk identification process	123	2.00	5.00	3.9919	.69537
Documentation review conducted to identify risks	123	3.00	5.00	3.7886	.76020
Stakeholder register used to engage key stakeholders during risk identification process.	123	2.00	5.00	3.7886	.76020
Characteristics of the risk are considered.	123	2.00	5.00	3.6504	.78910
There is a measurement system to analyze the risk	123	3.00	5.00	3.9268	.62948
Project documents are updated after risk assessment	123	2.00	5.00	3.9593	.99506
Valid N (list wise)	123				

Source: Research computation 2024

The results of the study survey on item one, table 7, indicate that Project team members play roles to identify risk. The respondents agreed, with a general mean response of 3.7236 and a standard deviation of .77142, that the Project team members play roles to identify risk. Regarding the second item, the research survey revealed that the Risk register is produced as an output in risk identification process. The respondents agreed, with a general mean response of 3.9919 and a standard deviation of .69537, that these strategies are effective. In relation to the third item, the research survey found that Documentation review conducted to identify risks, the respondents agreed, with a general mean response of 3.7886 and a standard deviation of
.76020, the fourth item showed that Stakeholder register used to engage key stakeholders during risk identification process. The general mean response was 3.7886, with a standard deviation of .76020, indicating agreement among the respondents. Regarding the fifth item, the research survey revealed that the Characteristics of the risk are considered. The respondents agreed, with a general mean response of 3.6504 and a standard deviation of .78910. Lastly, the sixth item indicated that there is a measurement system to analyze the risk

The respondents agreed, although specific mean response 3.9268 and standard deviation values .62948. The study results of items seven that Project documents are updated after risk assessment, the respondents agreed, with a general mean response of 3.9593 and a standard deviation of .99506. Project risk refers to the level of risk in the successful implementation of the project. Identifying the risk factor means identifying the cause of the risk, that is, the event or situation that can affect the project. The purpose of risk management is primarily risk prevention. Risk identification process is the initial step towards risk management and its main objective is to make early identification of events that may occur during the project implementation phase and may cause negative impacts to the project objectives.

2, Research Question Two: How is the effect of Risk Response and Planning on IT Project Success?

Table 7: Descriptive statistics the effect of the Risk Response and Planning on IT Project success.

Items	N	Minimum	Maximum	Mean	Std. Deviation
There is a well-developed strategy to respond risk.	123	2.00	5.00	3.7724	.76622
Factors such as budget, schedule and resources and quality are considered while responding to risk	123	2.00	5.00	4.0569	.66900
There is systematic approach or careful planning.	123	3.00	5.00	3.8211	.76857
Relevant stakeholders are involved in the planning	123	2.00	5.00	3.8374	.75067
Environmental factors are included as an input to plan for uncertainties	123	2.00	5.00	3.6585	.79784
Project team members receive training or have enough knowledge about how to handle uncertainties	123	3.00	5.00	3.9431	.60464
Risk management plan is incorporated with the project plan	123	2.00	5.00	4.0325	.97455
Valid N (list wise)	123				

Source: Research computation 2024

The study's survey yielded results that are summarized in Table 8. The findings indicate that there is a well-developed strategy to respond risk .The mean response for this item was 3.7724, with a standard deviation of .76622 on the Likert scale. This signifies agreement among the respondents, suggesting that they Factors such as budget, schedule and resources and quality are considered while responding to risk, and the general mean Response for this item was 4.0569, with a standard deviation of .66900, indicating agreement on the Likert scale. Furthermore, the survey discovered that there is systematic approach or careful planning. The mean response for this item was 3.8211, with a standard deviation of .76857, representing agreement on the Likert scale. Moreover, the survey findings indicate that the relevant stakeholders are involved in the planning .The mean response for this item was 3.8374, with a standard deviation of .75067, again signifying agreement on the Likert scale. In addition, respondents agreed that Environmental factors are included as an input to plan for uncertainties .The mean response for this item was 3.6585, with a standard deviation of .79784, denoting agreement on the Likert scale. Lastly, the survey respondents

acknowledged that the Project team members receive training or have enough knowledge about how to handle uncertainties. The mean response for this item was 3.9431, with a standard deviation of

.60464, signifying agreement on the Likert scale. The survey results of items seven that Risk management plan is incorporated with the project plan, the respondents agreed, although specific mean response 4.0325, and standard deviation values .97455.

3, Research Question Three: How is the effect of Risk Monitoring and Control on IT Project Success?

Table 8: Descriptive statistics the effect of the Risk Monitoring and control on IT Project success.

Items	N	Minimum	Maximum	Mean	Std. Deviation
Risks are registered and communicated properly.	123	2.00	5.00	3.7317	.77959
Risks are reviewed periodically	123	2.00	5.00	4.0081	.69537
Risk responses are audited	123	3.00	5.00	3.7967	.76779
Project performance is evaluated against risk.	123	2.00	5.00	3.7967	.76779
Risks are monitored and controlled appropriately.	123	2.00	5.00	3.6585	.79784
There is a policy and procedure that guide the project team to go through a disciplined risk management process.	123	3.00	5.00	3.9268	.62948
Tools like expert judgment, meetings or others are considered for risk controlling	123	2.00	5.00	3.9675	.99123
Valid N (list wise)	123				

Source: Research computation 2024

According to the survey results presented in Table 9, it was observed that Risks are registered and communicated properly. The respondents agreed that this system plays a significant role in various aspects. For item one, the general mean response was 3.7317 with a standard deviation of .77959, this indicates that the respondents agreed on the importance of Risks are registered and communicated properly. Item two showed a general mean response of 4.0081 with a standard deviation of .69537. This suggests that the Risks are reviewed periodically. The general mean response for item three was 3.7967, with a standard deviation of .76779, this indicates that the respondents agreed that the Risk responses are audited. For item four, the general mean response

was 3.7967, with a standard deviation of .76779, this implies that the respondents agreed that Project performance is evaluated against risk. Item five had a general mean response of 3.6585, with a standard deviation of .79784, this implies that the respondents agreed that Risks are monitored and controlled appropriately. Lastly, for item six, the survey results showed a general mean response of 3.9268, with a standard deviation of .62948. This indicates that the respondents agreed that the There is a policy and procedure that guide the project team to go through a disciplined risk management process. The observation results question seven indicate Tools like expert judgment, meetings or others are considered for risk controlling, the general mean response was 3.9675, with a standard deviation of .99123. Overall, the survey results highlight a consensus among respondents regarding the significance and efficacy of monitoring may also be used to identify new risks and revise some aspects of risk planning. The key to the risk monitoring and control process is to establish a cost, technical performance, and schedule management indicator system over the program that the program manager and other key personnel use to evaluate the status of the program. Risk monitoring and control is not a problem-solving technique but, rather a proactive technique to obtain objective information on the progress to date in reducing risks to acceptable levels.

IT Project Success (Dependent Variable)

Table 9: Descriptive Statistics for Dependent Variable of the study

Items	N	Minimum	Maximum	Mean	Std. Deviation
The project has a standard risk management process.	123	2.00	5.00	3.6992	.77813
There is responsible person or department handle risk.	123	2.00	5.00	3.9431	.68114
There is dedicated project management office.	123	2.00	5.00	3.6504	.80961
Project team have deep project experience in risk management.	123	2.00	5.00	3.8374	.75067
The development team members are adequately trained.	123	2.00	5.00	3.6585	.79784
The development team members are well experienced.	123	3.00	5.00	3.9431	.60464
There is adequate top management support for the project.	123	2.00	5.00	4.0325	.97455
Valid N (list wise)	123				

Source: Research computation 2024

The survey results from table 9, indicate that in terms of the first dependent variable, it was found that the project has a standard risk management process, ,with a general mean response of 3.6992 and a standard deviation of .77813, signifying agreement among respondents. Similarly, for the second dependent variable, it was discovered that respondents agreed that their There is responsible person or department handle risk, with a general mean response of 3.9431 and a standard deviation of .68114. The survey also revealed that for the third item of the dependent variable, respondents agreed that there is dedicated project management office, with a general mean response of 3.6504 and a standard deviation of .80961. In addition, the survey found that Project team have deep project experience in risk management, as indicated by a general mean response of 3.8374, and a standard deviation of .75067. For the fifth item. Furthermore, respondents agreed that they are development team members are adequately trained, with a general mean response of 3.6585 and a standard deviation of .79784. For the six item. Finally, for the sixth item, respondents agreed that they the development team members are well experienced. , as indicated by a general mean response of 3.9431 and a standard deviation of .60464.

In the final items demonstrated the adequate of top management support for the project, as indicated by a general mean response of 4.0325 and a standard deviation of .97455. Overall the research question also clearly indicated that an individual risk management activity is able to contribute to elements of project success. The impacts of each risk management process on project success are also demonstrated in the study and that risk identification and risk control and response taken are strongly influence with project success.

4, 3 Hypothesis Test

Hypothesis One: Risk Identification and Analysis has positive and significant effect on IT project success.

Table 10: Mode Summary for Hypothesis One

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.813[a]	.660	.658	.29255	2.439

a. Predictors: (Constant), Risk Identification and Analysis
b. Dependent Variable: IT project

Table 11: Hypothesis One ANOVAa

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	20.137	1	20.137	235.294	.000[b]
	Residual	10.356	121	.086		
	Total	30.493	122			

a. Dependent Variable: IT Project

b. Predictors: (Constant), Risk Identification and Analysis

Table 12: Hypothesis One Coefficientsa

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	.815	.198		.118	.000	.423	1.207		
	RIA	.785	.051	.813	15.339	.000	.684	.886	1.000	1.000

a. Dependent Variable: IT Project Success

To show model summary for hypothesis one table 10, the R-square of 66% that indicates the strength explanatory of risk identification and analysis and IT project success remaining 34% were causes by other relevant variables not indicated in the model.

The result of regression model of ANOVA in the table 8; shown that F-test P-value is observed to be .000b which is less than 0.05 (5%) level of significance and thus implies risk identification and analysis variables are jointly has a significant impact on IT project success.

It shown that the result of survey in table 11; researcher realize that risk identification and analysis has a significant (B: .813. t: 4.118. p: 0.000; p <000) influence on the dependent variable (IT project success) it was implies the survey results. Risk identification and analysis has significant relation between IT project successes.

Hypothesis Two: Risk Response and Planning has positive and significant effect on IT project success.

Table 13: Mode Summary for Hypothesis Two

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.946[a]	.895	.894	.16304	2.006

a. Predictors: (Constant), Risk Prepone and Planning
b. Dependent Variable: IT Project Success

Table 14: Hypothesis Two ANOVAa

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	27.277	1	27.277	1026.161	.000[b]
	Residual	3.216	121	.027		
	Total	30.493	122			

a. Dependent Variable: IT Project Success
b. Predictors: (Constant), Risk Response and Planning

Table15: Hypothesis Two Coefficientsa

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	.316	.110		2.862	.005	.098	.535		
	RRP	.905	.028	.946	32.034	.000	.849	.961	1.000	1.000

a. Dependent Variable: IT Project

The result of model summary for hypothesis tow to shown table 13, the R-square of 98.5% that indicates the stranger explanatory of risk response and planning and IT project success. Remaining 1.5% were causes by other relevant variables not indicated in the model.

The regression modal of ANOVA results of table 14; to shown that F-test P-value is observed to be .000b which is less than 0.05(5%) level of significant and thus implies risk response and planning variables are jointly has a significant impact on IT project success.

The result of survey in table 15; researcher were realize that risk response and planning has a significant (B: .946, t: 2,862, P: 0.000, P<000) influence on the dependent variable (IT project success) it has implies the survey result risk response and planning has a significance relation between IT project success.

Hypothesis Three: Risk Monitoring and Control has positive and significant effect on IT Project Success.

Table 16: Mode Summary for Hypothesis Three

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	18.531	1	18.531	187.434	.000[b]
	Residual	11.963	121	.099		
	Total	30.493	122			

a. Dependent Variable: IT Project Success
b. Predictors: (Constant), Risk Monitoring and Control

Table 17: Hypothesis Three ANOVAa

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.780[a]	.608	.604	.31443	2.266

a. Predictors: (Constant), Risk Monitoring and Control
b. Dependent Variable: IT Project Success

Table 18: Hypothesis Three Coefficientsa

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	.964	.211		4.574	.000	.547	1.381		
	RMC	.744	.054	.780	13.691	.000	.637	.852	1.000	1.000

a. Dependent Variable: IT Project Success

Model Summary for Hypothesis result of table 16; it shown that the R-square of 60.8% that indicates

the strength explanatory of risk monitoring and control and IT project success. Remain 39.2% were causes by other relevant variables not indicated in the model.

Regression Model of ANOVA results of table 17; it shown that the F-test P- value is observed to be .000b which is less than 0.05 (5%) level of significant and thus implies risk monitoring and control variables are jointly has a significant impact on IT project success. The researcher survey result table 18; were realize that risk response and planning has a significant (B: .780, t: 4.57, P: 000 P<0.000) influence on the dependent variable (IT project success) it implies the survey result risk response and planning has a significance relation between IT project success.

4.4. Correlation Analysis

Correlation describes the strength of association between variables. Correlation analysis measures the degree of linear association between dependent and independent variable. The value of correlation coefficient ranges from -1 to1. A correlation coefficient of 1 indicates that there is perfect positive relationship between two variables; while - 1 indicates that there is perfect negative relationship between two variables. On the other hand, a correlation coefficient of zero indicates no relationship between variables.

Table 19: Correlation Analysis of the Study Findings.

		IT Project Success	Risk Identification and Analysis	Risk Response and Planning	Risk Monitoring and Control
IT Project Success	Pearson Correlation	1	.813**	.946**	.780**
	Sig. (2-tailed)		.000	.000	.000
	N	123	123	123	123
Risk Identification and Analysis	Pearson Correlation	.813**	1	.849**	.852**
	Sig. (2-tailed)	.000		.000	.000
	N	123	123	123	123
Risk Response and Planning	Pearson Correlation	.946**	.849**	1	.828**
	Sig. (2-tailed)	.000	.000		.000
	N	123	123	123	123

Risk Monitoring and control	Pearson Correlation	.780**	.852**	.828**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	123	123	123	123
**. Correlation is significant at the 0.01 level (2-tailed).					

The result in table19; indicates that, there is significant positive correlation between the study dependent and independent variables with a correlation coefficient r=.945 and sig. (2-tailed) is .000, which is <.05. Therefore there is strong and statistically significant relationship at 5% significance level. Therefore there is strong and statistically significant relationship at 5% significance level. The correlation coefficient between risk identification and analysis and IT Project success is r=.946 and sign. (2-tailed) .000, this implies strong, positive and statistically significant relationship at 5%significance level. Risk response and Planning is positively related to IT Project success with a Pearson correlation coefficient r=.780 and sig. (2-tailed) .000, which indicates strong, positive association and statistically significant at 5% significance level.

4.5. Summary of overall Hypothesis findings

The study analysis conducted, three hypotheses were accepted with details as follows.

Table 20: Summary of Hypothesis Testing result

No	Hypothesis	Level of Significant	Conclusion	Types of Relationship
1	Risk identification and analysis	5% level of significant	Accepted	Positive
2	Risk Response and Planning	5% level of significant	Accepted	Positive
3	Risk Monitoring and control	5% level of significant	Accepted	Positive

4.6.Discussion of the study findings

By investigating the effect of risk management on IT project success, the model was based on the synthesis of previous studies, and the results of the descriptive and statistical analysis revealed that;-

- Risk identification and analysis process of those IT projects implementation by CBE, an average median score of 3.95 indicating much of the respondents believe it is better practice process. project risks were identified based on established risk identification and analysis process for projects by experts, risks are identified throughout the project lifecycle, the project team is involved in the risk identification process are better practiced elements whereas, risk register preparation and it's usage is less practiced elements in risk identification process of IT projects implementation in the Bank.

- In addition, risk management plan and historical information are the most used inputs while risk categories is the least used inputs for project risk identification and analysis process. On the other hand, SWOT analysis and documentation review are the most used tools and techniques while diagramming technique and brainstorming are the least used tools and technique in risk identification of those project. Risk categories such as production risk and financial risk are the most prominent risk types faced by IT projects implementation in the Bank.

- On the subject of risk response process, average median score of 3.67 is achieved which indicate this process is better practiced. Options and actions are developed to enhance opportunities and to reduce threats to project objectives and risks are addressed by their priority are best practiced elements whereas, use of decision tree analysis method is less practiced element when evaluating risk response practice of IT projects implementation by Commercial Bank of Ethiopia. Risk management plan and list of prioritized risk are prominently used input whereas, probabilistic analysis of projects and Risk response are used to minimize the severity of risk in different IT projects implementation.

- Regarding risk monitoring and control process, the average median score achieved is 3.33 indicating the status of best practiced process. Risks that occur within the project are controlled in a way that goes with the goal and objective of the project, new risks are identified and residual risks are monitored and risk monitoring and control is treated as a continuous process in the project are best practiced elements. On the contrary, project management plan, project documents and organizational process assets are updated after monitoring and control process is less practiced elements when monitoring and controlling IT projects implementation by CBE, whereas, additional risk response planning is the least used tools and techniques during risk monitoring and control process.

CHAPTER FIVE
CONCLUSIONS AND RECOMMENDATION

According to the researcher this chapter presents summary of the findings, Conclusion based on the study findings and Recommends.

5.1. Summary of the Finding

The objective of the study was to identify the Effect of risk management process on IT project success; in the case of commercial bank of Ethiopian at head office, using major factors of risk management process such as risk identification and analysis, risk response and planning, Risk monitoring and control and therefore, The study was conducted using self-administered questionnaires to the target population of 352 operational employees: out of 187 sampled employees 123 of them responded properly. Furthermore, the research is analyzed by using statistical analysis of SPSS 27.

Overall, both the correlation analysis and the regression analysis proved that the Three attributes of the study independent variables are quite relevant in shaping IT project success, That is, the correlation result showed that risk identification and analysis, risk reposes and planning, risk monitoring and control and have a positive significant association with IT project success with a correlation score of ($r = 0.66$, $p < 0.00$), ($r = 0.89{,}5$, $p < 0.00$), ($r = 0.60$, $p < 0.00$) and respectively. Likewise, the regression analysis also showed that the Risk identification and analysis, risk response and planning and Risk monitoring and control were positive significant effect on IT Project Success.

5.2.Conclusions

The study was to explore risk management practices that affected IT project success. To achieve this purpose, the survey research from the sample group provided results that contribute to the development of IT project success. The results found that the differences on organizational types affected IT project success in all aspects. However, the differences on organizational sizes did affect IT project success. Risk identification and analysis, risk response planning and risk monitoring and control influenced the success of IT projects.

The developed of model to investigate the relationship between risk management and IT project success and the model consisted of risk management in three categories; risk identification, risk analysis, risk response planning, and risk monitoring & control and organization factors. The research results found that risk identification and analysis, risk response and planning, risk monitoring and control and organization factors did influence the performance of the IT project in terms of reliability, easiness, flexibility, satisfaction and quality. There was method of risk management that positively influenced the performance of the IT project success.

5,3 Recommendation

This study examines the effect risk management practices on IT project Success; in the case of Commercial Bank of Ethiopia. Thus, any interested researcher can explore this area and clarify the relationship cross- sectional data and it is difficult to determine the time series link across variables. Hence, the research result may differ if it is conducted in other time. The limitation of sample size implied that the finding cannot be generalized across all projects in CBE or projects practiced in other different sectors. In addition to the above, researcher recommends that further research be conducted on the subject by using projects from different banks and unrelated sectors to assess the practice of risk management in those IT projects Success and explore its impacts on perceived project success.

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Appendix

INTRODUCTION

Questionnaires to be filled by commercial bank of Ethiopia at head office. I am conducting research on the practice of risk management process and project success; in the case of commercial bank of Ethiopia it projects at head office. The study required for the partial fulfillment of the requirement of Masters of project Management at St. Mary University. Your highly esteemed response for the questions are extremely important for success full completion of my thesis. The information you provide will be used only for academic purposes and confidentially treated. Thank you in advance for your cooperation.

- ✓ You don't need of write your name.
- ✓ Indicate your response by putting at tick ( ) in the provided box.
- ✓ Read each statement.
- ✓ Contact me for any clarity

Section I: General Information

1. Gender: Male ☐ Female ☐
2. Age (in year): 23-28 ☐ 29-34 ☐ 35-40 ☐ 41-46 ☐ above 47 ☐
3. Level of education: Diploma ☐ Bachelor Degree (BA, BSc) ☐ MSc and above ☐
4. Years of work experience: Below 2-5 ☐ 6-9 ☐ 10-13 ☐ 14-18 ☐ above 19 ☐
5. Specific role: Officer ☐ Project Team Leader ☐ Project Manager ☐ voper ☐ Department Manager ☐ Other Specify

Section II: close-ended questions

Please encircle the number for the five point scale question that best describes how you perceive project risk management is applied;

Where: **Strongly Disagree (SD) = 1, Disagree (D) = 2, Neutral (N) = 3, Agree (A) = 4 and Strongly Agree (SA) = 5.**

No	IT Project Success	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	The project has a standard risk management process.					
2	There is responsible person or department handle risk.					
3	There is dedicated project management office.					
4	Project team have deep project experience in risk management**.**					
5	The development team members are adequately trained.					
6	The development team members are well experienced.					
7	There is adequate top management support for the project.					
No	**Risk identification and analysis**	**1**	**2**	**3**	**4**	**5**
1	Project team members play roles to identify risk.					
2	Risk register is produced as an output in risk identification process					
3	Documentation review conducted to identify risks.					
4	Stakeholder register used to engage key stakeholders during risk identification process.					
5	Characteristics of the risk are considered.					
6	There is a measurement system to analyze the risk.					
7	Project documents are updated after risk assessment.					
No	**Risk Response and Panning**	1	2	3	4	5

1	There is a well-developed strategy to respond risk.					
2	Factors such as budget, schedule and resources and quality are considered while responding to risk.					
3	There is systematic approach or careful planning.					
4	Relevant stakeholders are involved in the planning.					
5	Environmental factors are included as an input to plan for uncertainties.					
6	Project team members receive training or have enough knowledge about how to handle uncertainties.					
7	Risk management plan is incorporated with the project plan.					
No	**Risk Monitoring and Control**	**1**	**2**	**3**	**4**	**5**
1	Risks are registered and communicated properly.					
2	Risks are reviewed periodically.					
3	Risk responses are audited					
4	Project performance is evaluated against risk.					
5	Risks are monitored and controlled appropriately.					
6	There is a policy and procedure that guide the project team to go through a disciplined risk management process.					
7	Tools like expert judgment, meetings or others are considered for risk controlling.					