



# **Assessment of the Success Factors of CORE Banking System project in Commercial Bank of Ethiopia**

**This Project Work is submitted to the Department of Business  
Administration and Information Systems Presented in Partial Fulfillment  
of the Requirement for Masters of Arts Degree in Project Management**

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# **Assessment of the Success Factors of CORE banking system project in Commercial Bank of Ethiopia.**

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## Statement of Certification

This is to certify that **WerkinehZenbabaKurfah** has carried out his project work on the topic entitled  
“Assessment of the Success Factors of CORE banking system project in Commercial Bank of

Ethiopia.

” is his original work and is suitable for submission for the award of Masters of Arts Degree in Project Management.

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(Advisor) **Dakito.A (PhD)**

June, 2022

## **Declaration Statement**

I, the undersigned, hereby declare that the work contained in this project work is my own original work and that I have acknowledged all additional sources I have used and/or quoted directly.

**Name**

**Signature**

**Date**

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## ABBREVIATIONS

ATM	Automated Teller Machine
BPR	Business Process Reengineering
BOD	Board of Directors
CBSO	Core Banking Solution
CBS	Core Banking System
CORE	Centralized Online Real-time execution
COBOL	Common Business oriented language
CSF	Critical Success Factor
IT	Information technology
LMTS	Local Monty Transfer system
NBE	National Bank of Ethiopia
PMO	Project Management Office
POS	Point of sale
ROI	Return on Investment
SPSS	Statistical Package for Social Sciences
STP	Straight-Through-Processing
SMS	Short Text Message

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## Abstract

The main purpose of this study was to identify Critical Success Factors for CBS selection and implementation in Ethiopia LCBS and to define a framework, which could be used by the LCBS to make their CBS projects successful.

The survey questionnaire was distributed among 50 individuals identified as sample population across IT departments. Out of the 50 all of them responded and responses of all CBS project experienced respondents were identified for further analysis.

Following noteworthy findings were observed on analysis of survey data. Most of the respondents were of the view that improved efficiency and end users satisfaction was the most important project goal to achieve, related to CBS projects. Timely implementation or implementing within allocated budget was not considered as important by the respondents.

Out of the 17 success factors in the questionnaire, 7 have been identified as Critical Success Factors (CSFs). Out of the 17, six were related to the CBS selection process and 11 were related to the implementation process.

Based on the identified CSFs, a framework for CBS projects has been developed and a comprehensive set of guidelines have been proposed for the Commercial bank LCBS, which could be useful for these banks in their future CBS Projects.

# Chapter One

## 1.1 Introduction

Core banking is a general term used to describe the services provided by a group of network bank branches; bank customers may occur their funds and other simple transaction from any of the member. Thus Core Banking Solution is a move towards enhancing the customer services through Any-where and Any-time banking (Manjushree, 2014). Simply put, core banking helps customers to remove temporal and spatial constraints, and utilize networks and telecommunications technology to transfer resources (money) in banking system (Heidarpour&Tahmasbi, 2009).

Following the implementation of the NBE's National Payment System (NPS) in 2011, a platform which integrates all electronic inter-bank money transactions, all Ethiopian banks were required to deploy CORE banking solutions. With the aim of establishment of a nationwide electronic payment system in Ethiopia, the National Bank of Ethiopia (NBE) instructed all commercial banks in the country to adopt core banking solutions in July, 2011 (NBE, 2011).

Various types of CORE banking services Internetbanking Internet has greatly affected electronic banking. There is no temporal and geographical constraint through the application of internet banking. Internet banking is an electronic payment system which enables customers to conduct financial transactions without referring to the bank, just through their PCs or communications networks (Taghavifard et al., 2012).ATM Automated teller machine (ATM) is an electronic telecommunications device that enables the customers of a financial institution to perform financial transactions. ATMs are often located inside a specific place which may be accessible 24 hours a day. They are also considered as a branch of the bank, since they provide different services offered in the bank (Maleki&Akbari, 2010). POS Point of sale (POS) is the place where a retail transaction is completed. It is the point at which a customer makes a payment to the merchant in exchange for goods. At the point of sale, the retailer would calculate the amount owed by the customer and provide options for the customer to make payment. Telephones or network communications may be utilized to conduct transactions through POS (HabibZadeh&Mirmajidi Hashjin,2011).

Mobile banking Multidimensional services such as GPRS which are accessible through mobiles enable customers to conduct financial transactions like getting account balance and financial statement, requesting check, and transferring from one account into other accounts (Farnoud, Soltani&Zarabiye, 2008, p. 356). Telephone banking Conducting small transactions between a customer and its bank can be possible through telephone banking which can be through three different methods: audio transaction, voice recognition, and pre-planned telephones (HabibZadeh&MirmajidiHashjin, 2011). Electronic money Electronic money involves the use of internet or other networks to store or transmit money. This type of money can be stored on smart cards or computer's hardware. Electronic money falls into different types as follows: electronic card, electronic wallet, electronic check, digital money, and virtual card (Maleki&Akbari,CORE banking in today's competitive environment, centralized and highly interlinked computerized information systems usage has played a key role in the business success model. Commercial bank of Ethiopia take as main system integration focused on improving the efficiency of their operational business while maintaining, or even extending the flexibility necessary to stay competitive in the market. Measures to implement these efforts include the digitalization to each customer of the country on different products and standardization of operational business processes such as transaction banking.

CORE banking can support almost every financial product and instrument being traded on any market in the world. This functional breadth means so that commercial bank of Ethiopia can enter new business areas, or handle rapid growth in existing areas, confident in the knowledge that CORE banking will provide the full support required to service the business effectively and maximize revenues in the longer term. Similarly, Commercial Bank of Ethiopia, the biggest and state bank of the country has been trying to adopt various properly selected and manageable up-to-date technologies in order to make its financial business run in an efficient, effective, and competitive manner both domestically and internationally. Such moves of technology adoption endeavors in order to meet its business objectives are expected to be implemented/executed successfully.

While, CBE is creating inalienable effort on enhancing resource/deposit mobilization, provision loans and advances and other related major services, the bank have been striving in

order to support its financial business activity by various up to date cross-functional enterprise systems. Consequently, CBE has been implementing different state-of-the-art ways of delivering of its major financial it requires proper, fast, reliable, secure, and services. Such systems most importantly expected to tailored in a manner that is aims to meet customers' needs/expectations is mandatory enough in order to keep CBE's current promising business growth momentum in terms of its profit status in highly competitive business environment.

## 1.2 Statement of the Problem

The Commercial Bank of Ethiopia (CBE) has a vision to become World Class Commercial Bank by the year 2025, in alignment to the Ethiopia's aspiration to become the middle earning country within the same year. by taking into account CORE banking success in commercial bank of Ethiopia its integration with other organization like Water and sewerage Ethiopian Electric Power Ethio telecom and etc

Commercial bank of Ethiopia passed through so many challenges by manipulating for the customer account interest calculation salary payment other related activities gradually the COBOL operating system come to existence to serve on the customer accounts including loan interest calculation and data handling side by side access data base to some of minor calculation then after still migration to branch power database for 36 braches within the city of Addis Ababa the rest braches started to use the Smart Bank data base only at branch level LMTS database for the local transfer then after on the year 2012 migration done to the central data base of CORE banking data base by investing nearly 6 million US dollars on May, 2012. (Capital, 2012) and have managed to interface with the Ethiopian Automated Transfer System (EATS) and modernize the banking system to international standards. Although, the original schedule for completion of the project was June 2010, CBE indicated that the launch would be delayed until the end of December, 2011 and further delaying for another five months and become operational in May, 2012 (Capital, 2012).

The core banking system also enabled the bank to strengthen and extend its relations with credit card providers such as Visa and Master Card as well as rollout new mobile and Internet banking services. Therefore, the study tried to assess determinants of critical success factors in Core

Banking implementation of Commercial Bank of Ethiopia by addressing the following research questions:

### 1.3 Basic Research Questions

In addressing the above goes through problem statement, it is tried to put the following five major research questions.

- 1) What is the level Top management support as to a project success factors?
- 2) What are levels of vendors support on the critical success of CORE banking?
- 3) What is the users' involvement as a project success factor to the project implementation of the CORE banking system?
- 4) What is the level of risk management on the critical success of CORE banking?
- 5) What are the levels clear goals and objectives to project success factor?

#### 1.3.1 General objective of the study

The overall objective of the study is to assessment on the success factors of the CORE banking system project in Commercial Bank of Ethiopia.

#### 1.3.2 Specific objective of the study

Whereas, in addressing the above overall objective and aiming to responded the above research questions, the study has focused on answering the following specific objectives.

- Assessed level of the Top management support as a project success factors.
- Assessed the vendors support on the project success.
- Determined the influence of end users involvement on the implementation of core banking system project in CBE.
- Assessed the risk management of the project on the critical success of CORE banking?
- Investigated the clear goal and objectives to the project success factors.

### 1.4 Significance of the study

Besides academic application to fulfill the prerequisite of the post-graduate study program in Project Management, given the fact that, though there are too many factors that may

determine the successful implementation of CORE banking system project, decision makers at the Bank (CBE) can be especially benefited from this project work outcomes, as it aims identified the key critical factors that matter most to the successfully execution of CORE banking projects in CBE and other similar organizations in Ethiopia.

Lastly another important significance of the project work is that, the result can be used as an input for other researchers to further study. In other words, given series of serious and related concerns mentioned within the above conceptual framework of this project work, exploring key **CSFs** to CORE banking projects execution is already considered as an important choice of research or project work title.

This is important given the fact that CORE banking system projects are one of the most costly investment decisions and one of a very few major strategic proportions to big financial institution of service providers and/or organization, and similarly getting them implemented is majorly a challenging task by itself.

### **1.5 Delimitation/Scope of the Study**

Overall, it would have been great to conduct a study of its kind by exploring critical factors that matter most the successful implementation of CORE banking system project the case of Ethiopia, yet this project work will restrict itself to Commercial Bank of Ethiopia. This is because, this project work is an exploratory study type it would have been great to extract may be many country wide key success factors or even across different sector of the bank industry.

The other key concern of this section of the project work is that the outcomes of this project work demand careful explanation, it is due to the fact that, this project work examines the perceived success factors of CORE banking projects implementation team members of the Bank (CBE) rather than determining the real success derived from the goal related measures of successful CORE banking projects implementation.

### **1.6 Definition of Terms / Concepts /constructs**

- **Operational Definition of Terms:**

By taking the emergent use of advanced recent technology by integration of servers WebSphere browsers oracle database and security features that commercial bank of Ethiopia started the full functionality of CORE banking system. This system nowadays take all the financial activities related to each Government and Non-Governmental organization public and private individual's salary payment started to handle by CBE.

Even CBE on the way to create cashless society any selling and buying activities to goes through transfer from account to account by using the digital products available due to the existence of the CORE banking system with many features and integration.

### 1.7 Organization of the Project Work

The project work will structure in five major chapters. The first chapter to gives a general background or highlights about the problem and its concerns or approach. The second chapter to present a detail review of related literature which was related to the study. Chapter three to include of detailed research methodology that will employ for this project work. The fourth chapter will consist of Data Presentation, Analysis and Result Interpretations. The last chapter of will be used to finalize the study by providing summery of Result Summaries and Conclusions and Recommendation.

## Chapter Two

### 2.1 Literature review

#### 2.1.1. Overview

Projects in commercial banks are focused towards serving customers more efficiently and effectively and reduce costs. Delay of such projects will therefore impact negatively on the customers as they do not get what they should be expecting to business loss and customer inconvenience (Stephen & Patricia, 2017). Hence, Core banking project delivery is a sensitive phenomenon in the banking industry due to digitization and technological changes.

A core banking system is essentially the heart of all the systems operating in a bank. It can be labeled as the core of a bank's IT platform. With the advancement of technology, core systems tend to cover more and more functionalities, providing the bank with an integrated solution for most of its operations in varied business lines. A core banking system resides in the heart of a bank's data centre and provides a central operational database of customers' assets and liabilities. It enables a full view of a customer's relationship with the bank (Rohan & Megha, 2013).

#### 2.1.2 The concept of CORE banking

Core banking system is the platform where communication technology and information technology are merged to suit core needs of banking such as handling deposits and lending (Chairlone & Ghosh, 2009 cited in Negalign & Lisanwork, 2016).

Core banking systems typically included deposit, loan and credit processing capabilities, with interface to general ledgers systems and reporting tools. Strategic spending on these systems is based on a combination of service-oriented architecture and supporting technologies that create extensible and agile architectures (Chairlone & Ghosh, 2009 cited in Negalign & Lisanwork, 2016).

Core banking is a banking service provided by a group of networked bank branches where customers may access their bank account and perform basic transactions from any of the member branch offices. It is often associated with retail banking and many banks treat the retail customers as their core banking customers. Businesses are usually managed via the corporate Banking division of the institution.

### 2.1.3. Core Banking Services and Products

Core Banking products and services such as Automatic Teller Machines, Electronic Fund Transfer, Mobile Banking, online banking, Electronic Data Interchange and telecommunication services are methods used by banking organizations to carry out their transactions at a center through centralized banking services (Negalign & Lisanwork, 2016).

### 2.1.4. Benefits of Core Banking

Core banking increased revenues since the bank will be able to reach more customers, improved customer satisfaction since services will be readily available and fast in their provision, cost reduction because it will not have to incur heavy wage bill, reduced space requirements and hence reduced rent or lease payments. Other benefits include increased efficiency since automation enables them to do more with less input, increased level of output and employee satisfaction and motivation (Negalign & Lisanwork, 2016).

Core banking enables banks to raise asset yield within existing business; move into more profitable markets and segments; to extract economies of scale; and to cut costs sustainably (Robinson, Chris, Walker, & Caldeira (2012).

### 2.1.5. Challenges of Core Banking

In almost all instances, banks cannot have any benefit without incurring cost or facing challenges. Potential customers do not trust bank's site: The Internet allows mom-and-pop websites to look just as good—may be even better than the websites of large corporations. All potential customers are well aware of this and they will be indifferent by a sophisticated layout and a professional logo. Potential customers do not trust the site they have just arrived at, and it must be banks' conscious decision to do what it takes to make them change their minds (Mahadevan & Venkatesh, 2000 cited in Negalign & Lisanwork, 2016).

Security concerns, the site may be attacked by hackers who may use the organization's website to defraud existing and other potential customers. Cost of acquisition, installation and maintenance is

also another issue that requires the commitment of huge resources to acquire the system, to continuously update it and repair in case of breakdown. Banks also have to invest in employee training or alternatively hire qualified employees who are usually expensive. Resistances by customers to adopt the new technology since most traditional customers are still shy of technology (Negalign & Lisanwork, 2016).

## 2.2. Empirical Literature

Young & Jordan (2008) demonstrated that top management support was a critical determinant of eventual project success or failure. According to the study result, projects that enjoyed full support from the top management succeeding whereas those with little to no support from the top management failed miserably. The study result also supported by Nwakanma et al. (2013) as the study indicated top management is one of the important factors for the success of IT projects in Nigeria. The study further discovered that, this critical success factor ensures top level interaction among project team members and project steering committee members and vendors to facilitate successful implementation.

Davis (2014) adopted a set of themes in order to describe success factors of projects: cooperation and communication, timing, identifying objectives, stakeholder satisfaction, acceptance and use of final products, cost aspects, competencies of the project manager, strategic benefits of the project and top management support. However, the study was based on theoretical point of view and considered perceptions of some senior management, project core team and project recipient stakeholder groups and the study lack of agreement in perceptions of project success factors between these groups, highlighting discontinuity between them. Thus, empirical research into multiple stakeholder groups' perceptions of project success needs to be conducted.

Ioana & Emil (2015) presented an overview on the topic of project success and identify main success factors when dealing with projects using a quantitative research. The study output showed that, success factors determine the positive outcomes of implementing projects. They have to be identified before projects' implementation, from the conception phase. However, the study didn't clearly identify which specific factors determine the positive outcomes of implementing projects. In addition, projects environments are dynamic, so success factors might change their level of influence in time, the study didn't consider the dynamic nature of projects

and the level of influence of success factors in time. Thus, a permanent monitoring of these factors is needed and whenever necessary the project managers should influence certain factors in order to increase chances of accomplishing success criteria.

Musau (2015) conducted a study to determine the influence of human resource management, project scope, project risks management, and vendor selection on the implementation of core banking system and establish the factors influencing successful implementation of core banking system in Kenya. The study concluded that human resource management, project scope management, risk management, and vendor selection greatly influence core banking system implementation in Kenya.

Seife & Mesfin (2015) in their findings on the study of core banking system implementation framework in the Ethiopian banking industry proposed that, the critical success factors identified such as: product selection, top management support, product evaluation, project management and vendor commitment were used to design an implementation framework for core banking system in Ethiopian banking system. The study of Seife & Mesfin (2015) further formulated a guideline on how to execute the critical factors and emphasized on the necessity of these critical factors towards a successful core banking system implementation. However, the study didn't investigate and extensively validated the influence of the factors considered in the designed framework on the implementation of core banking system project in Ethiopia.

Mangwanda et al. (2016) sought to evaluate the factors influencing implementation of Temenos T24 core banking system in Rwanda. The study clarified significance of: dependencies between organization structures, human resource factors, technical competencies and project risk management. The study result indicates that there is a correlation between the factors influencing implementation of T24 core banking systems such as organization structures, human resource factors, technical competencies and project risk management and implementation of T24 core banking system. However, successful projects are not only depending on organization structures, human resource factors, technical competencies and project risk management but also various determinants including complexity, duration of development, available budget and the desired quality of the project.

According to Negalign & Lisanwork (2016) study findings; security issues, empowering

employee to use the new system, vendor capabilities and credentials, risk of the software capability to meet banks requirements and expectations, unavailability of the diverse skills required and data migration were the challenges banks facing in the process of new core banking system development in Ethiopia. In addition, lack of suitable legal and regulatory framework for core banking and electronic payment is another impediment for the adoption of new technology in the Ethiopian banking industry (Negalign & Lisanwork, 2016). However, the study focused only on the development and challenges of core banking system project implementation in Ethiopia and did not identify the factors influencing the implementation of core banking system project.

Stephen & Patricia (2017) in their study concluded that, project management is an emerging trend as one of the key strategies for creating a digital bank setting, qualification in terms of professional training in project management would further boost the overall effectiveness of the team, user participation is important in early stages of system development as a way of increasing later acceptance of the final project, top management support needs to be focused on the realization of benefits from all IT projects rather than the narrowly defined project activities. However, the determinants considered in this study are not exhaustive and, further studies need to be done to unearth other determinants influencing implementation of information technology projects.

### **2.2.1. Review of Factors Influencing Project Implementation**

Success factors are input to project management practice which can lead directly or indirectly to project success. It encompasses many elements, which have to be synchronized to ensure the project delivery on time (Zarina & Yusof, 2014). The success in projects is something much more complex than just meeting cost, deadlines and specifications (Montequina, Cousillas, Alvarez, & Villanueva, 2016).

From a Project Management perspective, success factors are characteristics, conditions, or variables that can have a significant impact on the success of the project when properly sustained, maintained, or managed (Zarina & Yusof, 2014). Success factors can be perceived as main variables that contribute to projects' success, as levers that can be operated by project managers to increase chances of obtaining the desired outcomes (Westerveld, 2003). A combination of factors determines the success or failure of a project and influencing these factors

at the right time makes success more probable (Savolainen, Ahonen, & Richardson, 2012).

Different studies have identified different success factors and a lack of consensus of opinion among researchers on the criteria for judging project success and the factors that influence that success (Zarina & Yusof, 2014). From the previous study, a number of variables influencing the success of the project implementation were identified. Pinto & Slevin (1987) discovered ten factors that they felt to be crucial to successful project implementation. These are project mission, top management support, project plan, client consultation, personnel recruitment selection and training, technical tasks, client acceptance, monitoring and feedback, trouble shooting and communication.

Davis (2014) studies project management success in literature from 1970 to present, classifying the evolution of success factors into decades. According to this study, approaches of success factors evolved from focusing on the operation level of a project in 1970s to embracing a stakeholder focused approach after 2000s (Davis, 2014). As a result of the numerous studies that approached the topic of project success, several lists of success factors exist. Zarina & Yusof (2014) suggested that success factors can be grouped under five main categories. These include human-related factors, project-related factors, project procedures, project management actions and external environment. Variables within each group can influence a variable in others, and vice versa (Zarina & Yusof, 2014).

#### **2.2.1.1. Top Management Support as a Project Success Factor**

Top management support helps in effective decision making, managing risk, and in authorizing business process changes. It is necessary for top managers to get behind the project and make clear to all involved in the project that they anticipate a successful completion of the project (Pinto & Slevin, 1987).

#### **2.2.1.2. Vendor Involvement as a Project Success Factor**

Most of bank projects are handled by external vendors who sell system to the bank (Stephen & Patricia, 2017). Vendor's involvement in implementation becomes critical for project to be delivered within the stipulated time lines.

### **2.2.1.3. User Involvement as a Project Success Factor**

Many reasons have been given to involve users in information technology implementation projects. User involvement is predicted to increase user satisfaction and acceptance by: developing realistic expectations about system capabilities, providing an arena for bargaining and conflict resolution about design issues, leading to system ownership by users, decreasing user resistance to change and committing users to the system (Casanovas, Esteves, & Pastor, 2004). By involving end-users in decisions relating to implementation, workers may become more invested in the success of the implementation and more satisfied with the system (Stephen & Patricia, 2017).

### **2.2.1.4 Risk management as a project success factor**

A project is a unique thing which is totally depends on time, cost and customer satisfaction Kahneman and Tversky (as cited in Otieno, 2013). Proactive risk management is a key to success. According to Schwable (as cited in Otieno, 2013), risk identification process begins by reviewing the project documentation, most recent and historical information. As it has been stated (Otieno, 2013) risk analysis includes analyzing the risk and measuring its vulnerability and its impact. A project sponsor and manager in collaboration can implement risk controlling techniques (Ritter, as cited in Otieno, 2013). According to Ritter, risk can be analyzed in two ways: first brainstorm the probable risks and secondly do sensitivity analysis.

### **2.2.1.6. Clear Goals and Objectives as a Project Success Factor**

Goals and objectives of the project should be clearly understood both by the project team and by the organization (Pinto & Slevin, 1987). One of the most important project management critical success factors is clear and realistic objective (Nwakanma et al. 2013). Clearly establishing goals, objectives, outcomes and benefits expected from the project avoids accepting unrealistic deadline from vendors and purchasing software that doesn't meet the bank's requirements. If a bank clearly identifies which functionalities are to be performed by a core banking system, it will not experience scope creep. Hence, one of the causes for project time and budget run will be avoided (Seife & Mesfin, 2015).

### 2.2.1.1 Project Success Criteria

Since projects are temporary in nature, the success of the projects should be measured in terms of completing the project within the constraint of scope, time, cost, quality, resources, and risks as approved between the project managers and senior management. To ensure realization of benefits for the undertaken project, a test period (such as soft launch in services) can be part of the total project time before handing it over to the permanent operations. Project success should be referred to the last baselines approved by the authorized stakeholders (PMI, 2013).

Project success criteria are defined by Muller & Turner (2007) as a variable that measures project success. Initially, project success was referred to as reaching the objectives and the planned results in compliance with predetermined conditions of time, cost and performance (Ioana & Emil, 2015). Project success measurement is the result of clearly identifying goals and objectives at the 'project formulation' phase. When banks align project implementation with their goals, the success rate of the project highly increases. Therefore, banks should have project success measurement criteria defined (Seife & Mesfin, 2015).

The classic view of project management defines three main criteria of project success – time, cost and scope. These criteria well known as The "Iron Triangle" cover a particular part of the project objective missing to take into consideration the organizational objectives. Since projects have an organizational purpose the criteria of project success should consider their fulfillment (Ivanov, 2012). Projects are said to be successful if the iron triangle criteria are met: delivered on time, within budget and meeting the predetermined quality measures (Ivanov, 2012).

Project success measurement is the result of clearly identifying goals and objectives at the 'project formulation' phase. When banks align project implementation with their goals, the success rate of the project highly increases. Therefore, banks should have project success measurement criteria defined (Seife & Mesfin, 2015). Other authors determine the quality of the project management process and the satisfaction of the project stakeholder as an additional component of the "Iron Triangle" and the internal view of project success (Kernzer, 2009). A variety of models for measuring project success were developed for measuring success with different underlying assumptions (Dvir, Raz & Shenhar, 2003).

### **2.2.1.2. Core Banking Projects Implementation Framework**

A project is considered to fail when it doesn't bring the expected results and when the implementation team is unable to meet the requirements of time and budget (Hashmi, 2006 cited in Seife & Mesfin, 2015). A project is successful if it satisfies the needs of the intended customers (Kerzner, 2009).

Most core banking system implementations face challenges midway through the project. This can happen due to lack of coordination and communication between the vendors and the bank's project management team. Inadequate information gathered during the requirement phase, inability of the banks to identify the important requirements, and scope changes are additional challenges faced during a core banking system implementation (Rohan & Megha, 2013).

By embedding an application software package lifecycle model for applications purchased from vendors outlined by Oracle and Temenos, Seife & Mesfin (2015) designed a framework for success factors and formulated a guideline on how to execute the critical factors for a better and effective implementation of a core banking system for Ethiopian banking industry as outlined below:

### **2.2.1.3 Product Selection**

“Goals, objectives and expectations should be studied by the bank thoroughly for a period of time. This paints a clear image to the bank on the work to be done internally before selecting or implementing the core banking product, whether it is formulating or updating necessary strategies (business or IT) or identifying the requirements of the bank. Future interfacing with other systems and service delivery methods should also be identified thoroughly” (Seife & Mesfin, 2015).

### **2.2.1.4 Product Evaluation**

“Vendor should install a prototype of their core banking and demonstrate proof of concept to the bank. Concerned end users, project managers, and project team members should participate

in the proof of concept demonstration. Attendees of the demonstration should ask all the necessary questions during the demonstration, identify gaps and evaluate the core banking product thoroughly against their requirements thoroughly” (Seife & Mesfin, 2015). “Before finalizing the evaluation process, banks should thoroughly search the success or failure of the vendor in previous projects. All the above factors should influence the banks’ decision in selecting and evaluating a core banking product and its vendor thoroughly” (Seife & Mesfin, 2015).

#### **2.2.1.5. Vendor Commitment**

“Vendors should be committed to finishing the implementation of the project successfully. The contract between the vendor and the bank should clearly state the role of the vendor in the project in order to avoid misunderstandings down the road. Vendors should be attentive to the requests raised from the banks since it plays a vital role in the success of the project” (Seife & Mesfin, 2015).

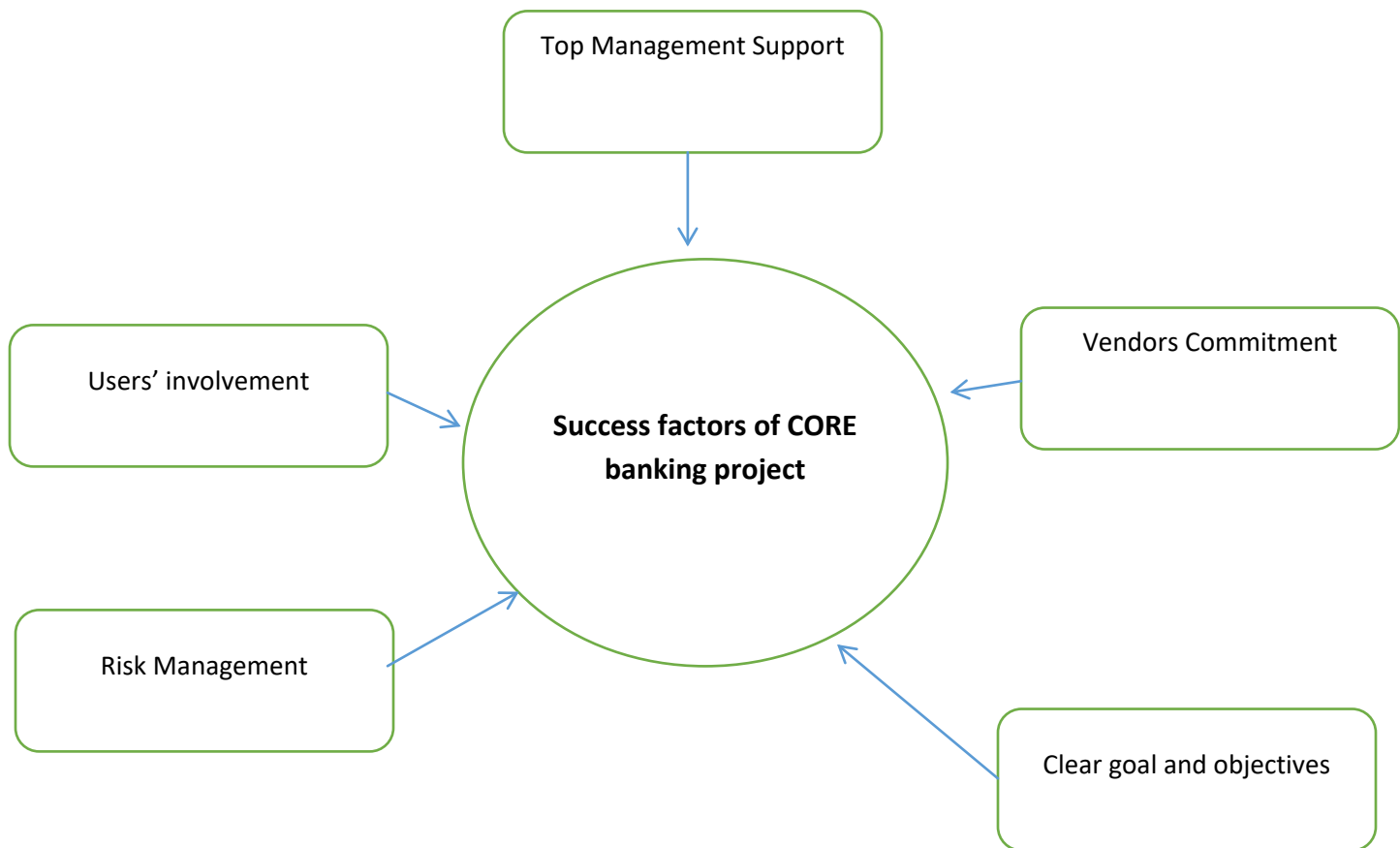
#### **2.2.1.6. Top Management Support**

“Top management should also resolve issues, which need a higher level decision, in an effective and timely manner. Top management should also resolve disagreements between vendors and project team members in an efficient way. Top management should compose the project steering committee, with the business users, project team members, project manager and the necessary senior officials. Top management should carry out attendance in steering committee meetings. Because important decisions regarding the systems are given in the meeting, all the project steering committee members should always attend the meeting” (Seife & Mesfin, 2015).

### **2.3. Conceptual Framework**

In this study the dependent variable is successful core banking system project implementation while the independent variables are the determinants of core banking implementation which are: Project Scope Management i.e. clear requirement and specifications, user acceptance test; Risk Management, Stakeholder management i.e. vendor and user involvement; clear goal and objectives and Top Management Support. The factors were selected after careful review of several articles and adapting the work of Stephen & Patricia (2017)

andNwakanmaet (2013)



**Figure 2.2 Conceptual Framework**

## **Chapter Three**

### **3.1 Research Methodology**

As the overall aim of the study has investigated the factors influencing the successful implementation of core banking system project, the study involved a cross-sectional survey methodological approach as data was gathered from individuals who participated in T24 core banking system project implementation in commercial bank of Ethiopia.

### **3.2. Target Population Sample**

Commercial Bank of Ethiopia has an established Program Management Office (PMO) headed by a director and reports directly to the president. The responsibilities of a PMO can range from providing project management support functions to responsibility for the direct management of IT

projects.

The overall responsibilities of the PMO are: planning, scheduling and implementation of IT projects; follow up IT projects activities and take corrective measures as required or escalate timely to the PMO's sponsor or president; ensure that all personnel involved in the project understand the project's background objectives, scope, timescale and approach; ensure the proper knowledge transfer is made to the information services staff on the IT projects implemented; and ensure that consultant inputs and advices are implemented accordingly.

The target population of the study comprises project management experts and professionals who are actively involved in T24 Core Banking system project implementation in CBE. According to the data obtained from PMO, a total of 200 employees constitute the target population of the study. Therefore, because of manageable size of the target population the researcher incorporated 50 of these project management professionals. So the sample size is 25 percent of the total population

### 3.3 Data Type and Source

Based on the objectives of the study, the study used both qualitative and quantitative type of data to investigate the factors influencing the implementation of core banking system project in CBE. The study mainly used primary data source. Employees of the bank who are actively participated in the Core Banking implementation process were the main sources for the primary data

### 3.4. Data Collection Techniques and Procedure

#### 3.4.1. Data Collection Methods

To achieve the study purpose, personally administered structured questionnaire used based on the factors identified referring to the previous literature and based on objective of the study. This study is carried out using structured questionnaire. As stated by Sekaran (2003) "questionnaire is a popular method of collecting data because researchers can gather information fairly easily and the questionnaire responses are easily coded".

#### 3.4.2. Data Collection Procedures

The structured questionnaire seeks data in relation to the variables of the study namely: clear

organizational goals and objectives, Risk management vendor and user involvement, and top management support.

The study asked participants response on the success of core banking system project implementation in CBE based on the identified projects success measurement indicators and on the factors influencing the successful implementation of core banking system project based on the identified factors using an ordinal scale such as “Yes” or “No”.

In addition, the respondents are asked to rate the degree of their agreement or disagreement on the factors identified for successful core banking system project implementation based on a five point scale. The rating scale was as follows: 5= Strongly Agree, 4=Agree, 3= Neutral, 2=Disagree and 1=Strongly Disagree.

The target respondents were Project management officers, project management experts, project managers, IT technical staffs and project management team leaders, since they are directly involved with the core banking system.

### 3.5. Data Processing and Analysis

#### 3.5.1. Data Processing

Prior to data analysis the data collected through questionnaire are carefully edited, coded, classified, tabulated and checked for consistency

#### 3.5.2. Data Analysis

The study mainly employed quantitative method of data analysis. The quantitative analysis of the study employed both descriptive and inferential analysis. As a part of descriptive statistics, measures of central tendency and measures of dispersions (frequency, percentage, mean and standard deviation) are used as a preliminary analysis.

As a part of inferential analysis, regression is used. Finally, in order to ensure error free computation, Statistical Package for Social Sciences (SPSS) version 26 software is used. The justification of this methodology is based on the fact that study papers available where the factors considered in this research have been established (See: Nwakanma et al., 2013; Mangwanda et al., 2016; and Stephen & Patricia, 2017).

### 3.6. Model Specification

The factors influencing the implementation of core banking system project have been analyzed and studied using various empirical models in the previous literature. So as to understand whether project success (completed within original cost, delivered within the planned time, and meet the desired benefits) can be predicted based on the identified project success factors (top management support, vendors support, users involvement, Risk identification and clear organizational goals and objectives), the study employed binary logistic regression econometric model.

### 3.7. Reliability and Validity

To ensure the validity of the data obtained from the questionnaire and to bring meaningful conclusion from the collected data, the study tested the validity of the measurement instruments. Hence, to ensure the reliability of measurement instrument the researcher performed first standardize the instrument and then, distributed the same to all respondents and was not changed from one person or situation to another.

Besides, the researcher believed that this study is valid in that the all respondents are selected based on their past experience on IT project implementation in general and core banking system project implantation in particular. Hence, their response was expected to be credible and applicable to independent researcher.

## **CHAPTER FOUR**

### **4. DATA PRESENTATION, ANALYSIS AND INTERPRETATION**

#### **4.1. Introduction**

The previous chapters three discussed the research design and methodology used to conduct the study. In this chapter, the result of questionnaire distributed to Core Banking Solution implementation project technical team at Debreworkbulding especially those working at core processing customization and user management departments including those to auxiliary interview response obtained from project Managers at Project Management Office (PMO) and Managers team leaders of both business team and technical team of CORE banking implementation of project at Commercial Bank of Ethiopia are presented. The study attempted to assess critical success factors in implementing Core Banking Solution implementation project at commercial Bank of Ethiopia.

The chapter has six sections. The first section of the chapter deals with the analysis of general profile of respondents. The second analysis of critical success factors of CORE banking implementation project Support of Top Management thirdly analysis of critical success factors of CORE banking implementation project about Vendors

Support fourthly at fifth analysis of critical success factors of CORE banking implementation project users involvement and support lastly analysis of critical success factors of CORE banking implementation project Risk Management the last section of this chapter presents discussion of the findings.

In order to determine the critical Success Factors of CORE banking project implementation a total of 50 questionnaires were distributed. Out of a total, 38 questionnaires were distributed to CORE banking implementation project team and the remaining 12 Technical team at commercial Bank of Ethiopia contact center. There response 47 (94%) questionnaires were obtained valid and used for analysis. To assess critical success factors of Core Banking implementation project at CBE.

**Table 4.1:RateofResponses by Respondents**

Questioners	CORE banking project implementation Team		Technical team at Contact center		Total	
	Respondents	Valid percentage	Respondents	Valid percentage	Num.	%
Returned	38	100%	12	100%	50	100%
Not-returned	0	0%	0	0%	0	0%
Total	38	100%	12	100%	227	100%

**Table 4.2 General Profile of respondents**

**Gender**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	40	80.0	80.0	80.0
	Female	10	20.0	20.0	100.0
	Total	50	100.0	100.0	
<b>Age</b>					
Valid	20-25 Years	3	6.0	6.0	6.0
	26-35 Years	26	52.0	52.0	58.0
	36 or above Years	21	42.0	42.0	100.0
	Total	50	100.0	100.0	

**Educational Background**

	Frequency	Percent	Valid Percent	Cumulative Percent	
Valid	Undergraduate degree(Bachelor's degree)	26	52.0	52.0	52.0
	Graduate degree(Master's degree) or above	24	48.0	48.0	100.0
	<b>Total</b>	<b>50</b>	<b>100.0</b>	<b>100.0</b>	

**Role in the implementation****Respondents role in CORE banking implementation**

Valid	Business Team	6	12.0	12.0	12.0
	Technical Team	42	84.0	84.0	96.0
	Data Migration Team	4.0	4.0	100.0	
	<b>Total</b>	<b>50</b>	<b>100.0</b>	<b>100.0</b>	

**Your Experience in the banking industry**

	Frequency	Percent	Valid Percent	Cumulative Percent	
Valid	Less than 5 years	14	28.0	28.0	28.0
	5 to 10 Years	14	28.0	28.0	56.0
	10 to 15 years	9	18.0	18.0	74.0
	Above 15 years	13	26.0	26.0	100.0
	<b>Total</b>	<b>50</b>	<b>100.0</b>	<b>100.0</b>	

**Number of instances respondent involved**

Valid	None	1	2.0	2.0	2.0
	Once	34	68.0	68.0	70.0
	Twice	5	10.0	10.0	80.0
	More than twice	10	20.0	20.0	100.0
	<b>Total</b>	<b>50</b>	<b>100.0</b>	<b>100.0</b>	

**Table4.3: Factors in Measuring Success of a CBS Implementation Project**

<b>Factors measuring success of CBS Descriptive Statistics</b>					
	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Deviation</b>
<b>Improved Efficiency</b>	<b>50</b>	<b>0</b>	<b>1</b>	<b>.86</b>	<b>.351</b>
<b>Reduced complexity</b>	<b>50</b>	<b>0</b>	<b>1</b>	<b>.60</b>	<b>.495</b>
<b>End-user satisfaction</b>	<b>50</b>	<b>0</b>	<b>1</b>	<b>.56</b>	<b>.501</b>
<b>Low cost of ownership</b>	<b>50</b>	<b>0</b>	<b>1</b>	<b>.10</b>	<b>.303</b>
<b>Timely implementation</b>	<b>50</b>	<b>0</b>	<b>1</b>	<b>.28</b>	<b>.454</b>
<b>Implement within budget</b>	<b>50</b>	<b>0</b>	<b>1</b>	<b>.16</b>	<b>.370</b>
<b>Valid N (listwise)</b>	<b>50</b>				

From The above factors measuring success of CBS implementation project we can easily find that improved efficiency as a greater success factor with mean .86 and standard deviation of .551 even the rest failed to be success measuring factors especially those implementation within budget scored mean .16 and standard deviation .370 then project timely implementation also with mean of .28 and standard deviation of .454 so that improved efficiency nominated as factors measuring success of CBS,

**Table 4.4 Factors influence Final Decision on CBS Descriptive Statistics**

	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Deviation</b>
<b>end user</b>	<b>50</b>	<b>0</b>	<b>1</b>	<b>.28</b>	<b>.454</b>
<b>Consultants</b>	<b>50</b>	<b>0</b>	<b>1</b>	<b>.26</b>	<b>.443</b>
<b>Corporate Management</b>	<b>50</b>	<b>0</b>	<b>1</b>	<b>.68</b>	<b>.471</b>
<b>IT Department</b>	<b>50</b>	<b>0</b>	<b>1</b>	<b>.48</b>	<b>.505</b>
<b>Specific individuals</b>	<b>50</b>	<b>0</b>	<b>1</b>	<b>.04</b>	<b>.198</b>
<b>Vendors</b>	<b>50</b>	<b>0</b>	<b>1</b>	<b>.24</b>	<b>.431</b>

As can be easily revealed on the table corporate management as a successful factor of influencing final decision making of the rest with mean value .68 and standard deviation of .471 all the rest standard deviated from central tendency so that failed to be as success full factor for CBS implementation

## 4.2 Descriptive Analysis of Data Collected

### 4.2.1 Analysis of Success factors Related to Top Management Support

There were 5 questions related to Top Management Support. Part II first five Questions, 1-5 were designed to ascertain the response of the population on success factors, which were designed to identify the level of top management support required during the Core Banking implementation processes. As indicated in the below mentioned table Top Management support is crucial for successful timely completion of the implementation process is identified as critical success factor with mean of 4.44 and standard deviation of .812 whereas, Top management unreserved support on implementation process highly fruitful to the outcome of the project. With mean 4.180 and standard deviation of 1.082 unreserved support on implementation, Top Management guidance is crucially to successful completion of the project implementation process with mean 4.30 and standard deviation of .863, Top management actively engagement in recruiting project team members and Top management support initiative of IT System project fail to identified as critical success factors.

**Table 4.5 Top Management support**

	Descriptive Statistics				
	N	Minimum	Maximum	Mean	Std. Deviation
Top management unreserved support on implementation process highly fruitful to the outcome of the project.	50	1	5	4.18	1.082

Top Management support is crucial for successful timely completion of the implementation process	50	1	5	4.44	.812
Top Management guidance is crucial to successful completion of the project implementation process	50	1	5	4.30	.863
Top management actively engages in recruiting project team members	50	1	5	3.46	1.147
Top management support initiative of IT System project	50	1	5	3.74	1.006
Valid N (listwise)	50				

#### 4.2.2 Analysis of Success factors Related to Vendor Commitment

Vendor support and commitment is one of the most important factors to complete implementation of CBS projects successfully. Question no. 6 and 11 of section II of the questionnaire designed to identify the critical success factors related to vendor support and commitment.

Vendor support and commitment is a key for successful implementation selected as critical successful factors with mean 4.28 and standard deviation of .784 and Vendor train the trainers and trainers train the end users to be successful factor for CBS implementation with mean value 3.76 and standard deviation of .969.

**Table 4.6 Analysis of success factor related to vendor support and commitment**

**Descriptive Statistics**

	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Deviation</b>
<b>Vendor support and commitment is a key for successful implementation</b>	<b>50</b>	<b>1</b>	<b>5</b>	<b>4.28</b>	<b>.784</b>
<b>Vendor train the trainers and trainers train the end</b>	<b>49</b>	<b>1</b>	<b>5</b>	<b>3.76</b>	<b>.969</b>
<b>Valid N (listwise)</b>	<b>49</b>				

Source: Survey result November 2022

Based Somers and Nelson, (2001) and Akkermans and Helden (2002) in their research have identified vendor support and commitment as a CSF for the success of ERP projects. End user training in knowledge transfer by vendor to these selective trainers who in turn would train the end users. Transferring knowledge to the end user is critical in implementing CBS projects successfully.

**4.2.3 Analysis of Success factors Related to USER Involvement and support**

Questions 7, 8, 9, 10 and 12 of section II were designed to identify the critical success factors related to the analysis of users involvement as a success factors during the CBS implementation process. User Training is important factor for implementation success is identified as critical success factor with the mean value of 4.44 and standard deviation of .907 and Dedicated users are mandatory to achieve successful implementation of a core banking system, Some training handled internally by Bank staff will follows by mean 4.22, 3.960 and standard deviation of .996, .791 respectively.

**Table 4.7 users involvement Descriptive Statistics**

	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Deviation</b>
Dedicated users are mandatory to achieve successful implementation of a core banking system	<b>50</b>	<b>1</b>	<b>5</b>	<b>4.22</b>	<b>.996</b>
User Training is important factor for implementation success	<b>50</b>	<b>1</b>	<b>5</b>	<b>4.44</b>	<b>.907</b>
End users actively involved or participated adequately in the system project implementation	<b>50</b>	<b>1</b>	<b>5</b>	<b>3.64</b>	<b>1.156</b>
Representative users from different processes and sub-processes were participated in the system project implementation	<b>50</b>	<b>1</b>	<b>5</b>	<b>3.72</b>	<b>.927</b>
Some training handled internally by Bank staff.	<b>50</b>	<b>1</b>	<b>5</b>	<b>3.96</b>	<b>.781</b>
Valid N (listwise)	<b>50</b>				

#### 4.2.4 Analysis of Success factors Related to Risk management

Questions 13, 14, 15 and 16 of section II were designed to identify the critical success factors related to the analysis of risk during the CBS implementation process. Both Proper analysis of risk on implementing Core Banking Solution is a critical success factor and Having risk management plan is important in implementing successful Core Banking Solution is identified as critical success factor with the mean value of 4.24 and standard deviation of .870 .. The

problem occurred during implementation most of the business and technical teams resigned because the market needs their skill. Schultz, Slevin and Pinto (1987) clearly identified analysis of risk for successful implementation of the project.

**Table 4.8 Risk analysis and management**

<b>Descriptive Statistics</b>					
	N	Minimum	Maximum	Mean	Std. Deviation
Risks were identified at the outset (beginning) of the project	<b>50</b>	<b>1</b>	<b>5</b>	<b>3.44</b>	<b>.951</b>
Risk management related activities were done from an organization perspective	<b>50</b>	<b>1</b>	<b>5</b>	<b>3.66</b>	<b>.895</b>
Proper analysis of risk on implementing CoreBankingSolution is a critical success factor	<b>50</b>	<b>1</b>	<b>5</b>	<b>4.24</b>	<b>.870</b>
Having risk management plan is important in implementing successful Core Banking Solution.	<b>50</b>	<b>1</b>	<b>5</b>	<b>4.24</b>	<b>.870</b>
Valid N (listwise)	<b>50</b>				

#### 4.2.5 Analysis of Success factors Related to clear organizational Goals

Questions 17, 18, and 19 of section II were designed to identify the critical success factors related to the analysis of Organizational goal and objectives. The proper requirements preparation will guide the institution to select the best suited software solution, capable of meeting the business requirements and goal is on implementing Core Banking Solution is a critical success factor with the mean value of 4.40 and standard deviation of .72.

So the rest Clear Organizational goals should always be defined in place before considering change of system and Clear Organizational goals should always be defined in Place before considering a change of system fail to be critical successful factor.

**Table 4.9 Analysis related to clear organizational Goals**

**Descriptive Statistics**

	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Deviation</b>
Clear Organizational goals should always be defined in place before considering change of system.	<b>50</b>	<b>1</b>	<b>5</b>	<b>4.36</b>	<b>.921</b>
The proper requirements preparation will guide the institution to select the best suited software solution, capable of meeting the business requirements and goal.	<b>50</b>	<b>1</b>	<b>5</b>	<b>4.40</b>	<b>.728</b>
Clear Organizational goals should always be defined in Place before considering a change of system.	<b>50</b>	<b>1</b>	<b>5</b>	<b>4.42</b>	<b>.883</b>
Valid N (listwise)	<b>50</b>				

**4.8 Major Findings**

In this section to do discussion based on results drawn from the data analysis .Discussion involves CORE banking implementation process success measurement criteria and critical success factors identified in previous section. As per the survey result let me summarize

findings as follows.

**Table 4.10 Major findings**

<b>SN</b>	<b>Cases to see of Criticality</b>	<b>Is it critical successful factor or not ( Yes/No)</b>	<b>IS it selected YES/NO</b>
<b>1</b>	<b>Improved Efficiency</b>	<b>Yes</b>	<b>Yes</b>
2	Reduced complexity	No	No
3	End-user satisfaction	No	No
4	Low cost of ownership	No	No
5	Timely implementation	No	No
6	Implement within budget	No	No
7	end user	No	No
8	Consultants	No	No
<b>9</b>	<b>Corporate Management</b>	<b>Yes</b>	<b>Yes</b>
10	IT Department	No	No
11	Specific individuals	No	No
12	Vendors	No	No
<b>13</b>	<b>Analysis of Success factors Related to Top Management Support</b>	<b>Yes</b>	<b>Yes</b>
<b>14</b>	<b>Analysis of Success factors Related to Vendor Commitment</b>	<b>Yes</b>	<b>Yes</b>
<b>15</b>	<b>Analysis of Success factors Related to USERS</b>	<b>Yes</b>	<b>Yes</b>
<b>16</b>	<b>Analysis of Success factors Related to Risk management</b>	<b>Yes</b>	<b>Yes</b>

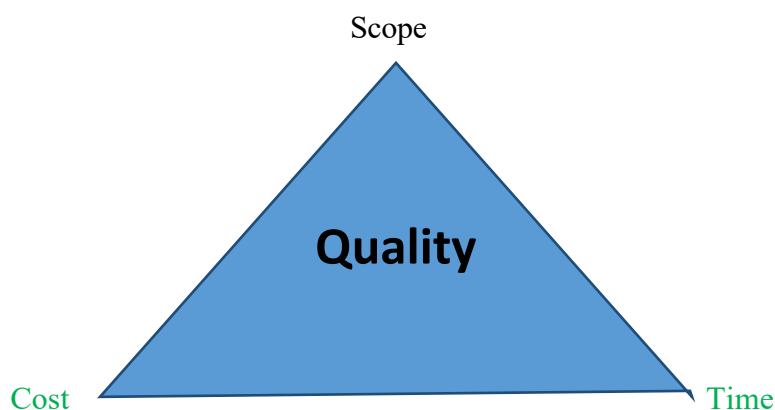
17	Analysis of Success factors Related to clear organizational Goals	Yes	Yes
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#### 4.6.1.1 Evaluation of Project Success Criteria

As per the literature reviews since projects are temporary in nature, the success of the projects should be measured in terms of completing the project within the constraint of scope, time, cost, quality, resources, and risk as approved between the project managers and senior management.

Project Success criteria are defined by Muller & Turner (2007) as variables that measure project success. Project success measurement is the result of clearly identifying goals and objectives at the 'project formulation' phase. When banks align project implementation with their goals, the success rate of the project highly increases. Therefore, banks should have project success measurement criteria defined (Seife & Mesfin, 2015).

The classic view of project management defines three main criteria of project success – time, cost and scope. These criteria well known as The “Iron Triangle” cover a particular part of the project objective missing to take into consideration the organizational objectives.



Since projects have an organizational purpose the criteria of project success should consider their fulfillment (Ivanov, 2012). Projects are said to be successful if the iron triangle criteria are met: delivered on time, within budget and meeting the predetermined quality measures (Ivanov, 2012).

#### **4.6.1.2 Top Management Support as a Project Success Factor**

It is necessary for top managers to get behind the project and make clear to all involved in the project that they anticipate a successful completion of the project (Pinto & Slevin, 1987).

#### **4.6.1.2 Vendor Involvement as a Project Success Factor**

Most of bank projects are handled by external vendors who sell system to the bank (Stephen & Patricia, 2017). Vendor's involvement in implementation becomes critical for project to be delivered within the stipulated time lines.

#### **4.6.1.3 User Involvement as a Project Success Factor**

User involvement is predicted to increase user satisfaction and acceptance by: developing realistic expectations about system capabilities, providing an arena for bargaining and conflict resolution about design issues, leading to system ownership by users, decreasing user resistance to change and committing users to the system (Casanovas, Esteves, & Pastor, 2004).

#### **2.2.1.4 Risk management as a project success factor**

A project is a unique thing which is totally depends on time, cost and customer satisfaction Kahneman and Tversky (as cited in Otieno, 2013). Proactive risk management is a key to success. According to Schwable (as cited in Otieno, 2013), risk identification process begins by reviewing the project documentation, most recent and historical information.

#### **4.6.1.6. Clear Goals and Objectives as a Project Success Factor**

Goals and objectives of the project should be clearly understood both by the project team and by the organization (Pinto & Slevin, 1987). One of the most important project management critical success factors is clear and realistic objective (Nwakanma et al. 2013). Clearly establishing goals, objectives, outcomes and benefits expected from the project avoids accepting unrealistic deadline from vendors and purchasing software that doesn't meet the bank's requirements. If a bank clearly identifies which functionalities are to be performed by a core banking system, it will not experience scope creep. Hence, one of the causes for project time and budget run will be avoided (Seife & Mesfin, 2015).

# CHAPTER FIVE

## 5.1 Summary, Conclusion and Recommendations

### 5.1.1 Summary of the major findings

Many conclusions related to the outcome of the research were drawn based on the research outcome. Existence of the issues raised under problem statement has been established in this chapter. After finding out critical success factors of the questions completion of project with in original cost, deliver time and level of meeting desired benefit or quality can be predicted and identified based on Top management support, Vendors support, dedicated users and involvement, risk identification managements philosophy and clear organizational goal and objectives toward the project properly identified.

In this chapter I am going to finalize the research study by summarizing key findings. The study conducted questioners with the commercial bank of Ethiopia core banking solution project implementation project manager, team leaders, technical staffs and business staffs. Besides, survey questionnaire distributed to all Core banking Solution implementation team members above. This research aimed at identifying core banking system implementation project critical success factors and success measurement criteria of Commercial Bank of Ethiopia.

### 5.1.2 The major findings of the study were:

- The study identified, 17 cases to see Critical Success Factors in relation to CORE banking implementation projects.

Out of 13 cases below listed 7 critical success factors under consideration

- Top Management Support
- vendors support and commitment
- Users involvement
- Risk Management
- Clear organizational goals and objectives

- Corporate Management and
- Improved efficiency

The study critically evaluated these selected CSFs and their impacts on the project. Further analysis has been made on the success factors, which have not been selected as critical and their impact on the project.

- In addition, success factors, success measurement criteria are identified in this study were improved efficiency, End user satisfaction and reduced complexity of operation.

## 5.2 Conclusion

The research aimed at identifying core banking system implementation project critical success factors and success measurement criteria of Commercial Bank of Ethiopia. To find answers to these questions, a literature review was conducted together with administering survey questionnaire.

This project implementation attributed to many factors. In this study, these factors are assessed by categorizing them under major factors. Moreover, among many, 7 most influential determinants classified under projects success were identified among 17 critical success factors. Our factors as important for the success of CBS projects, but have not been identified as CSFs by the respondents include: proper analysis of risk, interference of top management, prioritizing delivery of business requirements based on project timing, adopting the proposed system with minimum customization. On the other hand, the factors identified 7 critical factors related to the CBS implementation project of Commercial Bank of Ethiopia covering the key perceptions and aspects of attributes.

Generally, it can be concluded that literature reviews in the field of project management

generate lists of critical success determinants for project success. Therefore, investigating determinants of project implementation success is a fruitful area to achieve on a much larger scale. It is well-known that not only what determinants are important for achieving an outstanding project outcome, but also how they are interrelated and influence the project implementation success are crucial.

Finally, conclusion Commercial Bank of Ethiopia on the year 2012 migration done to the central data base of CORE banking data base by investing nearly 6 million US dollars on May, 2012. (Capital, 2012) and have managed to interface with the Ethiopian Automated Transfer System (EATS) and modernize the banking system to international standards. Although, the original schedule for completion of the project was June 2010, CBE indicated that the launch would be delayed until the end of December, 2011 and further delaying for another five months and become operational in May, 2012 (Capital, 2012).

From these I would like to conclude the project not completed as per the concept of 'Iron-Triangle' but as per the survey by any means and cost with those critical 7 successful factors the CBE become operational effective if not efficient.

## 5.3 Recommendations

The following recommendations are made in order to enhance the effectiveness of the CBS Selection and implementation processes in Commercial Bank of Ethiopia.

### 5.3.1 Recommendations for CBS Selection

#### 5.3.1.1 Having Clear Organizational Objectives

Organizational strategy forms the basis for the IT infrastructure and the functional capability requirement for a CBS. Therefore, having clear organizational objectives is of paramount importance. It will enable the bank to have an IT strategy aligned with the business strategy.

- a. Clear identification of broad organizational objectives, goals, and business models
- b. Identified organizational objectives and goals shall be converted in to operational business goals and targets, which could be useful in developing the IT Strategy.
- c. IT strategy shall be developed and documented based on the operationalized business goals.

### 5.3.1.2 Vendor Selection

Selecting an appropriate CBS, which can cater to the requirements of the bank, is a decisive factor in any CBS project. Capability of the vendor of the selected CBS in implementing the system is equally important to make the implementation a success. Following guidelines will assist the banks in selecting the appropriate vendor for a CBS.

- a. Primary consideration in selecting the CBS shall be given to the closeness of the proposed system to the requirements.
- b. Once the vendors are shortlisted based on the above, it is advisable to inform the vendor to perform a Proof of Concept (POC).
- c. Prior to finalizing the system, the bank shall do a background check of the vendor's capabilities in implementing systems in banks of similar size.
- d. Bank shall be cautious in bargaining pricing and the terms and conditions of the contracts.
- e. Bank shall adopt a mechanism to evaluate CBS proposals based on the total project cost and on the cost of ownership instead of only looking at the cost of the CBS.

- f. A decision to purchase a specific CBS shall be arrived only after considering all of the above factors.

### **5.3.1.3 Recommendations for CBS Implementation Vendor Relationship Management**

Strained relationship with the vendor (including vendor's project manager and the implementation team) could hamper the implementation process.

- a. Banks shall maintain a cordial relationship with the selected vendor throughout the project to ensure that the project is completed as expected.
- b. Banks shall ensure that the vendor sends an adequately experienced project manager and an implementation team.
- c. Banks (including their Project Managers and the implementation team members) shall be adequately flexible during the implementation and shall be practical and reasonable in assessing the situations.
- d. When required, apply appropriate amount of pressure on the vendor is recommended.
- e. Banks shall refrain from making decisions unilaterally on matters that could have an adverse effect on the vendor.
- f. Banks shall maintain communication channels open with the vendor at different levels and shall agree on an escalation mechanism of issues.
- g. Joint review meetings between the Bank and the vendor shall be held at regular intervals and all issues shall be resolved without any delays and without leading to strained relationships.

- h. Vendor support is extremely important within the first few days after going-live as that is the period possibly many issues may crop-up related to the system.

### 5.3.2 Recommendations Common for both CBS Selection and Implementation

#### 5.3.2.1 Top Management Support and Guidance

Top management support and guidance throughout the CBS project is a mandatory ingredient for the success of the project. The following guidelines will assist banks to have effective Top Management support for the projects.

- a. CBS Implementation projects shall be considered as business projects and not as IT projects, as the project is an outcome of business decisions.
- b. Due to the size of the investment and the business risk involved in CBS projects, CEO of the bank shall be the project sponsor.
- c. Top management should guide the selection process by clearly defining and spelling out the future business strategy of the bank and providing guidelines for developing business requirements and selecting the matching CBS.
- d. The top management shall release the best of their resources to the project as and when necessary and resolve issues related to the project in a timely and effective manner.
- e. A project steering committee headed by the CEO and other senior managers, including the head of IT may be set-up to provide directions, guidance, and necessary support for the project.
- f. Top management shall give their full corporation to the project manager and the project managers shall be made adequately independent to make decisions

related to the project within his scope, but shall make him/her responsible and accountable for such decisions and their implications on the project and the bank.

- g. The management shall devise appropriate reward schemes to encourage the active participation and obtain support of the bank staff for the project.

## REFERENCES

User Involvement and Participation in ERP Implementation Projects. Commercial Bank of

Ethiopia.(2017). Performance Report. Addis Ababa.

Negalign,M.,&Lisanwork,A.(2016).TheDevelopmentofCoreBanking Systemin Ethiopia:Challengesand Prospects(CaseStudyonEthiopianCommercialBanks). *Research Journal of FinanceandAccounting*, 7 (19), 32-41.

Musau,H.(2015).FactorsInfluencingImplementationofCoreBanking SystemProjectsby CommercialBanksinKenya:The CaseofNicBankKenyaLimited.*AResearchProjectReport fortheAwardoftheDegree ofMasterofProjectPlanningandManagement*.Kenya:The Universityof Nairobi.

Buys, F. (2015). *Five Causes of Project Delay and Cost Overrun, and their Mitigation Measures*. RetrievedonDecember10, 2018fromQSQuotes: <https://www.linkedin.com/pulse/five-causes-project-delay-cost-overrun-mitigation-measures->

Capital. (2012). *CapitalEthiopia Newspaper*. Retrieved December02, 2017, from News: <http://capitalethiopia.com/2012/01/09/cbes-core-banking-project-to-become-operational/>

Casanovas,J.,Pastor,J.,&Esteves,J.(2004).AGoals/Questions/MetricsPlanforMonitoring

Davis, K. (2014). Different Stakeholder Groups and their perceptions of Project Success. *InternationalJournal of Project Management*1(32), 189–201.

Dvir,D.,Raz,T.,&Shenhar,A.(2003).AnEmpiricalAnalysisoftheRelationshipBetween ProjectPlanningandProjectSuccess.*InternationalJournalofProjectManagement*,21(2),89-95.

FujitsuTechnology Solutions.(2009).NationalBankofAbuDhabiinvestsinstate-of-the-artIT. *Core banking systemupgradedwith technology from Fujitsu*.

George,D.,&Mallery,P.(2003). SPSSfor Windowsstep bystep:Asimpleguideandreference 11.0 update (4<sup>th</sup>Ed.). Boston:Allyn&Bacon

Gujarati, D. (2004), *Basic Econometric*. 4<sup>th</sup>edition. USA: McGrawHillIncorporation.

Harrin, E. (2015). *15 Skills Project Managers Will Need in 2015*. Retrieved December 04, 2017 from Project Management Perspective Blog:  
<http://www.esiintl.co.uk/blogs/pmoperspectives/index.php/15-skills-project-managers-will-need-2015/>

## **Questioners**

**Addis Ababa  
University School of  
Commerce**

**School of Graduate Studies**

**Department of Project Management (MBA)**

**Dear Respondent**

,

This survey is done purely for academic purposes. All information provided herein will be treated in the strictest confidence. Neither you nor your organization will be identified in any publication resulting from this research project. The main aim of this questionnaire is to gather and analyze relevant, accurate, and timely information that will help to assess critical success factors in implementation of Core Banking Solution at Commercial Bank of Ethiopia. This study is undertaken as a partial requirement for the completion of Masters of Business Administration in Project Management.

You are kindly requested to respond to the questions with utmost good faith, freely and to the best of your knowledge. There is no need to write your name on the Questionnaires.

**Thank you in advance for your time and kind response**

**Werkineh Zenbaba**

**Mail** [Werkinehzenbaba@cbe.com.et](mailto:Werkinehzenbaba@cbe.com.et)

**+251920959828**

This questionnaire is a means to collect data on assessment of critical success factors in Core Banking Solution implementation at commercial bank of Ethiopia.

Please put a “√” mark to all your responses in the box provided beside each statement.

### **I. General Profile**

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**1. Gender** Male

Female

**2. Age**

20-25years  26-35 years  36 or above years

**3. Education background**

High school diploma or below  Junior collegediploma   
Undergraduatedegree(Bachelor’s degree)   
Graduate degree (Master’s Degree) or above

**4. Which of the best describes your role in the Core Banking System Implementation?/ At CBE?**

Team Leader Business Team  Technical Team   
Data migration Team  Project Director  Consultant

Other-----

**5. Years of experience in Banking Industry**

Less than 5 years  5–10 years  10–15 years  over 15 years

**6. On what key factors do you define Core banking system implementation Success? (Please rank if more than one selected)**

Improved efficiency  Reduced Complexity of operation   
End user Satisfaction  Low cost of ownership   
Timely implementation  Implement within budget

Other(PleaseSpecify)-----

7. How many instances have you got involved in an area of core banking software selection?

None  Once  Twice  MorethanTwice

8. Are you aware of any in Ethiopia Commercial Banks where Core Banking System Implementation hasfailed?

Yes  No  if yes,howmanysuchfailures?

Comments:.....

9. In your opinion which of the following factor influence the final decision making?  
(Please rank if more than one selected)

End user  Consultants  Corporate Management   
IT department  Specific individuals  Vendor

If other Please specify\_\_\_\_\_

**Section II-**

Questionnaire part 2covers criticalsuccessfactorsinCore banking Solution implementationproject atcommercial Bank of Ethiopia.

So please indicate how muchyou agreeordisagreewitheachofthefollowingstatements by putting the right sign (√) thatbest representsyour opinion.

1 indicates strongly disagree (SDA),  
 2 indicates disagree (DA),  
 3 indicate neutral (N),  
 4 indicates agree (A) and  
 5 indicates strongly agree (SA).

<b>Sn</b>		<b>Strongly y disagree</b> <b>1(SDA)</b>	<b>Disagree</b> <b>2(DA)</b>	<b>Neither agree not disagreed</b> <b>3(N)</b>	<b>Agree</b> <b>4(A)</b>	<b>Strongly Agree</b> <b>5(SA)</b>
1	Top management unreserved support on implementation process highly fruitful to the outcome of the project.					
2	Top Management support is crucial for successful timely completion of the implementation process					
3	Top Management guidance is crucial to successful completion of the project implementation process					
4	Top management actively engages in recruiting project team members					
5	Top management support initiative of IT System project					
6	Vendor support and commitment is a key for successful implementation					

7	Dedicated users are mandatory to achieve successful implementation of a core banking system					
8	User Training is important factor for implementation success					
9	End users actively involved or participated adequately in the system project implementation					
10	Representative users from different processes and sub-processes were participated in the system project implementation					
11	Vendor train the trainers and trainers train the end					
12	Some training handled internally by Bank staff.					

13	Risks were identified at the outset (beginning) of the project					
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14	Risk management related activities were done from an organization perspective					
15	Proper analysis of risk on implementing CoreBanking Solution is a critical success factor					
16	Having risk management plan is important in implementing successful CoreBanking Solution.					
17	Clear Organizational goals should always be defined in place before considering a change of system.					
18	The proper requirements preparation will guide the institution to select the best suited software solution, capable of meeting the business requirements and goal.					
19	Clear Organizational goals should always be defined in Place before considering a change of system.					

20	Anyother factors relatedto banking System Implementation?  1. 2. 3. 4. 5.					
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Comments:

1.....

2.....

3.....