INFLUENCE OF STRATEGIC SUCCESS FACTORS ON IMPLEMENTATION OF INFORMATION COMMUNICATION TECHNOLOGY PROJECTS IN KENYAN COMMERCIAL BANKS

BY

ELIJAH WANAMBOE WEKESA

A RESEARCH PROJECT REPORT SUBMITTED IN PARTIAL FULFILLMENT OF THE AWARD OF THE DEGREE OF MASTER OF ARTS IN PROJECT PLANNING AND MANAGEMENT OF THE UNIVERSITY OF NAIROBI

DECLARATION

This project is my original work and university.	has not been presented for a degree in any	other
Elijah Wanamboe Wekesa L50/62254/2010	Date	-
This research project has been submitted Supervisor.	ed for examination with my approval as Univ	versity
Prof. Harriet Kidombo	Date	
School of Continuing and Distance Edu	ucation,	
University of Nairobi		

DEDICATION

This work is dedicated to my late aunt, Florence Nabwala Lukosi, my wife Gertrude and our children Terry, Jarden, Darian and Aurther.

ACKNOWLEDGEMENT

I am grateful for the University of Nairobi administration for giving me the chance to learn in this great insitution. I also would like to thank all the faculty staff in my department who have been always there to help. My deepest appreciation goes to my supervisor Prof. Harriet Kidombo for her guidance, great contribution and support offered in the course of this project report writing without her guidance and persistent help this project report would not have been successfully completed. I would like to thank my loving family and friends who have shown their support and committment towards creating an ideal learning environment,I hereby acknowledge their valued contribution. My special thank you goes to the Almighty God for having given me the strength to persevere all the obstacles that came on my way.

ABSTRACT

Increasingly these days institutions like banks are project based, meaning that the work they do apart from the normal banking services is split into programs of projects designed to deliver their strategies. The purpose of this study was to assess the influence of strategic success factors on implementation of ICT projects in Kenyan commercial banks. This study was guided by the following objectives; to assess the influence of the project mission on implementation of ICT; to establish the influence of top management support on effective ICT project implementation; to determine the influence of project schedule on ICT project implementation and to establish the influence of user involvement on ICT project implementation. The findings of this study would also be of importance to the ICT project management policy makers, would also contribute to the body of knowledge on ICT project management and the results of the study would form a base upon which future research. The study assumed that the respondents are knowledgeable on ICT project implementation and assumed that the respondents filled out the questionnaires correctly. The researcher adopted the descriptive approach to research design. The study was in form of a census survey as all the commercial banks in Kenya were studied. The target population was 86 ICT project team members from different commercial banks. Data was then analyzed using excel and Statistical Program for Social Scientist version 22 (SPSS) as the basic computer method for data analysis. Descriptive statistics was used mainly to summarize the data. Measures of central tendency including mean, standard deviation and percentages were used for quantitative variables. Tables were used as appropriate to present the data collected for ease of understanding and analysis. The study found out that bank's ICT project executive team was clear on their organizational objectives and expected benefits to be derived from successful implementation of the project, organizational objectives were documented and signed off by the Executive Team before any ICT project commenced, bank's top management team was supportive to project managers and teams and were readily available for decision making. The study established that commercial banks undertakes baselines for each ICT project undertaken, there was proper well structure and documentation in the ICT projects in the banks and ICT project product end users were always involved at all stages of the ICT projects in the Banks, users' expectations were managed during ICT project implementation in the banks. The study concludes that top management support needs to be focused on the initiation and realization of success of ICT projects implementation, for any success in ICT project implementation, effective project management which includes; planning, budgetary, monitoring and evaluation are critical and helps in achieving project goals and the involvement of user participation in early stages of system development was of great importance. The study recommends that top management at Commercial Bank in Kenya should engage in consistent communication with established project teams so as to identify their needs and progress in achieving successful implementation of ICT projects, there is a need for proper leadership and management in all areas to in order to support the project throughout the project cycle and management should engage users of the ICT systems at all stages of project implementation; from the designing and planning stage to the implementation stage.

TABLE OF CONTENT

DECLARATION ii
DEDICATIONiii
ACKNOWLEDGEMENTiv
ABSTRACTv
LIST OF FIGURESix
LIST OF TABLESx
ABBREVIATIONS AND ACRONYMS xi
CHAPTER ONE1
INTRODUCTION1
1.1 Background of the Study1
1.2 Statement of the Problem
1.3 Purpose of the Study4
1.4 Objectives of the Study4
1.5 Research Questions
1.6 Significance of the Study5
1.7 Limitations of the Study5
1.8 Delimitation of the Study6
1.9 Assumptions of the Study6
1.10 Definitions of Significant Terms6
1.12 Organization of the Study
CHAPTER TWO9
LITERATURE REVIEW9
2.1 Introduction9
2.2 Project implementation of ICT Projects9
2.3 Theoretical Framework
2.4 Empirical Review
2.5 Strategic Success Factors and ICT Project Implementation21
vi

2.5 Conceptual Framework	23
2.6 Research Gap	25
2.7 Summary of Reviewed Literature and Research Gaps	25
CHAPTER THREE	27
RESEARCH METHODOLOGY	
3.1 Introduction.	27
3.2 Research Design	27
3.3 Target Population	
3.4 Sample Size	28
3.5 Data Collection Instrument	28
3.6 Data Collection Procedures	30
3.7 Data Analysis Techniques	30
3.8 Ethical Considerations	31
3.9 Operationalization and measurement of Variables	32
CHAPTER FOUR	34
DATA ANALYSIS, PRESENTATION AND INTERPRETATION	34
4.1 Introduction	34
4.2 General Information	34
4.3 Influence of the Project Mission on Implementation of ICT Projects	37
4.4 Influence of Top Management Support on Effective ICT Project Implement	ntation 39
4.5 Influence of Project Planning on ICT Project Implementation	41
4.6 Influence of User Involvement on ICT Project Implementation	42
4.7 Success of ICT Projects Implementation	43
1 & Pagraggian Analysis	11

CHAPTER FIVE	46
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	46
5.1 Introduction	46
5.2 Summary of Findings	46
5.3 Conclusion	47
5.4 Recommendations	48
5.5 Suggestions for Further Research	49
REFERENCES	50
APPENDICES	55
Appendix I: Letter of Transmittal	55
Appendix II: Questionnaire	56
Appendix III: List of Commercial Banks in Kenya	62
Appendix IV: Research Permit	63

LIST OF FIGURES

Figure 1: Conceptual Framework		24
--------------------------------	--	----

LIST OF TABLES

Table 3.1: Reliability Analysis
Table 3.2: Operational Definition of Variables
Table 4.1: Response Rate
Table 4.2: Gender Distribution
Table 4.3: Duration Working in the Banking Industry
Table 4.4: Position Held in the Bank
Table 4.5: Number of Projects ICT Project Team Members has been involved in36
Table 4.6: Capacity in which they Participate in the Projects
Table 4.7: Influence of the Project Mission on Implementation of ICT Projects38
Table 4.8: Stages of the ICT Project
Table 4.9: Influence of Top Management Support on Effective ICT Project Implementation
Table 4.10: Influence of Project Planning on ICT Project Implementation41
Table 4.11: Influence of User Involvement on ICT Project Implementation42
Table 4.12: Statements that Best Describes the Success of ICT Projects
Table 4.13: Success of ICT Projects Implementation
Table 4.14: Regression Model
Table 4.15: ANOVA
Table 4.16: Coefficients

ABBREVIATIONS AND ACRONYMS

CBK: Central Bank of Kenya

GoK: Government of Kenya

ICT: Information Communication Technology

NIC: National Industrial Credit Bank

SPSS: Statistical Program for Social Scientist

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

In their 2009 publication, the Standish Group International (SGI) as United States of America (USA) based Information and Communication Technology (ICT) leader in projects relating to ICT in terms of value performance measurement highlighted the global trends in ICT project performance. The group reported that on 32% of all ICT implemented in the USA were successful, while 44% faced challenges ranging from over budget, late and/or with less features and functions than the required ones; and 24% failed. In addition to the alarming figures above, the group noted that ICT projects with estimated costs of over USD 10 Million only had a 2% of succeeding. Globally today, the business environment is very dynamic and is undergoing rapid changes as a result of technological innovations, increased awareness and varying demands from customers. Business organizations, more so the banking sector operates in a competitive industry characterized by the ever changing conditions and the highly unpredictable economic, political and social climate. Increasingly these days institutions like banks are project based, meaning that the work they do apart from the normal banking services is split into programs of projects designed to deliver their strategies.

In its strategy dubbed Vision 2030 which is a long term development strategy aimed at making the country globally competitive and prosperous, Kenya as a country has outlined how technology and innovation are to be harnessed to spur technological and industrial transformation that will translate to a sustained economic growth Government of Kenya (GoK, 2008). Commercial Banks in Kenya have been on the fore front to adopt and implement new technologies in the banking industry with the aim of improving efficiency. Most of the commercial banks in Kenya have been spending millions of shillings on ICT projects with banks like NIC spending KES 740 Million on a new core banking system (T24) (National Industrial Credit Bank, 2015) and Barclays Bank Kenya spending over KES 1 billion on a core banking system called Flextube in the past two years (Barclays, 2015). These projects among many that commercial banks have

implemented have come with their fair share of challenges. A new bond trading system implemented by the Central Bank of Kenya in early 2012 for example, slowed down the activities at the Nairobi Stoke Exchange with trading declining by almost half in one week just after the system was hailed as successfully implemented. It is therefore critical that commercial banks in Kenya identify and define key strategic ICT project success factors that will enhance success of such projects to ensure they (projects) deliver on the agreed benefits and/or functionality without any negative effect on the overall strategy of the commercial banks in Kenya.

1.1.1 ICT Project Success Criteria Factors

Delone (2002) acknowledge the difficulty in defining ICT project success criteria and noted that different researchers do address different aspects of success criteria which makes comparison very difficult and making the prospects of a cumulative trend for ICT project success criteria elusive. The models for assessing ICT project success and way forward in general (Delone, 2002) and developing countries (Heeks, 2002) have been suggested as tools for detrmining the criteria of success in ICT projects. Slevin (1987) developed a ten-factor model for effective project implementation. The first three factors on the rank were classified as strategic factors, while the rest were considered tactical.

Project mission, top management support and project schedule/plan were clasified as strategic factors that influence effective project implementation. Project/organizational mission is the initial or conceptual clearly defined goals and general directions. Top management support is basically the willingness of the top management to provide the ncessary resources and authority/power for the project to succeed. Project schedule/plans implies a detailed specificion of the individual action steps for effective project implementation. Other authors like De-Wit (1988) have gone further to distiguish between project success and project management success. Therefore one can conclude that there are an umpteen number of factors that may have a bearing on the effective implementation of ICT projects in Kenyan commercial banks. They may differ from project to another, but for the purpose of this study we shall focus on the strategic factors as outlined by (Slevin, 1987).

1.1.2 Kenyan Commercial Banks

Kenya achieved independence from the British in December 1963. Under the British, most commercial banks in Kenya were British and/or Indian in origin and served the interests of the colonialists, who were mainly sttler farmers. The earliest banks recorded to have started operations in Kenya are Standard Bank of South Africa(1910) and National Bank of South Africa(1916). After indepence the banking landscape changed, Cooperative Bank was formed in 1965 and National Bank of Kenya in 1968. In 1971 the government of Kenya acquired a 40% interest in Grindlay's Bank, which later became Kenya Commercial Bank (Kenya Commercial Bank , 2008).

The banking sector has tremendously grown over the years, from nine commercial banks at the time of independence to 53 at the beginning of the year 2000. This has however declined to 43 largely due to mergers. On the other hand, there are seven non-bank financial institutions, four building societies, two mortigage finance companies, 48 independent foreign exchange bureaux and a number of other related banking institutions. Buy 2004, the top 13 commercial banks controlled about 80 per cent of the deposits and 73 percent of of the total assests. Total commercial bank deposits and assets in early 2005 stood at, respectively, Kshs 465.6 billion and 577.6 billion (Central Bank of Kenya, 2013). Having seen the role the commercial banks play the economy, its important to mention that ICT has become the engine block of every banking institution worldwide and Kenyan Commercial banks are not exempted in employing ICT to improve banking system efficiency. It is therefore prudent that ICT projects implemented by the Kenyan commercial banks succeed to make the banks commpetitive both locally and globally.

1.2 Statement of the Problem

ICT has revolutionized service delivery in the banking sector to improve customer satisfaction, hence increasing the competitive edge of any Commercial Bank that stays ahead with its ICT implementation strategy. Since banks implement their ICT strategy in form of projects it is prudent that factors that contribute to the success of such projects are identified and adopted.

The Standish Group in (Zalilani, 2007) reported that over half of mainly ICT projects cost 189% of their original estimates and yet scholars like (Pinto, 1986; Slevin, 1987; Clarke, 1999; and Baccarini, 1999) seem not to agree on the most critical success factors. It is the absence of agreement as to the key factors influencing the success of ICT projects, especially at the strategic/planning phase that has motivated the researcher to carry out this study which seeks to determine the influence of strategic success factors on the successful implementation of ICT projects in Kenyan commercial banks. Knowledge of the best practices and critical strategic success factors will improve the quality of ICT project implementation and consequently improved and efficient service delivery in both the Kenyan commercial banks and the economy at large.

1.3 Purpose of the Study

The purpose of this study was to assess the influence of strategic success factors on implementation of ICT projects in Kenyan commercial banks.

1.4 Objectives of the Study

This study sought to:

- 1. Assess the influence of the project mission on implementation of ICT projects in Commercial Banks in Kenya.
- 2. Establish the influence of top management support on ICT project implementation in Kenyan Commercial Banks.
- 3. Determine the influence of project schedule on ICT project implementation in Kenyan Commercial Banks.
- 4. Establish the influence of user involvement on ICT project implementation in Kenyan Commercial Banks.

1.5 Research Questions

The study was guided by the following research questions:

1. How does project mission influence implementation of ICT project in Commercial Banks in Kenya?

- 2. How does top management support influence effective ICT project implementation in Kenyan Commercial Banks?
- 3. In what ways does project planning influence ICT project implementation in Kenyan Commercial Banks?
- 4. How does user involvement on ICT project implementation in Kenyan Commercial Banks user involvement influence ICT project implementation in Kenyan Commercial Banks?

1.6 Significance of the Study

The main objective of this study was to investigate the influence that strategic (planning) success factors have on the implementation of ICT projects the Kenyan commercial banking sector. The findings would be of importance to both top management and ICT project implementers who will use the knowledge to better understand the determinants of an ICT project success in the context of commercial banking sector, especially during the planning phase.

The findings of this study would also be of importance to the ICT project management policy makers as the findings would enable them to develop policies that may enable commercial banks and other organization obtain greater benefit from implementation of new ICT projects in their organization.

This study would also contribute to the body of knowledge on ICT project management, critical success factors and shape future policies decisions at the planning phase within a developing country context. Lastly, the results of the study would form a base upon which future research on the subject matter would build on and/or take a leaf from.

1.7 Limitations of the Study

One of the limitations the researcher expects to encounter is the respondents being reluctant to give information fearing that the information sought is meant for other purposes other than academia. This is because the information needed may be sensitive and thus the respondents may fear that it might be used against them. The researcher

assured the respondents that the information given was used for research purpose only and their identity will be held confidential.

The researcher was also likely to be faced with the difficulty in accessing top level management of the organization owing to their busy schedule. The researcher sought to address this limitation by using emails and also leaving the questionnaires at the respondents' place of work to be collected after they are fully filled.

1.8 Delimitation of the Study

The study limited itself to assessing the influence of strategic success factors on implementation of ICT projects in Kenyan commercial banks. The target population was 43 commercial banks in Kenya and investigated all ICT projects the commercial banks have carried out from January 2010 to January 2015. The researcher further restricted the survey only to ICT project managers and/or team members who have been involved from beginning to the end. The study was undertaken in the month of June, 2016.

1.9 Assumptions of the Study

The study assumed that the respondents are knowledgeable on ICT project implementation among commercial banks and that they are also knowledgeable on the role they play. The study also assumed that the respondents filled out the questionnaires correctly without delaying for effective data collection hence reliable data was obtained.

1.10 Definitions of Significant Terms

Project are temporary endeavors undertaken to meet unique goals and objectives within a defined shape, budget and time frame, that typically goes through a life cycle.

Project/organizational mission is the initial or conceptual clearly defined goals and general directions the institution wants to achieve.

Top management support is basically the willingness of the top management to provide the ncessary resources and authority/power for the project to succeed.

Project schedule/plans implies a detailed specificion of the individual action steps for effective project implementation.

User involvement: This is a psychological state of the individual and also as the importance and personal relevance of a system to the user i.e. their attitude toward the development process and its end product.

Strategic success factors: this implies the strategic factors that influence effective project implementation. Strategic factors may include the managerial support, available financial resources, skilled human resources and detailed plan for execution.

Commercial Banks are financial institution that provides various financial service, such as accepting deposits and issuing loans.

1.12 Organization of the Study

This research project shall be organized into five chapters. Chapter one covers introduction to the study which highlights the background of the study by looking at the ICT project success critical factors and the history of Kenya commercial banks. It also contains statement of the problem, purpose of the study, research objectives and research questions as well as the limitations of the study. It also states the significance, delimitations and limitations of the study. It states the assumptions, definitions of terms and the organization of the study. The second chapter contains theoretical and empirical literature review. It also provides a conceptual framework indicating relationships between variables. A brief summary of literature review is also tackled in this chapter. Chapter three describes the research methodology that was used to carry out the study including the research design, target population, sampling methodology, sample size, data collection methods, reliability and validity of research instruments, data collection procedures as well as data processing, analysis techniques and presentation. Chapter four shall present findings from the analysis of the questionnaires as collected from the field and discuss the finding in line with the objectives. The discussion shall include the demographic information of the respondents, discussion of the outcome and a summary of the chapter. Chapter five shall present the demographic information of the respondents, the discussion of the study, conclusions of the study, the recommendations of the study and suggestions for further studies.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents a review of the related literature on the subject under study presented by various researchers, scholars, analysts and authors. This chapter reviews literature with respect to strategic success factors on ICT project implementation in the Kenya commercial banks and the variables: project mission, top management support, project scheduling and user involvement. The chapter covers theoretical review, empirical review, conceptual framework and chapter summary.

2.2 Project implementation of ICT Projects

A project can be defined as a temporary endeavour undertaken by people who work cooperatively together to create a unique product or service within an established period of time and within and established budget to produce identifiable deliverables (Boyce and Haddad, (2001). Projects differ from project operations, because project operations are continuous and repeating while projects are temporary. Operations of projects deliver the same or almost the same results but in contrast, projects are unique. A project usually needs resources to deliver results. Project execution is based on a detailed plan, which also considers external factors and constraints. Planning, execution and controlling of projects is the primary field of project management. For major projects, it is necessary sometimes to set up a special temporary organization, consisting of a project team leader and one or more work teams (Flaman and Gallagher, 2001).

Implementation stage is where all the planned activities are put into action. Before the implementation stage of a project, the implementers, spearheaded by the project committee or executive, should identify their strength and weaknesses, which are internal forces, as well as opportunities and threats, which are the external forces. The strength and opportunities are positive forces that should be exploited to implement a project efficiently. The weaknesses and threats are hindrances that can hamper project management and implementation. Monitoring is important at this stage to ensure that the

project is implemented as per schedule. This continuous process should be put in place before project starts. As such, the monitoring activities should appear on the work plan and should involve all stakeholders. If activities are not going well, arrangements should be made to identify the problem so that they can be corrected.

Good project implementation is essential. Project scope should be established in advance to drive other operations of the project (Rosario, 2000) and controlled. The scope must be clearly defined and be limited. This includes the amount of the systems implemented and amount of projects process reengineering needed. Any proposed changes should be evaluated against projects benefits and, as far as possible, implemented at a later phase (Wee, 2000). Additionally, scope expansion requests need to be assessed in terms of the additional time and cost of proposed changes (Sumner, 1999).

According to Wee (2000), delivering early measures of success focus on results and constant tracking of schedules and budgets against targets are important. Project sponsor commitment is critical to drive consensus and to oversee the entire life cycle of management (Rosario, 2000). Someone should be placed in charge and the project leader should "champion" the project throughout the organization (Sumner, 1999). Falkowski et al., 1998, there should be a high-level executive sponsor, who has the power to set goals and legitimize change. Sumner (1999), states that a projects leader should be in charge, so there is the project perspective. The leader must continually strive to resolve conflicts and manage resistance. Project implementation often constitutes the most important stage in project development. (Wayne and Wittig, 2002). Depending on how it is managed, the project thus contributes to the economic development. Project implementation is the principal means through which government and private sector meet in order to focus on developmental needs such as the provision of physical infrastructure and the supply of essential health facilities (Rege, 1999). Because the deployment of the project implementation system to pursue these developmental goals, it therefore entails governmental exercise of enormous discretion. Project implementation is often an extremely controversial subject matter. This is especially the case where "the ability to exercise discretion in the award of government contracts has been a source of valued

political patronage" and procurement has been "a means for the illicit transfer of funds from governmental responsibility to private hands", (Rege, 1999).

The use of effective, regular and varied communication channels can facilitate collaborative and innovative behavior. Clear identification of risk allocation throughout the project is important to understand risk implications. In a comparative analysis, it reveals that clear understanding of risks, identification of roles and responsibilities, shared specific visions of each project, adequate resources to deal with unexpected problems and an entrepreneurial city viewpoint to advance urban revitalization are vital to project success (Nijkamp *et al.*, 2002).

2.3 Theoretical Framework

Theoretical framework provides a school of thought on which the study if built. It defines different theories which could underpin and guide the study. The specific theories reviewed here include: resource based theory, open systems theory and the dynamic capabilities theory. All these theories explain how organizations can utilize the resources at their disposal to gain competitive advantage. These theories are explained in details below:

2.3.1 Resource Based View Theory

The resource-based perspective has an intra-organizational focus and argues that performance is a result of firm-specific resources and capabilities (Barney, 1991). The resource-based view (RBV) is a basis for the competitive advantage of a firm that lies primarily in the application of a bundle of valuable tangible or intangible resources at the firm's disposal (Prahalad, 1996). The RBV isolates unique resources that are complex, intangible, and dynamic within a particular firm which can be utilized y the firm to gain and sustain competitive advantage (Barney, 1991). The bundles of resources that are distinctive to a firm give it an edge which other firms may not easily copy hence providing sustainability of the competitiveness (Wernerfelt, 1984).

The basis of the RBV is that successful firms will find their future competitiveness on the development of distinctive and unique capabilities, which may often be implicit or intangible in nature (Wernerfelt, 1984). The firm's unique resources and capabilities provide the essence of strategy. Barney (1991) argues that if all the firms were equal in terms of resources, there would be no profitability differences among them because any strategy could be implemented by any firm in the same industry. The RBV suggests that competitive advantage and performance results are a consequence of firm-specific resources and capabilities that are costly to copy by other competitors. Therefore, in an organization's effort to gain competitive advantage, it is important to establish the resources owned by the company and how such resources can be tapped for the given organization's competitive advantage.

2.3.2 Open systems Theory

Open system theory was developed by Ludwig von Bertanlanffy (1956), a biologist, but it was immediately applicable across all disciplines (Scott, 2003). Open system perspectives see organizations both as hierarchical systems and as loosely coupled systems. Open systems tend to have some semblance of clustering and levels. The open-systems theory assumes that all large organizations are comprised of multiple subsystems, each of which receives inputs from other subsystems and turns them into outputs for use by other subsystems (Hatch, 1997). The subsystems are not necessarily represented by departments in an organization, but might instead resemble patterns of activity. Interdependencies and connections within a subsystem tend to be tighter than between subsystems. These "stable sub-assemblies" give a distinct survival advantage to the entire system (Gortner, Mahler and Nicholson, 1997).

Open systems reflects the belief that all organizations are unique in part because of the unique environment in which they operate and that they should be structured to accommodate unique problems and opportunities (Krippner, 1998). Environmental influences that affect open systems can be described as either specific or general. The specific environment refers to the network of suppliers, distributors, government agencies, and competitors with which a business enterprise interacts. The general

environment encompasses four influences that emanate from the geographic area in which the organization operates. The open-systems theory assumes that all large organizations are comprised of multiple subsystems, each of which receives inputs from other subsystems and turns them into outputs for use by other subsystems. The subsystems are not necessarily represented by departments in an organization, but might instead resemble patterns of activity (Hatch, 1997). This theory holds that in order for the organization to achieve its objectives and goals, it is important that it operates as an open system where it takes care of the environment in its decision making process because failure to do this may lead to failure to deliver on organizational objectives.

Kenya commercial banking industry can be looked at as a complex organizational system that is at siege from all quarters of its external environment. On the one side the microfinance institutions which have traditionally served the lower end of the market are increasingly targeting traditional banking customers with cheaper loans and more personalized services while on the other end the telecommunications and technology companies are taking a huge chunk of traditional banking revenues by the introduction of mobile money services and agency banking with products such as M-Pesa, Airtel Money YU Money and PayPal. With this emerging variety of lending and payment channels, outside of traditional banking, bank customers are placing exceptional pressure on the banks to catch up with new market innovators or run the risk of losing out on the business. It is this feedback from customers and competitors that have seen commercial banks restructure themselves and redefine the way they do things, coming up with new and innovative products in a bid to protect their market share. These new innovations as outlined earlier in this document are being delivered within the context of ICT projects.

2.4 Empirical Review

Several researchers have examined strategic success factors on implementation of ICT projects. This study sought to build from the work of these studies while focusing solely on the banking sector.

2.4.1 Project Mission as a Project Success Factor

On any project undertaken by an organization, being able to articulate the organizational objectives is key to success simply because without objectives there will be no driving factor for the project management team. Without clear organizational objectives the destination will be vague and therefore the meaning of complete as well as how it is measure will be elusive. Kastner (2011) concluded that projects succeed because of clear organizational objectives: they dictate how projects should proceed in the face of difficulty and give the definition of "success" to enable a project have a clear ending. Successful Project Management team must know that clear business objectives are important not only for measuring completion, but also they are building blocks that for all project decisions. The business objectives will set the triple constraints of scope, time, and cost, in addition to providing guidance throughout the project lifecycle. He further opines that project management team must understand the general project philosophy and the general mission of the project as well as commitment to the goals. Accordingly, clear organizational objectives well articulated at the beginning of the project help to focus and prioritize solutions whilst guiding problem solving and decision making throughout the duration of the project and help measure the project for completion towards the tail end (Kastner, 2011).

Other scholars like Deming have argued that a good start to defining project success is to clearly define the project's intention to achieve specific outcomes. "The results that you achieve are perfectly suited to the process you used to achieve them. You got what you got because you did what you did" (Demming, 2012). He further proceeds to highlight some key characteristics of well-articulated organizational objectives as those that are clearly and formally stated, limited in number but sufficient to define the outcomes and the mile stones of a project, framed in a business language and fully measurable. This kind of user requirements will help to clearly define the scope of the project. He concludes by saying that when done well, objectives set the tone for project direction and sets up preconditions to ensuring success and avoiding failure but that once defined they still need to be managed well so as to guarantee success.

Lehner (2001) in their work noted that deficient requirements are the single biggest cause of software project failure. From studying several hundred organizations they discovered that Requirements Elicitation (RE) is deficient in more than 75 percent of all enterprises which is to say that too often a complex project is undertaken without clear objectives and direction. It is subsequently impossible to tell when the project is completed or whether it has delivered on its goals if there were no objectives/ requirements in the first place.

The Standish Group International's 2010 publication and The Chaos Summary 2010, underpins the importance of business requirements citing that "Clarity of objectives and focus are essential to successful project implementation. Every project stakeholder will have their own agenda that needs to be fulfilled by the project and thus clear business objectives are only achieved when all the stakeholders are focused on and understand the core values of the project (Standish Group International, 2010). This clearly pinpoints the importance of clear organizational objectives in implementation of ICT projects.

2.4.2 Top Management Support as a Project Success Factor

Top management support has been examined in various studies as one of the critical success factors in project implementation. Tukel (1996) and Jordan (2008) have argued that top management support is the most critical success factor in projects. Various authors have agreed upon the necessity of top management support as an independent variable for ICT project implementation. Top managers in an organization play a crucial role in providing and creating the required conditions for the project to succeed (Staehr, 2010). Top management support has been widely identified and highly ranked as a critical success factor in most ICT projects. Generally research findings in this area indicate that this level of support is critical for the planning, implementation and eventual success of ICT projects (Teo, 1997). It has become an important factor with the introduction of maturity models. These models analyse projects as an organisational effort, rather than a project manager's exercise. A basic assumption of these models is that an organisation has a direct effect on the manner in which project managers run their projects. One example of evidence to strengthen this assumption is that top management

support highly influences the tools that the project managers use in deliverying the project.

Mooney (2008) noted that among the factors found to be most critical to technology success is the support of the firm's top management, which includes the commitment of necessary resources and political support to the project. In other research findings it was concluded that top management support is more important than any other critical success factors and showed that top management influences IT projects by managing soft issues such as passion, motivation, culture and beliefs (Jordan, 2008).

According to McComb (2008), the literature of project management has made a strong sense for realizing and recognizing the importance of top management support. Furthermore, Green (1995), after investigating the 213 R and D projects, concluded that the projects with top mangement support were less likely to be unsuccessful. In addition Meredith (2010) did term the projects with management support as "sacred cows" which losely translates to projects that seldom fail. While studying ICT projects, several researchers have reported various aspects of top management support. For example, Guimareas (1995) argued that top management interests, understanding and encouragements are crucial elements for successful implementation of ICT projects. Some the the researchers have suggested thet for successful implementation of ICT projects, top managers should represent themselves as project champions (McComb, 2008). As highlighted by Kazanchi (2008) the importance of control and measurement activities in ICT projects by top managers. Effective top management support gives confidence to the project manager to steer the project to success by use of effective leadership skills (Morgan, 2012). Most of the studies in this area has treated ICT projects as a unit of analysis. Being an isolated phenomenon, separate from the rest of the organisation. This single single perspective overlooks the organizational practice of running several projects at the same time; which has become the norm in most organizations. Close to 90% of projects in an organization are carried out within a multiple-project platform (Payne, 1995). The Project Management Institute (2008) summarizes debate on top management support writing that "although we know that getting support from top management is important, there is little guidance about the factors that influence whether support is granted. Such guidance matters from both the perspective of the project team seeking such support and from the perspective of the top managers who want to provide support most effectively. Too often, the term "project sponsor" conjures up the image of a disconnected executive whose main responsibility is to secure the project funds and then come in for the victory lap when it is all over. But an engaged executive sponsor with a vested business interest in the project from kickoff to close can mean the difference between success and failure".

2.4.3 Project Planning as a Project Success Factor

Scheduling and planning are more often than not thought of as synonymous terms. In reality they are not. Scheduling has been defined differently by various scholars; (Popescu, 1995) defined it as a process of assigning the schedule the start and finish calendar dates to all or a percentage of the activities/duties that belong to a project. On the other hand, Mubarak (2010) defined it as the determination of the timing and sequence of operations in the project and their assembly to give the overall completion time. McCarthy (2010) opines that the real time of the activities and project is determined by the resources assigned to each activity (scheduling). Project Management Institute (PMI) summed up the definition as the process of analyzing schedule activity sequences, schedule activity durations, resource requirements and schedule constraints to create the project schedule (Project Management Institute, 2013). The main reason why schedules are developed and maintained during ICT project implementation is to provide a "roadmap" that represents the delivery of the project scope as determined by the project implementing team. Karzner (2013) has explained that a schedule is a plan that shows when activities/duties or accomplishments will start and end. Whose primary objective is to coordinate activities to complete the project within the time frame, least cost and minimal risks.

There are several steps of developing schedules based on a practice standard developed by the PMI. The foremost steps are selecting a scheduling method and tool. Thereafter a model is formed when specific project data is captured into the tool. The model is then used to generate a project schedules. Scheduling methods do provide a frame work upon which schedule models are developed. An example of a schedule model is the commonly used critical path method. Scheduling tools on the other hand provides the means of adjusting various parameters and components that are typical in a modeling process. The scheduling tools include; the capabilities to select the type of relationship, such as a finish-to-start or finish-to-finish, add lags and leads between activities, apply resources among others. By capturing specific project data such as activities, durations, and resources into the tool, the schedule model is created. The project model hence generates the project schedules which includes; the planned dates for completing project activities. In so doing the project model provides a tool for analyzing alternatives.

Once developed the model must be updated on regular basis to reflect the progress and changes. In Mubarak's works, he describes the three most important factors to consider when scheduling as the human factor, the technology and the management. He further states that if anyone of these three 'legs' is missing the system will fail. Karzner (2013) explains that every scheduling technique has its advantages and disadvantages. However, there are some scheduling problems that can impact all scheduling techniques like using unrealistic estimates for effort and duration, inability to handle employee workload imbalances and having to share critical resources across several projects among others. PMI explains that developing an acceptable schedule is often an interactive process. The development often requires the planners to review and revise their duration estimates and acceptance schedule. In fact to have a realistic schedule it is necessary to review and revise them throughout the project (Project Management Institute, 2013).

Planning has been defined as deciding what tasks must be performed to accomplish the goods of the project. This means establishing realistic schedules and budgets cording resources to get the work done and most importantly makes sure everyone knows what the plan of action is (Pierce Jr, 2013). Chitkara (1998) viewed planning as a way of deciding in advance what is to be done, how and in what order it is to be done in order to achieve the objectives. Planning according to Chitkara aims at deciding upon the future

course of action. Mubarak (2010) opines that planning is the process of choosing the one method and order of work to be adopted for a project form the various ways and sequences in which it could be done. Karzner (2013) states that planning can best be described as the function of selecting the enterprise objectives and establishing the policies, procedures and programs necessary for achieving the set objectives. Planning in a project environment may be described as established a predetermined course of action with a forecasted environment where the project's requirements set the major milestones.

The four basic reasons for planning in ICT projects are to eliminate or reduce uncertainty, improve efficiency of the operation, obtain a better understanding of the objectives and lastly to provide a basis for monitoring and controlling of the project's activities (Karzner, 2013). A project plan is fundamental to the success of any project. It is a formal, approved document that defines how a project is executed, monitored, controlled and closed (Karzner, 2013). Cooke-Davis (2002) concluded that the main purpose of applying assumptions, decisions, facilitate communication among stakeholders and documents it (project plan) serves as a guideline for which performance can be measured by both the client and the project team. This implies that all stakeholders should be involved when planning the project and developing the project management plan (Project Management Institute, 2013). ICT project planning has to be systematic flexible to handle unique activities, disciplined through reviews and controls and capable of accepting multi-functional inputs. In this context it is worth mentioning that the main reasons why ICT projects fail are behavioral rather than quantitative problems. This may be due to poor morale, poor human relations, poor labor productivity and lack of commitment by those involved in the project (Project Management Institute, 2013).

2.4.4 User Involvement in successful ICT project implementation

In the IS literature, the terms user involvement and user participation have frequently been used to mean the same thing. However, Barki (1994) in their works clarified that the two concepts are different and that they need to be defined separately. They defined user

involvement as a psychological state of the individual and also as the importance and personal relevance of a system to the user i.e. their attitude toward the development process and its end product. User participation on the other hand is defined as the observable behaviour of users in the ICT development and implementation i.e. the set of operations and activities performed by users or their representatives during the ICT development process or activities of users during the system implementation. The two authors further define four dimensions of user participation; Responsibility, User-ICT relationship, Hands-on Activity and Communication Activity. Other authors in the available literature have opted to use the term "User Engagement" in which they chose to include both user participation (the behaviour) and user involvement (the attitude) and thus according to them User Engagement is used to refer to the total set of user relationships towards ICT projects and their implementation. For purposes of clarity and to remove any ambiguities, this study shall take the term User Involvement to represent all the above three variations.

Varied reasons have been given as to why users must be involved in ICT project implementation. User involvement is viewed as a tool that helps 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. 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 through the social-psychological mechanism of perceived control. However, characteristics such as user expertise, degree of organizational decentralization, project complexity and users' previous experience with ICT could determine the degree of their involvement.

In ICT projects user participation is advocated for in order to discover users' needs and points of view validate specifications and hence build better ICT for the organization. The role of user participation in an organizational activity can be viewed from the

perspective of two different behavioral theories (Barki, 1994). These theories are change" "participative "planned organizational and decision-making". implementation of a new ICT project often implies a planned change in the way an organizational unit pursues its strategic objectives whereas participative decision making emphasizes the role of individuals in working groups. The authors also outlined how user participation can improve system quality by providing a more and complete assessment of user information requirements, providing expertise about the organization the system is to support, avoiding development of unacceptable or unimportant features and improving user understanding of the system. Mooney (2008) subsequently showed that user participation has a positive relationship with user satisfaction. They also argued that four factors affect this relationship; task complexity, system complexity, user influence and user-developer communication. Based on a meta-analysis study, the authors concluded that the inclusion of users in definition and design stages is the best way to increase their perception of the value of the system and to motivate them in order to achieve project success. The Chaos report also clearly shows that projects that lack user involvement perform poorly (Standish Group International, 2010).

2.5 Strategic Success Factors and ICT Project Implementation

The identification of success factors in Project implementation has dominated the field of project management from the 1980s to the year 2000 and beyond (Zalilani, 2007). Many scholars have tried to a large extent to identify success factors affecting successful project implementation. Pinto, Slevin and others have published a range of articles from 1987-1990 on critical success factors and established a widely known and accepted ten critical success factors. Pinto (1986) used a fifty-item instrument called the project management/implementation profile (P.I.P) to measure a projects score on each of the ten factors. The ten critical success factors identified by Pinto in his work are; Project Mission, Top mangement support, Project schedule/plana, client consultation, Personnel. Technical tasks, Client acceptance, Monitoring and feedback, Communication and Trouble shooting. Slevin (1987) did some critical work on the listed project success

factors, basing their findings on the opinions of a usable sample of 418 responses that was obtained from a group of project managers in multiple industries.

It was noted that the ten factors identified explained 63.3% of the total variance in the dependent variable in this case project success. It is important to note that the first three factors namely; mission/objective, top management support and schedules/plans are related to the initial phase of the project life cycle and are the variables under consideration in this study (Pinto, 1986). They further classified the ten factors as strategic and tactical, where the first three are strategic and the rest seven are tactical. Whereas both strategic and tactical issues are crucial for successful project implementation, their importance gradually shifts as the goes through its life cycle. Strategic issues (mission/objective, top management support and schedules/plan) are critical at the beginning but tactical issues gain importance towards implementation and at the tail end of the project.

Critical success factors on the other hand have been defined as elements which must be present within an organization in order to create an environment where projects can be managed with excellence on a consistent basis (Kerzner, 1987). He insists that there are a few areas where things must go right for a project to succeed. The areas include; corporate understanding of the project, Executive commitment, Organizational adaptability, Project Manager selection criteria, Leadership style and Commitment to planning and control. It is critical to note that value of the project to the commercial bank and use/client satisfaction are the main critical success measures in ICT projects among others. Critical success factors have also been defined as characteristics, conditions or variables that can have a significant impact on the success of a project when sustained, maintained and managed properly (Milosevic, 2005).

The output of most emperical and theoretical consideration of success factors in project management is complex and it is evident from the literature that there is no 'unified general theory' regarded as the basis for universally accepted characteristics of critical success factors in project management (Roe, 2014). The importance and weight of the success factors may strongly be linked to implementation stages and to the project management roles. The available literature points to the fact that strategic factors are weighted heavily at the early stages of the project while the tactical factors are on-going and/or later stage factors (Mwania and Muganda, 2011).

Closer home project team's experience, organizational objectives, top management support and planning were deemed to be determinants of successful delivery of housing construction Projects in the Ministry of Housing in Nairobi, Kenya (Owoko, 2012). In a study on the factors influencing ICT project performance in Kenya, organizational objectives, top management support, clear understanding of project scope and technical specifications, project planning and project staffing were found to be very important in determining the success of an ICT project (Mwai, 2012). This study will seek to expound on the three (3) strategic factors identified by (Slevin, 1987) as well the study of Kenyan ICT firms by (Mwai, 2012) which are also perceived to be most influential in successful ICT project implementation in Kenyan commercial banks. The factors are; organizational objectives, top management support and project scheduling/planning.

2.5 Conceptual Framework

The study proposes that the strategic success factors that influence the adoption and implementation of ICT projects in the commercial banks in Kenya. These strategic factors include project mission; top management support; project scheduling/planning and user involvement are the independent variables as projected in Figure 1 Moderating variables are those factors that may facilitate/hinder smooth realization of the dependent variable in this study it is government regulations.

The dependent variables of study are the deliverables that measure successful implementation of ICT project in the commercial banks in Kenya. Such variables include: ICT project delivered within budget and on schedule; meeting the client requirements; satisfying the stakeholders and achieving the business/organizations' objective.

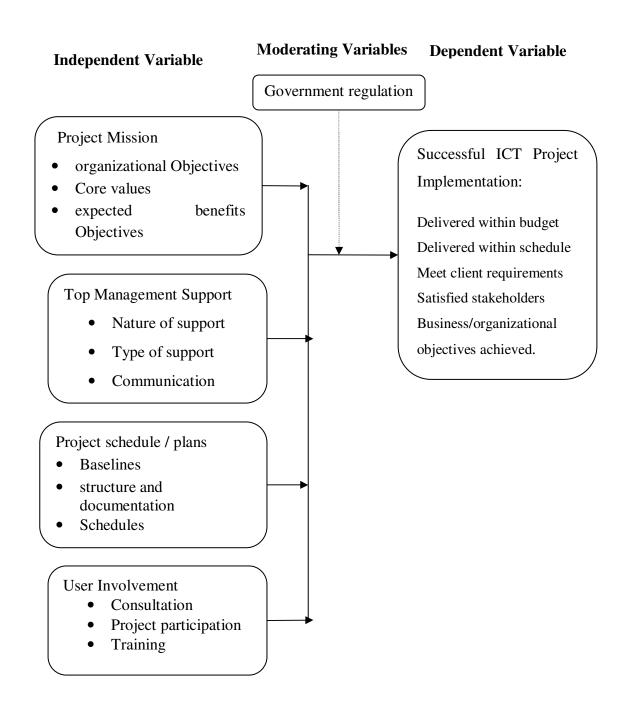


Figure 1: Conceptual Framework

2.6 Research Gap

Mwai (2012) did astudy on the factors influencing ICT project performance in Kenya and found out that organizational objectives, top management support, clear understanding of project scope and technical specifications, project planning and project staffing were found to be very important in determining the success of an ICT project. Owoko, (2012) found out that project team's experience, organizational objectives, top management support and planning were deemed to be determinants of successful delivery of housing construction Projects in the Ministry of Housing in Nairobi, Kenya. Mwania and Muganda (2011) found out that strategic factors are weighted heavily at the early stages of the project while the tactical factors are on-going and/or later stage factors (Mwania and Muganda, 2011). A critical review of the studies mention identifies that there is a clear gap in knowledge. None of the studies reviewed was carried in the banking sector. This study therefore sought to fill the gap by assess the influence of strategic success factors on implementation of ICT projects in Kenyan commercial banks.

2.7 Summary of Reviewed Literature and Research Gaps

Whereas various scholars and researchers have come up with multiple factors affecting ICT project implementation success, no single person or research can claim to have exhausted all the factors affecting project success. Furthermore, even where studies have primarily focussed on ICT, limited researches have focused on the strategic project success factors. Apart from being mentioned by a few scholars, the strategic success factors have received little scrutiny especially in the ICT projects. This goes to show the complexity of the subject and it will thus be foolhardy for the researcher to claim that the conclusions drawn by this study shall be exhaustive. In conducting their studies, most of the quoted researchers have approached the subject from within the project management teams of the studied projects by collecting primary data from the project managers themselves. All the indicators/ determinants of project success in these past studies have therefore emanated from only one party within the entire project organisation which would in a way be biased reporting since the project manager will always see themselves as the better person within the project and blame everyone and everything else for project

outcomes but themselves. This research study sought to collect the views of all project stakeholders from the top management down to the project product end users in a bid to identify the overall perception of staff in the various banks on factors affecting success of ICT projects within their organisation.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses the research methodology that was used to collect data. The chapter discusses the research design, the target population of the study, sample and sampling procedures, data collection instruments and methods, data analysis techniques, ethical considerations as well as operational definition of the variables of the study.

3.2 Research Design

The researcher adopted the descriptive approach to research design, a scientific method which involved observing and describing the behaviour of a subject without influencing it in any way. The choice of research design is informed by the fact that multiple projects have already been completed by the various banks in the Kenyan Commercial bank sector with some having a very successful closure while others not so successful. The main objective of the research was to identify the influence of the strategic project factors affecting the success of ICT project implementation in the Kenyan commercial banking industry. The researcher used the project participants' memory and experiences of projects they had been involved in to find answers as to what led to the particular outcome of each of their projects.

3.3 Target Population

Target population is the specific population about which information is to be collected (Ngechu, 2004). It is a well-defined or specified set of people, group of things, households, firms, services, elements or events which are being investigated. The target population of this study was ICT project team members from 43 commercial banks operating in Kenya as December 31, 2015. The study was in form of a census survey as all the commercial banks in Kenya were studied. A census allows the data gathered to be more representative and easy to generalize and overcomes the biases that arise if a sample is used. Owing to the fact that there is no universal approach to strategic success factors on implementation of ICT projects using a sample would not enable the researcher establish how banks in

Kenya carry out the process. The study got views of at least two ICT project team members from each commercial bank. The target population was 86 staff from different commercial banks.

3.4 Sample Size

Statistically, in order for generalization to take place, a sample of at least 30 must exist (Cooper & Schindler, 2003). Kotler (2001) argues that if well chosen, samples of about 10% of a population can often give good reliability. However due to the small size of the target population and easy accessibility from their head offices situated within Nairobi, all the members in the target population was included in the study hence a census.

3.5 Data Collection Instrument

This study used a questionnaire to collect primary data. Questionnaires are the most commonly used methods when respondents can be reached and are willing to co-operate. These methods can reach a large number of subjects who are able to read and write independently. The questionnaire comprised of both open and closed ended questions. The closed ended questions made use of a five point Likert scale where respondents were required to fill according to their level of agreement with the statements. The unstructured questions were used to encourage the respondents to give an in-depth response where close ended questions are limiting. The questionnaire comprise of five sections. Section A covered demographic information, section B covered organizational mission; section C covered top management support, section D covered project scheduling and Section D covers user involvement.

3.5.1 Pilot Study

A pilot study was conducted to test the reliability and validity of the research. According to Orodho (2003), a pilot test helps to test the reliability and validity of data collection instruments. Validity refers to the extent to which an instrument measures what is supposed to measure data need not only to be reliable but also true and accurate. If a measurement is valid, it is also reliable (Joppe, 2000). The pilot test comprised of 5 microfinance institutions because they exhibit similar characteristics to those of

commercial banks in Kenya. However, to ensure that the study findings are not compromised, the pilot study results were not being included in the final study. According to Kothari (2004) a pilot study can comprise of between 4-10 members of the target population is considered adequate.

3.5.2 Validity

According to Mugenda and Mugenda (2003), validity is the accuracy and meaningfulness of inferences, which are based on the research results. Validity is the degree to which results obtained from the analysis of the data actually represent the phenomenon under study. Validity exists if the data measures what they are supposed to measure. The common procedure to be used for the assessment of content validity of the research instrument is to engage the aid of an expert in that particular field. For this study, the researcher readily sought opinion from study supervisors in order to assess the research instruments validity.

3.5.3 Reliability

The consistence, stability, or dependability of the data is referred to as reliability. Whenever an investigator measures a variable, he or she wants to be sure that the measurement provides dependable and consistent results (Cooper & Schindler, 2003). To measure the reliability of the data collection instruments an internal consistency technique using Cronbach's alpha was applied to the gathered data (Kothari, 2004). Cronbach's alpha is a coefficient of reliability that gives an unbiased estimate of data generalizability and an alpha coefficient of 0.70 or higher indicates that the gathered data is reliable as it has a relatively high internal consistency and can be generalized to reflect opinions of all respondents in the target population (Zinbarg, Revelle, Yovel & Li, 2005). This correlation only estimates the reliability of each half of the test. It was necessary to use a statistical correction to estimate the reliability of the whole test.

The pilot study sampled 5 ICT project managers from microfinance institutions because they exhibit similar characteristics to those of commercial banks in Kenya. These were not included in the main study. This was to ensure that the instrument collects reliable and valid data. Reliability analysis was subsequently done using Cronbach's Alpha which measures the internal consistency by establishing if certain item within a scale measures the same construct. Gliem (2003) confirms the Alpha value threshold as 0.7, which forms the study's benchmark. Cronbach's Alpha was established for every objective in the study which formed a scale. The findings are shown in the Table 3.1.

Table 3.1: Reliability Analysis

Scale	Cronbach's Alpha	Number of Items
Project Mission	0.733	6
Top Management Support	0.715	6
Project Scheduling/Planning	0.936	5
User Involvement	0.800	6

Table 3.1 shows the strategic success factors on implementation of ICT projects. Project mission had α =0.733, top management support had α =0.715, project scheduling/planning had α =0.936 and user involvement had α =0.800. This illustrates that all the four scales were reliable as their reliability values exceeded the prescribed threshold of 0.7.

3.6 Data Collection Procedures

The data was collected using self-administered questionnaires. The questionnaires were administered through drop and pick later method where the researcher delivers the questionnaires in person at the respondents' places of work. However, where it proves difficult for the respondents to complete the questionnaire immediately, the researcher left the questionnaires with the respondents and picks them up at a later date.

3.7 Data Analysis Techniques

Before processing the responses, the completed questionnaires were edited for completeness and consistency. The questionnaires were then coded to enable the responses to be grouped into categories. Data was then be analyzed using excel and Statistical Program for Social Scientist version 22 (SPSS) as the basic computer method for data analysis. Descriptive statistics was used mainly to summarize the data. Measures of central tendency including mean, standard deviation and percentages were used for

quantitative variables. Tables were used as appropriate to present the data collected for ease of understanding and analysis.

Multivariate regression was used to determine the the influence of strategic success factors on successful implementation of ICT projects in Kenyan commercial banks. The multivariate regression equation took the form of;

 $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$

Whereby Y = Successful ICT Project Implementation

 X_1 = Project Mission

 $X_2 = \text{Top Management Support}$

 X_3 = Project scheduling

 X_4 = User Involvement

 ε = Error term/Erroneous variables

The significance of each variable was tested using the ANOVA test. Examining relationships or interviewing to understand the relationships is the centerpiece of the analytic process in qualitative analysis, because it allows the researcher to move from simple description of the people and settings to explanations of why things happened as they did with those people in that setting (Lacey & Luff, 2001). The process of examining relationships can be captured in a matrix that shows how different concepts are connected, or perhaps what causes are linked with what effects (Caudle, 2004). In this study a matrix was used to capture the extent to which strategic success factors influence successful implementation of ICT projects in Kenyan commercial banks.

3.8 Ethical Considerations

Ethics in research requires personal integrity from the researcher. Cooper & Schindler (2003) gives the goals of ethics in research as to ensure that no one is harmed or suffer adverse consequences from research activities. The researcher ensured that the questionnaires are non-invasive and the information is gathered solely for academic purposes only and not for any other purpose.

The researcher took the following steps to ensure that none of the respondents suffer discomfort, embarrassment, loss of privacy and physical harm: Names of the respondents was optional and no respondent required disclosing if they are uncomfortable. The respondent's personal privacy and the confidentiality of the information received from them was protected. The purpose of the research study was clearly explained. The respondents were assured that there will be no victimization as a result of the responses. The respondents were informed of their rights to participate or not to participate in this study.

Prior to conducting research, the researcher sought permission from each commercial banks and carry a long an introduction letter from the University of Nairobi to confirm that the study is purely for academic purposes. There after the final report was shared with the willing commercial bank management for their own consumption and review. The research findings presented exactly as reported by survey respondents without any alterations being made by the researcher whatsoever.

3.9 Operationalization and measurement of Variables

An operational definition is a result of the process of operationalization and is used to define something (e.g. a variable, term, or object) in terms of a process (or set of validation tests) needed to determine its existence, duration, and quantity.

Table 3.2: Operational Definition of Variables

Objective	Variable	Indicators /	Measurement	Measurement Scale	Data Analysis Method
Successful implementation of ICT projects	Dependent	Completed within budget Completed on time Delivering organizational objectives	Actual versus budgeted costs Attainment of objectives	Ordinal	Descriptive statistics, percentages Regression analysis
Project Mission	Independent	Clarity of the objectives to all stakeholders Documentation of the objectives Frequency of change to the objectives Validation of the changes to the objectives	Organization of the project activities Clarity in communication among project members	Ordinal	Descriptive statistics, percentages Regression analysis
Top Management Support	Independent	Support to the project team Availability of the top management to the project team Timely interventions Resourcing	Top management engagement	Ordinal	Descriptive statistics, percentages Regression analysis
Scheduling/ Planning	Independent	Establishing a baseline Coordinating resources Realistic schedules Knowing what needs to be done at all times	Plans and schedules	Ordinal	Descriptive statistics, percentages Regression analysis
User Involvement	Independent	Needs assessment Change Management Acceptance testing Overall project execution	Number of users involved Level or extent of user involvement	Ordinal	Descriptive statistics, percentages Regression analysis

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This chapter entails data analysis, presentation and interpretation. The data is summarized by use of descriptive statistics which involves the use of frequency tables, percentages, , mean, standard deviation and regression analysis.

4.1.1 Response Rate

A total of 86 questionnaires were distributed to the respondents. Out of these, 65 questionnaires were returned duly completed. This represents a response rate of 76%. This response was good enough and representative of the population and conforms to Mugenda and Mugenda (2003) stipulation that a response rate of 70% and above is excellent. This was therefore considered a representative sample for further analysis. The findings are shown in Table 4.1.

Table 4.1: Response Rate

	Frequency	Percentage (%)
Response	65	76
Non Response	21	24
Total	86	100

4.2 General Information

This section sought to identify the respondents' gender, duration working in the banking industry, position held in the bank, involvement in ICT project over the last four years, number of projects they have been involved and the capacity they participate in the projects.

4.2.1 Gender Distribution

The respondents were required to indicate their gender. The findings are shown on Table 4.2.

Table 4.2: Gender Distribution

	Frequency	Percent
Male	36	55.4
Female	29	44.6
Total	65	100.0

Table 4.3 shows that the gender balance among ICT project team members is quite even with 55.4% being male while 44.6 are female. This shows that all gender were well represented.

4.2.2 Duration Working in the Banking Industry

The study sought to find out the duration the respondents had worked in the banking industry. The findings are shown in Table 4.3.

Table 4.3: Duration Working in the Banking Industry

	Frequency	Percent
Below 1 year	18	27.7
1 – 5 years	31	47.7
6 – 10 years	4	6.2
11 – 15 years	3	4.6
Above 15 years	9	13.8
Total	65	100.0

As shown in Table 4.3, majority 47.7% had been working for between 1-5 years, 27.7% for below a year, 13.8% for over 15 years 6.2% for between 6-10 years and 4.6% for between 11-15 years. This implies that the ICT project team members were quite experienced with at least worked for a year. This points out that it is recommended to have experienced project team members to form a strong project implementation team.

4.2.3 Position Held in the Bank

The respondents were required to indicate their position in their respective commercial banks. The findings are shown in Table 4.4.

Table 4.4: Position Held in the Bank

	Frequency	Percent
Senior Management	35	53.8
Supervisor	18	27.7
Graduate Clerk	6	9.2
other	6	9.2
Total	65	100.0

From the findings in Table 4.4, 53.8% were in senior management positions, 27.7% were supervisors, 9.2% were graduate clerks and the rest 9.2% were in other positions. This shows that the ICT project team members were distributed in various positions in the commercial banks hence were familiar with the implementation of ICT in all levels thus the information provided were reliable for the study.

4.2.4 Number of Projects ICT Project Team Members has been involved in

The respondents were required to indicate the number of projects they have involved in the implementation of ICT. The findings are shown in Table 4.5.

Table 4.5: Number of Projects ICT Project Team Members has been involved in

	Frequency	Percent
No Project Involvement	2	3.1
1 Project	43	66.2
2 – 5 Projects	15	23.1
Above 10 Projects	5	7.7
Total	65	100.0

As indicated in Table 4.5, 3.1% of the respondents had not been involved in any project, 66.2% had been involved in 1 project, 23.1% had done between 2-5 projects and 7.7% had done above 10 projects. This shows that majority of the respondents had been involved in project implementation thus the information provided were relevant and reliable for the study.

4.2.5 Capacity in which they participate in the Projects

The respondents were required to indicate the capacity they participated in the project implementation. The findings are shown in Table 4.6.

Table 4.6: Capacity in which they Participate in the Projects

	Frequency	Percent
Project Steering Committee	10	15.4
Project Manager	20	30.8
Project Team Leader	31	47.7
Project Team Member	4	6.2
Total	65	100.0

From the findings in Table 4.6, 25.4% of the respondents indicated that they were project steering committee, 30.8% were in the capacity of project managers, 44.7% were in project team leader capacity and 6.2% were project team members. This implies that the respondents had been in relevant positions in the implementation of ICT thus the information provided were reliable for the study.

4.3 Influence of the Project Mission on Implementation of ICT Projects

Several organizational objectives were identified and the respondents were required to indicate the extent to which it applied to the organization.

Table 4.7: Influence of the Project Mission on Implementation of ICT Projects

	Mean	Std. Dev
Bank's ICT project Executive Team is clear on their		
organizational Objectives and expected benefits to be derived	2.84	1.252
from successful implementation of the project		
Organizational Objectives are documented and signed off by	2.56	1 201
the Executive Team before any ICT project is commenced	2.56	1.391
User Requirements are documented and signed off by the		
Senior User (Department that will utilise the end product)	2.78	1.363
before any ICT project is commenced		
Organizational objectives and user requirements keep changing	2.02	1 647
throughout the course of execution of IT projects	2.93	1.647
Changes introduced in the middle of ICT projects they are		
compared against the initially signed off requirements/	2.55	1.116
objectives and validated for consistency with the overall	2.55	1.146
Executive Team's vision		

As indicated in Table 4.7, bank's ICT project executive team was clear on their organizational objectives and expected benefits to be derived from successful implementation of the project had a mean of 2.84 with a standard deviation of 1.252, organizational objectives are documented and signed off by the Executive Team before any ICT project is commenced had a mean of 2.56 with a standard deviation of 1.391, user requirements are documented and signed off by the senior user (Department that will utilize the end product) before any ICT project is commenced had a mean of 2.78 with a standard deviation of 1.363, organizational objectives and user requirements keep changing throughout the course of execution of IT projects had a mean of 2.93 with a standard deviation of 1.647 and changes introduced in the middle of ICT projects they are compared against the initially signed off requirements/ objectives and validated for consistency with the overall executive team's vision had a mean of 2.55 with a standard deviation of 1.146.

The study revealed that effective project management methodology tools were followed while goals and targets set out were realistic and attainable. The management ensured adherence to regulations and policies to a very high extent. This findings is consistent with that of Kastner (2011) who concluded that projects succeed because of clear

organizational objectives: they dictate how projects should proceed in the face of difficulty and give the definition of "success" to enable a project have a clear ending.

4.3.1 Stages of the ICT Project

The respondents were required to indicate the stage of the ICT project where the system's deliverables are compared against the initial business objectives. The findings are shown in Table 4.8.

Table 4.8: Stages of the ICT Project

	Frequency	Percent
Design and Development	20	30.8
Execution and Implementation	2	3.1
Post Implementation	10	15.4
Never Compared	33	50.8
Total	65	100.0

As shown in Table 4.8, 30.8% of the respondents indicated that at design and development stage the system's deliverables are compared against the initial business objectives, 3.15 indicated execution and implementation stage, 15.4% indicated post implementation stage and 50.8 never compared.

4.4 Influence of Top Management Support on Effective ICT Project Implementation

Several statements on top management support in successful ICT project implementation were identified and the respondents were required to indicate the extent to which they agree with each of these statements on a scale of 1-5 where 1- strongly disagree, 2= disagree, 3= neutral, 4= agree and 5= strongly agree. The findings are shown in Table 4.9.

Table 4.9: Influence of Top Management Support on Effective ICT Project Implementation

	Mean	Std. Dev
My bank's top management team is supportive to project managers and teams	3.32	1.393
My bank's top management is readily available for decision making	3.69	1.171
My bank's top management offers guidance to the Project Manager and team	3.20	1.252
My bank's top management keeps a close eye on all ICT projects	4.16	1.008
My bank's top management is quick to intervene in terms of support to the project manager when things start going wrong	3.76	1.142
My bank's top management has consistently provided all the tools and resources required to successfully deliver all the approved ICT projects	3.73	1.502

As indicated in Table 4.9, bank's top management team was supportive to project managers and teams had a mean of 3.32 with a standard deviation of 1.393, bank's top management was readily available for decision making had a mean of 3.69 with a standard deviation of 1.171, bank's top management offered guidance to the Project Manager and team had a mean of 3.20 with a standard deviation of 1.252, bank's top management kept a close eye on all ICT projects had a mean of 3.76 with a standard deviation of 1.142 and bank's top management had consistently provided all the tools and resources required to successfully deliver all the approved ICT projects had a mean of 3.73 with a standard deviation of 1.502.

The findings from the study revealed that top management support for project teams was in the form of providing overall goals and objectives of the Banks in the success of ICT project implementation. Projects implemented in the organization require the support of top management as it promotes acceptance and success of the project in the organization. ICT projects tend to require business transformation to deliver value and this transformation can rarely be implemented without top management support. Top management communication with project team members is also essential for project success. According to the respondents there was good communication between the

project team members and top management. This finding concurs with that of Tukel (1996) and Jordan (2008) who argued that top management support is the most critical success factor in projects.

4.5 Influence of Project Planning on ICT Project Implementation

Several statements on scheduling and planning as a determinant of ICT project success were identified and the respondents were required to indicate the extent to which it had been practiced in their Bank. A scale of 1-5 was used where 1- strongly disagree, 2= disagree, 3= neutral, 4= agree and 5= strongly agree. The findings are shown in Table 4.10.

Table 4.10: Influence of Project Planning on ICT Project Implementation

	Mean	Std. Dev
My bank undertakes baselines for each ICT project undertaken	2.76	1.465
There is proper well structure and documentation in the ICT projects in my bank	4.10	.850
There is well coordination of resources in ICT project implementation in my bank	3.21	1.205
The Schedules developed during the implementation of ICT projects in my bank are realistic	3.63	1.281
All stakeholders are informed on what is being done at all times during implementation of ICT projects in my bank	4.09	.764

From the findings in Table 4.10, bank undertakes baselines for each ICT project undertaken had a mean of 2.76 with a standard deviation of 1.465, there was proper well structure and documentation in the ICT projects in the banks had a mean of 4.10 with a standard deviation of 0.850, there was well coordination of resources in ICT project implementation in the bank had a mean of 3.21 with a standard deviation of 1.205, schedules developed during the implementation of ICT projects in the banks were realistic had a mean of 3.63 with a standard deviation of 1.281 and all stakeholders were informed on what was being done at all times during implementation of ICT projects in the banks had a mean of 4.09 with a standard deviation of 0.764.

The study established that commercial banks put structures in place in order to ensure effective communication. In addition, goals for ICT project were communicated to all

stakeholders and all the project team members understood their roles and what was expected of them to a high extent. The findings however show that to a great extent, top management ensure establishment of effective communication structures to ensure flow of communication. This finding is in line with that of Kastner (2011) that clear organizational objectives well articulated at the beginning of the project help to focus and prioritize solutions whilst guiding problem solving and decision making throughout the duration of the project and help measure the project for completion towards the tail end.

4.6 Influence of User Involvement on ICT Project Implementation

Several statements on user involvement as an intervening determinant of ICT project success were identified and the respondents were required to indicate the extent to which each has been practiced in their Bank. A scale of 1-5 was used where 1- Never Involved, 2= Sometimes, 3= Most of the time and 4= All the time. The findings are shown in Table 4.11.

Table 4.11: Influence of User Involvement on ICT Project Implementation

	Mean	Std. Dev
ICT project product end users are always involved at all stages of the ICT projects in my Bank	2.98	1.124
Users' expectations are managed during ICT project implementation in my bank	2.40	1.156
Users define the test scripts and conduct the actual end user tests	2.92	1.020
Users are given predefined test scripts and use these to conduct the end user tests	2.81	1.248
Users observe as other project team members conduct the end user tests	2.78	1.082
Users are involved during the end user tests process	2.27	1.293

As shown in Table 4.11, ICT project product end users were always involved at all stages of the ICT projects in the Banks had a mean of 2.98 with a standard deviation of 1.124, users' expectations were managed during ICT project implementation in the banks had a mean of 2.40 with a standard deviation of 1.156, users define the test scripts and conduct the actual end user tests had a mean of 2.92 with a standard deviation of 1.020, users

were given predefined test scripts and use these to conduct the end user tests had a mean of 2.81 with a standard deviation of 1.248, users observe as other project team members conduct the end user tests had a mean of 2.78 with a standard deviation of 1.082 and users are involved during the end user tests process had a mean of 2.27 with a standard deviation of 1.293. The mean values ranges from 2.27-2.98 which indicates that the respondents were neutral on the statements.

The study found that users were indeed involved in ICT project implementation processes at all commercial banks. Their involvement was at the implementation stage where they were educated and trained on a new developed system. Thus this finding is consistent with that of Mooney (2008) who subsequently showed that user participation has a positive relationship with user satisfaction and also argued that four factors affect this relationship; task complexity, system complexity, user influence and user-developer communication.

4.7 Success of ICT Projects Implementation

The respondents were asked to select statements that best describes the success of ICT projects within Commercial banks in Kenya. The findings are shown in Table 4.12.

Table 4.12: Statements that Best Describes the Success of ICT Projects

	Frequency	Percent
Always successful	10	15.4
Mostly successful but sometimes struggling	20	30.8
Mostly struggling but sometimes successful	31	47.7
Always struggling but sometimes successful	4	6.2
Total	65	100.0

As shown in Table 4.12, 15.4% of the respondents selected always successful, 30.8% selected mostly successful but sometimes struggling, 47.7% selected mostly struggling but sometimes successful and 6.2% selected always struggling but sometimes successful.

The respondents were further asked to indicate the significant of strategic ICT project success determinants. The findings are shown in Table 4.13.

Table 4.13: Success of ICT Projects Implementation

	Mean	Std. Dev
Definition of organizational objectives/ user requirements upfront	2.67	1.300
Top management support to the project and project team	2.49	1.263
Scheduling and Planning of the Project	3.36	.761
User/ Customer involvement at all stages of the project	3.23	.805

As shown in table 4.13, definition of organizational objectives/ user requirements upfront had a mean of 2.67 with a standard deviation of 1.3, top management support to the project and project team had a mean of 2.49 with a standard deviation of 1.263, scheduling and planning of the project had a mean of 3.36 with a standard deviation of 0.761 and user/ customer involvement at all stages of the project had a mean of 3.23 with a standard deviation of 0.805.

4.8 Regression Analysis

The study carried out a multiple regression analysis to test the influence of the independent variables on the dependent variable. The findings are shown in the tables below.

Table 4.14: Regression Model

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.785^{a}	0.615	0.592	0.38869

From the findings in Table 4.14, R was 0.785 meaning that there was a positive relationship between all the four strategic success factors on implementation of ICT projects. R² was 0.615 implying that only 61.5% of the dependent variable could be explained by the independent variables while only 38.5% of the variations were due to other factors. This implies that the regression model has very good explanatory and predictor grounds.

Table 4.15: ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	4.84	4	1.21	24.2	.017 ^b
Residual	3.02	60	.050		
Total	7.86	64			

From the findings on Table 4.15, the significance value is 0.017 which is less that 0.05 thus the model is statistically significant in predicting how project mission, top management support, project schedule and planning and user involvement influence the success of ICT project implementation. The F critical at 5% level of significance was 2.75. Since F calculated (value = 24.2) is greater than the F critical (2.75), this shows that the overall model was significant.

Table 4.16: Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	В	Std. Error	Beta	_	
(Constant)	1.366	3.044		.449	.048
Project Mission	.826	0.269	3.07	2.127	.028
Top Management Support	.195	.609	.169	.320	.019
Project Schedule and Planning	.138	.352	.199	.393	.032
User Involvement	1.126	.640	.823	1.75	.021

The established regression equation becomes;

$$Y = 1.366 + 0.826X_1 + 0.195X_2 + 0.138X_3 + 1.126X_4 + \varepsilon$$

From the findings of the regression analysis if all factors (project mission, top management support, project schedule and planning and user involvement) were held constant, the success of ICT project implementation would be at 1.366. An increase in project mission would lead to an increase in success of ICT project implementation by 0.826. An increase in top management support would lead to an increase in success of ICT project implementation by 0.195. An increase in project schedule and planning would lead to an increase in success of ICT project implementation by 0.138. An increase in user involvement would lead to an increase in the success of ICT project implementation by 1.126. All the variables were significant as the P-values were less than 0.05 an indication that all the factors were statistically significant.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The chapter provides the summary of the findings, discussion, conclusions and recommendations of the study based on the research questions and objectives of the study. The purpose of this study was to assess the influence of strategic success factors on implementation of ICT projects in Kenyan commercial banks.

5.2 Summary of Findings

This chapter looks at the summary of the research findings based on each objective of the study as presented in subsequent subsections.

5.2.1 Influence of the Project Mission on Implementation of ICT

The study found out that bank's ICT project executive team was clear on their organizational objectives and expected benefits to be derived from successful implementation of the project, organizational objectives were documented and signed off by the Executive Team before any ICT project commenced, user requirements were documented and signed off by the senior user before any ICT project commenced, organizational objectives and user requirements keep changing throughout the course of execution of IT projects and changes introduced in the middle of ICT projects they were compared against the initially signed off requirements/ objectives and validated for consistency with the overall executive team's vision.

5.2.2 Influence of Top Management Support on Effective ICT Project Implementation

The study found out that bank's top management team was supportive to project managers and teams and were readily available for decision making. The study also found out that top management offered guidance to the Project Manager and the team, bank's top management kept a close eye on all ICT projects and had consistently

provided all the tools and resources required to successfully deliver all the approved ICT projects.

5.2.3 Influence of Project Planning on ICT Project Implementation

The study established that commercial banks undertakes baselines for each ICT project undertaken, there was proper well structure and documentation in the ICT projects in the banks, there was well coordination of resources in ICT project implementation in the bank, schedules developed during the implementation of ICT projects in the banks were realistic and all stakeholders were informed on what was being done at all times during implementation of ICT projects in the banks.

5.2.4 Influence of User Involvement on ICT Project Implementation

The study revealed that ICT project product end users were always involved at all stages of the ICT projects in the Banks, users' expectations were managed during ICT project implementation in the banks, users define the test scripts and conduct the actual end user tests, users were given predefined test scripts and use these to conduct the end user tests, users observe as other project team members conduct the end user and users are involved during the end user tests process.

5.3 Conclusion

The study concludes that top management support needs to be focused on the initiation and realization of success of ICT projects implementation, rather than the narrowly defined project activities. Top management is the most significant factor influencing the success of ICT projects implementation. For benefits to be realized, organizational changes are required which must emanate from top management and the support thereof.

The study also concludes that for any success in ICT project implementation, effective project management which includes; planning, budgetary, monitoring and evaluation are critical and helps in achieving project goals, thus the need for project managers to remain aware and anticipate change as re-planning is necessary throughout the project. Planning is necessary to develop reasonable project estimates, enhance the management of

customer and stakeholder expectations, mitigate project risks, establish and standardize a scope management process to develop concise project scope statements and handle issues consistently

The study also concludes that the involvement of user participation in early stages of system development was of great importance, as a way of increasing afterward acceptance of the final project. Commercial banks, using different means, have involved its users in their intended projects in order to guarantee acceptance.

5.4 Recommendations

The study recommends that top management at commercial banks in Kenya engage in consistent communication with established project teams so as to identify their needs and progress in achieving successful implementation of ICT projects. This should include provision of resources such as training requirements and material resources required for project implementation.

The study further recommends that the commercial banks should pay more attention to the factors influencing the implementation of ICT projects. There is a need for proper leadership and management in all areas in order to support the project throughout the project cycle. The banks ought to adopt more adequate communication systems to ensure there is effective communication flow of information and feedback. This will also facilitate monitoring and evaluation, to ensure that milestones are delivered within time and budget.

The study also recommends that the Commercial Bank's management should engage users of the ICT systems at all stages of project implementation; from the designing and planning stage to the implementation stage. This would be achieved through conducting customers' survey on a desired service that the banks want to introduce to its customers.

5.5 Suggestions for Further Research

The study has focused on the influence of strategic success factors on implementation of ICT projects in Kenyan commercial banks. There is need for further research on the factors responsible for strong top management support in commercial banks and a study should also be conducted on project management training to project team at commercial banks and its impact on measuring outcome of project objectives.

A study should also be conducted to include, apart from the ICT Project influencing factors, other factors like the nature of the industry, past profits and organization history, level of competencies of staff, government incentives among others to determine whether they influence the success of ICT Project Implementation in commercial banks.

REFERENCES

- Al-Debei, M. M. (2012). Implementation of ICT Innovations: A comparative Analysis in terms of challenges between developed and developing countries. *International Journal of information, Business and Managemnt, 4(1),* 216-224.
- Ann Mooney, M. M. (2008). Achieving Top Management Support in Strategic Technology Initiatives. *Home School Alliance for Technology(HSATM)*. 1(2), 1-3.
- Baccarini, D. (1999). The logical framework method for defining project success. *project management journal*, 30(4), 25-32.
- Barki, H. a. (1994). Rethinking the concept of user involvement in projects. *International Journal of project management*, 163-167.
- Burnes, B. (2004). Kurt Lewin and the Planned Approach to Change: A Re-appraisal. *Journal of Management Studies*, 984-986.
- Chitkara, K. (1998). Construction Project Management- Hill Ed. New Delhi: Tata McGraw.
- Clarke, A. (1999). A Practical use of key success factors to improve the effectiveness of project management. *International Journal of Project MAnagement*, 17(3), 139-145.
- Cooke-Davis, T. (2002). The "real" success factors on Projects. *International Journal of project management* 20(3), 185-190.
- De-Wit, A. (1988). Measuring Project Success. *International Journal of Project*Management 6(3), 130-192
- Delone, W. A. (2002). Information Sysytems Success Revisited. *HICSS* (p. 2). New York: Online.
- Demming, W. (2012, November 2). *ISCTL*. Retrieved December 15, 2015, from http://istcl.blogspot.co.ke: http://istcl.blogspot.co.ke

- Government of Kenya (2008). Science, Technology and Innovation Policy and Strategy. Nairobi: GoK Press.
- Green, S. G. (1995). Top management support of R&D projects: A strategic Leadership Perspective. *Engineering Management, IEEE Transaction on (Vol. 42, Issue 3)*, 223-232.
- Griffith, S. B. (1961). *The Art of War- A Transilation of Sun Tzu's Works*. New York and Oxford: Oxford University Press.
- Guimareas, T. a. (1995). Client/server system success: exploring the human side. *Decision Science* 28(4), 851-876.
- Heeks, R. (2002). Information Systems and Developing Countries: Failure, success and Local Improvisation. *Waterloo* (pp. 4-5). Philidelphia: Taylor and Francis.
- Jordan, R. Y. (2008). Top Management Support: Mantra or Necessity. *International Journal of Project Management* 26(7), 713-725.
- Karzner, H. (2013). *Project Management: A systems approch to planning, scheduling and controling.* New York: John Wiley and Sons.
- Kastner, R. (2011, January 4th). In the Belly of the Beast: Why projects succeed. (D. Price, Interviewer)
- Kazanchi, H. a. (2008). Achiecing IT project success through control, measurement, management experience and top management support. *International Journal of Project Management*, 26-7.
- Kerzner, H. (1987). In search of Excellence in Project Management. *Journal of Systems Management* 38(2), 30-40.
- Krippner, A. L. (1998). Systems Theories: Their Origins, Foundations and Development. *J.S Jordan (Ed)*, 47-74.

- Lehner, H. F. (2001). Requirements Engineering as a success Factor in Software projects. *IEEE Software*, 58.
- McCarthy, J. (2010). Construction Project Management. Westchester: Pareto.
- Meredith, J. a. (2010). *Project Management a Mnagerial Approach 7th Edn.* Hoboken, N.J: John Wiley and Sons.
- Milosevic, D. a. (2005). Standardised Project Management may increase development project success. *International Journal of Project Management*, 181-192.
- Morgan, T. (2012). An examination of project manager's leadership contributions to project success using critical success factors. Capella: Capella University.
- Mubarak, S. (2010). *Construction Project Scheduling and Control*. Ney Jersey: John Wiley and Sons.
- Mwai, M. M. (2012). Factors Influencing Project Performance of ICT Projects in Kenya: A case study of selected firms in Nairobi. Nairobi, Kenya: University of Nairobi.
- Mwania, M. & Muganda, N. (2011). An Investigation on the relationship between ICT conceptualization and Bank performance. *AIBUMA Conference Paper* (11-16). Nairobi: AIBUMA.
- National Industrial Credit Bank (NIC, 2015). New core banking system (T24). Annual Report & Financial Statements
- Nations, U. (2008). Services and Development: Implications for the Telecommunications, Banking and Tourism services sectors in Kenya. *United conference on treade and development* (p. 95). New York and Geneva: United Nations.
- Owoko, R. (2012). *Determinants of success in delivery of houses projects*. Nairobi, Kenya: Ministry of Housing.

- Payne, J. (1995). Management of multiple simultaneous project: a state of the art review. *International journal of project management* 13(3), 163-168.
- Pinto, J. (1986). Project Implementation: A Determination of its critical success factors moderators, and their relative importance across the project life cycle. *Doctorate Disertation- University of Pittsburg*, 38-43.
- Pinto, J. K. (1986). Project Implimentation: A determination of its critical success factors moderators and their relative importance across the project life cycle: Doctorate Dissertation. Pittsburg: University of Pittsburg.
- Popescu, C. (1995). Project Planning, Scheduling and Control in construction: An Encyclopedia of terms and application. New Jersey: John Wiley and Sons.
- Prescott, J. K. (1990). Planning and Tactical Factors in the Project Implementataion Process. *Journal of Management Studies*, 305-325.
- Project Management Institute. (2008). A Guide to the Project Management Body of Knowledge. USA. USA: PMI.
- Project Management Institute. (2013). A Guide to the Project Management Body of Knowledge (4th Ed). Philadelphia: PMI.
- Roe, P. (2014). Literature Review: The Factors Which Contribute to Successful Project. *Prepared for: The Association for Project Management*, 5-6.
- Sara McComb, D. K. (2008). Project team effectiveness: The case for sufficient set up and top management involvement. *Production, planning and control: The management of operations*, 301-311.
- Slevin, J. K. (1987). Critical Success Factors in Effective Project Implementation. *Sloan MAnagement Review*, 29(6), 33-41.
- Standish Group International. (2010). Chaos Report. New York: Project Smart.

- Tukel, W. B. (1996). A New Framework for determining critical success/failure factors in projects. *International Journal of Project Managemnet* 14(3), 141-151.
- Zalilani, C. W. (2007). Factors Influencing the Success of Project Management Amongest Manufacturing Companies in Malaysia: A conceptual Framework. *7th Global Conference on Business and Economics* (pp. 3-4). Rome, Italy: Penang, Malaisyia.

APPENDICES

APPENDIX I: LETTER OF TRANSMITTAL

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

RE: INTRODUCTORY LETTER - RESEARCH PROJECT

I am a student in the University of Nairobi pursuing Master of Arts in Project Planning and Management. To meet the requirements for the award of the degree, I am undertaking a study on the "influence of strategic success factors on implementation of ICT projects in Kenyan commercial banks".

I kindly request your input through filling this questionnaire. Please note that your honest responses will be strictly confidential and purely for academic purpose.

Your acceptance to complete this questionnaire is greatly appreciated.

Thanking you in advance for your co-operation.

Yours faithfully,

Elijah Wanamboe Wekesa

APPENDIX II: QUESTIONNAIRE

SECTION A: GENERAL QUESTIONS AND BIO-DATA

1.	What is your gender?								
	Male []	Female	e	[]			
2.	How many years have you	work	ed in the	e comm	ercial ba	ank ind	ustry in	Kenyaʻ	?
	Below 1 Year []	1 - 5 Y	ears /	[]	6 – 10	Years []
	11 – 15 Years []	Above	15 Yea	ırs []			
3.	What is your position with	in the	bank?						
	Senior Management	[]	Superv	isor	[]		
	Graduate Clerk	[]						
	Other (Please explains)							
4.	Have you been involved in	n any I	CT proj	ect ove	r the las	t four y	ears (20	12-201	5)?
	Yes []	No	[]					
5.	If yes, how many projects	have y	ou beer	involv	ed in?				
	No Project Involvement	nt	[]	1 Proje	ect		[]
	2 – 5 Projects	[]	5 – 10	Projects	S	[]	
	Above 10 Projects	[]						
6.	If you answered "Yes" to	questic	on 4 abo	ve, at v	vhat cap	acity di	id you p	articipa	te in the
	projects? Please shade onl	y the n	nost pre	valent/f	requent	role.			
	Project Steering Comm	nittee	[]	Project	Manag	ger]]
	Project Team Leader							. []
	Other (Please specify)								
SE	ECTION B: SUCCESS OF	ICT	PROJE	CTS					
7.	Kindly select the stateme	ent tha	t best d	lescribe	s the su	iccess	of ICT	project	s within
	Commercial banks in Ken	ya;							
	Always successful				[]			
	Mostly successful but	someti	mes stri	aggling	[]			
	Mostly struggling but	someti	mes suc	cessful	[]			

	Always struggling but sometimes successful []
8.	8. Kindly rank the following ICT project success indic	ators in order of importance with
	1 being the most important and 4 the least important;	;
	Project is completed within the allocated time _	
	Project is completed within the allocated budge	et
	Project delivers all the agreed user requirement	s/features
	Project delivers the intended organizational obj	ectives
9.	9. How often are ICT in your bank projects completed	on time?
	All the time []	
	Most of the times []	
	Once in a while []	
	Never []	
10.	10. How often are ICT projects in your bank completed	within budget?
	All the time []	
	Most of the times []	
	Once in a while []	
	Never []	
11.	11. How often do ICT projects in your bank deliver a	all the agreed user requirements/
	features?	
	All the time []	
	Most of the times []	
	Once in a while []	
	Never []	
12.	12. How often do ICT projects in your bank d organizational objectives?	eliver/accomplish the intended
	All the time []	
	Most of the times []	
	Once in a while []	
	Olice III a willie []	

Never [13. What in your opinion is the success in your bank?] single	most s	significant d	eterminant of ICT project			
14. Given the list of strategic ICT p.	roject s	uccess	determinants	s below, rank the 4 in order			
of significance with 4 being the most significant and 1 being the least significant;							
				Rank Use 1, 2, 3 and 4			
Definition of organizational obj	ectives	/ user	requirement	S			
upfront			•				
Top management support to the p		nd pro	ject team				
Scheduling and Planning of the Pr	roject						
User/ Customer involvement at al	l stages	of the	project				
SECTION C: ORGANIZATION ICT PROJECT SUCCESS 15. Your bank's ICT project Executand expected benefits to be derived the second successive and the second successive a	ıtive Te	eam is	clear on thei	r organizational Objectives			
Strongly Agree	-			nontation of the projects.			
Agree	[-					
Disagree	_	1					
Strongly Disagree	-]					
16. Organizational Objectives are obefore any ICT project is common		ented a	and signed o	ff by the Executive Team			
Yes – All the time		[]				
Yes – Most of the ti Yes - Sometimes No – Rarely Signed		[[]]]				
- io ituiti, signou		L	J				

17. 16. Us	ser Requirements are docu	imented	and s	signed	off	by	the	Senior	User
(Depart	tment that will utilise the end	product)	before	any IO	СТ рі	rojec	et is c	ommen	ced?
	Yes – All the time	[]						
	Yes – Most of the time Yes - Sometimes	[[]						
	No – Rarely Signed	[]						
18. Organi	zational objectives and user re	equireme	nts kee	ep char	nging	thro	ough	out the o	course
of exec	eution of IT projects?								
	Yes – All the time	[]						
	Yes – Most of the time	[]						
	Yes - Sometimes	[]						
	No – Never Changed	[]						
initially	ges are introduced in the mide y signed off requirements/ of Executive Team's vision? Yes – All the time Yes – Most of the time	bjectives [1 0		•		•	Ū	
	Yes - Sometimes	[]						
	No – Never Changed	[]						
20. At wha	at stage of the ICT project are	e the sys	tem's	deliver	ables	cor	npar	ed agair	st the
initial b	ousiness objectives?								
	Design and Developmen	nt	[]					
	Execution and Implemen	ntation	[]					
	Post Implementation		[]					
	Never Compared		[]					

SECTION D: TOP MANAGEMENT SUPPORT AS A DETERMINANT OF IT PROJECT SUCCESS

21. Below are several statements on top management support in ICT project success. Kindly indicate the extent to which you agree with each of these statements on a scale of 1-5 where 1- strongly disagree, 2= disagree, 3= neutral, 4= agree and 5= strongly agree.

	1	2	3	4	5
My bank's top management team is supportive to					
project managers and teams					
My bank's top management is readily available for					
decision making					
My bank's top management offers guidance to the					
Project Manager and team					
My bank's top management keeps a close eye on all					
ICT projects					
My bank's top management is quick to intervene in					
terms of support to the project manager when things					
start going wrong					
My bank's top management has consistently provided					
all the tools and resources required to successfully					
deliver all the approved ICT projects					

22. In your opinion, how else has the Top Management team at your bank supported the successful delivery of ICT projects?

SECTION D: PLANNING AS A DETERMINANT OF ICT PROJECT SUCCESS

23. Below are several statements on scheduling and planning as a determinant of ICT project success. Kindly indicate the extent to which each has been practices in your Bank. Use a scale of 1-5 where 1- strongly disagree, 2= disagree, 3= neutral, 4= agree and 5= strongly agree.

	1	2	3	4	5
My bank undertakes baselines for each ICT project					
undertaken					
There is proper well structure and documentation in the					
ICT projects in my bank					
There is well coordination of resources in ICT project					
implementation in my bank					
The Schedules developed during the implementation of					
ICT projects in my bank are realistic					
All stakeholders are informed on what is being done at all					
times during implementation of ICT projects in my bank					

24. In your opinion, what other form of Scheduling and planning would you suggest for all future ICT projects in your bank so as to increase the chances of project success?

SECTION E: USER INVOLVEMENT AS AN INTERVENING DETERMINANT OF ICT PROJECT SUCCESS

25. Below are several statements on user involvement as an intervening determinant of ICT project success. Kindly indicate the extent to which each has been practices in your Bank. Use a scale of 1-5 where 1- Never Involved, 2= Sometimes, 3= Most of the time and 4= All the time.

	1	2	3	4
ICT project product end users are always involved at all				
stages of the ICT projects in my Bank				
Users' expectations are managed during ICT project				
implementation in my bank				
Users define the test scripts and conduct the actual end user				
tests				
Users are given predefined test scripts and use these to				
conduct the end user tests				
Users observe as other project team members conduct the				
end user tests				
Users are involved during the end user tests process				

25. In	your opinion,	what other	form of user	involvement	would you	suggest for	all future
ICT pr	ojects within	your bank se	o as to increa	ase the chance	es of proje	ct success?	

APPENDIX III: LIST OF COMMERCIAL BANKS IN KENYA

- 1. African Banking Corporation
- 2. Bank of Africa Ltd
- 3. Bank of Baroda
- 4. Bank of India
- 5. Barclays Bank of Kenya Ltd
- 6. Cfc Stanbic Bank Limited
- 7. Charterhouse Bank Limited
- 8. Chase Bank Limited
- 9. Citibank N.A.
- 10. Commercial Bank of Africa
- 11. Consolidated Bank of Kenya
- 12. Co-Operative Bank of Kenya
- 13. Credit Bank Limited
- 14. Development Bank of Kenya
- 15. Diamond Trust Bank Kenya
- 16. Dubai Bank Limited
- 17. Ecobank
- 18. Equatorial Commercial Bank
- 19. Equity Bank Limited
- 20. Family Bank Ltd
- 21. Fidelity Commercial Bank
- 22. Fina Bank Limited

- 23. First Community Bank
- 24. Giro Commercial Bank
- 25. Guardian Bank
- 26. Gulf African Bank
- 27. Habib Ag Zurich
- 28. Habib Bank Limited
- 29. I&M Bank
- 30. Imperial Bank Limited
- 31. Jamii Bora Bank
- 32. Kenya Commercial Bank Ltd
- 33. K-Rep Bank
- 34. Middle East Bank of Kenya
- 35. National Bank of Kenya Ltd
- 36. National Industrial Credit Bank
- 37. Oriental Commercial Bank
- 38. Paramount-Universal Bank
- 39. Prime Bank Limited
- 40. Standard Chartered Bank Ltd
- 41. Transnational Bank Limited
- 42. Uba Kenya Bank Ltd
- 43. Victoria Commercial Bank

APPENDIX IV: RESEARCH PERMIT

THIS IS TO CERTIFY THAT:

MR. ELIJAH WANAMBOE WEKESA

of UNIVERSITY OF NAIROBI, 35474-200

Nairobi,has been permitted to conduct
research in Nairobi County

on the topic: INFLUENCE OF STRATEGIC SUCCESS FACTORS ON IMPLEMENTATION OF ICT PROJECTS IN KENYAN COMMERCIAL BANKS

for the period ending: 2nd August,2017

Applicant's Signature Permit No: NACOSTI/P/16/89685/12890
Date Of Issue: 3rd August,2016
Fee Recieved: ksh 1000



National Commission for Science, Technology & Innovation

CONDITIONS

- You must report to the County Commissioner and the County Education Officer of the area before embarking on your research. Failure to do that may lead to the cancellation of your permit.
- 2. Government Officer will not be interviewed without prior appointment.
- 3. No questionnaire will be used unless it has been approved.
- Excavation, filming and collection of biological specimens are subject to further permission from the relevant Government Ministries.
- 5. You are required to submit at least two(2) hard copies and one (1) soft copy of your final report.
- 6. The Government of Kenya reserves the right to modify the conditions of this permit including its cancellation without notice



REPUBLIC OF KENYA



National Commission for Science, Technology and Innovation

RESEACH CLEARANCE

Serial No.A

CONDITIONS: see back page