

**IMPLEMENTATION OF ENTERPRISE RESOURCE PLANNING  
SYSTEMS AS A STRATEGIC APPROACH BY THE EQUITY BANK  
LIMITED IN KENYA**

**BY**

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**A RESEARCH PROJECT SUBMITTED IN PARTIAL  
FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF  
THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION,  
SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI**

**NOVEMBER, 2013**

## DECLARATION

This research project is my original work and has not been submitted for examination in any other university.

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This research project has been submitted for examination with my approval as university supervisor.

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## **ACKNOWLEDGEMENTS**

My sincere appreciation to my supervisor Mr. Eliud Mududa and the team of lecturers who offered their guidance and support during the development of this project. My sincere gratitude to the management and the staff of the Equity Bank limited for granting me the permission to conduct the study at the institution.

## **DEDICATION**

This project is dedicated to Almighty God who makes all things possible in His own time, and to my family, particularly my beloved father the Late Mr. Patrick Odhiambo, my mother Miriam Odhiambo, my husband Pius Nunda, and my daughter Audrey Joyner Hawi.

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## **ABBREVIATIONS AND ACRONYMS**

<b>ERP:</b>	Enterprise Resource Planning
<b>ICT:</b>	Information, communication Technology
<b>BPR:</b>	Business Process Re-engineering
<b>EBL:</b>	Equity Bank Limited
<b>SMEs:</b>	Small Medium Enterprises
<b>SAP:</b>	Systems, Applications, and Products in Data Processing
<b>CBK:</b>	Central Bank of Kenya



## **ABSTRACT**

Equity Bank Limited is one of the institutions in Kenya currently implementing enterprise resource planning system as a strategic approach. This study sought to establish the factors that influence the implementation of the system as a strategic approach by Equity bank limited. The study was based on the resource- based view theory and Mayer's contingency theory. A case study approach was adopted for the study. The interviewees were departmental heads from the various departments of the bank. An interview guide was used to collect data from the interviewees; analysis was done through content analysis. The resultant findings were presented using tables. The results of the study revealed and confirmed critical factors in the implementation of the enterprise resource planning approach. The factors included: system design, system selection, training and education of staff and change management process. The study also revealed some of the challenges experienced in the implementation of the approach, this included: loss of information during data migration, high system interdependence, low staff motivation and high cost overruns due to underestimation of resources during planning. The study recommended increased staff involvement in system design, adequate system selection, appropriate training and education of the staff proper change management during transition and allocation of adequate resources for the implementation. The study concluded that the implementation of ERP system approach by the Equity Bank Limited approach was an approach that most institution should consider investing in however there is need to pay attention to the critical factors that influence the implementation. The above mentioned factors were confirmed to be indeed critical and needed to be considered by institutions currently implementing or were intending to adopt the enterprise resource planning system as a strategic approach.

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background of the Study

Business organizations exist in an environment of competition where they use a number of resources to compete with other companies. To remain competitive and effective organizations have resorted to using strategies in their planning and management processes, enterprise resource planning is one of the strategic approaches adopted by some of the organizations seeking to achieve competitive advantage.

According to Magnusson et al (2004) strategy implementation refers to allocating resources and changing organizational structure to ensure the output of the firm is maximized. Emphasis in most organizations is on formulation of strategies; however it is evident from various studies that some of the best formulated strategies have failed to deliver the expected results due to failure in the implementation of the activities. Strategy implementation is affected by both internal and external factors, organization's environment is one of the external factors that affect strategy and so a strategy should continuously be adapted to changes in the business environment.

According to resource- based view theory a firm's strategic advantage is based on its distinct combination of assets, skills and capabilities by utilizing core competencies and resources. The 21<sup>st</sup> century has seen a rapid and large adoption of technology in different sectors of business. Lured by guarantees of improved business productivity, streamlined business operations, and increased cost savings, organizations worldwide have launched initiatives to integrate ERP systems into their existing business environments, Tilley et al (2007). According to Davenport (1998), there has been a growing increase in using enterprise resource planning system as a business information system platform for large organizations and government corporations in developed and some of the developing countries in attempt to achieve competitive advantage.

Since 2010 Equity bank has experienced a major increase in the customer base and that motivated the need to source for a system that was able to integrate and manage customer growth and the bank's information under one roof. The bank acquired Finacle Infosys which is a comprehensive, integrated, yet modular and agile business solution, addressing all the core needs of banks, in easy-to-configure modules. So far the bank has managed to successfully introduce banking solutions that have not been achieved by most banks in Kenya; this has been made possible by the enterprise resource planning system the bank is currently implementing.

### **1.1.1 Concept of Strategy**

According to Drucker (1954) a strategy refers to basic long-term goals and objectives of an enterprise, the adoption of causes and actions and the allocation of resources necessary for achievement of the goals. Strategy according to Ansoff (1965) is a means of achieving goals. It specifies the competitive position of the organization or the institution in the market place.

The aim of a strategy is to establish a sustainable and profitable position against the forces that determine industry competition. Strategy formulation is the process of choosing a strategy among the various strategies, and adapting the strategy to fit the organization's actual circumstances, the essence of strategy formulation is to design a strategy that makes the most effective use of core resources and capabilities. Grant (1991) claimed that resources and capabilities play a pivotal role in the competitive strategy which the firm pursues and these are the firm's "crown jewels" and need to be protected.

Strategic management according to Noe et al. (2006) is a process of analyzing a company's competitive situation, developing strategic goals, devising a plan of action and allocation of resources that will increase the likelihood of achieving those goals. Schermerhorn (1989) points out that strategy must be well formulated and implemented in order to attain organizational objectives.

### **1.1.2 Strategy Implementation**

Strategy implementation is about transforming strategies into action. Most strategic thinkers are of the view that formulated strategy is best implemented within an organization environment that is supportive.

Some of the elements accounting for this supportive environment include: leadership, organization structure, organization culture and provision of all other needed economic resources. The role of this climate in the success of strategy implementation is seen in a wide range of literature that advocates for development of organizational cultures and climate for facilitating strategy implementation through programs such as organization development, change management and creating of learning organizations.

According Magnusson et al (2004) the failure rate in strategy implementation may go as high as above 70% due to lack of supportive organization environment. Based on various studies Hansen, Boyd and Kryder (1998) identified additional implementation problems such as failing to periodically alter the plan or adapt the strategy to changes in the business environment, deviation from original objectives and lack of confidence about success.

### **1.1.3 Enterprise Resource Planning System as a Strategic Orientation**

Information technologies are becoming an inseparable part of a competitive business strategy. One of the products of information technologies is enterprise resource planning system. Enterprise resource planning is business management software that allows an organization to use a system of integrated applications to manage the business. They are “commercial software packages that enable the integration of transaction oriented data and business process throughout an organization” ,Markus and Tanis ( 2000).

Enterprise resource planning software integrates all facets of an operation, including development, manufacturing, HR, Finance, sales and marketing. It promises one database and a unified interface across the entire enterprise. Such systems are promptly making their way into the functioning of enterprises.

Enterprise resource planning system is a principal infrastructure of information systems helping an organization to prosper under the present day economic conditions. Successful implementation of enterprise resource planning system is therefore a business strategy to remain competitive as it creates organizational synergy, which provides a stimulus for the development of particularly efficient processes necessary for the success of an organization. Businesses aiming to be global and competitive will therefore not underestimate the effect ICT can have on their customer base.

According to Spanos et al. (2002), information systems remove distance and time constraint in accessing required information flows. Enterprise resource planning also reduces the cost of production as knowledge is produced, transmitted, accessed and shared at a minimum cost. There is a reduction in the degree of inefficiencies and uncertainty with the use of the system because it enables businesses to interact more efficiently (Buhalis, 2003). It is imperative to mention that implementation of enterprise resource planning system in an organization is a highly complex process which is influenced not only by technical, but also by other factors.

#### **1.1.4 Banking Industry in Kenya**

A bank can be defined as a company, which carries on, or purposes to carry on banking business (Kenyan Banking Act, Cap 488). Banking in Kenya started with British colonialist and few Indian traders towards the end of the 1900 Century. According to Wagacha and Ngugi (1999), the first bank to start in Kenya was the National Bank of India now called the Kenya Commercial Bank in 1896, followed by the standard bank in 1910.

Up to the 1980's, regulation in the financial services was mainly of restriction on both the range of products that a bank could offer and the nature and volume of contracts in the geographical area in which the services could be offered. The banking sector was liberalized in 1995. Liberalization of banking in Kenya in 1995 brought about most of the changes, which have impacted on the banking business both positively and negatively. One major positive change is the lifting of foreign exchange control.

According to the Central Bank of Kenya, there were 46 commercial Banks in Kenya as at 1st July 2007 (<http://www.cbk.com>). Financial reforms and free market has spurred the adoption of innovations that improve efficiency and provide a healthy balance between lending and deposit rates.

According to the 2007 banking survey, three players, Barclays Bank of Kenya, Standard Chartered Bank and Kenya Commercial Bank have maintained their dominance in the Kenya's banking sector, controlling between 40% and 50% of the sector throughout the past ten years. But other players are coming up and staking their claim to the cake; most notably among them is CFC Bank whose market share has grown from 1.68% in 1997 to 5.28% in 2006 in terms of total asset. Worth noting also is Equity Bank which entered the market as a commercial bank in 2004 with a market share of 1.17% but now claims to 2.63% as at the end of 2006 [www.cbk.co.ke](http://www.cbk.co.ke) (2007).

### **1.1.5 Equity Bank Limited**

Equity bank was founded as Equity Building Society (EBS) in October 1984 and was originally a provider of mortgage financing for the majority of Kenyans who fell into the low income population. In 2004, Equity's transformed from a mortgage financing provider to a savings and loan institution, a path completed on January 1, 2005.

In August 2006, the bank was listed on the Nairobi Stock Exchange, with an initial valuation of KSh 6.3 billion. Equity's transformation into a rapidly growing retail bank was widely considered to be an inspirational success story.

The bank has branches spread all over the country and neighboring countries like Uganda and Sudan (Equity Bank, 2013). There are a total of 557 ATMs, as well as 2,500 points of sale terminals and over 1,000 merchant outlets. The bank has 237 branches in Kenya, Uganda, Rwanda, Sudan and the Republic of Tanzania.

Since 2010 the bank has experienced a major increase in the customer base and that motivated the need to source for a system that was able to integrate and manage customer information and the bank's under one roof. The bank acquired Tier 4 and Finacle Infosys.

Finacle is a comprehensive, integrated, yet modular and agile business solution, addressing all the core needs of banks, in easy-to-configure modules. The system provides all the building blocks of business functionality, enabling users to configure products and processes flexibly in order to adapt to a dynamic environment.

With a 360-degree single source view into customer accounts, the banks can empower both staff and customers with relevant information and delight them with the right business solutions, presented at the right time through the right channel Equity bank (2013). Enterprise resource planning in Equity bank is also used in major banking transactions such as cash management, lending and customer management, wealth management. The software can be used as well for a number of banking solutions like bill payments, cheque monitoring, collections and treasury management. The full use of the enterprise resource planning will always depend on the bank or financial institution since different banks will have different needs and requirements.

## **1.2 Research Problem**

Many organizations face significant difficulties with regards to strategy implementation process. As Noble (1999) notes, most organizations' best-formulated strategies fail to produce superior performance for the firm due to poor implementation. According to the White Paper of Strategy Implementation of Chinese Corporations (2006), strategy implementation has become "the most significant management challenge which all kinds of corporations face at the moment". Developing countries still lag far behind as far as enterprise resource planning implementation is concerned as compared to Europe and North America Huang et al (2004).

However, due to economic growth and the changing business environment countries such as Kenya are becoming major targets for enterprise resource planning system vendors O'Kane (2002), where a number of large and mid-sized organizations have implemented ERP systems into their business operations. According to Otieno (2008), enterprise resource planning projects in developing countries face challenges related to economic, cultural and basic infrastructure issue.

Enterprise resource planning projects are notorious for taking a longer time and costing more money than is projected. Too often, the best laid plans for full organization integration become mired by system incompatibility, legacy issues, cost overruns, and time extensions.

The banking industry in Kenya has experienced tremendous growth in the last few years, this has seen the entry of several new banks into the market and equally intensified competition among the players in the industry. Several strategies have been adopted by the competitors in attempt to remain relevant this includes strategies like enhanced customer service, cost leadership, enhanced products mix among many others. Equity Bank being one of the key players in the industry adopted enterprise resource planning as a strategic approach to remain relevant to the competition it is currently facing. The bank radically changed its information technology system to maintain a competitive advantage, become more responsive to changes in the market, and deliver quality service at lower cost. Equity Bank was a target for the study since it is currently implementing enterprise resource planning system and is among the leading banks in Kenya.

According to studies conducted by Otieno and Abesingnje (2006) while there exist studies on ERP there is very little empirical research on ERP focused on developed countries. Soh and Sia (2004) state that studies on ERP system reflect western ways of doing things while Boersman and Kingman (2005) argue that the benefits of implementing ERP as revealed by most studies are applicable to the developed countries and that there is still need to conduct more studies in developing countries. The above studies reveal a knowledge gap in the implementation of ERP system especially in the developing countries. It is for this reason that the study seeks to fill the gap by determining factors influencing implementation of ERP system by Equity Bank Ltd in Kenya. Conducting a study on ERP in Kenya reduces the existing gap by providing body of knowledge that is applicable to most developing countries. The study will thus seek to address the question: What factor critical factors influence the implementation of enterprise resource planning system by the Equity Bank Limited in Kenya? What challenges are faced by Equity bank in the implementation of the system?



### **1.3 Research Objectives**

The objectives of the study were:

- i. To determine the factors influencing implementation of enterprise resource planning system by Equity Bank Ltd.
- ii. To establish the challenges experienced by Equity Bank in implementing of enterprise resource planning system.

### **1.4 Value of the Study**

This study will inform and provide a guideline for the formulation of policies in regard to implementation of enterprise resource planning projects in the financial institutions, organizations and the government by providing the factors that influences the implementation and also by addressing some of the challenges experienced during the implementation process.

The research also presents avenues for continuing theoretical and empirical research investigations in the field of IS, in particular enterprise resource planning. The study is expected to be of benefit to academicians as it will contribute to the existing literature in the field of enterprise resource planning system and project implementation by financial institutions in Kenya. Future scholars can use this research as a basis for further research in the area of enterprise resource planning and project implementation in Kenya industries.

The study will contribute to practice by identifying what organizational factors to look for when initiating implementation of the system and subsequent culture change. Enterprise resource planning implementation and organizational change are linked. The findings of the study can help the management of corporations to better support the deployment of ERP in their organizations. ERP Vendors such can benefit from this study because they will utilize the research to be able to develop systems that addresses the needs of enterprises as they evolve over the years.

The study will also provide insight and strengthen the existing theories like the resource-based theory and the Myers contingency theory that formed the foundation of this study by providing further evidence from the practices identified in the study in relation to the theories.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

In this chapter literature related to factors influencing ERP project implementation is reviewed and critiqued for identification of gaps. The chapter reviews the academic and practitioners' literature published on enterprise resource planning system relevant to the focus of this research. Easterby Smith et al. (1991) notes that it is important for researchers to familiarize themselves with existing research prior to collecting their own data since it serves as a guide against the risk of overload at the primary data collection stages and throughout the study it ensures a sense of the topic's perspective.

#### **2.2 Theoretical Foundation**

The study was based on the resource- based view theory which suggests that a firm's strategic advantage is based on its distinct combination of assets, skills and capabilities core competences and resources Andersen (2012).Enterprise resource planning system is one of the approaches adopted by organization to achieve a distinct synergy in organizations assets, skills and capabilities to achieve competitive edge. The study was also built on the Mayer's contingency theory, Myers et al. (1997) that clearly delineates external environmental variables" from the organizational factors, which affect strategy implementation and hence contributing to the study of implementation of ERP systems at Equity Bank. The theory addresses the technical and cultural factors that influence implementation of the approach

### **2.3 Enterprise Resource Planning System**

According to Deloitte (1998), an enterprise resource planning system is a packaged business software system that allows a company to automate and integrate the majority of its business processes, share common data and practices across the entire enterprise, produce and access information in a real-time environment.

Davenport (1998) definition emphasizes the integration laid by enterprise resource planning between various organizational networks, in particular functional divisions within organizations such as finance, marketing, procurement, inventory, sales and distribution, human resources planning and payroll. Umbel et al. (2003) argues that enterprise resource planning is not just a software package to be tailored to an organization but an organization business blue-print that affects how people work by imposing its own logic on a company's strategy, organization, and culture Lee & Lee (2002). Many companies are radically changing their information technology strategies to maintain a competitive advantage, become more responsive to change markets, and deliver better service at lower cost. Purchasing integrated enterprise resource planning software instead of developing IT systems in-house is one of the strategies used by organizations to achieve effectiveness.

### **2.4 Critical Factors Influencing Enterprise Resource Planning System**

#### **Implementation**

Implementing an enterprise resource planning system is a major project requiring a significant level of resources, commitment and changes throughout the organization. It is therefore worthwhile to examine the factors that to a great extent determine whether the implementation will be successful. Numerous authors have identified a variety of factors that can be considered to be critical to the success of an enterprise resource planning implementation.

In this study three broad factors that are critical in the implementation of ERP systems in an organization have been considered. These are strategic, technical and cultural factors. Strategic factors entail factors such as Top Management commitment, mission and vision as well as ERP System Selection. Technical factors are focused on short-term operational goals; some of the technical factors include software integration and User Training and involvement while cultural factors include change management and effective communication

According to Zhang et al. (2002) top management support in enterprise resource planning implementation has two main aspects: providing leadership and providing the necessary resources. Additionally, the roles of top management in enterprise resource planning implementation comprise developing an understanding of the capabilities and limitations, establishing reasonable objectives for the system implementation, Al-Mashari et al. (2003) argued that top management support must be evident from the time of project initiation and must extend to the full implementation of the system. Top management support is necessary in securing the required financial and personnel resources which is central management for successful project implementation.

When an organization has identified the need to implement enterprise resource planning system there needs to be a clear project mission and vision to guide the project throughout the ERP life cycle Loh and Koh (2004). Project management identifies three competing and interrelated goals namely; scope, time, and cost goals .The primary stage of any project should begin with a conceptualization of the goals and possible ways to achieve these goals. According to Somers and Nelson (2004) project goals should be explained so they are specific and operational to indicate the general directions of the project. Project management activities span from the first stage of the enterprise resource planning life cycle to go-live and should also put into consideration post implementation stage.

There are various enterprise resource planning system packages in the market with similar functionality but different designs. Various authors identified important criteria that need to be taken into account when selecting a new enterprise resource planning system, a study by Everdingen et al. (2000) stressed that the enterprise resource planning system selected has to closely fit with most of the current business procedures, additionally the system has to be flexible, user-friendly and easy to implement. Sprott (2000) reported that applicability, integration, adaptability and upgradeability are essential factors that have to be considered in enterprise resource planning adoption therefore an organization must select an appropriate vendor that is able to provide a flexible system. Organizations should be willing to change their businesses to fit the software in order to reduce the degree of failure and customizations Murray and Coffin (2001).

Technical factors are focused on short-term operational goals; some of the technical factors include software integration and User Training and involvement .Enterprise resource planning system integration with specialized software products serving the specific industry needs is necessary to achieve the full benefits of implementation and sometimes companies needs to develop their own interfaces to achieve such integration. According to Murray and Coffin (2001) system integration testing is a high-level software testing process in which testers verify that all related systems maintain data integrity and can operate in coordination with other systems in the same environment. The testing process ensures that all subcomponents are integrated successfully to provide expected results.

Enterprise resource planning system is an extremely complex system and demand rigorous training. Installing such a software package without adequate end-user preparation could yield to drastic consequences. Inadequate or lack of training has been one of the most significant reasons of many enterprise resource planning system fail Kelley, et al (1999) .User involvement is one of the most cited critical success factors in ERP implementation project since increases user satisfaction and acceptance by developing realistic expectations.

According to Zhang et al. (2002) there are two areas for user involvement when the company decides to implement an enterprise resource planning system, user involvement is necessary in the stage of definition of the organization's enterprise resource planning system needs, and in implementation of the systems. Nah et al., (2003) argued that sufficient training can assist increase success for enterprise resource planning system; however, lack of training may lead to failure

Cultural factors in are extremely important in enterprise resource planning implementation. The study considered change management and effective communication as some of the cultural factors.

Change management refers to an approach to transitioning individuals, teams and the entire organization to a desired state by an organization. It is structured to ensure changes are smoothly and successfully implemented to achieve lasting benefits. According to Umble et al. (2003), enterprise resource planning system implementation in an organization is not just a software project but an organizational change project. Successful implementation of ERP requires the change in staff behavior, processes, departments and organizations: Seyed M.S. Hosseini (2012).

Effective communication promotes desire to participate in the changes and brings acceleration of business process reengineering Rosario (2000). Communication includes the formal promotion of project teams and the advertisement of project progress to the rest of the organization Holland et al.(1999).Employees should be told in advance the scope, objectives, activities and updates, and admit change will occur Sumner(1999). Constant communication also helps in eliminating resistance of the new system introduction, throughout the business.

## **2.5 ERP Implementation Challenges**

Identifying challenges relevant to local companies is one way to increase the chances of a successful local implementation. Al-Mashari (2003) and Markus et al. (2000) states integration is often cited as a key challenge associated with the implementation of enterprise resource planning system. Berente et al. (2009) argues that integration of existing stand-alone information systems with enterprise resource planning system is a major problem for many organizations.

According to Lowe & Locke (2008), enterprise resource planning system is a complex and comprehensive business information systems change an organization can undertake. Report by Institute for Data Research report Aiken (2002) further asserts that enterprise resource planning systems are built on new powerful technologies that require very different skill sets. Managers find it very challenging to manage the technological complexity of different platforms and to harness the technological power of new enterprise technology.

Even though the price of prewritten software is cheap compared with in-house development, Monk & Wagner (2006) observes that the total cost of implementation could be more since an enterprise resource planning system is a semi-finished product which needs to be configured and tailored to individual organizational needs by consultants. The implementation cost is even higher when an organization decides to undertake major customization and also the cost of hiring individual consultants.

Therefore, arguably, enterprise resource planning systems are generally expensive to purchase and implement in organizations. One of the greatest fears that organizations have is the fact that staff once trained are very marketable and can be poached by other competing firms. Retention strategies such as flexible work hours, telecommunication options, and opportunities are also being used and have equally proved to very expensive to the organization. Enterprise resource planning systems are becoming increasingly similar in functionality but are still different in their quality, ease of implementation and vendor support Fourney (2007).



## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter looks at the methodology the study used to come up with the findings that are likely to expose the real issues on the ground concerning the factors influencing the implementation of ERP in Equity Bank Limited. The first section addresses the research design; the second section is on data collection which illustrates on how information was collected. The chapter ends by illustrating on how the collected information was analyzed.

#### **3.2 Research design**

Since the study aimed at revealing the factors that influence the implementation of enterprise resource planning projects in financial institutions, it adopted a case study. Gilham (2000) considers a case study as a design that focuses on a single or several cases but gives a detailed investigation of the phenomena in that case. He also argues that the case must be abstracted and collated to get the best possible evidence that can vividly address the problem at hand.

The study aimed at giving a detailed description of the factors influencing enterprise resource planning projects in financial institutions, bearing in mind the expansive nature of financial institutions, a case study was considered as the most appropriate design.

#### **3.3 Data collection**

The data collection was based on an interview guide. The interview guide was used in seeking information on a face to face basis from the relevant informants that comprised of the target of the study.

The target for the study comprised departmental heads from various departments within Equity bank limited such operations managers, business development managers, branch managers. The target for the study enabled the researcher to collect evidence relevant to address the problem at hand since the interviewees interact with the implementation in their various functions in the bank.

Focus was on branches within Nairobi, this was informed of the fact that enterprise resource planning services offered in the bank branches are similar in all the branches hence targeting a section of the banks that that are easily accessed. The study therefore targeted 3 of the bank's branches within the Nairobi city.

### **3.4 Data analysis**

The method of analysis was content analysis since the data was collected using an interview guide. Krippendorff (1980) defines content analysis as a research technique for making replicable and valid inferences from data to their context with the objective of building body of knowledge. Content analysis is a widely used qualitative research technique that allows researchers to sift through large volumes of data with relative ease in a systematic fashion. It is technique used to discover and describe the focus of individual, group, institutional, or social attention by allowing inferences to be made which can then be corroborated using other methods of data collection.

## **CHAPTER FOUR**

### **DATA ANALYSIS RESULTS AND DISCUSSION**

#### **4.1 Introduction**

This chapter focuses on data analysis and discussion of the findings. The study aimed at determining the factors that influence the implementation of enterprise resource planning as a strategic approach by Equity bank limited Kenya and establishing the challenges in the implementation of the approach. The chapter starts with the data analysis and proceeds to discuss the findings of the study.

#### **4.2 Data Analysis**

Out of the targeted eighteen head of departments from three Equity bank branches fifteen were available for the interviews .The core focus of the analysis was “who said what, to whom, why, to what extent and with what effect. The process involved summarizing information from the interviewees with attention to reliability, analytical generalizability and replicability of the given information.

During the study the respondents highlighted several factors as factors that influenced the implementation of the approach at the Equity bank limited, they also mentioned some of the challenges experienced in the implementation of the approach by the institution. Based on the objectives of the study the researcher developed content categories to make it possible to review relevant literature together to make it possible to answer the research questions. The identified content categories included: system design, system selection, education and training and organization management of change.

#### **4.3 Results and Discussion**

To ensure reliability of information obtained from the interviewees the study sought to establish the period that the interviewees had been with the bank. According to the findings most of the interviewees had been with the bank between three and five years, with at least 6months experience in their current positions. Having been with the institution longer the interviewees were able with precision to respond to most of the questions, make comparisons and comprehensively explain the significant changes.

### 4.3.1: System Design

**Table 4.1: Relationship between ERP system and various Departments at Equity bank limited**

<b>Department</b>	<b>Function performed by the ERP system</b>
Operations	Branch procurement, Staff leave management, staff loans management, staff training needs,
Delivery Channels	Agency banking, Mobile banking and internet banking
Credit control	Loans appraisal and approval, Loans account management, individual and group loans disbursement, M-kesho management; a temporary loan facility, management of credit card information.
Customers service	Customer queries management, 24/7 customers support center, customer service training, and customer service evaluations.
Account opening	Eazzy 24/7 management , mobile bank pin admistration and internet banking
Banc Assurance /Insurance	Premium updates, online insurance renewals medical insurance alerts.
Business growth and development	Corporate accounts management

The study sought to determine if system design influenced the implementation of the approach by the Equity bank limited; how well the design addressed the needs of the various departments and how adequate was the system intergration in relation to the institutions existing business procedures. It is evident that the system was in one way or another linked to and relevant to the various departments but at different departments levels of engagement. The study revealed that to a very large extent the system design was adequate and relevant since the system was able to perform most if not all of the core functions in the various departments.

The study revealed minimum intergration issues; the system was described as compatible with most of the existing business procedures and existing software. This confirms studies conducted by Everdingen et al that stressed the need for the system to closely fit existing business procedures

### **4.3.2 User Education and Training**

The study sought to establish the role of training and education in the implementation of the approach process. The interviewees in all the branches confirmed that trainings had been conducted prior to the introduction of the system; it was mentioned staff were released in shifts for 3 to 5 days training, the interviewees also mentioned that each branch was allocated a champion to oversee and support at the branch level after the trainings. Some of the interviewees explained that by the time of “go-live” for the system they had minimal challenges in their departments in terms of the system use; this was attributed to the trainings that had been adequately done prior to introduction of the system and the constant support from the champions at the branch level.

Some of the respondents however commented on the complexity and intensity of the trainings this was based on feedback from staff from their departments, some of staff in their department felt that too much content was taught within a short time yet the staffs were expected to implement within a short period.

The trainings were also described as general by some of the respondents who were concerned that the trainings did not handle the specific needs of the various departments, this presented a challenge at the department levels since the departments depended on the champions longer than expected, the departments constantly needed the support of the champion who most of the time was overworked being only one per branch for that reason some of the respondents commented that the trainings were not very adequate. Some of the interviewees also commented on lack of commitment and negative attitude towards training by some of the staff; this rendered the trainings ineffective they mentioned cases of staff that attended the trainings but still experienced great challenges in implementation. The study confirmed studies by Kelley,et al (1999) that mentioned that inadequate or lack of training is one of the most significant reasons why most enterprise resource planning system fail.

### **4.3.3 Enterprise Resource Planning System Selection**

The study sought to establish how adequate the system selection was and how it influenced the implementation. System selection addressed the critical factors to consider when selecting the system. The commonly mentioned factors included: flexibility, compatibility, user friendliness and ease of trouble shooting.

The findings confirmed that Finacle info system was quite compatible with the T24 system that was previously in use by the bank, this was supported by most of the respondents who commented that most of their core functions stabilized as soon as the system went live and they commented on minimum loss of information as compared to migration to the previous system.

The interviewees commented on the system being user friendly, they mentioned that with basic computer skills most of the staff in their departments were able to operate the system; no information technology background was required. Some of the respondents also mentioned the system was easy to troubleshoot and did not require the constant support of an IT specialist to diagnose problems. This was important to most of respondents since in the past it cost much to diagnose simple problems in the system.

The system was also described as flexible by most of the respondents; they commented that the system was able to perform several functions that the previous system was not able to do. Multiple of functions ranging from procurement, inventory management, knowledge management to human resource management like leave management could now be managed from the click of button.

The respondents however expressed concern on the interdependence of the system whereby the functions were interlinked and failure in one function of the system was likely to affect most of the functions. Some also commented on the system being very rigid in terms of the procedures followed for some functions; leave management was mentioned as an example, the respondents commented that it was rigid making it impossible for the branches to operate in their absence.

#### **4.3.4 Organization Change and Culture Management**

The study sought to establish how the institution managed the transition and how that influenced the implementation of the approach. Most of the respondents appreciated that the transition had been managed quite well. Some of the respondents mentioned constant timely update on the changes arising from the transition this ensured timely communication to the staff in their department and reduced the level of resistance to change.

The interviewees also appreciated the role of champions that were placed at the branch level to support the staff support during the transition. Some described them as a quick fix to most of the problems that arose during the transition; this ensured a smooth transition to the new system.

The role of training was also appreciated as a major factor that enhanced the transition; the respondents commented that the trainings equipped the staff with adequate skills that made it possible to embrace the changes. Trainings we also mentioned to have positively influenced the attitude.

However concerns were raised on managing the psychological and emotional aspect of the staff, concerns were expressed on the long working hours that the staff were exposed to at the initial stages of the implementation of the approach yet during planning for transition no much financial provision were made for the same. This included provision for medical covers for complications that arose from the long working hours, overtime allowances and nutritional provisions.

Some of the respondents commented on staff motivation and expressed concern that it was possible to overlook staff motivation at the expense of achieving the objective of the approach since the approach is more oriented towards customer satisfaction. Some commented that this might have equally contributed to a high staff turnover during the transition. This confirms the statement by Umbel et al (2003) that ERP is not just a software project but an entire organizational change process.

#### 4.4 Challenges facing ERP implementation

**Table 4.2: Challenges in implementation of ERP as a strategic approach at the Equity bank limited**

<b>Challenge</b>	<b>Frequency of mentioning</b>
Loss of Data during Migration	2
Low staff motivation	6
High Staff turnover	2
High implementation cost	3
Time overrun	2
Over reliance on consultants	1
Under-estimating resources required	4

Table 4.2 is a summary of some of the challenges experienced by the Equity bank limited in the implementation of the system as a strategic approach. Of great concern was the level of staff motivation in the implementation of the approach, this was of concern at the initial stages of the introduction of the approach since the staff worked for long hours as they tried to adapt to the changes that came with the system. This was suggested by some of the respondents that may in one way or the other have influenced staff turnover during the period.

The respondents experienced the challenge of cost overruns, some commented that most of the costs associated with the approach were overlooked during planning; this resulted to underestimation of the required resources. This included overtime allowances, staff welfare allowances like taxis when the staff worked late in the night, staff stress release initiatives like staff lunches. All the above resulted into high implementation costs that had not been adequately planned for.

Though minimal, the respondents also raised concern on loss of important information during data migration, some commented on important client information that lost during the transition that was never recovered and presented great challenges in handling and following up of clients, this was evident in cases of clients whose loans disappeared from the system and clients whose account balances were affected.



## **CHAPTER FIVE**

### **SUMMARY, CONCLUSION AND RECOMMENDATION**

#### **5.1 Introduction**

This chapter presents the summary of the study, conclusion drawn from the findings and recommendation made there-to. The conclusion and recommendations drawn were focused on addressing the purpose of this study which was to determine the factors that influence the implementation of enterprise resource planning system as a strategic approach by the Equity bank limited

#### **5.2 Summary**

The study revealed system design as one of the critical factors that influence enterprise resource planning implementation. The focus was on how well the system addressed the user's needs and the intergration of the system with the existing business procedures and software. The interviewees commented on the ability of the system to perform the key functions of the business. The study confirmed the need of the adopted system to fit the existing business processes. The study further revealed the need to involve users to ensure the right system is adopted.

The critical role of training and education was also revealed during the study, the interviewees associated the success of the transition with the adequate training that was provided prior and during the transition. According to the interviewees the training provided them with the capacity and the critical skills that enhanced the implementation. The study further revealed the need to ensure trainings are made as relevant and as simplified as possible.

The study also established system selection as another factor that influences the approach, from the study it was important to ensure that the acquired system was compatible with the existing business procedures, use friendly, flexible and easy to trouble shoot.

The study further revealed managing change as key in implementation of enterprise resource planning system. The interviewees were concerned about effective and timely communication of changes; the study revealed that staff valued constant update on what was going on and why what was not working .The study further revealed need for staff motivation during transition.

Enterprise resource planning implementation at Equity bank equally faced challenges. The research revealed staff motivation as one of the key challenges experienced in the initial stages of implementation of the approach, it was also suggested that low staff motivation is likely to influence high staff turnover. Interdependence in the functions of the system was also mentioned as one of the challenges experienced in the approach; when one aspect of the system failed it is likely to affect other functions.

Though a minor concern the study also revealed loss of information during data migration as one of the challenge that was faced by the institution during transition to adopt the approach .The study therefore revealed the importance of ensuring information is protected during adoption of the approach to prevent loss of any important information .

The challenge of cost overruns was also evident during the study; the study established that some of the actual costs went above planned. The study revealed the importance adequate financial allocation in the implementation of the approach however it is important to have cost controls to ensure there are no cost and time overruns, Staff welfare was also a major concern and so it is important to ensure that adequate allocations are made to cater for staff welfare.

### **5.3 Conclusion**

The study confirmed that enterprise resource planning system approach is an important investment that institutions need to consider to remain competitive. It is however important to ensure that institutions that choose to invest in the approach consider the critical factors the influence the implementation and equally consider the challenges.

The study concludes that ERP system design influences the implementation therefore it is important to ensure the system design addresses the core needs of the organization. Secondly the study also concludes that the system selection is also critical therefore it is important to ensure that the system selection is correctly done; the selected system should be flexible, user friendly, compatible and easy to trouble shoot.

The study also revealed training and education as core to the implementation of enterprise resource planning approach, for that reason the study concludes that adequate and relevant training of staff is necessary in implementation of enterprise resource planning.

The study concludes that Managing change is key in implementing enterprise resource planning system; the study emphasized the need for timely communication of the objectives of implementing the approach. Constant update on the arising changes enhances staff commitment and makes it easier to embrace change.

To address the challenges arising from implementation of enterprise resource planning the study concludes that it is important to consider system intergration in the implementation of the approach; it is important to ensure the adopted system is compatible with the existing system and software. It is also important to ensure information is protected to avoid loss of information during data migration. Finally the study concludes that it is important to have correct budgetary allocations to overcome the challenge of cost overruns.

#### **5.4 Recommendation**

The study recommends staff involvement in developing the system design; this ensures the design selected is adequate and relevant to the needs of the staff. It is also important to ensure the system is compatible with the existing business procedures. This ensures the approach is cost effective since there is no need to replace the existing software.

Staff trainings are important in the implementation of the approach so it is important to ensure that training needs analysis are conducted prior to trainings to ensure trainings are made as simplified and as relevant as possible. Training equally plays an important role in managing of change.

During system selection it is important to ensure the selected system is flexible, user-friendly and easy to troubleshoot. This minimizes the cost of implementing ERP as an approach. Timely communication and staff motivation is important in managing transition in use of the approach.

### **5.5 Limitations**

Due to the busy schedules of the managers at the bank the interviews were not very exhaustive due to the time factor. Some of the earlier approached respondents were not available for the interview hence the assumption that their views were represented by the others.

### **5.7 Areas for further research**

The researcher recommends further research on cost benefit analysis of enterprise resource planning as an approach since the study focused on the critical factors in implementation of the approach only. The researcher also recommends further research in the area of the relationship between enterprise resource planning and staff turnover, this was mentioned in some of the literature review and also came up during the interviews hence the need for an in-depth study of the same.

### **5.6 Implications on policy, theory and practice**

The researcher recommends that there should be clear guidelines on system design and system selection in organizations implementing or planning to adopt the enterprise resource planning system, the guidelines should clearly spell out the involvement of the staff this is to ensure the correct system design and system selection in organizations.

Organization's policies should ensure adequate staff capacity building through quality trainings. Organizations should be willing to invest in capacity building of staff prior to introduction of such approaches to ensure the capacity of the staff is adequate handle the needs arising during the implementation process. The policies should also address staff motivation.

Organizations should ensure relevant financial policies to address issues that are related to project implementation. The policies should ensure adequate budgetary allocations for projects and should cover any unexpected eventualities arising from projects.

Organizations should strive to ensure adequate management of transition; policies should ensure clear communication and staff motivation for effective implementation of the enterprise resource planning system.

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**Appendix 1: Introduction letter**



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DATE 22/08/2013

**TO WHOM IT MAY CONCERN**

The bearer of this letter NOREEN AKWO ODHINGO

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is a bona fide continuing student in the Master of Business Administration (MBA) degree program in this University.

He/she is required to submit as part of his/her coursework assessment a research project report on a management problem. We would like the students to do their projects on real problems affecting firms in Kenya. We would, therefore, appreciate your assistance to enable him/her collect data in your organization.

The results of the report will be used solely for academic purposes and a copy of the same will be availed to the interviewed organizations on request.

Thank you.



✓ **PATRICK NYABUTO  
MBA ADMINISTRATOR  
SCHOOL OF BUSINESS**

## **Appendix 2: Interview guide**

1. What is your position in the organization?
2. How many years have you worked for the organization?
3. How does ERP systems relate to your department?
4. Do you think you have been adequately trained to use the ERP system?
5. What is the role of other departments in the ERP implementation process in the organization?
6. How well was the ERP system designed in relation to the implementation?
7. What ERP modules are currently being implemented in the organization?
8. What are some of the challenges that have been experienced during the ERP implementation process?
9. How did ERP System Selection as a factor influence the overall implementation of the system?
10. Did the organization find it necessary to re-engineer the business during system integration?
11. To what extent has the ERP system met the overall needs of your department?
12. What are some of the significant changes in your department and the overall organization that can be attributed to the ERP system?
13. How valuable are the outcomes of the implementation of the ERP system to the organization?
14. What are the overall benefits of using ERP system in your organization?
15. From your experience state what you consider to be the major factors that influence ERP implementation in your organization?