CRITICAL FACTORS FOR ENTERPRISE RESOURCE PLANNING PROJECTS IMPLEMENTATION: A CASE OF INSURANCE SECTOR, KENYA

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DECLARATION

This research report is my original work and has not been presented for an award of a degree in any university.

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This research project report has been submitted for examination with my approval as the University supervisor.

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DEDICATION

I dedicate this project work to my beloved wife Jane, my children, James, Apollo and Vincent you have always believed in me. Thank you for all the financial and moral support you provided.

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ABBREVIATIONS AND ACRONYMS

BPR   -   Business Process Re-engineering

CF   -   Critical Success Factors

ERP   -   Enterprise Resource Planning

ICT   -   Information Communication Technology

I.T   -   Information Technology

MRP   -   Materials Resource Planning

SPSS   -   Statistical Package for Social Sciences

NACOTSI   -   National Commission for Science, Technology and Innovation

ABSTRACT

The purpose of this study was to investigate critical factors for enterprise resource planning projects implementation: a case of Insurance Sector, Kenya. The study was guided by the following research objectives: to determine how strategic factors influence the implementation of ERP projects in the Insurance sector in Kenya; establish how tactical factors influence the implementation of ERP projects; to determine how cultural factors influence the implementation of ERP projects. This study adopted a descriptive survey design to a target population of 48 Insurance companies in Kenya which are headquartered in Nairobi where a 10 percent sample size participated in the study. Simple random sampling technique was then employed to select the respondent companies based on the chosen sample. Purposive sampling was used to select one project manager from each of the sampled Companies as target respondents in the study. The researcher used a structured questionnaire to obtain primary data from the project managers drawn from the selected companies. The researcher used descriptive statistics to analyze data by utilizing means, modes and standard deviation as per the research objectives. Inferential statistics analysis was done to determine the strength between independent variables and dependent variables. The results of data analysis were presented in form of frequency tables for interpretation. The study found that strategic factors do influence ERP projects implementation in Insurance companies in Kenya. The study further found that tactical factors have influence on the success of ERP projects implementation. The study concluded that cultural factors influence ERP projects implementation in Kenya Insurance sector. The study concluded that there is a correlation between the strategic factors, critical factors and cultural factors for ERP projects implementation. The study recommended that there is need for planning and consensus to improve the success of ERP projects implementation in Kenyan Insurance sector.

CHAPTER ONE

INTRODUCTION

1.1   Background of the Study

The Insurance companies in Kenya today face dramatic and dynamic changes sometimes without any warnings. These challenges may include competition from existing rivals and new markets entrants, increasing regulatory requirements and rising customer expectations. This increases the pressure on them to lower their costs in the entire distribution chain, reduce throughput times, drastically reduce inventories, expand product portfolios, reduce claims settlement durations, provide better client service and faster responses to the market needs. Insurance companies facing these challenges require to rethink and adapt their strategies, goals, processes and technologies to meet their long term business goals.

To accomplish their business objectives, Insurance companies are turning and adopting Enterprise Resource Planning (ERP) systems to enable them facilitate related shifts and become more adaptable to operate in dynamic business environments (Kee-Young, and Jae-Nam, 2008).

Enterprise Resource Planning (ERP) system is defined as "a set of business applications, which links business units of an organisation such as financial, manufacturing, marketing, research and development and human resources into a tightly integrated single system with a common platform for flow of information across the entire business" (Beheshti, 2006). ERP systems in many Insurance companies are described as a pillar of business intelligence that offers seamless integration of processes across functional areas with better-quality workflow, standardisation of several business practices and access to real-time up-to-date data (Mottaghi and Akhtardanesh, 2010). As a result, Insurance companies normally invest large sums of money on ERP systems and their implementation process as projects (Mottaghi and Akhtardanesh, 2010).

The research and development of ERP began in 1950's as Material Resource Planning (MRP), which was designed to manage process in materials and stores inventories in organisations. MRP involved to MRP II which incorporated corporate financial control and measurement, master production and capacity planning.

Later ERP has been extended not only to capture entire functions in the business organisations which has integrated with business intelligent and decision support systems (Mabert, Soni and Venkataramana, 2000).

ERP systems provide benefits that are nonexistent in standalone departmental systems, it is able to integrate and control business processes in departments such as Sales and Marketing, Production, Manufacturing, Inventory, Research and Development and Human resources. According to Davenport (2000), ERP systems' impact on revenue-creating core processes, such as customer services, sales and distribution, result in a strong bottom line. Insurance companies committed to implementing ERP perform better across a wide variety of financial metrics (Hitt et al., 2000).

ERP systems have enabled organisations to develop new facilities to meet the requirements of the Insurance companies' users where all business transactions are entered, recorded, processed, monitored, and reported. This unified view increases the requirement for, and the extent of, interdepartmental cooperation and coordination. It also enables Insurance companies to achieve their objectives of increased communication and responsiveness to all stakeholders. This has been a moving target. Down to its fundamental since its introduction to the market, ERP system has been seen as an off-the-shelf instrument for improving business processes.

ERP as an integration of hardware technology and software has a very high investment value, the switch to ERP system is expensive and it requires development of new procedures, training and converting data. However, a larger capital investment on ERP does not always give a more optimal return in investment value to the companies. There are a number of challenges that are associated with the implementation of ERP systems projects. First, ERP systems are expensive and consequently require complex decision-making processes to purchase them. Second, ERP systems usually effect the whole organization. As such, requires a combination of technical and human expertise to select, develop and implement successfully (Ragowsky and Romm Livermore, 2002). Third, there have been many reported failures of ERP implementations.

The success or failure of ERP project implementation is closely related to how the companies handle the implementation process. The ERP project implementation process could differ in every Insurance company. The differences might concern to the implementation goals, the scope, or the available resources. But among all the differences in every implementation process there are some salient points that are important in the process and would strongly result in either success or failure of the project. These important points or features are identified as critical success factors (CSFs) (Laudon & Laudon, 2008).

Nyandiere (2002) and Nyaga (2006) did studies investigating the challenges facing ERP systems implementation in Kenya and as such it is extremely important to examine the emerging challenges given that technology is dynamic and furthermore many more organisations have continued to implement and adopt ERP systems in a changing business environment.

Understanding the critical factors in ERP project implementation would give some guidelines on what factors that should be given more attention in order to bring the project implementation process into success. In view of the foregoing, the study was to investigate Critical Factors influencing the success of ERP projects implementation in Kenya's Insurance sector headquartered in Nairobi City County (N.C.C).

1.2   Statement of the Problem

Whereas there are enormous benefits that are attained by implementing ERPs projects in organizations, it is still a challenge to implement by many Kenyan Insurance companies. While a few companies have successfully implemented the ERP systems, others are still struggling with the implementation and

others planning to implement. This leaves one wondering and wanting to know the critical factors contributing to successful implementation of ERP system projects. Studies on critical factors affecting ERP implementation in companies and organizations have been carried out but a little attention has been paid on ERP projects implementation in companies in developing countries such as Kenya.

The process of moving from functional applications to an ERP system is complicated and quite demanding (Kroenke, 2008). Moreover, the switch to ERP system is expensive and prone to failures and normally requires development of new procedures, training and data conversion (Zhang et al., 2005). According to Gartner Group (2006), 70 percent of all ERP projects implementations fail to be fully implemented. The success or failure of any ERP projects implementation is influenced by some factors, which can vary from industry to industry (Mary and Zhenyu, 2007). The reasons for successes or failures of ERP projects implementation, such as in Kenyan Insurance sector, have left many academicians and researchers asking and seeking to find out (Bhati, 2005).

As computer based systems grow in popularity in the situation, Insurance companies must work in order to successfully implement ERP systems, as there exists low rate of successful implementation.

Given the fact that Kenyan insurance companies are embracing this technology and the enormous resources involved in ERP systems implementation, it was important to examine the critical factors for such implementation of ERP projects as well as the factors considered important for successful implementation of ERP systems. In particular consider widely documented techniques for improving ERP projects implementation which include use of critical factors. Documentation is not readily available about such factors in Kenyan Insurance sector.

It is therefore very important for Insurance companies to enhance success by ensuring the factors considered very important in ERP project implementation and challenges encountered during implementation are well considered. The process of ERP system project implementation presents an on-going challenge for project managers and all the stakeholders. This is because the exact combination of factors for success of ERP projects implementation varies over time from one company to another and should be decided regarding a given set of company circumstances. Limited studies have been conducted in ERP projects implementation, with most of research consisting of case studies of system implementation in individual companies. Research on critical factors in ERP projects implementation in Kenyan Insurance companies is rare and fragmented. To date little has been done to theorize the important predictions for initial and ongoing ERP projects implementation success.

Due to the diverse background, infrastructure and other conditions in different ERP adopting Insurance companies, these critical factors may vary dramatically from one adopter to another. Adopting organizations, therefore, are supposed to do some adjustments and adaptations accordingly. It is evident that there is no single framework for ERP project implementation that suits to different ERP adopting organizations. This research is an effort to achieve it. It identifies the critical factors in ERP projects implementation that suits to different adopting organizations. Consequently, results of the data

collection and analysis resulted in recommendations that can help companies make better decisions about future ERP systems projects implementation.

1.3   Purpose of the Study

The purpose of the study was to investigate Critical Factors influencing the success of ERP projects implementation in Kenya Insurance sector.

1.4   Objectives of the Study

The study was guided by the following three research objectives:

   i.   To determine how strategic factors influence the implementation of ERP projects in the Insurance sector in Kenya.

  ii.   Establish how tactical factors influence the implementation of ERP projects in the Insurance sector in Kenya.

 iii.   To determine how cultural factors influence the implementation of ERP projects in the Insurance sector in Kenya.

1.5   Research Questions

The following research questions was used for the study:

   i.   How do strategic factors influence the implementation of ERP projects in the Insurance sector in Kenya?

  ii.   How do tactical factors influence the implementation of ERP projects in the Insurance sector in Kenya?

 iii.   How do cultural factors influence the implementation of ERP projects in the Insurance sector in Kenya?

1.6   Significance of the Study

The results of the study was expected to be of much importance and benefit to the stakeholders. They included:

For financial institutions i.e. insurance companies, microfinance institutions, Co-operative Sacco's, commercial banks and regulatory authorities would be interested in findings on the critical factors for ERP projects. The institutions would also obtain information on projects or ERP projects implementation in Kenya and the strategies that are needed to be in place to solve these problems and the experience of similar organisations in other parts of the world in solving these problems. This will help them formulate policies that would minimize the level of ERP projects implementation failures.

ICT consultants would be interested in the results of all research objectives because they advise a lot of organisations on implementation of ERP's and would have some concrete research to back and/or discard the advice they give their clients.

Scholars and researches would be interested in the results of all research objectives so that they can be able to determine further research to carry out on the area of ERP's projects implementation to deepen

knowledge in those areas. Research in the various components in this area would help to unearth hitherto unknown information that would go a long way in facilitating further understanding of critical factors for ERP implementation projects. It would also contribute to the existing body of knowledge and fill gap on the critical factors for ERP projects implementation. It will also act as a source of reference materials to scholars.

1.7   Basic Assumptions of the Study

The study assumed that the targeted respondents would participate by giving accurate responses as the situation is and not the ideal scenario. It also assumed that the respondents would be available to fill the questionnaires.

1.8   Limitations of the Study

Financial limitation was a major limitation. Due to the expensive nature of research the researcher incurred costs to facilitate travelling from one place to another, stationary expenses, typing and printing and binding expenses. To mitigate this challenge, the researcher budgeted for all expenses so as to facilitate the research.

Time factor was also another limitation that the researcher faced. Due to the demanding nature of research, collection, interpretation and data analysis were time consuming affairs. To handle this challenges the researcher sought for a time off from his employer during which he comfortably collected and analyzed data.

1.9   Delimitations of the Study

This study concentrated on the insurance sector in Kenya. This study discussed CFs for ERP projects at a generic level by concentrating on their basic functionalities rather than distinguishing between top brands and mid-market ERP products.

The study incorporated large, medium and small size insurance organisations. The research area and ERP technology was subject to dynamic change.

1.10   Definition of Significant Terms used in the study

The researcher used the following significant terms in the study.

Critical Factor (CSF) - Refers to element that is necessary for an organization or project to achieve its mission. Factor and parameter are used interchangeably in this research.

Enterprise Resource Planning (ERP) - Enterprise-wide information system that supports all of an institution's processes and operations including finance, human resources, procurement, projects management, and so on. In other words, the goal of ERP is to have one integrated system for the entire organization.

Implementation of ERP - Act of carrying out or physical realization of something.

Strategic Factor - The things that an organization or business unit needs to get right in order to succeed with key stakeholders, that is, customers, suppliers, employees, owners and any other organization,

business unit or individual that they depend on for success. The stakeholders use these criteria to evaluate an organization or business unit.

Tactical factor – This factor supports strategic plans by translating them into specific plans relevant to a distinct area of the organization. Tactical plans are concerned with the responsibility and functionality of lower-level departments to fulfill their parts of the strategic plan.

Cultural factor – These are factors which indicate the characteristics and knowledge of a particular group of people in an organisation, defined by everything from language, religion, cuisine, social habits, music and arts.

1.11   Organisation of the Study

This study investigated the Critical Factors influencing the success of ERP projects implementation in Kenya Insurance sector headquartered in Nairobi County.

Chapter one, provided the background and motivations towards the undertaking of the study was highlighted, presenting the reader with the research questions, significance of the study and potential contributions from the study. By providing a background to the overall context of the study, the motivations and rationale for the study are put forth. Chapter two was on literature review organized as per the proposed research objectives themes, theoretical framework for the study, conceptual framework that explained the relationships of variables, gaps in the literature review and the summary of the literature review.

Chapter three dealt with research methodology that was adopted in the proposed study. This covered the research design, target population, sampling size and sampling procedures, data collection instruments, data analysis techniques, ethical consideration and operationalization of variables. Chapter four contains data analysis, presentation and interpretation while chapter five outlines summary of findings, conclusion and recommendations. Chapter Five covers the summary of the findings, conclusions, discussions, and recommendations. It takes note of the contribution to the body of knowledge. This is followed by references and appendices sections.

<center>**CHAPTER TWO**</center>

<center>**LITERATURE REVIEW**</center>

2.1   Introduction

This chapter reviews the related literature to the problem of the study. It focuses on the studies that had been conducted by other researchers and their findings. The themes covered are as per the three research objectives formulated in the study, theoretical framework for the study, conceptual framework developed by the researcher, explanation for the relationships of the variables in the conceptual framework. Also, this chapter identified the knowledge gaps in the literature reviewed and summary of the literature review. These are discussed as follows.

2.2 Strategic factors and ERP project implementation

These are factors which influence long-term strategic business objectives and are critical to the success of ERP projects implementation in any organisation. They are top management support and ERP strategy as discussed below.

2.2.1   Top management support

Top management support as strategic factor for ERP projects implementation was identified by Bingi, Godla, and Sharma (2009). The studied literature clearly demonstrated that for ERP projects to succeed top management support was critical. Implementing an ERP system rather it is a matter of repositioning the company and transforming the business practices rather than changing of software systems (Myerson, 2002). ERP projects need to receive approval from top management and align with strategic business goals (Sumner, 1999). The top executives of the organization must be involved in the critical steps of the ERP project implementation and also need show commitment and willingness to allocate valuable resources to the implementation effort. With such involvement the top management will be able to monitor and provide leadership for the project.

Executives need to communicate the project as a top priority publicly and explicitly to all stakeholders, set up the required competent team and share the roles in the organization structure. Top management commitment goes beyond the CEO giving his/her blessings to the ERP project, which would imply they are willing to spend significant amount of time serving or project committees overseeing the implementation team (Chen, 2001). The top management can intervene to resolve conflicts that may arise in the project and bring every to the same level of thinking and build cooperation and harmony among the diverse groups in the organization (Myerson, 2002). Top management need to play leadership by acting coaches who keep the staff motivated and in harmony for the success of the ERP project implementation (Mousseau, 1998).

Top management need to address two additional issues. One, business plan. Each company should evaluation of its resources and business needs so as to figure out whether it is ready for the system or not (Razi & Tarn, 2003). A clear business plan and vision are required to steer the direction of the

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project throughout the ERP life cycle (Buckout, Frey & Nemec, 2009). Two, financial budget. Enough budget should be approved by pop management to cater for hiring of competent consult/s and staff training needs for the ERP project. Given the complex nature of an ERP system and its costly implementation prospect, it is essential for a company to find out its financial, technological and human resources strengths before embarking on an ERP system implementation (Razi et al., 2003).

2.2.2 ERP strategy

ERP strategy indicates what kind of ERP packages would be purchased and how long the implementation process will take. It considers minimum customization and implementation time. While choosing an ERP package, companies should consider the software with its business fit. The company should try to purchase the package that fits best into its business process and also meet its customer requirements.

Off-the-shelf ERP package is not made only for one particular business. To make software and business process to be compatible with each other, the company needs to carry out further technical choice whether to carry out custom development on the packed software and the amount of the custom development work (Holland et al., 1999). Modifying the software to fit the business means may mean that potential benefits from reengineering business processes may not be achieved (Holland et al., 1999). ERP package customization means that the general package will be configured to the specific needs of the business. The total duration for the customization will determine of the length of the project implementation. The higher the amount of the customization is required, the longer it may take to roll the software and the more it will cost to keep the software update in the future (Myerson, 2002). Research has shown that many adopters could not avoid software modification, because the operation cannot function effectively with software functionality, even with modified business process (Axline et al., 2001). Most ERPs come with a pre-defined "reference model" to reflect the new customers work style and business practices that may be preferable to rather than what comes with the reference models and such ERP software will require the source codes to some degree.

Custom modification may be required to reduce the gap between the system capability and the business practice and will allow the customer to enhance the capability of the system (Razi et al., 2003).

As much the new ERP system may require modification, too much of it will lead to complex system difficult to support and virtually impossible to upgrade to the lastest version of the software. ERP softwares should not be modified as far as possible; otherwise, it will increase errors and reduce the advantage of newer versions and releases of ERP packages Myerson (2002). According to Axline et al., (2001), adopters were often making unnecessary modification because they usually made modification plans early in the project beginning before fully understood the software thoroughly. Adopter later on after "wrestling" with modifications and understanding the software better discover a way to implement the capabilities without modifications.

System implementers should consider their business implications and organizational resources, and then make a reasonable schedule of project implementation plan. According to Davenport (1998), a speedy implementation of an ERP may be a wise business move; a rash implementation is not. The length of project implementation is often affected to a great extent by the number of modules being implemented, the scope of the implementation, the extent of customization, and the number of interfaces with other applications that may be existing in the organisation. The total number of units will increase the total implementation time (Myerson, 2002). Based on the characteristics of ERP modules and organization resources, suitable and reasonable implementation time should be planned for a standard and smooth adoption process of the ERP project.

2.3 Tactical factors and ERP projects implementation

The factors considered to be tactical for ERP project implementation are namely: Business Process Re-engineering, Project team and change management, Monitoring and Evaluation and Problems Anticipation. They are discussed as follow.

2.3.1 Business Process Reengineering (BPR)

Business process re-engineering (BPR) is defined as "the fundamental rethinking and radical redesign of business processes to achieve dramatic improvements in critical, contemporary measures of performance such as cost, quality, service and speed" (Hammer and Champy, 2001). BPR process analyzes an organization's business in order to identify the best way of doing things.

Companies must identify their existing business structure and business process associated with their current IT systems in the beginning of ERP project and relate this to the business process contained within ERP system. ERP system configuration is different from building any customized system because the development focus shifts from the traditional system analysis to the software configuration (Holland et al., 1999).

Companies implementing any ERP project need to be willing to change their business process to be in line with the ERP software because the software should be modified little as possible (Holland et al., 1999). Many of the ERP software in the market already have software and analysis work done on them prior and any modifications can reduce the capability and functionalities (Rosario, 2000). The intention of the business process changes other than to align the business process with the software is to simplify the process towards elimination of redundant activities.

2.3.2 Project team & change management

A good project team is required and is crucial to any large business endeavor, and this is also important for ERP projects (Davenport, 2000). The project team and change management focus on 3 areas: team composition, team skills and change management. Project team should be composed of one with adequate and viable experience. Most of the time companies lack such team with necessary experience and they end up combining consultants and their project management team to get required expertise

for the project. Such combination of consultants and internal staff skills enable members to grow the required skills for ERP system design and project implementation. The project implementation team and consultant should be assigned on a full time basis to enable them focus on the project fully (Adams and Lee, 1990).

The companies must invest in time and effort to ensure that the project goes smoothly. Sometimes companies do not fully comprehend the impact of choosing internal staff with the correct skill sets. The right staff for the project team should not be experts in the company's process but also be knowledgeable of the best practices in the industry. Some large consulting agencies may provide guidelines for the selection of the staff to be involved in the ERP project, but sometimes companies do not follow such guidelines. Ignorance of the project needs and lack of leadership and guidance to the ERP project by the company's team is one of the major reasons for the failure of ERP projects. It is common practice to find functional departments reluctant to sacrifice their best resources to the project; this is one of the difficulties to be overcome (Bingi et al., 1999).

User resistance has been associated with almost any type of system change and large information system like ERP is no exception (Grabski, Leech, and Lu, 2000). The main resistance to change is because users are worried that their jobs and usual way of doing things will be changed or eliminated altogether. The workers whose jobs have been reengineered in BPR process out of their previous positions may display "a grieving process" that results into low productivity (Arnold, Hunton and Sutton, 2000).

According to Appleton (1999), when an organization moves to a complex information system environment like ERP, changes in staff relationships are most likely to occur. Some employees may need to create new working relationships, new information sharing among departments, and assume additional responsibilities. This will lead to resistance, confusion, and fear (Glover, Prawitt and Romney, 1999). Therefore, managers' soft skills like communication and team building are required for a successful implementation of the ERP project.

Users involvement from the beginning of the process enable to gain users' buy in for the project (Cameron and Meyer, 1998). This participation and involvement of users is encouraged to ensure that user requirements are met, to gain user commitment, and to avoid user resistance (Cavaye, 1995). Users' involvement enables the project team to be aware of users' requirements and address users concerns (Best, 1997).

2.3.3 Monitoring and Evaluation of Performance

An ERP system project implementation is complex and contains lots of checks and balances. According to Razi et al. (2003), common risk is the data visibility, integrity, and accuracy across the system. Companies' management ought to understand that during the project implementation system glitches may occur, and will disturb the work. All efforts must be made to eliminate major system glitches or bugs which have been identified as early as possible.

Monitoring of the system performance is needed to identify and align any problems that may occurred and were not apparent. According to Cameron and Meyer (1998), appointment of an executive-level individual with extensive knowledge of the organizational's operational processes to be the project leader ensures that the monitoring of ERP project progress. The individual will be held responsible and be accountable for the project outcome.

Milestones and targets are important to keep the track of the progress (Kuang et al., 2001). They further argued that achievements should be measured against the project goals. Project milestones should be used to measure against the completion date of the stages, realization of costs and quality. Operational criteria should be used to measure against the production system. The project goals need to be "SMART". The monitoring exercise should be inclusive of exchange of information between the project team member and analysis of users' feedback (Holland and Light, 1999). The monitoring system should have early proof of success to manage any skepticism that may arise (Rosario, 20000.

Team morale is another important factor vital for the success of the project. When team members are required to put long hours of work and stress coupled their routine duties could reduce team morale (Rosario, 2000). Continuous evaluation can enable monitoring the achievement of the project. Honest and open communication, among the stakeholders (vendors, managers, project team leaders, users and consultants) is vital in monitoring the project progress and helping to evaluate the performance (Jiang et al., 2001).

2.3.4   Problems Anticipation

Software problems and glitches such as bugs in the system and troubleshooting might appear during the testing phase of the ERP system. Any modified ERP system increases the possibilities of bugs and identification of errors (troubleshooting) (Razi and Tarn, 2003). Systems implementers quick response, patience, resilience, problem solving and firefighting skills are important to manage any troubleshooting (Rosario, 2000).

Close cooperation between vendors and consultants is key to resolving the problems that arise during project implementation. Vigorous and sophisticated software testing eases implementation pain (Rosario, 2000).

2.4   Cultural factors and ERP projects implementation

Besides strategic and tactical factors, cultural factors are another perspective that is necessary to dig into. The implementation of the same ERP software project in two companies will sometime results in different outcomes (Seddon, Shanks and Willcocks, 2003). Hard issues can be analyzed and solved by computers and experts, but human factors are not easy to be handled only by codes or programs because they are soft issues. The cultural issues in any organization may set an un-neglected able effect on success of ERP project implementation which is discussed in the following part. Culture is defined as "the collective programming of people in an environment that manifest itself the values of the group of people (Khosrowpour and Szewczak, 1996). In any ERP project implementation, cultural issues are

divided into three factors as organizational culture, effective communication, and cultural diversity as discussed herein below.

2.4.1 Organizational Culture

An organisation culture is divided into three layers (Schein, 1992). The outer layer deals with issues about the strategies, missions, and objectives of the organization. In the middle layer contains the beliefs, which are the current issues that the staff of the organization talk about. In the inner layer has thee "taken for granted" assumptions which is those aspects of the organizational life which people or users may find difficult to recall and explain.

All the cultural issues cultivate the working ways and relationships in the organization. A culture with shared values and common aims will be conducive to success because the emphasis will be on quality and empower the staff willingness to accept the new technology (Kuang et al., 2001). It would be an asset that greatly aids project implementation efforts. Companies implementing ERP projects should have a strong corporate identity that is open to change (Kuang et al., 2001). ERPs being a strategic solution, normally change the way people are used to doing things, rather than operational levels, such as using an ICT program.

The innovative and open organizational culture will influence the users' participation throughout the whole ERP project implementation process. According to Ross (1996), an open and creative culture will recognize employees as the primary source of ideas, actions, and delivery of performance, which results in a stable work environment that reinforces the loyalty of its employees in the company. An organizational culture that does support learning and information sharing will be detrimental and will ultimately lead to the ERP project failure.

2.4.2 Effective Communication

According Goldhaber (1993), communication is the lifeblood of the organization; the glue that binds the organization; the oil that smoothest the organization's functions; the thread that ties the system together; the force that pervades the organization; and the binding agent that cements all relationships. Effective communication remain to be a key in organizational and individual success, how they people connect, receive and deliver messages in any organization may be the key to the success (Harris, 2002). Effective communication also works in the implementation of ERP systems projects. The effective communication will make the new ERP project implementation penetrate into the organization. The new project should also reach all levels in the company, from upper executives to bottom operators as they will know what they could expect in the business process change. The staff will have to change their responsibility and roles according to the new requirements of ERP systems project. Effective communication will enhance the willingness to change and take part which results in the increase speed of BPR.

Constant communication strategy is another of avoiding company-wide rebellion to the new ERP system project implementation. The staff should be made to understand what is changing, the necessity of change and how the change is going to benefit the organization (Mendel, 1991).

The environment of effective communication should be formed and nurtured across the organization across the organization while any ERP projects. Communication should include formal promotion of project teams and the continuous advertisement of the project progress to the rest of the organization. Top-town communication will place from top management to users regarding the project goals, project priorities, and selection criteria. Senior management should communicate effectively to all staff on issues of budget policy, standards and the predefined needs of the project. Bottom-up communication will occur when new users' needs and investment requests from all staff are reported to top management for decision making purposes. Parallel communication between end users and ICT personnel is required to obtain the consensus of the demand and the supply of the project.

Effective communication between internal groups and external parties like vendors and consultants etc. cannot be ignored (Nah, 2002). Good communication will maximize the support from vendors and consultants, which means that an organization will reap its returns on investment from the ERP project.

2.4.3 Cultural Diversity

Different cultural practices between customers, consultants and vendors will indicate not only an organization culture as well as national culture. Trompenaars (1994), described national culture is into three ways: how people relate to one other (universalism versus particularism, individualism versus to collectivism, neutral versus emotional, specific versus diffuse, achievement versus ascription), people's attitudes to time, and people's attitudes to the environment.

Hofstede (1994), argued that national culture differences reside more in values and less in practices, and organizational culture differences reside more in practices and less in values .The problems could be 1) the vendor's culture, implicit in the ERP package, conflicts with the customer's organizational culture, 2) few consultants and vendors understand their customers' organizational culture and business processes sufficiently. It has been observed that a common problem when adopting ERP system has been the issue of 'misfits', which represents the gaps between the functionality offered by the ERP system and those required by the adopting organization (Davis, 1988; Ginzberg, Lucas and Walton, 1988).

ERP system projects present the problematic choice to organizations. To bridge the cultural diversity, organisations have to choose among changing their culture and business process to fit into the off-the-shelf ERP systems, or customizing the ERP system to smooth alignment of the software functionality to business requirements. As foregoing, the companies should consider the cultural diversity among vendors, consultants and themselves before they decide which ERP system to purchase and implement. Otherwise, they may be forced to scale back their ERP projects and accept minimal benefits, or even abandon implementation altogether (Marcus & Tanis, 2000).

2.5 Theoretical Framework

This section covers the theoretical framework selected for the study and its relevance within the ERP projects implementation context. Morrison (2003) describes a theory as a relationship between definable, observable and empirically measurable variables or constructs, the latter which can be defined as a concept operationalized with units that are approximated. This study adopted three theories namely; Technology Acceptance Model, Technology Organisation Environment Framework and Diffusion of Innovation theory as was discussed below.

2.5.1 Technology Acceptance Model (TAM)

Davis (1985), proposed the TAM in his doctoral thesis. He proposed that any system use is a response that can be explained or predicted by user motivation, which in turn is directly influenced by an external stimulus consisting of the actual system's features and capabilities. He further refined his conceptual model and suggested that user motivation can be explained by three factors: (i) Perceived Ease of Use, (ii) Perceived Usefulness, and (iii) Attitude toward using the System. He hypothesized that the attitude of a user toward a system was a major determinant of whether the user will actually use or reject the system. The attitude of the user, in turn was considered to be influenced by two major beliefs: (i) perceived usefulness and (ii) perceived ease of use, with perceived ease of use having a direct influence on perceived usefulness (Chuttur, 2009). TAM is represented in the following diagram in figure 2.1 below.
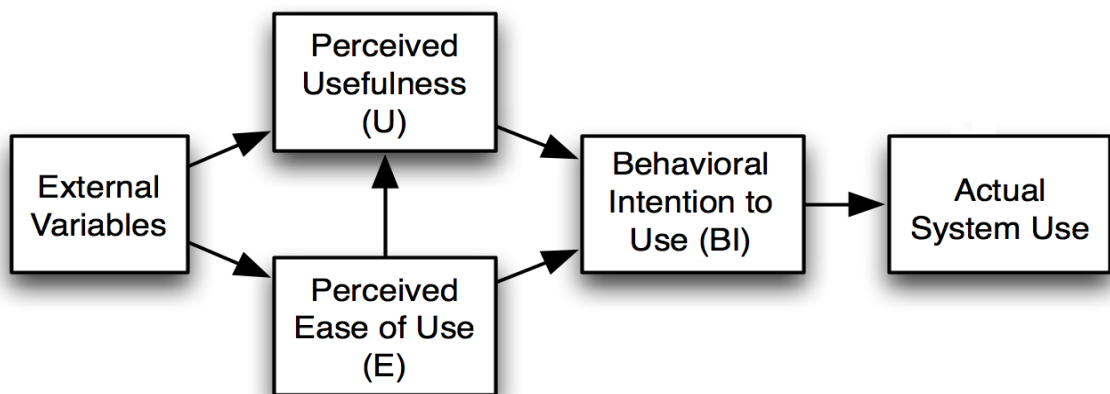
Figure 2.1: Technology Acceptance Model (Davis, 1989)

2.5.2 Technology, Organisation and Environment (TOE) Framework

Tornatzky and Fleischer (1990) developed a framework named TOE that comprises three key determinants that affect organizational adoption: (i) technology, (ii) organization, and (iii) environment. In TOE framework, the technological context relates to the technologies available to an organization. The organizational context describes the characteristics of an organization which include firm size, degree of centralization, formalization, complexity of its managerial structure, the quality of its human resources, and the amount of slack resources available internally. The external

environmental context is the arena in which an organization conducts its business. This includes the industry, competitors, regulations, and relationships with the government. These are factors external to an organization that present constraints and opportunities for technological innovations (DePietro et al., 1990). TOE framework is a general theory of technology diffusion and therefore is an appropriate theoretical groundwork for studying the adoption of IS innovation (Zhu, Kraemer, and Xu, 2003). TOE is represented in the following diagram in figure 2.2 below.
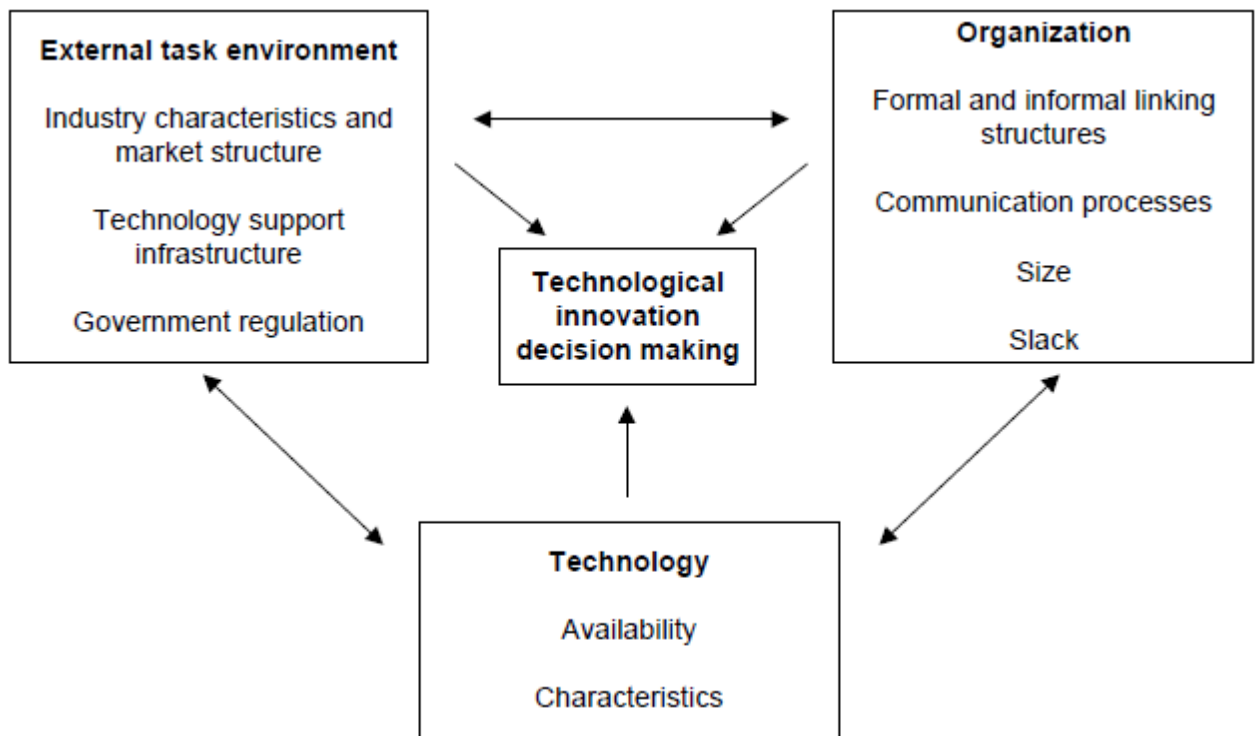
Figure 2.2: Technology, organization, and environment framework (Tornatzky and Fleischer 1990)

2.5.3 Diffusion of Innovation (DOI) Theory

DOI is a theory of how, why, and at what rate new ideas and technology spread through cultures, operating at the individual and firm level. DOI theory sees innovations as being communicated through certain channels over time and within a particular social system (Rogers 1995). Individuals are seen as possessing different degrees of willingness to adopt innovations, and thus it is generally observed that the portion of the population adopting an innovation is approximately normally distributed over time (Rogers 1995). Breaking this normal distribution into segments leads to the segregation of individuals into the following five categories of individual innovativeness: innovators, early adopters, early majority, late majority, laggards (Rogers 1995). The innovation process in organizations is much more complex. It generally involves a number of individuals, perhaps including both supporters and opponents of the new idea, each of whom plays a role in the innovation-decision.

Based on DOI theory at firm level (Rogers 1995), innovativeness is related to such independent variables as individual (leader) characteristics, internal organizational structural characteristics, and external characteristics of the organization (Figure 2.3). (a) *Individual characteristics* describes the leader attitude toward change. (b) *Internal characteristics of organizational structure* includes

observations according to Rogers (1995) whereby: "centralization is the degree to which power and control in a system are concentrated in the hands of a relatively few individuals"; "complexity is the degree to which an organization's members possess a relatively high level of knowledge and expertise"; "formalization is the degree to which an organization emphasizes its members' following rules and procedures"; "interconnectedness is the degree to which the units in a social system are linked by interpersonal networks"; "organizational slack is the degree to which uncommitted resources are available to an organization"; "size is the number of employees of the organization". (c) *External characteristics of organizational* refers to system openness. DOI theory is represented in the following diagram in figure 2.3 below.
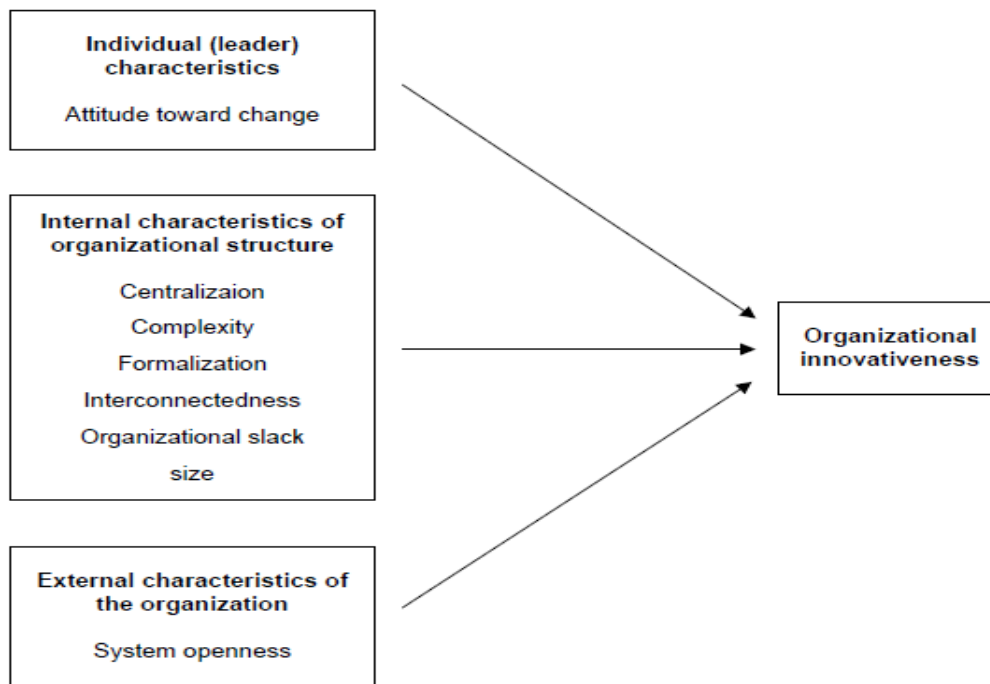
Figure 2.3: Diffusion of innovations (Rogers 1995)

2.6   Conceptual Framework

A conceptual framework is a set of broad ideas and principles taken from relevant fields of inquiry and used to structure a subsequent presentation. It's a tool intended to assist a researcher to develop awareness and understanding of the situation under scrutiny. It helps the research to explain the relationship among interlinked concepts such as the dependent and independent variables (Kombo, 2006). In this study, the researcher sought to establish the relationship between strategic, tactical and cultural factors that influence the success of ERP systems project implementation. Figure 2.4 shows diagrammatic representation of the relationship between the dependent and independent variables.

Independent Variables   **Dependent Variable**

Strategic Factors:
- No of meetings
- Budget allocation

Tactical Factors:
- No of errors reported
- No of redundant activities
- Team composition
- No of reports
- No of users concerns

ERP Project Implementation
- Completion on time and budget
- Smooth operation with ERP
- Achieving business improvement
- Meeting expectation and Perceptions

Cultural Factors:
- Frequencies of users feedback
- Milestones achieved
- Targets achieved

Project Management

Moderating Variable

Figure 2.4: Conceptual Framework (Author, 2016)

ERP implementation success is the dependent variable whereas the factors shown in the rectangles are the independent variables.

2.7 Explanation of relationship of variables in the Conceptual Framework

The independent variables for this study are factors influencing the success of ERP implementation projects. They include strategic factors which include top management support and strategy. Indicators would include be the number of meetings and budgetary allocation.

Tactical factors, which according to literature review, play major role in implementation success has been investigated through number of errors reported, number of redundant activities, team composition, number of reports and number of user concerns.

Cultural factors are also considered to be part of independent variables. Such factors are measured using frequencies of users' feedback, milestones achieved and targets achieved.

In this study the dependent variable is ERP project implementation success. Fang (2005) ERP success is measured from several angles, including: (1) Completion on time and budget; (2) Smooth operation with ERP system; (3) Achieving business improvements; (4) Achieving business expectations and perceptions.

Project management has been considered at moderating variable in the study.

Table 2.1: Empirical Review. ('+' or '-' respectively indicate a positive or negative relationship to the project outcome measure)

Authors	Study Focus	Methodology & Country	Critical Success Factor (Independent Variable)	Project outcome measure (Dependent Variable)
Michael Frimton	ERP Project in Ghana's public service sector	Survey, Ghana	Have an ERP Strategy (+) Management support (+) Decision delegation to project team members (+) Appoint a project Champion (+) Have sufficient support hardware/software (+) Ensure data accuracy (+) Minimise customization (+) User involvement (+) Scope management (+) Education and training (+)	Successful ERP Implementation
Aladwani (2000)	ERP System Project Performance	Survey, Kuwait	Project staff expertise (+) Top management support (+) Project team conflict (-) Horizontal coordination (+) Project complexity (-) Adequate development tools (+) Project planning (+) User participation (+)	Project efficiency Project effectiveness
Barry & Lang (2003)	Enterprise systems project performance	Survey, Ireland	Inadequate staff skills (-) Unrealistic user expectations (-) Scope creep (-) Project complexity (-) Staff shortages (-) Cost overruns (-) Time overruns (-) Unclear requirements (-) Lack of standard method (-)	Project completion time
Bussen & Myers (1997)	Enterprise Information Systems Implementation	Case Study, New Zealand	Lack of user commitment (-) Lack of user readiness (-) Lack of top management support (-) Lack of user-developer communication (-) Organisational politics (-)	Project abandonment

			Non-alignment with business goals (-) Time overruns (-) Staff turnover (-) Technical problems (-) Data problems (-) Poorly defined requirements (-) Lack of project planning (-)	
Butler & Fitzgerald (1996b)	Information System development critical success factors	Case Studies, Ireland	Top management support (+) Adequate vendor support (+) Use of prototyping tools (+) Technical problems (-) Well-defined requirements (+) Project management (+) Project planning (+) Use of a standard method of project management (+) User participation (+) Management of change (+)	Effective IS Project execution
Clegg et al. (1997)	Information System Project Performance	Interviews, United Kingdom	Lack of project staff expertise (-) Unrealistic user expectations (-) Lack of top management support (-) Organisational politics (-) Non-alignment with business goals (-) Cost overruns (-) Time overruns (-) Project complexity (-) Unclear requirements (-) Poor project management (-) Inadequate standard methods (-) Lack of user participation (-) Adequate user training (+) Poor management of change (-)	Meeting Project Objectives
Jiang & Klein (1999; 2000)	ERP System Project Risks	Survey, USA	Lack of user commitment (-) Lack of user experience (-) Lack of project staff expertise (-) Lack of project staff domain knowledge (-) Unclear role definition (-) Project team conflict (-) Project size (-)	Project effectiveness Satisfaction with system Organisational impact

			Project complexity (-)	
			Technological newness (-)	
			Inadequate resources (-)	
			Extent of change (-)	
Kappelman et al. (2006)	ERP System Project Risks	Survey, USA	Lack of project staff expertise (-)	Use satisfaction Organisational benefits
			Lack of top management support (-)	
			Lack of project team commitment (-)	
			Poor communication (-)	
			Unclear business case (-)	
			Unavailability of appropriate expertise (-)	
			Lack of documented requirements (-)	
			Poor project planning (-)	
			Poor project leadership (-)	
			Lack of user participation (-)	
			Lack of management of change (-)	
Aladwani (2000)	ERP System Project Performance	Survey, Kuwait	Project staff expertise (+)	Project efficiency Project effectiveness
			Top management support (+)	
			Project team conflict (-)	
			Horizontal coordination (+)	
			Project complexity (-)	
			Adequate development tools (+)	
			Project planning (+)	
			User participation (+)	
Barry & Lang (2003)	Enterprise systems project performance	Survey, Ireland	Inadequate staff skills (-)	Project completion time
			Unrealistic user expectations (-)	
			Scope creep (-)	
			Project complexity (-)	
			Staff shortages (-)	
			Cost overruns (-)	
			Time overruns (-)	
			Unclear requirements (-)	
			Lack of standard method (-)	

Bussen & Myers (1997)	Enterprise Information Systems Implementation	Case Study, New Zealand	Lack of user commitment (-) Lack of user readiness (-) Lack of top management support (-) Lack of user-developer communication (-) Organisational politics (-) Non-alignment with business goals (-) Time overruns (-) Staff turnover (-) Technical problems (-) Data problems (-) Poorly defined requirements (-) Lack of project planning (-)	Project abandonment
Butler & Fitzgerald (1996b)	Information System development critical success factors	Case Studies, Ireland	Top management support (+) Adequate vendor support (+) Use of prototyping tools (+) Technical problems (-) Well-defined requirements (+) Project management (+) Project planning (+) Use of a standard method of project management (+) User participation (+) Management of change (+)	Effective IS Project execution
Clegg et al. (1997)	Information System Project Performance	Interviews, United Kingdom	Lack of project staff expertise (-) Unrealistic user expectations (-) Lack of top management support (-) Organisational politics (-) Non-alignment with business goals (-) Cost overruns (-) Time overruns (-) Project complexity (-) Unclear requirements (-) Poor project management (-) Inadequate standard methods (-) Lack of user participation (-) Adequate user training (+) Poor management of change (-)	

Jiang & Klein (1999; 2000)	ERP System Project Risks	Survey, USA	Lack of user commitment (-)	Project effectiveness
			Lack of user experience (-)	Satisfaction with system
			Lack of project staff expertise (-)	Organisational impact
			Lack of project staff domain knowledge (-)	
			Unclear role definition (-)	
			Project team conflict (-)	
			Project size (-)	
			Project complexity (-)	
			Technological newness (-)	
			Inadequate resources (-)	
			Extent of change (-)	
Kappelman et al. (2006)	ERP System Project Risks	Survey, USA	Lack of project staff expertise (-)	Use satisfaction
			Lack of top management support (-)	Organisational benefits
			Lack of project team commitment (-)	
			Poor communication (-)	
			Unclear business case (-)	
			Unavailability of appropriate expertise (-)	
			Lack of documented requirements (-)	
			Poor project planning (-)	
			Poor project leadership (-)	
			Lack of user participation (-)	
			Lack of management of change (-)	

2.8 Chapter Summary

The literature review offered an insight how various scholars examined the critical factors for ERP projects implementation. Strategic, tactical and cultural factors were assessed. It was notable that in spite of the fact that Insurance companies successfully implement ERP projects, challenges on project execution is still a key concern.

The study was anchored on a number of theories which include: Technology Acceptance Model (TAM), Technology Organization Environment (TOE) and Diffusion of Innovation (DOI) Theory. In the literature review it was noted that most of the studies had been carried out on developed countries hence there was need to carry out similar research based on a developing country context.

In light of the gaps identified in literature, this research aims at filling the gap by studying critical factors for ERP projects implementation in Insurance sector in Kenya.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter outlined the overall methodology of how the research was carried out. This included the research design, population of the study, sample size, data collection methods and data analysis and presentation.

3.2 Research Design

To undertake the study, a descriptive research design was used. This is a scientific study done to describe a phenomena or an object. In this case the study phenomenon is evaluation of critical factors for ERP projects implementation. This kind of study involved a rigorous research planning and execution and often involves answering research questions. It involved an extensive well-focused literature review and identification of the existing knowledge gap. The method was preferred as it permits gathering of data from the respondents in natural settings. In this case, it was possible for the researcher to administer the data collection tools to the respondents in their workstations, which was relatively easy, with high likelihood of increasing the response rate (Wolman and Kruger 2001).

3.3 Target Population

The population from which the study was undertaken was all the companies licensed to undertake insurance business in Kenya, whose number stood at 48 as a January 2016. The researcher was guided by the latest list of registered insurance companies from Insurance Regulatory Authority (IRA). In addition, all the 48 insurance companies were studied at their head offices located in Nairobi. The respondent from each of the companies was the manager in charge of ERP projects or in the absence of such a manager any other manager who represents project matters of the Company, Appendix IV (Insurance Regulatory Authority 2016).

3.4 Sample Size and Sampling Procedure

This section describes the sample size and the sampling procedures that was adopted in the study as explained as follows.

3.4.1 Sample Size

A sample size is a subset of total population used to give general views of the target population (Kothari, 2004). From a population of 48 Insurance companies involved in ERP projects implementation, a 10% sample size of 5 target companies were selected (Mugenda and Mugenda 2003).

3.4.2 Sampling Procedure

This is a method of statistically selecting a random (or "representative") subset of a population. It is concerned with the selection of a subset of individuals from within a statistical population to estimate characteristics of the whole population. Sampling technique is widely used for gathering information

about a population. Purposive sampling and simple random sampling was used in order to gather data required in this research. It involved studying of the entire population of some limited group or a subset of a population. A sample of 10% of the total population of heads of IT department and IT managers (representing institution management), project managers, system administrators, technical staff was applied using simple random sampling. According to Gay (1992) as cited by Mugenda and Mugenda, (2003) suggests that for descriptive studies at least 10% - 20% of the total population was enough.

In statistics, a simple random sample is a group of subjects (a sample) chosen from a larger group (a population). Each subject from the population is chosen randomly and entirely by chance, such that each subject has the same probability (or chance) of being chosen at any stage during the sampling process.

Simple random sampling merely allows one to draw externally valid conclusions about the entire population based on the sample. Conceptually, simple random sampling is the simplest of the probability sampling techniques. It requires a complete sampling frame for small populations. A simple random sample gives each member of the population an equal chance of being chosen. One way of achieving a simple random sample is to number each element in the sampling frame and then use random numbers to select the required sample.

3.5 Research Instruments

The researcher used the structured questionnaire as the research instrument for data collection. The questionnaires contained both closed ended and open ended questions. Closed ended questions was chosen because they were easier to analyze and facilitate harmonization of information from the respondents. Open ended questions helped in obtaining information necessary for the discussion of the results. The structured questionnaires consisted of questions which were designed in accordance with the objective of the study. A set of attributes in form of statements were used to capture the opinions of the respondents with regard to the variables of study anchored on a *5*-point likert scale. The five scale points adopted as part of the questionnaires was quite sufficient to stimulate a reasonably reliable indication of response direction (Frary, 1996).

The research questionnaire for data collection in this study had six parts. part 1 seeks to obtain general information about the respondent demographic factors, part 2 solicited information on overall success or failure of an ERP project, part 3 probed on the strategic factors, part 4 obtained data on tactical factors for ERP implementation, part 5 asked questions on cultural factors for ERP project implementation. Part 6 probed on rating of factors ERP critical factors for ERP project implementation. In all parts the direction for filling in the responses was provided. The questionnaires was adopted because they are stable, consistent, and uniform hence offered a considered and objective view of issues. This therefore allowed drawing of valid inferences from the study (Sarantakos, 2005).

3.5.1 Piloting Testing of the instruments

The researcher developed a questionnaire and pretested it to the selected pretest sample which was similar to actual sample for the study. However, the subjects in the actual sample were not used during piloting. This enabled the researcher to make meaningful observations though feedback in order to improve the questionnaire and enhance reliability of the instrument. According to Mugenda and Mugenda (2003), a pretest sample ranges from 1% to 10% depending of the sample size. Thus, in this study the researcher adopted a 5% pretest sample and encouraged the respondents to make comments and suggestions concerning instruction, clarity questions and relevance was done.

3.5.2 Validity of the instrument

Validity indicates the degree to which a research instrument measures what is supposed to measure (Kothari, 2004).Validity assess how accurately the data obtained in the study represents the variables in a study and thus inferences based on such data will be accurate and meaningful. The study focused on the content validity and the construct validity. Content validity is concerned with whether the questions in the questionnaire answer the research objectives. Thus, the researcher sought the guidance from the supervisor to give opinion as to whether the research instrument met the criterion (Carmine and Zeller, 1979). On the other hand, the construct validity is concerned with framing of the questions to ensure that they are phrased logically and sequentially in a simple language.

3.5.3 Reliability of the instrument

Reliability is a measure of the degree to which a research instruments yields consistent results or data after repeated trials (Mugenda and Mugenda, 2003).The researcher intended to pilot test the research instrument by use of internal consistency technique where the instrument was subjected to a pretest sample to ensure that questions were constructed or phrased in a simple manner that was easy to understand. In this study the researcher used a pretest sample of 10% which will give 5 respondents (Mugenda and Mugenda 2003). Internal consistency technique was determined from scores obtained from a single test administered by the researcher to a sample of subjects. Cronbach's Coefficient Alpha was computed to determine how items correlate among themselves. The formula for calculating Cronbach's Coefficient Alpha was as follows:

$$KR2O = \frac{(K)(S^2 - \sum s^2)}{(S^2)(k-1)}$$

Where: KR20 =Reliability coefficient of internal consistency

K=Number of items used to measure the concept

S^2=Variance of all scores

s^2=Variance of individual items

The use of this technique reduced the time required to compute a reliability coefficient in other methods. Its application resulted in a more conservative estimate of reliability (Mugenda and Mugenda, 2003). A high coefficient implied that items correlates highly among themselves implying consistency among the items in measuring the concept of interest. According to Brown *et al* (2004) a

correlation coefficient value above 0.7 is sufficient and reliable. Similarly, Bagoole (2011) noted that the Cronbach Alpha was above 0.5, indicating that the research instrument was worth taking to the field.

3.6 Data Collection Procedures
This section describes data collection procedures.

3.6.1   Questionnaires

The questionnaires were directed to project managers, system administrators, technical staff and users. This method is popular especially when big inquiries are needed as it saves on time.

After seeking permission from the university and the National Commission for Science, Technology and Innovation (NACOSTI), the researcher embarked to the field to collect data. A cover letter that explained the aims of the research and offering assurance of confidentiality and anonymity alongside questionnaires was then forwarded in hard copies to the respondents by researcher. In addition, the researcher sought the consent of the respondents to participate in the study. The researcher employed a drop and pick basis for the questionnaires. Since the target respondents were managers who were very busy employees of various organizations, the researcher allowed them time to fill the questionnaire and collected them after two days. To ease follow ups, the researcher requested for the respondents' telephone contacts. The contacts were used to confirm with respondent if the questionnaires were ready for collections.

3.7   Data Analysis Techniques

According to Orodho (2003), data analysis is the process of systematically searching and arranging field notes, data and other materials obtained from the field with the aim of increasing one's own understanding and to enable one to present them to others.

Before analysis, data was cleaned by checking for logical consistency and any unnecessary data removed. Coding involved converting responses to numbers. The data collected was analyzed using both qualitative and quantitative methods of analysis. The quantitative data was analyzed using descriptive statistics where the responses from the questionnaires was tallied, tabulated and analyzed using percentages, frequencies, mean and standard deviation using Statistical Package for Social Sciences (SPSS V 21). According to Martin & Acuna (2002), SPSS is able to handle large of amounts of data and is efficient because of its wide spectrum of statistical procedures purposively designed for social sciences. Descriptive statistics was used to summarize the results for each of the main variables. The resulting factors were used as independent variables and the implementation of ERP project was the dependent variable. Regression analysis was applied to determine the joint relationships between the factors.

3.8   Ethical Considerations

According to Mugenda and Mugenda (2003) a researcher must conform to the principle of voluntary consent where the respondents willingly participate in the research. Informed consent should be based

on the information regarding: the purpose of the research study, identification of the researcher, any benefits that may be received. Kothari (2005) noted that participation in research should be voluntary and subjects are at liberty to withdraw from the study at any time without any consequences. The researcher through the trained assistant ensured that all respondents fully understood all the details pertaining to the study. No respondent was forced to take part in the study but voluntarily.

According to Ngechu (2004) plagiarism refers to passing off another person's work as if it were your own, by claiming credit for something that was done by someone else. It is taking and using another person's thoughts as if they were your own. Utmost care was taken to ensure that all work borrowed from other scholars was acknowledged.

3.9 Operationalization of variables

This sub-section identifies and operationalize the key variables (independent and dependent variables) of the study. It further highlights the criteria of measurement that the researcher intended to use as shown in Tables 3.1 and 3.2.

Table 3.1: Operationization of Variables

Objectives	Variables (Independent)	Indicators	Measurement scale	Data analysis method	Study design	Tools of Analysis	Specific Tool
1. To determine how strategic factors influence the implementation of ERP projects in the Insurance sector in Kenya	Strategic Factors	• No of meetings attended • Amount of budgetary allocation • No of ERP software reviewed • No of minimum customization required	Interval Nominal Nominal Interval	Descriptive and explanatory	Descriptive and explanatory	Central tendency dispersion and causal relationship	Mean, standard deviation, regression and correlation analysis
2. Establish how tactical factors influence the implementation of ERP projects in the Insurance sector in Kenya.	Tactical Factors	• No of errors reported • No of redundant activities • Team composition • No of reports • No of users concerns	Interval Nominal Nominal Interval	Descriptive and explanatory	Descriptive and explanatory	Central tendency dispersion and causal relationship	Mean, standard deviation, regression and correlation analysis
3. To determine how cultural factors influence the implementation of ERP projects in the Insurance sector in Kenya.	Cultural Factors	• Frequencies of users feedback • Milestones achieved • Targets achieved	Interval Nominal Nominal Interval	Descriptive and explanatory	Descriptive and explanatory	Central tendency dispersion and causal relationship	Mean, standard deviation, regression and correlation analysis

Table 3.2: Operationalizing the Dependent Variable

Main Objective	Variables	Indicators	Measurement Scales	Type of Analysis	Tools of Analysis
To determine critical factors for ERP planning projects implementation.	Successfully implemented ERP projects	The strength between the independent and dependent variables	Ratio	Inferential analysis	Pearson' Correlation analysis

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This chapter presents the study findings which have been discussed in line with the study objective themes areas as follows: questionnaire response rate, reliability test, the general information of the respondents, overall success/failure of an ERP project, benefits of ERPs, strategic factors influencing the success of ERP projects implementation, tactical factors influencing the success of ERP projects implementation and cultural factors influencing the success of ERP projects implementation. The objective of the study was to investigate the critical factors for enterprise resource projects implementation: the case of Insurance sector, Kenya.

4.2 Questionnaire Return Rate

The research was gathered exclusively through questionnaires as the primary research instruments as in Appendix 2. A total of forty eight (48) questionnaires had been distributed to the respondents, out of which 32 were completed and returned. This gave a response rate of 66.67%. According to Mugenda and Mugenda (2003) a response rate of 50% is adequate for a study, 60% is good and 70% and above is excellent. Thus, a response rate of 66.67% was fit and reliable for the study as shown in Table 4.1

Table 4.1

Questionnaire Response Rate

Response	Frequency (f)	Percent (%)
Responded	32	67
Did Not Respond	16	33
Total	**48**	**100**

Source: Research Data, 2016

4.3 Demographic Characteristics of the Respondents

The first part of the questionnaire asked the respondents for their demographics. Demographic factors included gender, designation, education level, age and years of service of the respondents in their respective firms. The results were analyzed as follows.

4.3.1 Gender of Respondents

The research sought to find out the gender of the respondents for general demographic pattern. The responses were analyzed and the results are shown in Table 4.2.

Table 4.2
Respondents Gender

Gender	Frequency (f)	Percentage (%)
Male	18	56
Female	14	44
Total	**32**	**100**

Source: Research Data, 2016

The results showed male respondents constituted 18 (56%) while the female respondents comprised of 14 (44%) of the total. All the responses were valid giving a validity of 32 (100%). From the results it can be observed that male form the bulk of the project management team members than the females. This showed that the research considered all the genders.

4.3.2 Educational Level of Respondents

The research wanted to find out the educational level of the respondents for general demographic pattern. The responses were analyzed and the results are shown in Table 4.3.

Table 4.3
Educational Level of Respondents

Education Level	Frequency (f)	Percentage (%)
Diploma	3	10
Degree	19	59
Post graduate	10	31
Total	**32**	**100**

Source: Research Data, 2016

From Table 4.3, the research noted that the respondents were highly educated. Of the 32 (100%) respondents, 10 (31%) had university post graduate degrees while the other 19 (59%) had bachelor's degrees. This means that most of the persons in Insurance sector are well conversant with their field of study and knowledgeable. 3 (10%) of the respondents had a diploma.

4.3.3 Designations of Respondents

The research sought to find out the designation of the respondents from the different functional departments on the research. The responses were analyzed and the results are shown in Table 4.4.

Table 4.4

Designation of Respondents

Designation	Frequency (f)	Percentage (%)
Top Management	4	12.50
Senior Management	10	31.25
Middle Management	4	12.50
Officer/Supervisor	14	43.75
Total	**32**	**100.00**

Source: Research Data, 2016

From Table 4.4 respondents from officer/supervisor constituted 14(43.75%) followed by Senior Management at 10 (31.25%) then top management at 4 (12.50%) and finally 4 (12%) from top management. Although ERP is an information system where it is likely to get more respondents, functional persons from other departments are noted to be quite few.

4.3.4 Professional Background of the Respondents

The research wanted to find out the professional background of the respondents for general demographic patterns. The responses were analyzed and the results are shown in Table 4.5.

Table 4.5

Distribution of Respondents Professional Background

Professional Background	Frequency (f)	Percentage (%)
ICT	14	43.75
Finance and Accounts	13	40.63
Insurance	5	15.63
Total	**32**	**100.00**

Source: Research Data, 2016

The results shown in Table 4.5; 14 (43.75%) of respondents were ICT professionals, 13 (40.63%) had Finance and Accounts background and 5 (15.63%) were from Insurance background.

From the literature review (Oslo D., 2004 and Harwood, 2003) most of the functions affected by the introduction of ERP system are finance, human resource, purchasing and supplies hence these results did not deviate much from the discussions in the literature review.

4.3.5 Years of Professional Work Experience

The research wanted to find out the age categories of the respondents for general demographic patterns. The responded were analyzed and the results are shown in Table 4.6.

Table 4.6

Distribution of Respondents years of experience

Experience	Frequency (f)	Percentage (%)
3-5	6	18.75
5-10	14	43.75
10-15	5	15.63
Above 15	7	21.86
Total	**32**	**100.00**

Source: Research Data, 2016

From Table 4.6, over 19 (59%) of the respondents have 10-15 experience in the organizations. This means that the respondents have vast knowledge of their companies and well suited for the research. Academic qualification and experience is a critical factor in the performance of project team members during project execution (Michael Frimpton, 2012). These results show that the respondents are fairly experienced in their respective professions. These results gave the researcher an assurance of the quality of data received from the respondents.

4.3.6 The Respondent Role in the Project

The research wanted to find out the role of the respondents in the organisation for general demographic patterns. The respondents' roles were analyzed and the results are shown in Table 4.7.

Table 4.7

Distribution of Respondents Role in the Project

Role	Frequency (f)	Percentage (%)
Consultant	2	6.25
Functional Expert	8	25.00
Business Analyst	5	15.63
Project Manager	7	21.88
Programmer/Implementation	10	31.25
Total	**32**	**100.00**

Source: Research Data, 2016

From Table 4.7, most of the respondents were programmer/Implementers 10 (31.25%), followed by functional experts 8 (25%) and Project Manager 7 (21.88%). Others were Business Analyst 5 (15.63%) and Consultants 2 (6.25%). Aldawani (2002) urges that all processes which may be affected by the introduction of an ERP system must be represented in the project management.

4.3.7 Overall Success/Failure of an ERP Project

The study sought to find out the success/failure rate of organisation's ERP project against the meeting the objectives. The overall success/failure of an ERP projects were analyzed and the results are shown in Table 4.8.

Table 4.8

Overall Success/Failure of an ERP Project

Success/Failure Rate	Frequency (f)	Percentage (%)
0 - 25	5	17
26 - 50	18	56
51 - 75	9	27
76 - 100	0	0
Total	**32**	**100**

Source: Research Data, 2016

From Table 4.8; 18 (56%) of the respondents responded that ERP projects in their organisation achieved a success rate of between 26-50% only. This success rate is an average of 50%. Only 9 (27%) indicated that their ERP project was between 51-75 % successful. 5 (17%) of the respondents indicated that their project were 0- 25% successful. There was no single project which achieved a success rate of 76% and above. These results indicate a high level of failed ERP projects in Kenyan Insurance sector.

4.3.8 Project Lateness and Timeliness

The study sought to find out completion schedule for ERP project implementation time lines. The responses were analyzed and the results are shown in Table 4.9.

Table 4.9
Project Completion Schedule

Schedule Lateness (Months)	Frequency (f)	Percentage (%)
3 months	2	5
6 months	4	13
9 months	9	27
12 months	6	20
More than a year	11	35
Total	**32**	**100**

Source: Research Data, 2016

From Table 4.9; Majority of the respondents at 11 (35%) indicated that their respective projects were more than one (1) year behind schedule. 9 (27%) of the respondents indicated that their projects were 9 month late. 6 (20%) responded that their projects were about 12 months (1 year) late. 4 (13%) responded that their projects were 6 months late and 2 (5%) responded that their projects were 3 months late. The project completion schedule is one of the key indicators of project success. From the results it therefore implies that all the ERP projects faced a lot of problems which resulted in them being completed behind schedule with majority at more than one year late.

4.3.9 ERP Benefits to the Organisations

The research sought to find out the extent to which the target firms in the insurance sector have benefited from ERP projects implementation. The responses were analyzed and the results are shown in Table 4.10.

Table 4.10
ERP Benefits to the Organisation

Organisational Benefit	Mean	Standard Deviation
Operational cost reduction	3.938	0.561
Increase in business process efficiency and integration	3.969	0.656
Improvement in decision making process	3.906	0.517
Improvement in customer service	4.031	0.549
Better resource management	3.484	1.068
Increase in innovation of products and service delivery	3.742	0.643
Increased competitive advantage	3.452	0.863
Enhanced collaborations with customers, suppliers and partners	2.900	0.555
Improved cross functional understanding in the organization	3.750	0.655

Source: Research Data, 2016

From Table 4.10 most of the respondents (34%), disagreed (mean 3.938) that their ERP projects lead to the reduction of operational costs. As for business process efficiency and integration as a benefit, majority (34%), fairly agreed (mean 3.969) that the project lead to increase in business process efficiency and integration. A question was asked regarding the improvement in decision making process. Most respondents (44%) strongly disagree (mean 3.906) that the projects improved the process of decision making in their organisations. Other responses are as follows; improvement in customer service, 28% fairly agreed (mean 4.031), better resource management 34% strongly disagreed (mean 3.484), increase in innovation of products and service delivery 37% strongly disagreed (mean 3.742), increased competitive advantage 54% disagreed (mean 3.452), enhanced collaborations with customers, suppliers and partners, 50% agreed (mean 2.900), improved cross functional understanding in an organisation 33% disagreed (mean 3.750).

The mean response for this variable indicates a perception that most of the projects failed to bring about any organisational benefits to their respective organizations. This study shows that nearly almost third of respondents' organisations have yet to realize any financial gain or operational improvements from their ERP projects.

4.4 Strategic Factors and ERP projects implementation

The responses were analyzed and the results are shown in Table 4.11.

Table 4.11

Strategic Factors influencing the success of ERP projects implementation

Statement	Mean	Standard Deviation
Composition of the project team enhances project success	3.752	0.517
Support of the top management is critical in the success of such project	3.990	0.656
Formal IT Strategy is necessary before the implementation	3.500	0.555
Interpersonal attributes of PM affects the outcome of the projects	4.750	1.067
The best person to head the project is the head of IT	3.668	0.198
Members of the project team should concentrate on the project and surrender their normal daily operational activities	3.864	0.771
Project sponsor must be a member of Board of Directors or the CEO	4.719	0.022
Enhanced collaborations with customers, suppliers and partners	4.510	0.593
Improved cross functional understanding in the organization	3.203	0.555

Source: Research Data, 2016

From the findings, the respondents strongly agreed that interpersonal attributes of Project Manager (PM) affects the outcome of the projects (Mean=4.750), this was followed by Project sponsor must be a member of Board of Directors or the CEO (mean=4.719), enhanced collaborations with customers, suppliers and partners (Mean=4.510), members of the project team should concentrate on the project and surrender their normal daily operational activities (mean=3.864), composition of the project team enhances project success (3.752). The respondents further agreed that Improved cross functional understanding in the organization (Mean=3.203), the best person to head the project is the head of IT (Mean=3.668), and then Support of the top management is critical in the success of such project (Mean=3.990).

This implies that majority of the respondents strongly agreed that strategic factors of top management and ERP strategy influence the success of ERP projects implementation.

4.5 Tactical Factors and ERP Projects Implementation

To assess the extent to which tactical factors influence ERP projects implementation.

The above information was sought as per sub themes as follows:

4.5.1 Business Process Reengineering (BPR)

The research sought to find out the extent to which BPR influence the success of ERP projects implementation. The responses were analyzed and the results are shown in Table 4.12.

Table 4.12
Business Process Reengineering

Statements	Mean	Standard Deviation
Business Process Re- engineering before, during and after the implementation affects the project deliverables	3.229	0.718
Poorly documented processes affect the project success	3.510	0.734
You derive better results if you undertake ERP project and ISO certification project concurrently	3.338	0.655
Documentation of BPR should involve all the affected	3.438	0.865

Source: Research Data, 2016

From the findings, the respondents strongly agreed that poorly documented processes affect the project success (Mean=3.510), documentation of BPR should involve all the affected (Mean= 3.438), better results are driven if ERP and ISO certification projects are taken concurrently (Mean=3.338) and lastly Business Process Re- engineering before, during and after the implementation affects the project deliverables (Mean=3.229).

4.5.2   Effective Project Management

The research sought to find out the extent to which Project Management influence the success of ERP projects implementation. The responses were analyzed and the results are shown in Table 4.13.

Table 4.13
Effective Project Management

Statements	Mean	Standard Deviation
Effective before, during and after the implementation affects the project deliverables	3.484	0.561
A good project team is crucial to the success of any large ERP project	3.074	0.656
Project team should consist of a good team composition, preferably the one with experience	3.452	0.517
ERP implementation teams need to be multidisciplinary	2.990	0.559
Using a mix of consultants and internal staff to work together in the project enable staff to grow technical skills	3.750	1.068
The employees for the team should be experts in the company process but also knowledgeable of the best business practices in the industry	3.375	0.655
Users resist ERP systems because they are worried that their jobs might be eliminated or changed from their usual way of doing things	3.375	0.823
Users involvement from the beginning of ERP project help to gain users buy in for the project	3.000	0.922

Source: Research Data, 2016

From the findings, the respondents strongly agreed that using a mix of consultants and internal staff to work together in the project enable staff to grow technical skills (Mean=3.750), this was followed by effective project management before, during and after the implementation (mean=3.484), project team

and composition, preferably the one with experience (Mean=3.452), the employees for the team should be experts in the company process but also knowledgeable of the best business practices in the industry, and users resistance to ERP systems because of job worries (mean=3.375), a good project team is crucial to the success of any large ERP project (Mean=3.074). The respondents further agreed that users involvement from the beginning of ERP project would help to gain users buy-in for the project (Mean=3.000), and ERP implementation teams need to be multidisciplinary (Mean=2.990).

4.5.3   Employee Retention

The respondents were requested to indicate their level of agreement on the influence of employee retention on successful ERP projects implementation. The findings were shown in the Table 4.14

Table 4.14
Employee Retention

Statements	Mean	Standard Deviation
Experienced employees are critical for success of ERP project	3.281	0.720
ERP skills are in acute shortage because of high demand for people with good understanding of business and ERP systems	3.419	0.766
Ability to recruit and retain qualified ERP consultant are critical for ERP project success	3.389	1.224
Finding the right people and training them is a major challenge of ERP project implementation	3.343	0.793

Source: Research Data, 2016

From the findings, the respondents strongly agreed that ERP skills are in acute shortage because of high demand for people with good understanding of business and ERP systems (Mean=3.419), ability to recruit and retain qualified ERP consultant are critical for ERP project success (Mean= 3.389), finding the right people and training them is a major challenge of ERP project implementation (Mean=3.343) and lastly experienced employees are critical for success of ERP project (Mean=3.281).

4.5.4 Problems Anticipation

The respondents were requested to indicate their level of agreement on the influence of Problems Anticipation on successful ERP projects implementation. The findings were shown in the Table 4.15.

Table 4.15
Problems Anticipation

Statements	Mean	Standard Deviation
Software problems such bugs in the system and troubleshooting might appear during testing	3.719	1.998
A modified system increases the possibility of bugs and troubleshooting	3.96	1.326
Quick response, patience, perseverance, problem solving and troubleshooting	3.548	0.916
Hand-on cooperation with vendors and consultants is needed to resolve the problems	3.348	0.793

Source: Research Data, 2016

From the findings, the respondents strongly agreed a modified system increases the possibility of bugs and troubleshooting (Mean=3.960), software problems such bugs in the system and troubleshooting might appear during testing (Mean= 3.719), quick response, patience, perseverance, problem solving and troubleshooting (Mean=3.548) and lastly hand-on cooperation with vendors and consultants is needed to resolve the problems (Mean=3.348).

The above statements imply that majority of the respondents strongly agreed that tactical factors (BPR, Effective Project Management, Employee Retention and Problems Anticipation) influence the success of ERP projects implementation.

4.6 Cultural Factors and ERP projects implementation
To assess the extent to which cultural factors influence ERP projects implementation.

The researcher sought information as per sub themes as follows:

4.6.1 Organisation Culture
The respondents were requested to indicate their level of agreement on the influence of Organisation Culture on ERP projects implementation. The findings were shown in the Table 4.16.

Table 4.16
Organisation Culture

Statements	Mean	Standard Deviation
A culture with shared values and common aims is conducive to success of ERP project implementation	3.625	1.134
Shared culture with shared values and common aims greatly aid in implementation efforts	3.625	0.993
An open and creative culture recognizes employees as the primary source of ideas, actions, and delivery of performance, which results in a stable work environment that reinforces the loyalty of employees	3.839	1.254

Source: Research Data, 2016

From the findings, the respondents strongly agreed that an open and creative culture recognizes employees as the primary source of ideas, actions, and delivery of performance, which results in a sTable work environment that reinforces the loyalty of employees (Mean=3.839), a culture with shared values and common aims is conducive to success of ERP project implementation and shared culture with shared values and common aims greatly aid in implementation efforts (Mean= 3.625).

4.6.2 Effective Communication

The respondents were requested to indicate their level of agreement on the influence of Organisation Culture on ERP projects implementation. The findings were shown in the Table 4.17.

Table 4.17
Effective Communication

Statements	Mean	Standard Deviation
Communication is the lifeblood of the organization	3.984	0.779
Effective communication can make the new system penetrate into the organization	3.969	1.024
Constant communication owns another strategy of avoiding company rebellion to new systems implementation	3.092	0.96

Source: Research Data, 2016

From the findings, the respondents strongly agreed that communication is the lifeblood of the organization (Mean=3.984), effective communication can make the new system penetrate into the organization (Mean= 3.969) and constant communication owns another strategy of avoiding company rebellion to new systems implementation (Mean= 3.092).

4.6.3 Cultural Diversity

The respondents were requested to indicate their level of agreement on the influence of Organisation Culture on ERP projects implementation. The findings were shown in the Table 4.18.

Table 4.18
Cultural Diversity

Statements	Mean	Standard Deviation
The vendors culture, implicit in the ERP package, clashes with the customers' organizational culture	3.938	0.779
Few consultants understand their customers organizational culture and business processes efficiently	3.939	1.025
Organisations need to consider the cultural diversity among vendors, consultants and themselves before they decide which ERP packages to purchase and implement	3.960	0.970

Source: Research Data, 2016

From the findings, the respondents strongly agreed that organisations need to consider the cultural diversity among vendors, consultants and themselves before they decide which ERP packages to purchase and implement (Mean=3.960), few consultants understand their customers organizational culture and business processes

efficiently (Mean= 3.939) and the vendors culture, implicit in the ERP package, clashes with the customers' organizational culture (Mean= 3.938).

The above statements imply that majority of the respondents strongly agreed that cultural factors (organization culture, effective communication and cultural diversity) influence the success of ERP projects implementation.

4.7 Variable influence on ERP Projects Implementation

The respondents were requested to indicate the extent to which the following variables influence ERP projects implementation in their respective Insurance Companies. The findings were shown in Table 4.19.

Table 4.19

Variable influence on ERP Projects Implementation

Critical Success Factors	Mean	Standard Deviation
Top management support	3.994	0.548
Business Process Re-engineering	3.379	0.743
Effective Project Management	3.313	0.720
Employee Retention	3.358	0.876
Problem Anticipation	3.644	1.258
Organisation culture	3.696	1.127
Effective communication	3.682	0.921
Cultural diversity	3.955	0.925

Source: Research Data, 2016

From the findings, the respondents rated top management support to be the highest critical factor that influence success of ERP projects implementation (Mean=3.994), this was followed organisation culture (Mean=3.696), cultural diversity (Mean=3.955), problem anticipation (Mean=3.644), business process re-engineering (Mean=3.379), employee retention (Mean=3.358) and effective project management (Mean=3.313).

In summary the critical success factors for ERP projects implementation are rated as follow:
1. Strategic factors;
2. Cultural factors;
3. Critical factors.

4.8 Respondents comments, suggestions and recommendation to their companies that can facilitate ERP Projects implementation.

Respondents were asked to state which comments, suggestions and recommendations they can give to their Companies to facilitate successful ERP projects implementation. Majority of the respondents stated Insurance companies should engage the stakeholders more to harmonize its goals and objectives with the aspirations of the stakeholders and reduce dissonance levels thereby increasing satisfaction

and avoiding projects budget overruns, hire qualified staff and in addition, train them to enable them deliver projects optimally.

4.9 Inferential Statistics

The researcher conducted a multiple regression analysis so as to test relationship among variables (independent) influence on ERP projects implementation. The researcher applied the statistical package for social sciences (SPSS V 21) to code, enter and compute the measurements of the multiple regressions for the study.

Coefficient of determination explains the extent to which changes in the dependent variable can be explained by the change in the independent variables or the percentage of variation in the dependent variable (project Implementation) that is explained by all the three independent variables (strategic factors, critical factors and cultural).

Table 4.20
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.792	0.638	0.592	0.043

Source: Research Data, 2016

The three independent variables that were studied, explain only 63.8% of critical factors for enterprise resource planning project implementation as represented by the r^2. This therefore means that other factors not studied in this research contribute 36.2% of the critical factors for enterprise resource planning project implementation therefore, further research should be conducted to investigate the (36.2%) critical factors for enterprise resource planning project implementation.

4.10 Regression Analysis

The relationship of the extent of critical factors for ERP projects implementation of an organization was sought and done via regression analysis where means and standard deviation are the variables used in the study. Because the unit of analysis in this study organizations in insurance sector, multiple responses from the same organization were averaged to be used as organizational level variables.

Table 4.21
Descriptive Statistics of Organizational Variables

Variable	Extent of ERP implementation	ERP contribution to performance
Mean	3.229	3.510
Std. Deviation	0.718	0.734

Source: Research Data, 2016

CHAPTER FIVE

SUMMARY OF THE FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter covers the conclusions that can be drawn from the analysed data, recommendations, limitations of the study and areas requiring further research. The study had the following objectives; to determine how strategic factors influence the implementation of ERP projects in the Insurance sector in Kenya; establish how tactical factors influence the implementation of ERP projects in the Insurance sector in Kenya; to determine how cultural factors influence the implementation of ERP projects in the Insurance sector in Kenya.

5.2 Summary of the Findings

The study findings have been summarized as per the themes as follows:

5.2.1 General Information of the Respondents

The study concluded that gender of respondents were male (56%) and female (44%) and many had ICT background (43.75%) and had working experience of 5-10 years (66%).

5.2.2 Strategic Factors and ERP Projects Implementation

The study found out that top management support is very strategic for the success of ERP projects implementation. In order to be successful, project must have top management support. Top management must publicly recognize ERP implementation project as top priority, be personally involved in project, and in that way increase commitment of all employees. This insures greater commitment on all organization levels, which is key factor of ERP implementation success. It is not good enough that top management is personally engaged in project, but they also have to allocate valuable resources for the implementation project. This includes not only the provision of adequate number of resources and time to complete the work, but essential personnel. It is also necessary that the project has a sponsor from top management level, which is capable of implementing organizational changes whenever is necessary. Project sponsor is critical for achieving consensus and monitoring the entire life cycle of ERP system implementation.

Somebody has to act as a system advocate throughout the organization, and that has to be a high-level sponsor who has the power to set goals and justify the change. For big and costly projects sponsor should be a strong individual with a high position in the hierarchy that will act as promoter of the system. In addition, sponsor leadership skills play a key role in the implementation success, because sponsor must be able to resolve conflicts, deal with resistance, and manage changes. Complexity of ERP projects often force employees to have additional working hours, besides their regular duties and that may lead to stress and lower their morale. So the role of sponsor is to promote ERP implementation project through entire organization and increase morale and commitment of all team members.

This affirms that strategic factors do influence the success of ERP projects implementation.

5.2.3 Tactical Factors and ERP Projects Implementation

The second objective was to establish how tactical factors influence the implementation of ERP projects in the Insurance sector in Kenya. The study found out that companies ought to identify their existing business structure and business process associated with their existing IT systems in the beginning of ERP project and relate this to the business process contained within ERP system. It was further found that using a mixture external consultants and internal staff working together makes the project team to grow the technical skills for the ERP project implementation.

Subsequently any alignment problems that might have occurred in the project can resolved by carrying system monitoring exercise. Further, close cooperation between vendors, consultants is required to resolve problems after implementation. Sophisticated software testing before system implementation would ease implementation pain.

5.2.4 Cultural Factors and ERP Projects Implementation

The study established that majority of the respondents indicated that cultural factors influence success of ERP projects implementation in their Insurance companies. On this, the study established that companies need to consider the cultural factors among vendors, consultants and themselves before deciding which ERP system to purchase and implement. Lack of cultural factors consideration may force the companies to either scale down the ERP projects, acceptance of minimum benefits and may abandon project implementation altogether.

5.3 Discussions of the Findings

The study findings were discussed as per the research objectives themes as follow:

5.3.1 Strategic factors influencing ERP projects implementation

The strategic factors were divided into two i.e. top management support and ERP strategy. Their findings were discussed herein below.

5.3.1.1 Top Management Support

The study found out that strategic factors of top management support and ERP strategy do influence ERP projects implementation. The study established that ERP projects implementation required top management support because an implementation involves significant change to existing business processes as well as significant amount of capital investment therefore gaining the required amount of support from senior management becomes paramount for ERP projects.

It also showed that ERP projects cover a wide range of functional areas, it is important for the implementing companies to have a clear goals, focus and scope prior to project implementation as lack of this will most likely lead to project failure. Companies that do not a clear strategic plan in regard to their business have high failure rate of ERP implementation.

Top management support is needed because sometimes there are unresolved problems from both sides that need a hand from top management. Then appropriate time, sufficient effort, enough budget and qualified technical support will be allocated to the management process, which is a secure investment for ERP.

The shared vision of the organization and the role of the new system and structures should be communicated between managers by their senior management. Policies made by the manager will come with the new systems in the company. In case of conflict, the proper mediation will be based on that standard (Carol Brown and Iris Vessey, 1999).

The study was in agreement with Mckersie and Waltoon (1991) who suggested that senior must be involved, including the required staff and appropriate time to finish and allocate valuable resources to the ERP implementation effort.

5.3.1.2 ERP Strategy

The study found that that factor of ERP strategy influences ERP projects implementation.

Project managers should consider their own business implications and organisationnal resources and then make a reasonable schedule of implementation plan.

The study further showed that the length of ERP implementation is affected to a great extent by the number of modules being implemented, the scope of the implementation, the extent of customization, and the number of interfaces with the applications. Suitable and reasonable implementation time should be planned for a standard and smooth adoption process for ERP implementation projects. The study was in agreement with Myerson (2002) who stated that greater the number of units, the longer the total implementation time.

5.3.2 Tactical factors and ERP projects implementation

The objective on tactical factors that influence projects implementation had four sub themes (Business Process Reengineering, Project Management, Employee Retention and Problems Anticipation) and their research findings are discussed below.

5.3.2.1 Business Process Reengineering and ERP Projects Implementation

The study showed that BPR should ground process of the whole project. It is also important that there is an official agreement of the whole process plan agreed by both sides (company and consultant). The study further established that it is important to do BPR independently and then take a look to the ERP system project. The study concurs with Fang (2005) who emphasized that companies need to identify their current business structure and business processes associated with their existing IT systems in the

beginning of ERP project and relate this to the business processes contained within ERP system. The study was in contrary with Dantes and Hasibuan (2011), which stated that BPR will make employees to learn completely new things and this will lead to the decline in the overall productivity of the company.

5.3.2.2 Project Management and ERP projects implementation

The study established that effective project management influence ERP projects implementation. It found out that project manager leadership in both sides must be good to ensure smooth implementation because it is strongly related with the working atmosphere along the implementation. It can affect the working mood among the project team members which in the end will affect the whole company. The project manager must calm under stress, make effective decisions, demonstrate good people skills in dealing with various factions and coaching own team members. They also have to manage expectations of managers and end-users properly and promote the project's benefit to the entire organization and create positive perceptions of the project. The study concurs with Katarina, Damir and Mladen (2012) who asserted that an individual or group should be given the authority to manage the project, because ERP implementation projects are usually estimated by level or achieving planned budget and time.

5.3.2.3 Employee Retention and ERP projects implementation

ERP project success call for high demand for people with good understanding of business and ERP systems. The study found that once experienced employees leave the companies, it will greatly affect the working process and morale. The departure of experienced employee often result in high turnover rates and leads to overdue time for ERP project because the company would have to train a new unskilled employee from scratch. The study was in agreement with Kumar, Kumar and Maheshwari (2003) who asserted that employee turnover do not just rise in companies, but also external service providers (such as consultants) themselves are unable to maintain continuity of customer support personnel.

5.3.2.4 Problems Anticipation and ERP projects implementation

The study established that problems anticipation does have influence on the implementation of ERP projects. The study found out that project implementation team need to have plan which incorporate quick response and fire-fighting capabilities to resolve problem during ERP project implementation. Therefore, it is natural work to anticipate the problems and solve them. This is in agreement with Rasario (2000) who found that close cooperation between vendors, consultants and users is needed to resolve the problems. Systematic software testing eases pain during implementation of ERP system projects.

5.3.3 Cultural factors and ERP projects implementation

The objective on cultural factors that influence ERP projects implementation had three sub themes and their research findings are discussed in the following points below.

5.3.3.1 Organisation Culture and ERP Projects Implementation

The study found that organisation culture does have influence on the implementation of ERP projects implementation. Sometimes, human factors are more important than technical problems. Such human factors will include interactions and communication.

Companies should have a strong corporate identity that is open to change from the environment. The implementation of ERP project will change the way people are used to doing things and will be more strategic than operational way of using a new computer system. The study was in agreement with Kuang et al., (2001) who stated that innovative open organizational culture will facilitate the user participation throughout the whole implementation process.

5.3.3.2 Effective Communication and ERP Projects Implementation

The study established that effective communication has influence on the implementation or ERP projects implementation. Effective communication can make the new system penetrate into the organization, enhance employees' willingness to change and take part, and maximize the support from vendors and consultants, which means that an organization can better make use of its technique resources from ERP. People will feel secure when they know what to do while facing a new situation. The study was in line with Trimble (2000) who stated that "Technology is not always the issue, but the people." If there is no effective communication for the new project from top to bottom, the ERP implementation surely will fail.

5.3.3.3 Cultural Diversity and ERP Projects Implementation

The study established that cultural diversity has influence on the implementation of ERP projects. It finally established that ERP projects implementation present problematic choice to organisations. To bridge the cultural diversity, companies need to choose among the changing the organization culture and business process to fit into the off-shelf ERP systems, or customizing the package to smooth alignment of the software functionality of business requirement.

The study was in line with previous research done by Marcus and Tanis (2000), who argued that companies need to consider the cultural diversity among vendors, consultants and themselves before they decide on which ERP packages to purchase and implementation.

5.4 Conclusions

ERP systems link together Insurance companies' strategy, structure, and business processes with the ICT system. ERPs have become an essential system for many of the world's leading companies. These

systems provide an increased level of integration to support core business processes. They provide real time information to improve decision making within the companies.

The improved integration and standardization have made the systems attractive to companies to attract their national, regional and global operations.

For every company whatever the reason they come to decision in implementing ERP, they need to comprehend ERP as a broad and complex system, involving a lot of resources, efforts, and cost. This therefore call for need to assimilate ERP in the enterprise.

By looking at the total critical factors (CFs) for ERP implementation, it can be concluded that CFs of ERP implementation are quite well studied. It was also shown that all these CFs were interrelated and changes in one CFs influence all the others, directly or indirectly.

Though all the factors had an important role to play in successful ERP rollouts the degree of focus in the literature varies. For instance top management support gained overall eminence above other factors.

However the implementation and use of ERP systems face a number of issues due to their complexity and the impact they have on companies. These complex issues are such as barriers available in implementing the systems. Therefore, Insurance companies have to be prepared to overcome those barriers by considering the critical factors influencing ERP projects implementation.

Very little research has been undertaken which assess critical factors influencing the implementation of ERP systems projects in Kenyan Insurance sector. This study has collated industry presentations to identify possible issues in this sector related to ERP systems. The issues have been identified as critical factors influencing ERP systems projects and the best procedure to follow during implementation.

This research is far from comprehensive however it provides a starting point in an area of research where there is a limited literature reviews concerning ERP implementation particularly in the Kenya Insurance sector context. It provides future researches with a foundation to expand on.

5.5 Recommendations for policy action

To improve the success of ERP projects in insurance companies this study recommends improved planning and consensus.

Top management should ensure transparency and accountability in procurement processes to ensure that the ERP choice is keenly scrutinized, request for proposals and proof of concept done diligently. Top management should also ensure that departmental managers comply, play and execute their part diligently avoid complacency and be open to business processes reengineering. This will reduce organizational culture creeping into the project and prevent the organization realize the full benefits of an ERP.

The study proposes best practice adoption in order to reduce customizations. This study proposes that this should be done after adequate sensitization and awareness through efficient and effective change

management and communication structures. Training and capacity building must be undertaken prior to such projects being undertaken to ensure that there will be efficient knowledge transfer and experience as project takes shape.

This study proposes that Insurance sector top management must embrace ICT as a strategic partner and no longer the desktop and keyboard support personnel. Hence qualified IT professionals should be engaged in these projects to drive innovation, automation and collaboration.

5.6 Recommendations for Further Study

Based on the limitations encountered and the reported findings of this research it is necessary to provide several directions for further research. The following topics are recommended for further study;

 i. A study of the ERP projects implementation challenges in the financial industry in Kenya as this study was done on one sector only.

 ii. Further research can also be done on the impact of ERP on organisational performance.

iii. The study further suggests that research should be done on the risk management of ERP systems since there is increased internet crime which may lead to the exposure of an organisation if not well safeguarded and control measures put in place.

iv. How organisations can be better prepared for the success in ERP projects implementation.

5.7 Contributions to the body of knowledge

The findings of this study, it is hoped that it will contribute to the existing body of knowledge and form basis for future researches. The study recommends continuous review of ERP projects implementation efforts in Kenya's Insurance sector. This should be done to provide up to date literature on progress and experiences in various companies for information and contribution to the body of knowledge in use of ERPs in financial industry in Kenya. Continuous review should be done to avoid stalled as well as abandoned ERP implementation efforts in Kenya's insurance sector. The observations resonate with findings by Huang and Palvia (2001) which point out that literature on use of enterprise systems is lacking in developing countries.

An ERP deployment should be undertaken when sufficient critical success factors are addressed to position an organization favourably in successfully implementing an ERP system. The chosen ERP system by a company should not only meet present functional requirements of it but also provide compatibility with existing systems while providing scalable options for future growth of respective companies. Use of an adequate mix of internal and external human resources should be taken into consideration to facilitate successful implementation of ERP systems in the insurance sector.

The study further recommended continuous monitoring of communication interfaces conducted over ERP platforms. Preventive maintenance procedures and debugging should be conducted to provide

efficiency and reliability and avert would be system downtimes. Implementation of ERP systems should meet improved service delivery needs in respective companies. Quality of service delivery should be responsive to organisational needs while providing operational advantage to respective companies.

REFERENCES

Adams, D., & Lee, M. (1990). A manager's guide to the strategic potential of information systems.

Akkermans H., & Van K. (2002). Vicious and Virtuous Cycles in ERP Implementation: a Case Study of Interrelations between Critical Success Factors, European Journal of Information Systems.

Aladwani, A. M. (2001). "Change management strategies for successful ERP implementation". Business Process Management Journal, Vol. 7 No. 3, pp. 266-275

Al-Mashari, M., (2002). Implementing ERP through SAP R/3: A process change management (PCM) perspective. King Saud University Journal-Computer & Information Sciences Division 14, 25-37 *and Management*, 28, 311323.

Ang, J.S.K. Yang, K.K. & Sum, C.C. (1994). MRP II company profile and implementation problems: a Singapore experience. International Journal of Production Economics, 34,35-46.

Appleton, E. (1999). How to survive ERP. *Datamation,* March.

Approaches, Acts Press, Nairobi
Approaches, Acts Press, Nairobi

Arnold, V., Hunton, J. E., & Sutton, S. G. (2000). On the Death and Dying of Originality.

Avraham Shtub, (2001). A framework for teaching and training in the Enterprise Resource Planning (ERP) era. INT.J. PROD. RES. VOL.39, NO.3, 567-576

Bagoole, M.(2011). Funds Disbursement, Monitoring, Accountability & Performance: A case of Universal Primary Education in Uganda

Bancroft, N., seip, H. & Sprengel, A. (1998). Implementing SAP R/3, 2nd edn (Manning Publications, Greenwich, CT).

Beekhuyzen, J., Hellens, L., & Nielsen, S. (2005). *Qualitative case studies on implementation* Benchmark.

Best, C. (1997). Integrated system builds on human foundation, *Computing Canada*, 23.

Bingi, P., Sharma, M.K. & Godla, J. (1999). Critical issues affecting an ERP implementati. *Information Systems Management*, pp. 7-14.

Brown, C. and Vessey, I. (1999). ERP implementation approaches: toward a contingency framework, *Proceedings of the International Conference on Information Systems*, pp. 411-16.

Brown, G. T. L., Glasswell, K., & Harland, D. (2004). Accuracy in the scoring of writing: Studies of reliability and validity using a new zealand

Buckhout, S., Frey, E. and Nemec, J. Jr (1999). Making ERP succeed: turning fear into promise, *IEEE Engineering Management Review*, pp. 116-23.

Buckhout, S., Frey, E., & Nemec, J. J. (1999). Making ERP succeed: turning fear into

C. Holland and B. Light (1999a). Global Enterprise Resource Planning Implementation, in Proceedings of HICSS 32 - 32nd Annual Hawaii International

C. Holland and B. Light (1999b). A Critical Success Factors Model for Enterprise Resource Planning Implementation. 7th European Conference on Information Systems ECIS, Copenhagen, Denmark.

C. Ptak & E. Schragenheim (2000). ERP: Tools, Techniques, and Applications for Integrating the Supply Chain (Boca Raton, Fl: St. Lucie Press).

Caldas, M. P. & Wood, T. (2000). Stripping the big brother: snooping into the Enterprise.

Callaway, E. (2000). *Enterprise Resource Planning + Integrating Application and Business.*

Cameron, D., & Meyer, L. (1998). Rapid ERP implementation-a contradiction.

Carmines, Edward G., and Richard A. Zeller (1979). *Reliability and Validity Assessment.*
Carol, B. & Iris, V. (1999). ERP implementation approaches: toward a contingency framework.

Proceeding of the 20th international conference on Information Systems Conference on System Sciences, Maui, Hawaii, pp. 10.

Cavaye, A. L. M. (1995). User participation in system development revisited.

Chen, I.J. (2001). Planning for ERP systems: analysis and future trend.

Chen, J. Injazz, (2001). *"Planning for ERP system: Analysis and Future Trend",* Business Process Management Journal Vol. 7 Number 5, pp 347-386.

Coulianos, N., Galliers, J., Krumbholz, M., & Maiden, N. A. M. (2000). Implementing Enterprise Resource Planning packages in different corporate and national cultures. *Journal of Information Technology*, 15, 267-279.
D. L. Olson (2001), Introduction to Information systems Project Management (New York: Irwin/McGraw-Hill).
Davenport, T. H. (2000). *Mission critical: realizing the promise of enterprise systems*.

Davenport, T.H. (1998). Putting the enterprise into the enterprise system, *Harvard Business.*

Duchessi, p., Schaninger C. & Hobbs, D. (1989) Implementing a manufacturing planning and control information system. California Management Review, Spring, 31, pp 75-90

Ehie, I., & Madsen, M. (2005). Identifying critical issues in enterprise resource planning (ERP)

Elisabeth J. Umble, Ronald R. Haft, & M.Umble (2003) Enterprise resource planning: Implementation procedures and critical success factors, European Journal of Operational Research, pp 241-257

Falkowski, G., Pedigo, P., Smith, B. & Swanson, D. (1998), ``A recipe for ERP success'', *Beyond Computing*, pp. 44-5.

Frary, R.B. (1996) . Washington, DC: ERIC Clearinghouse on Assessment and Evaluation (30 pages) *Brief Guide to Questionnaire Development*
G. Langernwalter (2000), Enterprise Resources Planning and Beyond: Integrating Your Entire Organization (Boca Raton, FL: St. Lucie Press).

G. Stewart, M. Milford, T. Jewels, T. Hunter, & B. Hunter (2000) "Organizational readiness for ERP implementation," Proceeding s of the Americas Conference on Information Systems, pp.966-971

Gartner Group (2006). Findings From the SAMA/ERP Research Community: A Framework for Evaluating Vendors' BPP and WOA Strategy

Gattiker, T., & Goodhue, D. (2000). Understanding the plant level costs and benefits of ERP: will the ugly duckling always turn into a swan? IN R. Sprague Jr. (ed.), Proceedings of the Thirty-Third Annual Hawaii International Conference on System Sciences. Los Alamitos CA:IEEE. Computer Society Press..

Gay, L.R. & Diehl, P.L. (1992). *Research Methods for Business and Management*. New York: Macmillan.

Gibson, N., Holland, P., & Light, B. (1999). A critical success factors model for enterprise resource planning implementation. *Proceedings of the 7th European Conference on Information System*, Vol 1, 273-297.

Glover, S. M., Prawitt, D., & Romney, M. (1999). Implementing ERP. *Internal Auditor*,

Goldhaber, G. M. (1993). *Organizational communication (6th ed.)*. WI: Brown and

Grabski, S. V., Leech, S. A., & Lu, B. (2000). *Successful implementation of ERP systems:*

Grabski, S.,& Leech, S. (2007), "Complementary controls and ERP implementation success",

H.J. Harrington, E.K.C. Essing, & H. Van Nimwegen (1997) Business Process Improvement Workbook: Documentation, Analysis, Design, and Management of Business Process Improvement. (New York: McGraw-Hill), p.1.

Harris, T. E. (2002). *Applied organizational communication*. Lawrence Erlbaum Associates.

Hooshang M. Beheshti, (2006) "What managers should know about ERP/ERP II", Management Research News, Vol. 29 Iss: 4, pp.184 - 193

Huang Z. & Palvia P. (2001) ERP Implementation Issues In Advanced and Developing Countries. *Journal of Enterprise Information Management* International (P) Limited Publishers.

J. Manetti (2001). How Technology Is Transforming Manufacturing," Production and Inventory Management Journal pp. 54-64.

J.A. offer, J.F. George, & J.S. Valacich (1998). Modern Systems Analysis and design (2nd Ed.), Addison-Wesley Reading, MA

J.S.K. Ang, C.C.Sum, & W.F.Chung (1995) "Critical Success Factors in Implementing MRP and Government Assistance: A Singapore Context", Information and Management, pp.63-67

Jacques V., & Alannah H. (2003). "A six-stage model of the buying process for ERP software," Industrial Marketing Management 5560.

K.Kumar & J.V. Hillegersberg (2000). "ERP experiences and evolution", Communications of the ACM, Vol.43, No. 4, pp. 23-26.

Khosrowpour, M., & Szewczak, E. (1996). *The human side of information technology*

Klaus, H., Roseman, M., & Gable, G. G. (2000). What is ERP. *Information Systems Frontiers, 2* (2), pp. 141 - 162.

Kothari, C. (2006). *Research Methodology, Methods and Techniques. New* International Age

Kothari, C. R. (2004). *Research methodology. Methods and techniques*. New Delhi. New Age
Kroenke, D. (2008). Experiencing MIS, Prentice Hall.

Kuang, J., Lau, J. L. S., & Nah, F. F. H. (2001). Critical factors for successful implementation

L.P. Willcocks & R.Sykes (2000) "The Role of the CIO and IT Function in ERP," Communications of the ACM 43, no. 4, pp. 22-28

Larsen, M.A. and Myers, M.D. (1997) BPR success or failure? A business process reengineering model in the financial services industry. In Proceedings of the International Conference on Information Systems, pp.367-82

Lucas, H. C., Walton, E. J., & Ginzberg, M. J. (1988). Implementing Packaged Software. *MIS Quarterly, 12*, 537-549.

M. Wheatley (2000). "ERP Training Stinks," CIO Magazine, www. Cio.com/archive/060100_erp_content.html

M.L. Markus, C. Tanis, & P.C.vanFenema (2000). "Multisite ERP implementations," Communications of the ACM 43, no.4 pp. 42-46

M.Lynne Markus, Sheryl Axline, David Ptere & Cornelis Tanis (2000). Learning from adopters' experiences with ERP: problems encountered and success achieved, Journal of Information Technology, pp 245-265

Mabert, V, Soni, A. & Venkataramanan, M.A. (2000). The impact of organization size on enterprise resource planning (ERP) implementations in the US manufacturing sector. Omega, 31 (3), 235-246.

Mabert, V, Soni, A. & Venkataramanan, M.A. (2000): Enterprise Resource Planning: Common Myths Versus Evolving Reality. Business Horizons, May-June 2001. Contains interesting data on the costs of ERP systems.

Mabert, V., Soni, A., & Venkataramanan, M. (2003).The impact of organisation size on enterprise resource planning (ERP) implementations in the US manufacturing sector. Omega, 31, 235-246.

Majed Al, Abdullah A, & Mohamed Z,. (2003). Enterprise resource planning: A taxonomy of critical factors, European Journal of Operational research 146, pp 352-364

Markus, M.L. & Tanis, C. (2000). ``The enterprise system experience from adoption to N. Sutcliffe, "Leadership Behavior and Business Process reengineering (BPR) Outcomes: An empirical Analysis of 30 BPR Projects," Information & Management 36, no. 5 (1999), pp.273-86

Mary Jo Davis & Zhenyu H,.(2007). ERP in higher education: A Case study of SAP & Campus Management, Issues in Information Systems, Vol. VIII, No. 1, 2007. McGraw-Hill.

Mauti, J. M., Muranga, J. N., & Magutu, P. O. (2013, May). The Critical Success Factors and Challenges In E-Procurement Adoption Among Large Scale Manufacturing Firms In Nairobi, Kenya. *European Scientific Journal, 9*(13), 375-401.

Mendel, B. (1991). Overcoming ERP project hurdles. *InfoWorld,* 21, p. 29. Michigan State University, East Lansing. MIT.

Michael Frimpton (2012), Project Approach to ERP implementation, Ghana Institute of Management and Public Administration (GIMPA),· Ghana. International Journal of Business and Management Vol. 7, No. 10; May 2012

Mottaghi, H. and Akhtardanesh, H. (2010) Applying Fuzzy Logic in Assessing the Readiness of the Company for Implementing ERP. World Applied Sciences Journal, 8(3), pp.354-363.

Mousseau, P. (1998). ERP projects call for multi-talented managers, *Computing Canada*,

Mugenda, O M and Mugenda, A B, (2003), *Research Methods: Quantitative and qualitative Approaches*, Acts Press, Nairobi.

Mugenda, O.M and Mugenda, A.G (1999) *Research Methods, Quantitative & Qualitative*
Mugenda, O.M and Mugenda, A.G (2003) *Research Methods, Quantitative & Qualitative*
Myerson, J. M. (2002). *Enterprise systems integration*. Boca Raton, Fla. : Auerbach

Nah, Fiona Fui-Hoon; Lau, Janet Lee-Shang; Kuang, Jinghua (2001) "Critical factors for successful implementation of enterprise systems", Business Process Management Journal; Volume 7 No. 3 Newbury Park, CA: Sage Publications.

Ngechu, M. (2004). Understanding the research process and methods. *An introduction to research methods.* Acts Press, Nairobi.
Ngechu. M. (2004), Understanding the research process and methods. *An introduction to*
Njihia, E., & Mwirigi, F. M. (2014). The effects of Enterprise Resource System on Firms Performance. *International Journal of Business and Commerce,* 120-129.

Nyaga (2006). Critical success factors for the successful implementation of Enterprise Resource Planning systems in Bamburi Cement Ltd, *Unpublished MBA paper, School of Business, University of Nairobi*.

Nyandiere, C.M. (2002). Challenges facing Enterprise Resource Planning in Kenya Airport Authority (KAA), *Unpublished MBA paper, School of Business, University of Nairobi.*

O'Leary, D. (2000). Enterprise Resource Planning Systems: Systems, Life Cycle, Electronic Commerce, and Risk. New York: Cambridge University Press

Olso D. (2004): Managerial issues of Enterprise Resource Planning System, McGraw
Orodho, A. J. (2003). *Essentials of Educational and Social Sciences Research Method*. Nairobi: Masola Publishers.

Parr, A.N., Shanks, G. & Darke, P. (1999) Identification of necessary factors for successful implementation of ERP systems. In New Information Technologies in pp. 232-4.

Prosser, C., & Canty, D. (1998). Proof of Concept: An Efficient Way to Shop. *APICS THE PERFORMANCE ADVANTAGE, 8*(6), 50-53.

R.B.McKersie, & R.E. Walton (1991). Organizational Change in M.S. Scott Morton (ed.) (1991), *Processes Across the Enterprise*, Computer Technology Research Corporation, Charleston.

Rabaa'i, A.A. (2009).The impact of organizational culture on erp systems implementation: lessons from Jordan.

Ranganathan C., & Samarah , (2001). *"Enterprise Resources Planning Systems and Firm Value: An Event Study analysis",* Twenty-Second International Conference on Information Systems. *Risks and complementary Factors*. Working Paper, Eli Broad College of Business, *research methods.* Acts Press, Nairobi.

Roa, S., (2000). Enterprise resource planning: Business needs and technologies. Industrial Management & Data Systems 100(2), 81-88

Roberts, H.J. and Barrar, P.R.N. (1992), ``MRPII implementation: key factors for success'',

Rockhart, J. F. (1979). Critical success factors. *Harvard Business Review*, March-April,

Rosario, J.G. (2000), ``On the leading edge: critical success factors in ERP implementation projects'', *Business World*, Philippines.

Ross, J. (1996). Dow Corning Corporation (A): Business processes and information

S.Cliffe (1999). ERP implementation, Harvard Business Review 77 (1) (1999) 16-17 Computer Technology Research Corporation. Enterprise Resource Planning:

Sakamoto, K., K. Nakakoji, Y. Takagi & N. Niihara (1998), *Toward Computational Support for*

Sarantakos, S.(2005). Social Research, 2nd edition, Palgrave Macmillan Hampshire, pp 464.
Sauer C. (1993). *Why information systems fail: a case study approach*. London:

Scheer, A. and Habermann, F. (2000), ``Making ERP a success'', *Communications of the ACM*,

Schein, E. H. (1992). *Organizational culture and leadership*. San Francisco: Jossey-

Siau, K. (2004) „Enterprise Resource Planning (ERP) implementation methodologies", *Journal of Database Management*, Vol. 15, No. 1, pp.1–6.

Software Process Improvement Activities, International Conference on Software Engineering,

Somers, T.M., Nelson, K. & Ragowsky, A. (2000), ``Enterprise resource planning (ERP) for the next millennium: development of an integrative framework and implications for research'',

Stefanou, C.J. (1999), ``Supply chain management (SCM) and organizational key factors for successful implementation of enterprise resource planning (ERP) systems'', *Proceedings of* success'', in Zmud, R.W. (Ed.), *Framing the Domains of IT Management: Projecting the Future Through the Past*, Pinnaflex Educational Resources, Inc., Cincinnatti, OH, pp. 173-207.

Sumner, M. (2000). "Risk factors in enterprise-wide/ERP projects". Journal of Information Technology, vol.15, n. 4, December (2000), 317-328

Sumner, M. (2009), ``Critical success factors in enterprise wide information management systems projects'', *Proceedings of the Americas Conference on Information Systems (AMCIS),the Americas Conference on Information Systems (AMCIS)*, pp. 800. Vol. 43 No. 3, pp. 57-61.

T.R. Bhatti, "Critical Success Factors for the Implementation of Enterprise Resource Planning" (ERP), 2005, *The Second International Conference on Innovation in Information Technology (IIT'05)*

Taylor, J. (1999). Fitting enterprise software in smaller companies. *Management Accounting*, technology. *Center for Information Systems Research*, Sloan School of Management,

Trimble, P. S. (2000). *The key to ERP success*. Retrieved April 2, 2005, from http://www.fcw.com/fcw/articles/2000/0313/fcw-mgt-erp-03-13-00.asp

Trompenaars, F. (1994). *Riding the waves of culture: understanding cultural diversity in*

Uwizeyemungu, S., & Raymond , L. (2005). Motivations for ERP Adoption in the Public Sector: An Analysis from "Success Stories". *ASAC*, 220-231.

W.H. Delone, and E.R. McLean (1992) "Information Systems Success: The Quest for the Dependent Variable", Information Systems Research (3:1), pp. 60-95

Wang, B. and Nah, F. (2001), ``ERP + e-business = a new vision for enterprise system'', in Washington, DC, USA. pp. 22-31.

Waterndge J. (1995), I.T projects. A basis for success, International Journal on project management Vol. 13 1995 pg 169-172

Wee, S. (2000), ``Juggling toward ERP success: keep key success factors high'', *ERP News*,

Welman, J.C. & Kruger, S.J. (2001). *Research methodology for the business and administrative sciences,* 2nd ed. Cape Town: Oxford University Press SA.

Zhang L., Lee K.O.M., Zhang Z., Banerjee P.,(2002) Critical Success Factors of Enterprise Resource Planning Systems Implementations Success in China, IEEE Computer Society, 2002

Zmud, R. W. (Eds.), Cincinnati, OH:Pinnaflex Educational Resources.

APPENDICES

APPENDIX I: Transmittal Letter.

The Project Manager,

……………………………….

Dear Sir/Madam,

RE: REQUEST TO COLLECT DATA FROM YOUR ORGANISATION.

My name is Walter Ndege, a Master of Arts (Project Planning and Management) student at the University of Nairobi. As partial fulfillment of the degree, I am conducting a research on critical success factors on ERP Systems implementation project. Your organization has been sampled to be a respondent in this survey.

Thus, I kindly request you to respond to the questions attached as per the questionnaire. The information you give on this questionnaire will be treated with confidentiality and at no instance will it be used for any other purpose other than the academic. The researcher will be available to clarify any issue during the data collection process.

Your assistance is highly appreciated. I look forward for your prompt response.

Yours faithfully,

Walter Ndege

APPENDIX II: Research Questionnaire

AN INVESTIGATION OF THE CRITICAL SUCCESS FACTORS FOR THE ENTERPRISE RESOURCE PLANNING (ERP) SYSTEM IMPLEMENTATION PROJECTS: A CASE OF KENYA INSURANCE SECTOR ORGANISATIONS.

The University of Nairobi – College of Education and External Studies

This research work analyses the critical success factors for Enterprise Resource Planning (ERP) system project implementation in selected Insurance Companies in Kenya. In this study, I intend to establish factors and issues which must be put in place for an effective and successful implementation of such projects. Your participation and co-operation will help in identification of these critical success factors.

Instructions

It is important that you personally fill the questionnaire for the final result to be meaningful. Choose answers that best represent your views. Additional spaces have been provided to allow you provide general comments and suggestions concerning the subject matter.

Confidentiality

The confidentiality of the respondents is guaranteed. Taking part in this survey is on voluntary basis only. By returning the questionnaire you are indicating your willingness to participate. This research work is purely for academic purposes and the results will not be used for any other purpose.

Section One: Demographics

1.1   Your Name (Optional) ………………………………………………………………

1.2   Your Gender (Please tick one only): Male [ ]   Female [ ]

1.3   What is your highest level of education? (tick as applicable)

Diploma.   [ ],
Degree.   [ ],
Postgraduate.   [ ].

1.4   Which category best describes your position in your organisation's organizational structure (Choose one only).
Top Management – Head of division   ( ),
Senior Management – Head of department   ( ),
Middle Management – Head of section   ( ),
Officer – Lower Management & Supervisor   ( ),
Support Staff – Unionisable staff   ( ),
External Consultant/Vendor/Supplier/Other   ( ).

1.5   Your Professional Background (Choose one only).
ICT   ( ),
Finance & Accounts   ( ),

Human Resource ( ),
Procurement & Logistics ( ),
Insurance ( ),
Other (Please Specify: e.g. Engineering)……………………………………………………

1.6 Years of professional work experience (Choose one only).
Less than 3 years ( ),
3 – 5 years ( ),
5 - 10 years ( ),
10 – 15 years ( ),
More than 15 years ( ).

1.7 Years of experience with ERP systems and projects prior to your organisation's ERP project implementation (Choose one only)
None ( ),
Less than 3 years ( ),
3 – 5 years ( ),
5 - 10 years ( ),
10 – 15 years ( ),
More than 15 years ( ).

1.8 What was your role in your organization ERP project? (Choose all that apply).
Consultant [ ],
Functional Expert [ ],
Business Analyst [ ],
Project Manager [ ],
Quality Assurance [ ],
Programmer &Implementer [ ],
Supplier/Vendor [ ],

Other (Specify) …………………………………………………………………

Section Two: Overall Success/Failure of an ERP project

2.1 Kindly rate the success (in percentage) of your organisation's ERP project against the objectives of meeting organizational requirements (Choose one only)

0 – 25% success rate ( ),

26 – 50% success rate ( ),

51 – 75% success rate ( ),

76 – 100% success rate ( ).

2.2 Do you think that the project was completed on schedule: YES – ( )   NO – ( )

2.3 If the answer to 2.2 is NO, and then what is your estimation of the project lateness?

(Choose one only)

3 months late   ( ),

6 months late   ( ),

9 months late   ( ),

12 months late   ( ),

More than a year late   ( ).

2.4 In your opinion, do you think that the project was completed within budget?

     YES – ( )   NO – ( )

2.5 If the answer to 2.4 is NO, and then what is your estimation of the project budget overran?
(Choose one only)

0- 25%   ( ),

26- 50%   ( ),

51- 75%   ( ),

76 – 100%   ( ).

2.6 On a scale of 1-5 (1 being the lowest and 5 being the highest) rate the following benefits accrued by your organization from the implementation of the ERP project.

What are your views on the following statements?

[1] Strongly agree [2] Agree [3] Not sure [4] Disagree [5] Strongly disagree

(Please tick (√) appropriately)

Organisational Benefits	1	2	3	4	5
Operational Cost reduction					
Increase in business process efficiency and integration					
Improvement in decision making process					
Improvement in customer service					
Better resource management					
Increase in innovation of products and service delivery					

Increased competitive advantage					
Enhanced collaborations with customers, suppliers and partners					
Improved cross functional understanding in the organization					

Please provide any general comments and suggestions regarding the benefits derived from successful implementation of an ERP system.

………

………

………

………

Section Three: Strategic Factors influencing the success of ERP projects implementation

3.1 Top management support refers to the fact that the ERP project needs to receive approval from top

management. Please rate the level of top management support for your ERP project.

 [1] Strongly agree [2] Agree [3] Not sure [4] Disagree [5] Strongly disagree

(Please tick (√) appropriately)

Statement	1	2	3	4	5
Composition of the project team enhances project success					
Support of the top management is critical in the success of such project					
Formal IT Strategy is necessary before the implementation					
Interpersonal attributes of PM affects the outcome of the projects					
The best person to head the project is the head of IT					
Members of the project team should concentrate on the project and surrender their normal daily operational activities					
Project sponsor must be a member of Board of Directors or the CEO					
Enhanced collaborations with customers, suppliers and partners					
Improved cross functional understanding in the organization					

Please provide any general comments and suggestions regarding the Top Management support and ERP project strategy.

………
………
………
………

Section Four: Tactical Factors influencing the success of ERP projects implementation

4.1 Business process reengineering refers to aligning the company business processes with the ERP software that will be implemented. Please rate the degree of business process reengineering for your ERP project.

What are your views on the following statements?

[1] Strongly agree [2] Agree [3] Not sure [4] Disagree [5] Strongly disagree

(Please tick (√) appropriately)

Statements	1	2	3	4	5
Business Process Re- engineering before, during and after the implementation affects the project deliverables					
Poorly documented processes affect the project success					
You derive better results if you undertake ERP project and ISO certification project concurrently					
Documentation of BPR should involve all the affected					

Please provide any general comments and suggestions on the need for Business Process Reengineering, Identification and support of process owners/data owners
………
………
………
………

4.2 The effective project management refers to the effective planning and execution of the

implementation process. Please rate the level of effectiveness of the project management of your ERP

implementation.

[1] Strongly agree [2] Agree [3] Not sure [4] Disagree [5] Strongly disagree

(Please tick (√) appropriately)

Statements	1	2	3	4	5
Effective before, during and after the implementation affects the project deliverables					
A good project team is crucial to the success of any large ERP project					

	1	2	3	4	5
Project team should consist of a good team composition, preferably the one with experience					
ERP implementation teams need to be multidisciplinary					
Using a mix of consultants and internal staff to work together in the project enable staff to grow technical skills					
The employees for the team should be experts in the company process but also knowledgeable of the best business practices in the industry					
Users resist ERP systems because they are worried that their jobs might be eliminated or changed from their usual way of doing things					
Users involvement from the beginning of ERP project help to gain users buy in for the project					

Please provide any general comments and suggestions on project team & change management……………………………………………………………………………………………

……………………………………………………………………………………………………

……………………………………………………………………………………………………

4.3 Employee retention refers to the best effort put by organization ensure that they can have experienced employees for the time of Project implementation. Please rate the level of effectiveness of the employee retention of your ERP implementation.

[1] Strongly agree [2] Agree [3] Not sure [4] Disagree [5] Strongly disagree
(Please tick (√) appropriately)

Statements	1	2	3	4	5
Experienced employees are critical for success of ERP project					
ERP skills are in acute shortage because of high demand high demand for people with good understanding of business and ERP systems					
Ability to recruit and retain qualified ERP consultant are critical for ERP project success					
Finding the right people and training them is a major challenge of ERP project implementation					

Please provide any general comments and suggestions on retention of experienced employees ……………………………………………………………………………………………………

……………………………………………………………………………………………………

………

……

4.4 Problems anticipation refers to controlling a situation by making things happen or by preparing for possible future problems. Please rate the level of effectiveness of problems anticipation (troubleshooting, bugs, etc.) in your ERP project implementation.

[1] Strongly agree [2] Agree [3] Not sure [4] Disagree [5] Strongly disagree

(Please tick (√) appropriately)

Statements	1	2	3	4	5
Software problems such bugs in the system and troubleshooting might appear during testing					
A modified system increases the possibility of bugs and troubleshooting					
Quick response, patience, perseverance, problem solving and troubleshooting					
Hand-on cooperation with vendors and consultants is needed to resolve the problems					

Please provide any general comments and suggestions on problems anticipation on ERP projects implementation.

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Section Five: Cultural Factors influencing the success of ERP projects implementation

5.1 Organisation culture is defines as a system of shared assumptions, values, and beliefs, which governs how people behave in organizations. Please rate the level of organization culture influence in your ERP project implementation.

[1] Strongly agree [2] Agree [3] Not sure [4] Disagree [5] Strongly disagree

(Please tick (√) appropriately)

Statements	1	2	3	4	5
A culture with shared values and common aims is conducive to success of ERP project implementation					
Shared culture with shared values and common aims greatly aid in implementation efforts					

An open and creative culture recognizes employees as the primary source of ideas, actions, and delivery of performance, which results in a stable work environment that reinforces the loyalty of it employees					

5.2 Effective Communication

Effective communication is **defined** as verbal speech or other methods of relaying information that get a point across. Please rate the level of effective communication on your ERP project.

[1] Strongly agree [2] Agree [3] Not sure [4] Disagree [5] Strongly disagree

(Please tick (√) appropriately)

Statements	1	2	3	4	5
Communication is the lifeblood of the organization					
Effective communication can make the new system penetrate into the organization					
Constant communication owns another strategy of avoiding company rebellion to new systems implementation					

Please provide any general comments and suggestions on retention of experienced employees

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5.3 Cultural Diversity

Cultural diversity refers to differences among people because of their racial or ethnic backgrounds, language, dress and traditions.

Please rate the level of effectiveness of the cultural diversity on your ERP project.

[1] Strongly agree [2] Agree [3] Not sure [4] Disagree [5] Strongly disagree

(Please tick (√) appropriately)

Statements	1	2	3	4	5
The vendors culture, implicit in the ERP package, clashes with the customers' organizational culture					
Few consultants understand their customers organizational culture and business processes efficiently					
Organisations need to consider the cultural diversity among vendors, consultants and themselves before they decide which ERP packages to purchase and implement					

Please provide any general comments and suggestions on cultural diversity and ERP projects implementation.

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Section Six: Please rank the following factors according to their importance in the implementation of ERP system projects.

[1] Lowest [2] Low [3] Average [4] High [5] Highest

(Please tick (√) appropriately)

Critical Success Factors	1	2	3	4	5
Top Management Support					
Business Process Re-engineering					
Effective Project Management					
Employee Retention					
Problem Anticipation					
Organisation Culture					
Effective Communication					
Cultural Diversity					

Please provide any general comments and suggestions on the critical success factors in implementation of ERP system project.

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Section Seven: Comments, Suggestions and Recommendations
Please provide any general comments and suggestions concerning the overall success/failure of ERP project.

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End of the Questionnaire

APPENDIX III: Research Permit.

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

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2241349, 310571, 2219420
Fax: +254-20-318245, 318249
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When replying please quote

9th Floor, Utalii House
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NAIROBI-KENYA

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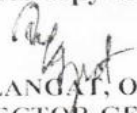**NACOSTI/P/16/18349/9226**

Date:
7th March, 2016

Walter Aloo Ndege
University of Nairobi
P.O Box 30197-00100
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on *"Critical factors for ERP implementation projects. A case of Insurance Sector, Kenya"* I am pleased to inform you that you have been authorized to undertake research in **Nairobi County** for a period ending **4th March, 2017.**

You are advised to report to **the Chief Executive Officers of selected insurance companies, the County Commissioner and the County Director of Education, Nairobi County** before embarking on the research project.

On completion of the research, you are expected to submit **two hard copies and one soft copy in pdf** of the research report/thesis to our office.

DR. S. K. LANGAT, OGW
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The Chief Executive Officers
Selected Insurance Companies.

The County Commissioner
Nairobi County.

The County Director of Education
Nairobi County.

National Commission for Science, Technology and Innovation is ISO 9001: 2008 Certified

APPENDIX IV: The No of Insurance Companies in Kenya.

No.	Company	Contact Address
01	AAR Insurance Kenya Limited	P.O Box 41766 – 00100, NAIROBI
02	A P A Insurance Limited	P.O Box 30065 – 00100, NAIROBI
03	Africa Merchant Assurance Company Limited	P.O Box 61599 – 00200, NAIROBI
04	Apollo Life Assurance Limited	P.O Box 30389 – 00100, NAIROBI
05	AIG Kenya Insurance Company Limited	P.O. Box 49460 – 00100, NAIROBI
06	British-American Insurance Company (Kenya) Limited	P.O Box 30375 – 00100, NAIROBI
07	Cannon Assurance Limited	P. O. Box 30216-00100,NAIROBI
08	Capex Life Assurance Company Limited	P. O. Box 12043 – 00400, NAIROBI
09	CFC Life Assurance Limited	P.O. Box 30364 – 00100, NAIROBI
10	CIC General Insurance Limited	P.O. Box 59485 – 00200, NAIROBI
11	CIC Life Assurance Limited	P.O. Box 59485 – 00200, NAIROBI
12	Continental Reinsurance Limited	P.O. Box 76326-00508, NAIROBI
13	Corporate Insurance Company Limited	P.O. Box 34172 – 00100, NAIROBI
14	Directline Assurance Company Limited	P.O. Box 40863 – 00100, NAIROBI
15	East Africa Reinsurance Company Limited	P.O. Box 20196 – 00200, NAIROBI
16	Fidelity Shield Insurance Company Limited	P. O. Box 47435 – 00100, NAIROBI
17	First Assurance Company Limited	P.O. Box 30064 – 00100, NAIROBI
18	G A Insurance Limited,	P.O. Box 42166 – 00100, NAIROBI
19	Gateway Insurance Company Limited	P.O. Box 60656 – 00200, NAIROBI
20	Geminia Insurance Company Limited	P.O. Box 61316 – 00200, NAIROBI
21	ICEA LION General Insurance Company Limited	P.O. Box 30190 – 00100, NAIROBI
22	ICEA LION Life Assurance Company Limited	P.O. Box 46143 – 00100, NAIROBI
23	Intra Africa Assurance Company Limited	P.O. Box 43241 – 00100, NAIROBI
24	Invesco Assurance Company Limited	P.O. Box 52964-00200, NAIROBI
25	Kenindia Assurance Company Limited	P.O. Box 44372 – 00100, NAIROBI
26	Kenya Orient Insurance Limited	P.O. Box 34530-00100, NAIROBI
27	Kenya Reinsurance Corporation Limited	P.O. Box 30271 – 00100, NAIROBI
28	Madison Insurance Company Kenya Limited	P.O. Box 47382 - 00100, NAIROBI
29	Mayfair Insurance Company Limited	P.O. Box 45161 – 00100, NAIROBI
30	Mercantile Insurance Company Limited	P.O. Box 20680 – 00200, NAIROBI
31	Metropolitan Life Insurance Kenya Limited	P.O. Box 46783 – 00100, NAIROBI
32	Occidental Insurance Company Limited	P.O. Box 39459 – 00623, NAIROBI
33	Old Mutual Life Assurance Company Limited	P.O. Box 30059 – 00100, NAIROBI
34	Pacis Insurance Company Limited	P.O. Box 1870 – 00200, NAIROBI
35	Pan Africa Life Assurance Limited	P.O. Box 44041 – 00100, NAIROBI
36	Phoenix of East Africa Assurance Company Limited	P.O. Box 30129 – 00100, NAIROBI
37	Pioneer Assurance Company Limited	P.O. Box 20333 - 00200, NAIROBI
38	Resolution Insurance Company Limited	P.O Box 4469 – 00100, NAIROBI
39	Shield Assurance Company Limited	P.O. Box 25093-00100, NAIROBI
40	Takaful Insurance of Africa Limited	P.O Box 1811 – 00100, NAIROBI
41	Tausi Assurance Company Limited	P.O. Box 28889-00200, NAIROBI
42	The Heritage Insurance Company Limited	P. O. Box 30390 - 00100, NAIROBI.
43	The Jubilee Insurance Company of Kenya Limited	P.O. Box 30376-00100, NAIROBI
44	The Monarch Insurance Company Limited	P.O. Box 44003 – 00100, NAIROBI
45	Trident Insurance Company Limited	P.O. Box 55651 – 00200, NAIROBI
46	UAP Insurance Company Limited	P.O. Box43013 - 00100, NAIROBI
47	UAP Life Assurance Limited	P.O. Box 23842 – 00100, NAIROBI
48	Xplico Insurance Company Limited	P.O Box 38106 – 00623, NAIROBI

Source – Insurance Regulatory Authority (IRA) - 2016