

**A SURVEY OF CRITICAL SUCCESS FACTORS OF ENTERPRISE RISK
MANAGEMENT AMONG COMMERCIAL BANKS IN KENYA**

BY

ANISETU RUGENDO JUSTUS MAKUNYI

D61/62994/2011

**A RESEARCH PROJECT SUBMITTED IN PARTIAL FULLFILMENT O THE
REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTERS IN
BUSINESS ADMINISTRATION SCHOOL OF BUSINESS UNIVERSITY OF
NAIROBI**

OCTOBER, 2013

DECLARATION

I, the undersigned, declare that this project is my original work and that it has not been presented in any other university or institution for academic credit.

ANISETU RUGENDO JUSTUS MAKUNYI

D61/62994/2011

Signature

Date

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

Supervisor

Date

Dr SIFUNJO E. KISAKA

DEDICATION

I dedicate this project to my parents and family, mentors, role models and friends. Thank you for all you have been.

ACKNOWLEDGEMENT

I hereby acknowledge the following for their support and the role they played in making this Research Project a success. The Almighty God for making His grace sufficient, my lecturers and especially my supervisor Dr Sifunjo E. Kisaka for his guidance and support, my dear wife Irene Wairimu for her devotion, encouragement and moral support, my sons Macthomas Muriuki and Emmanuel Gitonga, my daughter Mercy Kathure, my brothers Oswald muthengi, Godfrey Kirimi, Benjamin Ntwiga, Douglas Mugambi, my sisters Agnes Karimi, Ann Njeri, Monica Muthoni and Dorothy Karithi for their undying support and patience, my colleagues especially Samuel Mbugua, Lilian Odhiambo, Jesse Lord and Silas for their cooperation especially during group discussions, the administration of University of Nairobi for providing me with the requisite background information.

ABSTRACT

The financial industry has always been affected by unsystematic changes such as changes in the economic situation, political changes, social changes and systematic risk such as internal controls, corporate governance and information technology systems as well. ERM implementation will have to overcome multiple inherent challenges like strong support from top management, sufficient resource in terms of cost and trained professionals, expert knowledge in risk management and the continued focus on the implementation without losing steam in the middle, (Nielson et al. (2005). This study endeavored to ascertain the critical success factors enterprise risk management among commercial banks in Kenya.

The study adopted a descriptive research determines and reports the way things are and attempts to describe such things as possible behavior, attitudes, values and characteristics, (Mugenda & Mugenda, 2003). The population for this study was all 44 Commercaill banks in Kenya. Primary data was gathered and generated for the project at hand directly from respondents mainly using questionnaires. The researcher used a questionnaire as data collection instrument. The data collected was run through various models so as to clearly bring out the various critical factors influencing ERM among commercial banks. Logit model was used to analyze the regression equation.

The study revealed that that top management commitment, organization culture, risk culture, training and technology affect implementation of Enterprise Risk Management in commercial banks to a very great extent. The study establish that IT plays a key role in achieving an organization's objectives and organizations need to consider IT as an important factor in the face of increasing competition. The study established that organization structure affect implementation of Enterprise Risk Management in commercial banks to a great extent.

TABLE OF CONTENT

| | |
|--|------------|
| DECLARATION | ii |
| DEDICATION | iii |
| ACKNOWLEDGEMENT | iv |
| ABSTRACT | v |
| TABLE OF CONTENT | vi |
| LIST OF TABLES | ix |
| LIST OF ABBREVIATIONS | x |
| CHAPTER ONE | 1 |
| INTRODUCTION | 1 |
| 1.1 Background of the Study | 1 |
| 1.1.1 Enterprise Risk Management..... | 1 |
| 1.1.2 Critical Success Factors for ERM..... | 4 |
| 1.1.3 Effects of Critical Success Factors on Enterprise Risk Management..... | 5 |
| 1.1.4 Banking Industry in Kenya..... | 7 |
| 1.2 Statement of the Problem | 7 |
| 1.3 Objective of the Study | 9 |
| 1.4 Value of the Study | 9 |
| CHAPTER TWO | 10 |
| LITERATURE REVIEW | 10 |
| 2.1 Introduction | 10 |
| 2.2 Theoretical Literature | 10 |
| 2.2.1 Stakeholder Theory..... | 10 |
| 2.2.2 Contingency Theory | 12 |
| 2.2.3 Institutional Theory..... | 12 |
| 2.2.4 Challenges in ERM implementation..... | 14 |
| 2.3 Critical Success Factors..... | 15 |

| | |
|---|-----------|
| 2.3.1 Commitment and Support from Top Management..... | 15 |
| 2.3.2 Culture | 16 |
| 2.3.3 Organizational Structure | 17 |
| 2.3.4 Training..... | 18 |
| 2.3.5 Information Technology (IT)..... | 19 |
| 2.4 Empirical Literature | 21 |
| 2.5 Summary | 24 |
| CHAPTER THREE | 25 |
| RESEARCH METHODOLOGY | 25 |
| 3.1 Introduction | 25 |
| 3.2 Research Design | 25 |
| 3.3 Population..... | 25 |
| 3.4 Data and Data Collection Procedure | 26 |
| 3.5 Data Analysis | 27 |
| 3.5.1 Conceptual Model..... | 27 |
| 3.5.2 Analytical Model | 29 |
| CHAPTER FOUR..... | 31 |
| DATA ANALYSIS, PRESENTATION AND INTERPRETATIONS | 31 |
| 4.1 Introduction | 31 |
| 4.2 Summary Statistics | 31 |
| 4.3 Estimated Model..... | 44 |
| 4.4 Discussion | 45 |
| 4.5 Summary | 48 |
| SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS..... | 49 |
| 5.1 Introduction | 49 |
| 5.2 Summary Of The Study | 49 |
| 5.3 Conclusion..... | 51 |

| | |
|--|-----------|
| 5.4 Limitations of the study..... | 51 |
| 5.5 Recommendation For Further Research | 52 |
| REFERENCES..... | 53 |
| APPENDICES | 63 |
| Appendix I: Letter of introduction | 63 |
| Appendix II: Questionnaire | 64 |
| Appendix III: Licensed Commercial banks in Kenya | 71 |

LIST OF TABLES

| | |
|---|----|
| Table 1: Commitment and support from top management | 31 |
| Table 2: Commitment and support from top management | 32 |
| Table 3: Level of Implementation in the Organization..... | 32 |
| Table 4: Effects of top management on implementation of ERM | 33 |
| Table 5: Effects of organization culture on implementation of ERM..... | 34 |
| Table 6: Extent to which organization culture affect implementation of ERM..... | 35 |
| Table 7: Effects of organization culture on implementation of ERM..... | 35 |
| Table 8: Effects of risks culture on implementation of ERM | 36 |
| Table 9: Extent to which risk affect implementation of ERM..... | 37 |
| Table 10: Effects of risk culture on implementation of Enterprise Risk Management..... | 37 |
| Table 11: Effects of training affect implementation of Enterprise Risk Management | 38 |
| Table 12: Extent to which training affects implementation of Enterprise Risk Management . | 38 |
| Table 13: Effects of Training on Implementation of Enterprise Risk Management..... | 39 |
| Table 14: Effects of technology on implementation of Enterprise Risk Management | 40 |
| Table 15: Extent to which technology affect implementation of Enterprise Risk Management | 40 |
| Table 16: Effects of technology affect implementation of Enterprise Risk Management..... | 41 |
| Table 17: Effects of organization structure on implementation of Enterprise Risk Management | 42 |
| Table 18: Extent to which organization structure affect implementation of ERM | 42 |
| Table 19: Effects of organization structure on implementation of Enterprise Risk Management | 43 |
| Table 20: Model Summary..... | 44 |
| Table 21: Coefficients | 44 |

LIST OF ABBREVIATIONS

| | |
|------|---|
| CAS | Casualty Actuarial Society |
| CBK | Central Bank of Kenya |
| COSO | Committee of Sponsoring Organizations |
| CRO | Chief Risk Officer |
| CSF | Critical Success Factors |
| ERM | Enterprise Risk Management |
| EWRM | Enterprise-Wide Risk Management Process |
| IT | Information Technology |
| NSE | Nairobi Securities Exchange |
| SPSS | Statistical Package for Social Sciences |

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

A dynamic organization is exposed to a staggering array of risks, as rich and diverse as the opportunities it enjoys (Shimpi, 2001). Moody (2008:106) notes that for more and more corporations, enterprise risk management is a key element of their long-term strategic plan. In business, there is no way of avoiding risk without giving up the opportunity to gain profits. Therefore, to be competitive, companies must learn how to manage risk intelligently. This means identifying risks early, expecting the unexpected and knowing which risks are worth taking and which to avoid. The main objective of this study is to assess critical success factors enterprise risk management among commercial banks in Kenya. The financial industry has always been affected by unsystematic changes such as changes in the economic situation (uncertain interest rates, foreign exchange rates), political changes, social changes and systematic risk such as internal controls, corporate governance and information technology systems as well.

1.1.1 Enterprise Risk Management

In the past, companies have been using the “Traditional Risk Management” concept to manage risk. However, this approach is limited in scope and application as noted by (Kleffner et al, 2003 and Hoyt et al, 2008). The “Traditional Risk Management” concept appears to be lacking in terms of total integration. This is because risk exposures are being managed in silos hence the incompleteness of such an approach, (Lam, 2000; Davenport & Bradley, 2001; Barton, Shenkir & Walker; 2002). As a result of these shortcomings, the gradual change from traditional risk management to an all-encompassing risk management concept, Enterprise Risk Management (ERM) has gained substantial acceptance in the recent years.

Kleffner et al (2003) define ERM as the management of operational and financial risks simultaneously in order to maximize the cost effectiveness of risk management within the constraints of the organization's tolerance for risk. Though this definition encompasses operational risks, it fails to appreciate that companies are exposed to other risks like strategic and reputational risks and also fails to identify who is responsible for risk management in organization. The definition also fails to show the linkage of risk management to the organization's objectives. COSO (2004) on the other hand defines ERM as "a process, effected by an entity's board of directors, management and other personnel, applied in strategy setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives".

From the different definitions of ERM, the underlying principles of ERM seem to be an integrated approach to risk management across silos, backed by corporate risk philosophy or strategy with the aim of maximizing organization value (Kleffner et al, 2003; COSO, 2004; Beasley et al, 2005; Panning, 2006). Though the implementation of risk management is gaining prominence globally, (Economist Intelligence Unit, 2001; Kleffner et al, 2003; Liebenberg and Hoyt, 2003; Beasley et al, 2005), some studies undertaken have shown that the implementation of risk management practices does not have any value addition to companies (Sharpe, 1964; Lintner, 1965). These studies argue that in the absence of market inefficiencies, investors can undo any financial transaction undertaken by a firm thus the firm value is independent of the risk management strategy (Efficient market hypothesis). For example, the Modigliani and Miller (1958) theorem states that in perfect markets a company's capital structure which is an integral component of its risk management, is irrelevant to the company's value. Jin and Jorion (2005) also studied the hedging activities of 119 U.S. oil and gas producers from 1998-2001 and concluded that, while hedging, which is a common form of risk management, reduced the company's stock price sensitivity to oil and gas prices, it did not appear to increase the value of the firm. Other studies that concluded that risk management does not have a significant effect on the value of companies include; (Lookman, 2004).

However, contradicting this argument, Yow and Sherris (2008) argue that, in practice, market imperfections exist and informational asymmetries create frictional costs for the firm. They argue that risk management can add value to the company through different ways like reducing earnings, cash flow or stock price volatility. These studies have a limitation in measurement of the value of companies because, though a reduction of volatility increases predictability of returns from the firm, the reduction of volatility does not seem to have a direct correlation to the value of the firm.

In light of the contradictory arguments on the value proposition of ERM, and the need to justify the cost of implementing ERM in companies, this study seeks to investigate whether the implementation of risk management has a positive contribution to the company's value (using Tobin's Q as a measure of firm value). The results of this study will contribute to a better understanding of the value proposition of ERM for corporate executives thus giving them a quantifiable business case through a cost benefit analysis of ERM implementation. It will be noted that most of the research work quoted in this study focused on companies in developed countries with only a few in emerging markets. However, although the underlying principles in ERM generally apply to most companies and countries, there are some aspects of risk management that might be specific to emerging markets. These markets generate higher rates of return on capital markets than mature markets, are characterized by high rates of volatility and are more susceptible to external impact including regulatory and operational, (Fuss, 2002).

As the concept of ERM gains prominence globally, Kenyan companies and regulators have not been left behind in this drive to enhance risk management practices in companies through the implementation of Enterprise Risk management. For example, in 2007, the Central Bank of Kenya introduced regulation requiring all banks to develop and implement an Enterprise Risk Management Framework in their institutions and in 2010. With the introduction of an Operational Memorandum of Understanding between regulators in the country with the aim of regulators sharing best practices, it is anticipated that the other regulators will also require the companies that operate in the industries they regulate, implement ERM framework.

From a regulator point of view, the main aim of requiring companies to implement ERM is mainly to protect stakeholders' investments in such companies. Thus the companies implement ERM for compliance purposes. However, the cost of implementing ERM is significant yet the value of ERM implementation is not easily measured. Therefore organizations may be having a challenge in assessing the cost benefit analysis of ERM implementation. Besides that, some companies are at various stages of ERM implementation despite the fact that it is not a regulatory requirement that they do so. These companies believe that ERM implementation has a positive effect on the value of companies that implement it.

1.1.2 Critical Success Factors for ERM

As the starting point, the definitions of Critical Success Factors (CSFs) are introduced by Rochart (1979). He defines Critical Success Factors as "The limited number of areas in which results, if they are satisfactory, will ensure successful competitive performance for the organization. They are the few key areas where things must go right for the business to flourish. If results in these areas are not adequate, the organization's efforts for the periods will be less than desired". Boynton and Zmud (1984) discuss CSF methodology, define CSFs and review a range of uses of the CSF method in the first part of their article. They regard Critical Success Factors as one of the few things that ensures success for an organization. Critical success factors are maintaining a high performance for an organization's currently operating activities and its future.

Freund (1988) explained the CSFs concept as the most important for overall organizational objectives, mission and strategies. Critical Success Factors which are appropriate to each unit of business and overall organization aim to fulfill the organization's objectives. A great number of factors are extremely difficult to focus on and therefore only five to ten should be indicated. The following review of Critical Success Factors will discuss Critical Success Factors for Enterprise risk management. There are a number of papers on Critical Success Factors contributing to risk management. Grabowski and Roberts (1999) examine the problem

of risk mitigation and suggest a process designed to support the high level of performance in an organization. They identify the four important factors as: Organizational Structuring and Design; Communication; Organizational Culture and Trust. Galorath (2006) focuses on the importance of risk management, the essence of risk management and assesses the processes to implement risk management. He argues that risk management requires five activities, which are as follows: top-level management support; an integral part of the entire program management structure and processes; the participation of everyone involved; cultural imperative and a pattern of measurement.

Carey (2001) reviews the Turnbull's approach for risk management. He describes the Turnbull report and how to apply this approach in order to manage risk. The approach can be summarized in the nine main issues which are: The importance of sound judgment; Identification issues; Keeping control of your reputation; assessing the importance of risks; verifying your judgments; changing management; embedding risks; cultural challenges and remuneration issues. Hasanali's paper (2002) is related to management in an organization. This study maintains that the success of knowledge management depends upon many factors. In the point of view of the authors, there are some interesting factors which should be adopted to risk management. Hasanali's critical success factors can be categorized into five categories: leadership; culture; structure, roles, responsibilities; information technology infrastructure and measurement.

1.1.3 Effects of Critical Success Factors on Enterprise Risk Management

ERM implementation will have to overcome multiple inherent challenges like strong support from top management, sufficient resource in terms of cost and trained professionals, expert knowledge in risk management and the continued focus on the implementation without losing steam in the middle, (Nielson et al. (2005). For instance, integration of market risk management, credit risk management, liquidity risk management and operational risk with other "financial" risks is a difficult step which requires a significant efforts, time and costs to improve the underlying data management,(Kloman , 1992).

Top challenges being faced by banks to adapt ERM: Improving efficiency; achieving greater efficiencies in the risk and control processes, improving coordination, unifying and streamlining approaches, (Tansey, 2004). Challenging regulatory environment; Ever changing regulatory demands, high degree of regulatory scrutiny, variation of regulations across jurisdictions, preparing to operationalize / compliance with Basel II. Keeping pace with business growth and complexity; Rapid business growth, competitive intensity, M&A activity, global expansion, increases product complexity, increases customer expectations, (Skipper & Skipper, 2001). Attracting and retaining talent; Shortage of good talent in competitive markets, especially in specialized areas or emerging geographies. Managing Change; Dealing with people and organizational issues as new processes demand new methods of work. Fear of compliance failures and emerging risks; Fear of compliance failures despite best efforts, due to human error or unanticipated events; identifying and preparing for future risks, (Rippl, 2002).

The challenge of measuring risks involves estimation of the probabilities of an outcome and this is difficult because of ignorance associated with the subjectivity attached to the events. However, the main concern detected from the interview survey is the calculation of economic capital while absorbing diversification benefits, (Osterloh and Frey, 2000). This is a particularly significant issue for reinsurers as their businesses, by nature, are geographically diversified whereas the retail insurers secure diversification through large volume. Communication is often a challenge associated with an emerging topic, (Masuda and Garvin, 2006). The analysis suggests that lack of understanding is a major obstacle; risk communication must be improved and conflict overcome in order for the goals of ERM to be achieved, (Osterloh and Frey, 2000). However, risk communication is not an isolated issue. It is essentially linked to the attitude of individuals towards risk and is subsequently linked to culture. Moreover, all these issues are linked to the motivation of achieving risk management goals. Furthermore, an effective risk communication system can introduce a culture of choosing good risks and rejecting bad risks at every level of the organization, (Masuda and Garvin, 2006).

1.1.4 Banking Industry in Kenya

A commercial bank means a company which carries on, or proposes to carry on banking business in Kenya, it provides transactional, savings, and money market accounts and that accepts time deposits(CBK) According to the Central Bank of Kenya, there are 43 licensed commercial banks in Kenya and 1 mortgage finance company (see list in appendix IV). Out of the 44 Institutions 31 are locally owned and 13 are foreign owned. The locally owned financial Institutions comprise 3 Banks with significant shareholding by the government and state corporations, 27 commercial banks and 1 mortgage finance institution.

Commercial banks in Kenya play a major role in Kenya. They contribute to economic growth of the country by making funds available for investors to borrow as well as financial deepening in the country. Commercial banks therefore have a key role in the financial sector and to the whole economy. A number of strategic decisions have been made in the banking industry in Kenya in the past two decades. For instance, there have been 33 mergers in the industry since 1989 with the recent one being the merger between Equatorial Commercial Bank and Southern Credit Banking Corporation in June 2010 (Central Bank of Kenya, 2012). There have also been three acquisitions since 2000 with the latest being the acquisition of EABS Bank Ltd by Ecobank Kenya Ltd in June 2008 (Central Bank of Kenya, 2012). Some of the reasons put forward for mergers and acquisitions are: to meet the increased levels of share capital; expand distribution network and market share; and to benefit from best global practices among others. This study is done in the context of the banking industry in Kenya. Banks play a significant role in Kenya's economy. With intense competition in the industry, there's always need for banks to be strategically positioned to effectively compete in the market. This has seen several mergers and acquisitions take place in the banking industry in Kenya as banks position themselves to compete in the market.

1.2 Statement of the Problem

Since the last financial crisis, there is more pressure for regulation towards risk management at financial companies,, in order to decrease the consequences of a future crisis. However,

there is still no clear consensus about whether the implementation of ERM leads to better performance. In other words, it is not proven that more regulations on risk management are effective in helping organization survive a financial crisis. Therefore, research is needed to address the critical success factors for Enterprise Risk Management.

Based on the modern portfolio theory from Markowitz (1952), risk management is not valuable for shareholders. This is because shareholders can easily diversify their own risk, and therefore only the systematic risk is important. In that case, every risk management practice is a negative net present value project and should not be undertaken. Beasley *et al.* (2008) empirically investigated this argument. They related ERM implementation and share prices during the announcement period for both financial and non-financial firms. ERM implementation is measured as the appointment of a Chief Risk Officer (CRO), and the market reaction to it as the accumulative abnormal return. The authors only find an insignificant negative relation between the accumulative abnormal returns and the appointment of a CRO. However, there are findings that suggest that ERM implementation enhances firm performance of financial companies in general. An example is the paper by Liebenberg & Hoyt (2011), who investigate the relation between ERM adoption and firm value of the firms. These authors also use CRO appointment as indicator for ERM implementation, but use firm value as dependent variable. This indicates that ERM does enhance firm value in general.

Locally studies done on risk management include; Odipo (2000) who did a an empirical study on accounting determined measures of systematic risk at NSE. Sang (2001) who did a study on a computer security risk analysis of firms quoted in the Nairobi Stock Exchange; Kibara (2007) who did a survey of internal auditors risk management practices in the banking industry in Kenya and Weru (2010) who did a study on an assessment of information systems risk management practices: a case of practical action (international). This study will endeavor to ascertain the critical success factors enterprise risk management among commercial banks in Kenya. The study seeks to answer the following research question: what are the critical success factors of enterprise risk management among commercial banks in Kenya?

1.3 Objective of the Study

To determine the critical success factors of enterprise risk management among commercial banks in Kenya.

1.4 Value of the Study

Management of Commercial Banks in Kenya: The study will be invaluable to management of commercial banks in Kenya in that it will provide an insight into the critical success factors enterprise risk management among commercial banks in Kenya. It will help them identify various critical factors that influence the critical success factors enterprise risk management among commercial banks in Kenya.

To the government: It will help the government through central banks in having a clear picture of the critical success factors enterprise risk management among commercial banks in Kenya.

To the researchers and academicians: This study seeks to contribute to the literature by broadening the understanding of the concept of enterprise Risk management and the critical success factors for enterprise risk management among commercial banks in Kenya.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews the existing literature, information and publication on the topic related to the research problem by accredited scholars and researchers. This section shall examine what various scholars and authors have said about critical success factors of enterprise risk management, in particular, section 2.2 covers the theoretical review of literature; where the stakeholders theory, contingency theory and institutional theory are reviewed, in section 2.3 empirical literature on critical success factors for ERM implementation are reviewed, in section 2.4 the study reviews the various critical success factors for ERM implementation, in section 2.5 covers the challenges faced in ERM implementation and lastly section 2.6 presents the summary of the literature review.

2.2 Theoretical Literature

This study is guided by the following theories, the stakeholders' theory, contingency theory and institutional theory, these theories try to explain various factors that influence the implementation of ERM in organization.

2.2.1 Stakeholder Theory

The concept of stakeholder has been acknowledged in the literature after the publishing of the book titled *Strategic Management: A Stakeholder Approach* by Freeman (1984) although the first emergence of the term dates back to a study conducted by Stanford Research Institutes in 1963. Edward Freeman is considered to be the founder of the stakeholder theory and he describes the term stakeholder as any group or individual who can affect or is affected by the achievements of the organization's objectives.

Stakeholder theory highlights the necessity to serve all the stakeholders regardless of the amount of their legal interests in an organization and deals with the relationships with the

stakeholders both in terms of the process and the outcome (Gilbert and Rasche, 2008). This theory also suggests that the relationships with stakeholders can be managed effectively and claims that successful business management is based on the relationships and collaboration practices with stakeholders (Sarikaya, 2009).

Stakeholder theory aims at increasing the efficiency of organizations by bringing new definitions to organizational responsibilities. In this respect, the theory suggests that the needs of shareholders cannot be met before the needs of stakeholders are met. Similarly, it claims that developing strategies by considering a broader stakeholder network and interaction will produce more successful results than focusing merely on direct profit maximization attempts (Jamali, 2008). Carroll and Buchholtz (2000) point out that the concept stakeholder has a basic role in understanding enterprise-society relationship. Moreover, this theory involves certain elements such as interests, demands and rights by giving a new dimension to the share concept. Stakeholders might have legal rights on the enterprise as well as the rights in terms of ethic (Carroll and Buchholtz, 2000). To deal with the concept of sharing in such a wide perspective enables enterprises to understand the expectations of society and to meet these expectations more effectively.

Stakeholder theory is an organizational management and ethic theory, which highlights values and morality as the basic characteristics of organizational management (Phillips *et al.*, 2003). In other words, it is possible to consider stakeholders theory as a strategic management method based on ethical principles. The attempts made by enterprises to meet the demands of their stakeholders are not only to avoid the possible pressures from the stakeholders but also to create a better society. The fact that enterprise-stakeholder relationships as well the relationships among stakeholders are getting more and more complex leads to the acknowledgement of stakeholder theory as a management model to a great extent (Russo and Perini, 2010).

2.2.2 Contingency Theory

How best to organize the IT function is a long-standing question for researchers and practitioners alike (von Simson, 1990). For ERM projects, and for post-implementation support, this issue is critically important, especially with regard to the use of subject matter experts (Worrell *et al.*, 2006). However, until recently (Zhu *et al.*, 2010), research has primarily focused on implementation efforts rather than post-implementation.

Subject matter experts are invaluable contributors to the success of ERM installations, whose knowledge of business practices and system processes are critical to configuring enterprise systems (Volkoff *et al.*, 2004). As a result, project managers often plan carefully and petition strongly to secure the best and the brightest employees from each of the functional business units that will be impacted by an implementation project (Gallagher and Gallagher, 2006).

2.2.3 Institutional Theory

Burns and Scapens (2000) have observed that the social sciences have taken an increasing interest in institutional theory, and that the accounting literature reflects this interest in at least two ways: new institutional sociology (NIS); and old institutional economics (OIE). According to Burns (2000), analytical studies of changes in management-accounting routines are founded on OIE – which is a heterogeneous body of theory. Authors who can be considered within the paradigm of OIE include Karl Marx and Vilfredo Pareto. Others include various empiricists who were influenced by Darwinist biology and who were affiliated with the German school in the last quarter of the nineteenth century (Santos, 2003). Given the difficulty of defining an “institutionalist author” with any precision, Santos (2003) decided to restrict the term to those authors about whom there is a relative consensus.

Fonseca and Machado da Silva (2002) have observed that, according to the institutional approach, individual behavior is modeled by standards that are originally created and shared in interactions, but which later become incorporated in the form of objective standards and rules about the most efficient way of functioning. From the perspective of OIE, the institution

becomes the main object of analysis. According to this view, rational and optimizing behavior no longer proceeds from individual decision-makers (as posited by neoclassical theory). Scapens (1994) emphasized the institutional approach and rejected the postulates of neoclassical theory as being appropriate to understanding management-accounting practices.

It is therefore important to conceptualize the institution; however, no simple and widely accepted definition of an “institution” exists. Burns and Scapens (2000, p. 8) defined an institution on the basis of Barley and Tolbert's (1997) work “presuppositions that are shared and taken for granted, which identify categories of human agents and their appropriate activities and relations”. Scapens (1994) noted that, in the context of the OIE, the first definition of institution was established by Veblen in 1919 “a habit of thought common to the generality of men”. According to Burns (2000), the idea of an institution that has been most frequently applied in OIE came from Hamilton (1932), who considered an institution to be a way of thinking or acting by something that prevails and continues, which is inserted into the habits of a group or the customs of a people. This definition emphasizes the social and cultural character of an institution, and the importance of habitual behavior. Rowsell and Berry (1993) utilised certain concepts of Selznick (1957), who defined an institution as a natural product of social needs and pressures. The institution is a social system that gives meaning to the integrated aspirations of a group of people. Selznick (1957) contrasted an institution with an administrative organisation – describing the latter as a rational instrument defined to carry out a job.

The notions of “habits” and “institutions” are connected through the concept of “routine”. A “habit” is a predisposition or tendency to become involved in previously adopted or acquired forms of action. However, the existence of habits does not exclude the possibility of intentional individual behaviour; indeed, habits can be modified. In contrast to such habits, which are located in the personal sphere, “routines” involve a group of people (Oliver, 1997). Routines are formalized and institutionalized behaviours that are guided by rules. Such routines are reinforced by the process of repeating actions to comply with rules. Routines represent forms of thinking and acting that a group of individuals takes for granted.

Rules and routines provide an “organisational memory” and constitute the basis for the evolution of organisational behaviour. According to Scapens (1994), they are the organisational equivalents of genes in the biological process and, in this sense, evolution is not the creation of optimal behavior, but merely the reproduction and possible adaptation of behaviours over time. Oliver (1997) has emphasized that, from the institutional perspective, companies operate within a social structure of standards, values, and presuppositions about appropriate or acceptable behaviour. The institutional viewpoint thus suggests that motives for human behaviour go beyond economic optimization to involve justification and social obligation.

In the present study, the concept of institutionalization is clearly important. Oliver (1997) has noted that institutional activities tend to be long-lasting, socially accepted, resistant to change, and not directly dependent on rewards or monitoring of their permanence. In the context of management accounting, Scapens (1994) has observed that, over time, management accounting can constitute a structure that reflects a particular organisation's way of thinking and acting – which is taken for granted and detached from its specific historical circumstances. It thus becomes an unquestioned way of doing things.

2.2.4 Challenges in ERM implementation

In business, enterprise risk management (ERM) includes the methods and processes used by organizations to manage risks (or seize opportunities) related to the achievement of their objectives, (Kloman, 1992). ERM program provides a framework for risk management, which typically involves identifying particular events or circumstances relevant to the organization's objectives (risks and opportunities), assessing them in terms of likelihood and magnitude of impact, determining a response strategy, and monitoring progress. By identifying and proactively addressing risks and opportunities, business enterprises protect and create value for their stakeholders, including owners, employees, customers, regulators, and society overall (Skipper & Skipper, 2001).

ERM can also be described as a risk-based approach to managing an enterprise, integrating concepts of strategic planning, operations management, and internal control, (Tansey, 2004). ERM is evolving to address the needs of various stakeholders, who want to understand the broad spectrum of risks facing complex organizations to ensure they are appropriately managed. Regulators and debt rating agencies have increased their scrutiny on the risk management processes of companies. Various consulting firms offer suggestions for how to implement an ERM program, (Kloman, 1992). Common topics and challenges include: Identifying executive sponsors for ERM, establishing a common risk language or glossary, Identifying and describing the risks in a "risk inventory", implementing a risk-ranking methodology to prioritize risks within and across functions, establishing a risk committee and/or Chief Risk Officer (CRO) to coordinate certain activities of the risk functions, establishing ownership for particular risks and responses, demonstrating the cost-benefit of the risk management effort, developing action plans to ensure the risks are appropriately managed, developing consolidated reporting for various stakeholders, Monitoring the results of actions taken to mitigate risk and ensuring efficient risk coverage by internal auditors, consulting teams, and other evaluating entities , (Nielson et al. (2005).

2.3 Critical Success Factors

2.3.1 Commitment and Support from Top Management

Ifinedo (2008) investigates the impact of contingency factors such as top management support, business vision, and external expertise. The results show that top management support influences the success level of the organizational system. The paper from Zwikael (2008) argues that the high importance of top management support is considered to be among the Critical Success Factors for project management. It is also important to emphasize effective top management support for different project scenarios. Critical top management support includes a broad range of activities in an organization, including developing project procedures that include the initiation stage, training programs, establishing a project management office, support quality management and so on.

Young and Jordan (2008) suggest that “the essence of top management support related to effective decision-making to manage risk and to authorize business process change”. A crucial part of a successful project is top management support, the benefit of which is related to improving decision making in order to manage risk. Top-level management responds to business processes and manages risk. Successful mitigation or bearing of risk is contingent upon commitment and support from top management.

Moreover, commitment and support from top management plays a key role in influencing the success in almost any initiative within an organization (Hasanali, 2002). Top management formulated and decides objectives and strategies for organizational risk management activities, mission and overall objectives (Henriksen and Uhlenfeldt, 2006). In one study, it is argued that an organization uses risk management to anticipate the probability of a negative impact and that risk management needs top-level management support. Risk management requires the acknowledgement that risk is a reality and the commitment to identify and manage risk (Galorath, 2006). These concepts refer to the highly needed support and approval from top management for risk management. The essence of commitment and support from top management supports the effective decision-making process in order to manage risk. Commitment and support from top management is important in every kind of management and it is thus an important factor for risk management.

2.3.2 Culture

The definition of culture has been described in many ways. Geert Hofstede is well-known for culture theory. Hofstede (2001) defines culture as “the collective programming of mind that distinguishes the members of one group or category of people from another”. According Hofstede’s definition, culture consists of patterns of values, ideas, thoughts and feelings and is transmitted by symbols as factors in shaping behavior. Consequences of beliefs, attitudes and skills affect thoughts, emotions and actions.

Another definition of culture is described by Hasanali (2002): “Culture is the combination of shared history, expectations, unwritten rules, and social customs that compel behaviors. It is

the set of underlying beliefs that, while rarely exactly articulated, are always there to influence the perception of actions and communications of all employees”. In any situation where cooperation is important to solve a crisis, culture is the key factor for willingness to learn from mistakes and to exchange best practice within organizations. But a supply chain consists of many different organizations and cultures and so developing any single culture is very difficult. It is not only the one factor which encourages the members to work more but also to work more efficiently.

Grabowski and Roberts (1999) suggest that Enterprise risk management requires the combination of several cultures that make the system into a cohesive whole in which the deep assumptions and espoused values of each of the member organizations can be built around the need for melding a culture of reliability. In particular situations, teamwork can develop some behavior by sharing individual beliefs, conducting meetings and seeking consensus in order for management to succeed. The importance of culture within enterprise risk management is that knowledge transference requires individuals to come together to interact, exchange ideas and share knowledge with one another.

2.3.3 Organizational Structure

Stank, Daugherty and Gustin (1994) believe that organizational structure involves an organization’s internal pattern of relationships, authority and communication. Structure is comprised of formal lines of authority and communication and the information as well as data that flow along these lines. Thus, organizational structure defines the lines of authority and communication, serves to allocate tasks and resources and provides a means of coordination. Hunter (2002) supports the idea that organizational structure provides the authority to predetermine the way employees work. Structure and processes of an organization are most effective when their design functions match their environment and have a positive impact upon the organization’s strategies.

Therefore, one of the most important aspects for effective risk management is organizational structure. Organizational structure provides the concept, guideline, direction and support to

the employee that is conducted by the steering committee. They design and teach employees to share and use a common vocabulary. The employees work as a team in order to prevent a silo mentality and incorporate resistant employees in the process (Hasanali, 2002). NSW Department of State and Regional Development (2005) believe that setting clear objectives and guidelines is necessary for risk management.

The business and financial world is in constant fluctuation. The environmental condition will change and somethings new will develop gradually over time, while others may sweep the market quickly. Organizational structure must be reviewed regularly and adjusted to adapt to changing financial environments. The management's role is to recommend policies for managing risk, the committee's role is to respond to review and approve them, and it is the management's role once more to implement them and report back on their operation (Carey, 2001). Moreover, Grabowski and Roberts (1999) suggest that risk management is primarily associated with the fluidity of organizational structures. Responding in different ways and responding quickly in the face of changing conditions is a flexible approach. DeLoach (2004) focuses on enterprise-wide risk management process (EWRM) to manage risks and to create and protect enterprise value. EWRM is built on a well-defined organizational structure. Risk management responsibilities and authorities are assigned to appropriate personnel. They decide what must be done for developing and assessing risk management alternatives and selecting a structural approach to evaluating risk management options. The effectiveness of alternative strategies is balanced within established risk parameters and limits.

2.3.4 Training

Today, almost all companies provide some type of training to their employees. Some companies have a very formal process of training while other companies use outside consultants to conduct employee training sessions (Hughey and Mussnug, 1997). Treven (2003) maintains that the training methods used by organizations can be classified into two methods. The first method is on-the-job training which provides one-on-one instruction, coaching, job rotation and an apprenticeship / internship. The second method is off-the-job

training which is conducted away from the worksite. It covers a number of techniques, classroom lectures, films, demonstrations, case studies, other simulation exercises and programmed instructions.

The success of the training programme is influenced by the following factors; The high quality of the training manual, The use of an ongoing mentorship programme during the course. The high degree of interactive learning employed during the programme. The extensive use of self and peer group critiquing skills. The extensive use of problem-based learning strategies throughout the programme. The critical support of highly motivated training staff. The motivation of continuous assessment throughout the course. The educator input delivered in a working, subject-oriented context” (Moss, 1997).

It is inevitable that the success of an organization depends upon its staff or employees. It is important to ensure that an adequate supply of staff is equipped with the appropriate skills for special departmental or managerial positions. The process of staff development and training should fulfill an organization’s performance. The purpose of training is to improve knowledge, skills and attitudes which in turn increase confidence, motivation and job satisfaction (Fill and Mullins, 1990). The endless brief, but vital if risk management is to be brought to the organization. A risk manager should set up training sessions through the directorate manager for members of staff and through the risk management team for consultants (Symons, 1995). Carey (2001) shows that the ability to respond to changing conditions in an organization’s operations relates to a range of activities including the development of risk training courses and the involvement of staff in responding to early warning systems.

2.3.5 Information Technology (IT)

Halliday, Badenhorst and Solms (1996, p.22) define Information Technology (IT) as consisting of two components: “(1) the information systems (including related information) on which the critical business functions and processes depend (2) the computer technologies (hardware and software) which support the processing, storage and distribution of the

company's data and information". It provides information about being the connector between one human to information and one human to another one (Wong, 2005).

Organizations need to consider IT as an important factor in the face of increasing competition, higher performance levels, globalization, and liberalization. IT plays a key role in achieving an organization's objectives. IT relates to all aspects of the business processes, including access to a shared infrastructure consisting of knowledge, human assets, core competencies, resource allocation, performance management, project tasking and communication support (Mutsaers, Zee and Giertz, 1998).

Shin (1999) focuses on using IT to redesign business processes and to improve business profitability and productivity. IT relates to better information processing, sharing, fast responsiveness, and better coordination between separate units of an organization and across organizations. Moreover, IT is associated with reducing costs such as the cost of documentation, decision information and cost effective monitoring or performance evaluation device. Xenomorph (2007) argues that "Effective risk management is impossible without effective information technology" and describes the IT architecture necessary for this.

Additionally, an organization is on such a large scale that it would be difficult for members to communicate and share information without an information technology infrastructure (Hasanali, 2002). Information technology can enable prompt searches, the access of and retrieval of data, and support communication in an organization. Rolland (2008) suggests using IT to drive effective risk management. IT can create an important link between risk management and corporate performance. IT provides data security by employee level, limiting a user's access by time, line of business, business activity and individual risk. IT tools collect data used in the past so companies can learn through experience and avoid repeating the same mistakes. The effective risk management information make more valuable for decision making. Therefore, Information Technology (IT) is another imperative factor for successful risk management.

2.4 Empirical Literature

Aabo (2004) investigates the relationship between the objectives of companies and the risk management strategy that the companies employ. The study sought to determine the relationship between objectives of companies and the risk management strategy that the companies employ. The research employed both descriptive and regression analysis in data analysis. The study found a distinct difference between the two groups of companies in relation to actual risk management decisions which in turn have an effect on whether the risk management decisions will have a value addition or value retention effect on the company. This study concludes that this difference in risk management behavior could not be explained by company characteristics normally identified in the literature as being decisive for the extent of hedging such as firm size, leverage, and export ratio. Rather, the study finds a unique relationship between the managerial focus on stakeholders taking a conservative risk management strategy (that focused more on value preservation) and managerial focus on shareholder taking a forward looking risk management strategy (that focused on value addition).

Ifinedo (2008), investigates the impact of contingency factors such as top management support, business vision, and external expertise. The study sought to investigate the impact of contingency factors such as top management support, business vision, and external expertise, descriptive statistics were used in the analysis of data. The results show that top management support influences the success level of the organizational system. The paper from Zwikael (2008) argues that the high importance of top management support is considered to be among the Critical Success Factors for project management.

March and Shapira (1987) in a study of managerial perspective of risk and risk taking. The objective of the study was to determine the managerial perspective of risk and risk taking. The study used descriptive and Chi-square to test the research hypothesis. The study found that that managers see risk in ways less precise and different from risk as it appears in decision theory. The study finds three differences between managers perception of risk and decision

theory. It finds that management does not treat uncertainty about positive outcome as an important aspect of risk but rather associate risk with negative outcome. This means that positive variations from possible outcomes will not be considered as risks. Secondly, the study suggests that for managers, risk is not primarily a probability concept but rather defined risk in terms of amount of loss.

Dam (2010), investigated the Enterprise Risk Management framework and the effectiveness of the risk management practices at both the bank's and a transaction office's level. The research used both qualitative and quantitative research methods. An in-depth interview with two in three staffs and a questionnaire to all three were conducted. Moreover, the State Bank of Vietnam's regulations, the bank's internal policies and annual reports as well as the transaction office's business results also provided significant findings for the research. Dam (2010), concluded that the bank tried to adopt a close-to-standard risk management framework with numerous published documents governing the day-to-day credit activities.

Kithinji (2010) conducted a study on risk management and profitability of commercial banks in Kenya using the non-performing loan portfolio as an indicator of the effectiveness of credit management practices. The intervening variable was the amount of credit as indicated by loans and advances normalized by the total assets. The dependent variable was the profitability measured by the return on total assets. The author concluded that there was no significant relationship between credit risk management, amount of credit and profitability. The study also concentrated on credit risk only and failed to recognize the role of other financial risk such as market risk and liquidity risk.

Ahmed et al. (2011) conducted a study on risk management practices and Islamic Banks. The authors' aim was to determine the firm's level factors which have significantly influenced the risk management practices of Islamic banks in Pakistan. The study used credit, operational and liquidity risks as dependent variables while size, leverage, NPLs ratio, capital adequacy and asset management are utilize as explanatory variable for the period of four years from 2006 to 2009. The study concluded that size of Islamic banks have a positive and statistically

significant relationship with financial risks (credit and liquidity risk), whereas its relation with operational risk is found to be negative and insignificant. The asset management establishes a positive and significant relationship with liquidity and operational risk. The debt equity ratio and non-performing loans (NPLs) ratio have a negative and significant relationship with liquidity and operational risk. In addition, capital adequacy has negative and significant relationship with credit and operational risk, whereas it is found to be positive and with liquidity risk.

Hansen (2009) conducted a study on the strategic foreign exchange risk management practice by Danish medium-sized non-financial, not-listed companies that are involved in international activities. The study showed that interaction between financial and operational hedges exists in the management of operating exposure and that operational and financial strategies are seen as complements to each other. The empirical results supported the hypothesis that the hedging strategies of the companies depend on their flexibility. Multi-nationality and foreign build exposure were significant explanatory factors for the importance and application of various hedging strategies. On the aggregate level, the risk management objective of the companies and the involvement of both the operational and financial departments in the risk management were significant factors in explaining the importance and application of the operational hedging strategies. The size of the company exhibited significance in explaining the importance and application of the financial hedging means. In addition, the study by Hansen (2009) was conducted in a developed economy while the current study is being conducted in a developing economy.

Standards and Poor's, (2007) did a study on possibility of loss or sub-optimization of gain to companies, the objective of the study was to establish the possibility of loss or sub-optimization of gain to companies. The study used descriptive statistics in the data analysis. The study further revealed that the specific circumstances influencing an organizations management accounting practices comprise a set of contingent variables which may include but are not limited to; the external environment, technology, organization structure and age of firm. Therefore, Contingency theory will also apply in this research because the level of ERM

implementation in a company might be influenced by a set of contingent variables which include size, industry, auditors, growth rate, regulatory requirements, ownership structure and board independence among others.

2.5 Summary

The literature review on enterprise risk management and clearly shows that related management activities are critical in enterprise risk management. The review also indicates that the development and effective enterprise risk management is a systematic, continuous, and methodological process permeating the whole organization. The effectiveness of enterprise risk management should be measured against the success of the organization in meeting its strategic objectives and is dependent upon the collaboration and cooperation of various role-players within and outside the organization. The commitment of the top management, organization culture, organization structure, training and information technology are key to effective enterprise risk management in the banking industry.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter provides a discussion of the research methods and procedures that were employed in this study, in particular, section 3.2 covers the discusses the research design especially with respect to the choice of the design, in section 3.3 presents the target population and sample for the study, section 3.4 presents the data and data collection instruments and section 3.5 covers the data analysis where it present the conceptual model and analytical model.

3.2 Research Design

Research design is the basic plan that indicates an overview of the activities that are necessary to execute the research project. Mathoko *et al* (2007) describe a research design as a set of decisions that make up the master plan specifying the methods and procedures for collecting and analyzing the needed information. This study adopted a descriptive research design.

Kothari, (2004) describes descriptive research as including survey and facts finding enquiries adding that the major purpose of descriptive research is description of affairs as it exists at present. A descriptive research determines and reports the way things are and attempts to describe such things as possible behavior, attitudes, values and characteristics, (Mugenda & Mugenda, 2003). This research design was the best in explaining if two variables are related and if they vary together with the help of enough information or data for testing cause and effect relationship.

3.3 Population

Target population in statistics is the specific population about which information is desired. According to Ngechu (2004), a population is a well-defined or set of people, services, elements, events, group of things or households that are being investigated in order to

generalize the results. The population for this study was all 44 Commercial banks in Kenya. There are a total of 44 Commercial Banks in Kenya which formed the target population for this study. Mugenda and Mugenda, (2003), explain that the target population should have some observable characteristics, to which the researcher intends to generalize the results of the study. The study being census survey as all the commercial banks were involved in the study. The study being a survey means one respondent was selected in each bank thus a sample of 44 respondents will be selected

3.4 Data and Data Collection Procedure

This study collected both primary and secondary data. Primary data was gathered and generated for the project at hand directly from respondents mainly using questionnaires. Secondary data is the data gathered for other purposes and used in the recent project usually the secondary data was found inside the company, libraries, research centers, internet and etc. Secondary data involved the collection and analysis of published material and information from other sources such as annual reports, published data.

The researcher used a questionnaire as primary data collection instrument. The questionnaire was designed to give a brief introduction of restructuring. The questionnaire was divided into sections representing the various variables adopted for study. For each section of the chosen study included closed structured and open ended questions which sought the views, opinions, and attitudes from the respondent which might not have been captured by the researcher. The questionnaires were administered through drop and pick method to the officers of the selected departments. The questionnaire was designed to collect qualitative and quantitative data. The open ended questionnaires gave unrestricted freedom of answer to respondents. The researcher used research assistants to distribute by hand the questionnaires which were completed by the selected respondents. Upon completion, the research assistants collected the questionnaires and ensure high completion rate and return of the completed questionnaires.

3.5 Data Analysis

Data was analyzed using Statistical Package for Social Sciences (SPSS Version 20.0) program. Both quantitative analysis and regression analysis was used as data analysis technique. The data collected was run through various models so as to clearly bring out the various critical factors influencing ERM among commercial banks. Logit model was used to analyze the regression equation. The focus of this study is the link between critical success factors of enterprise risk management among commercial banks in Kenya. The study measured ERM through the various implementation levels. The set of independent variables includes commitment of top management, organization culture, organization structure, and training and information technology.

3.5 1 Conceptual Model

The following conceptual model was adopted in the study where ERM is a function of Top management support (TM), Organizational Culture (OC), Training (TR), Organizational structure (OS) and Information Technology (IT) :

$$ERM_{it} = f(TM, OC, RC, OS, TR, IT) \dots \dots \dots (1)$$

Where

ERM = Enterprise Risk Management implementation levels

TM = Top management support

OC = The organization culture

RC = Risk is culture

OS = The organization structure

TR = Is training in risk management

IT = Information technology

Enterprise Risk Management was measured using the implementation levels in the organization

Top management support was measured by the support they give in terms of budget approvals, support for staffing and the support they give to risk issues.

Organization culture was measured by teamwork and collective programming of mind within the organization.

Risk culture was measured by the severity of fraud in the organization and culture of staff appreciation within the organization.

Organization structure was measured by the nature of organization structure, whether flat or vertical organization structure.

Training in risk management was measured by training experience, specialized training, training workshop, seminars, reduction in risk as result of training and employee performance after training.

Information technology was measured by the system control in the organization, system failure in the organisation, frauds due, information security , number of cases of hacking , fault tolerance.

Young and Jordan (2008) suggest that “the essence of top management support relates to effective decision-making to manage risk and to authorize business process change such as Implementation of Enterprise Risk Management. Thus top management support positively influences Implementation of Enterprise Risk Management.

Grabowski and Roberts (1999) suggest that Enterprise risk management requires the combination of several cultures that make the system into a cohesive whole in which the deep assumptions and espoused values of each of the member organizations can be built around the

need for melding a culture of reliability. Thus organization culture if well managed positively influences Implementation of Enterprise Risk Management.

Grabowski and Roberts (1999) suggest that risk management is primarily associated with the fluidity of organizational structures. ERM is built on a well-defined organizational structure. Thus organization structure supports the implementation of enterprise Risk Management.

Symons (1995) states that risk manager should set up training sessions through the directorate manager for members of staff and through the risk management team for consultants. Training of employee is positively related to implementation of Enterprise Risk Management in an Organization.

Xenomorph (2007) argues that “Effective risk management is impossible without effective information technology” and describes the IT architecture necessary for this. Information technology in an organization is positively associated with implementation of Enterprise Risk Management.

3.5.2 Analytical Model

The following regression model was used to perform panel data analysis

$$ERM = \beta_0 + \beta_1 TM + \beta_2 OC + \beta_3 OS + \beta_4 TR + \beta_5 IT + \varepsilon \dots\dots\dots(2)$$

Enterprise Risk Management was measured using the implementation levels in the organization.

Top management support was measured by the support they give in terms of budget approvals, support for staffing and the support they give to risk issues.

Organization culture was measured by teamwork and collective programming of mind within the organization.

Risk culture was measured by the severity of fraud in the organization and culture of staff appreciation within the organization.

Organization structure was measured by the nature of organization structure, whether flat or vertical.

Training in risk management was measured by training experience, specialized training, training workshop, seminars, reduction in risk as result of training and employee performance after training.

Information technology was measured by the system control in the organization, system failure in the organisation, frauds due to system and procedure failures, information security, number of cases of hacking, fault tolerance.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATIONS

4.1 Introduction

This chapter discusses the interpretation and presentation of the findings obtained from the field, in particular, section 4.2 covers the, summary of statistics, where descriptive statistic were used, in section 4.3 estimated model was used where regression analysis was done to show the empirical model , section 4.4 reviewed, the discussion and finally section 4.5 reviewed the summary .

4.2 Summary Statistics

Descriptive and inferential statistics have been used to discuss the findings of the study. The study targeted a sample size of 44 respondents from which 40 filled in and returned the questionnaires making a response rate of 88.9%.

Table 1: Commitment and support from top management

| | Frequency | Percentage |
|-------|-----------|------------|
| Yes | 35 | 87.5 |
| No | 5 | 12.5 |
| Total | 40 | 100 |

Source, Research (2013)

The study sought to establish whether the commitment and support from top management affects implementation of Enterprise Risk Management in commercial banks from the finding 87.5 % of the respondent indicated that the commitment and support from top management affect implementation of Enterprise Risk Management in commercial banks whereas 12.5% were of contrary opinion. This commitment and support from top management affects implementation of Enterprise Risk Management in commercial banks.

Table 2: Commitment and support from top management

| | Frequency | Percentage |
|-------------------|------------------|-------------------|
| Very great extent | 15 | 37.5 |
| Great extent | 19 | 47.5 |
| Moderate extent | 6 | 15.0 |
| Total | 40 | 100 |

Source, Research (2013)

The study sought to determine the extent to which commitment and support from top management affects implementation of Enterprise Risk Management in commercial banks, from the findings 47.5 % of the respondents indicated to a great extent 37.5 % of the respondents indicated to a very great extent , where as 15.0% of the respondents indicated to moderate extent, this implies that commitment and support from top management affects implementation of Enterprise Risk Management in commercial banks to a great extent.

Table 3: Level of Implementation in the Organization

| Level | Percent |
|--|---------|
| No ERM framework and no plans to introduce one | 5.6 |
| No ERM framework is in place but there is a plan to introduce one in the short-term | 8.3 |
| ERM framework is a partially developed concept and there is no clear timetable for implementation | 19.4 |
| ERM framework is well formulated across the business, with a clear timetable for implementation but implementation has not started | 30.6 |
| ERM framework is well formulated across the business, with implementation in progress and a clear timetable for completing implementation. | 27.8 |
| ERM framework is well formulated across the business and fully implemented | 8.3 |

Source, Research (2013)

From the finding on the level of implementation of Enterprise Risk Management in the organization, the study found that most of the organization as shown by 30.6% indicated that ERM framework is well formulated across the business, with a clear timetable for implementation but implementation has not started, 27.8% of the respondent indicted ERM framework is well formulated across the business, with implementation in progress and a

clear timetable for completing implementation, 19.4% of the respondent indicated ERM framework is a partially developed concept and there is no clear timetable for implementation, those who indicated ERM framework is well formulated across the business and fully implemented and No ERM framework is in place but there is a plan to introduce one in the short-term were shown by 8.3% in each case whereas 5.6% of the respondent indicated no ERM framework and no plans to introduce one .

Table 4: Effects of top management on implementation of ERM

| Statement | Strongly Agree | Agree | Moderate | disagree | Strongly disagree | Mean | Standard deviation |
|--|----------------|-------|----------|----------|-------------------|------|--------------------|
| Commitment and support from top management plays a key role in influencing the success in almost any initiative within an organization | 9 | 30 | 1 | 0 | 0 | 1.80 | 0.32 |
| business vision positively influence the implementation of ERM in the bank | 11 | 27 | 2 | 0 | 0 | 1.78 | 0.29 |
| Top management support staffing in the implementation of ERM | 10 | 25 | 5 | 0 | 0 | 1.88 | 0.26 |
| The essence of commitment and support from top management supports the effective decision-making process to key risk issues | 9 | 31 | 00 | 0 | 0 | 1.78 | 0.34 |
| Top management supports external expertise which positively influence the implementation of ERM in the bank | 10 | 30 | 0 | 0 | 0 | 1.75 | 0.33 |
| The presence of a CRO is positively associated with implementation of ERM in the bank | 15 | 25 | 0 | 0 | 0 | 1.63 | 0.29 |
| The board of directors are involved in the ERM adoption process | 15 | 20 | 5 | 0 | 0 | 1.75 | 0.23 |

Source, Research (2013)

The study sought to establish the level at which respondents agreed to the above statements which relate to effect of top management on implementation of Enterprise Risk Management

in commercial banks, from the findings the study established that, majority of the respondents agreed that The presence of a CRO is positively associated with implementation of ERM in the bank as shown by a mean of 1.63, The board of directors are involved in the ERM adoption process, Top management supports external expertise which positively influence the implementation of ERM in the bank as shown by a mean of 1.75 in each case . The essence of commitment and support from top management supports the effective decision-making process to key risk issues, Top management support staffing in the implementation of ERM as shown by a mean of 1.78 in each case, Commitment and support from top management plays a key role in influencing the success in almost any initiative within an organization as shown by a mean of 1.80 and finally that top management support staffing in the implementation of ERM as shown by a mean of 1.88. The finding above concurs with the findings in the study conducted by Zwikael (2008) argues that the high importance of top management support is considered to be among the Critical Success Factors for project management.

Table 5: Effects of organization culture on implementation of ERM

| | Frequency | Percentage |
|--------------|------------------|-------------------|
| Yes | 35 | 87.5 |
| No | 15 | 37.5 |
| Total | 40 | 100 |

Source, Research (2013)

The study sought to determine whether organization culture affects implementation of Enterprise Risk Management in commercial banks, from the findings the study established that majority of the respondents were of the opinion that the organization culture affect implementation of Enterprise Risk Management in commercial banks 87.5% whereas 37.5% of the respondents were of contrary opinion this implies that organization culture affect implementation of Enterprise Risk Management in commercial banks.

Table 6: Extent to which organization culture affect implementation of ERM

| | Frequency | Percentage |
|-------------------|-----------|------------|
| Very great extent | 14 | 35.0 |
| Great extent | 19 | 47.5 |
| Moderate extent | 1 | 2.5 |
| Total | 55 | 100 |

Source, Research (2013)

The study sought to establish the extent to which organization culture affect implementation of Enterprise Risk Management in commercial banks, from the findings 47.5% of the respondents indicated to a very great extent, 35.0% of the respondents indicated to a great extent whereas 2.5% of the respondents indicated to a moderate extent this implies that the organization culture affect implementation of Enterprise Risk Management in commercial banks to a great extent

Table 7: Effects of organization culture on implementation of ERM

| Statement | Strongly Agree | Agree | Moderate | disagree | Strongly disagree | Mean | Standard deviation |
|---|----------------|-------|----------|----------|-------------------|------|--------------------|
| the collective programming of mind that distinguishes the members of one group or category of people from another | 16 | 24 | 0 | 0 | 0 | 1.60 | 0.28 |
| organizational structure involves an organization's internal pattern of relationships, authority and communication | 12 | 24 | 4 | 0 | 0 | 1.80 | 0.25 |
| Organizational structure provides the concept, guideline, direction and support to the employee that is conducted by the steering committee | 14 | 21 | 5 | 0 | 0 | 1.78 | 0.23 |
| risk management is primarily associated with the fluidity of organizational structures | 15 | 27 | 5 | 0 | 0 | 2.10 | 0.29 |

Source, Research (2013)

The study sought to establish the level at which respondents agreed or disagree with the above statements which relate to organizational culture , from the findings , the study established that majority of the respondents agreed that the collective programming of mind that distinguishes the members of one group or category of people from another as shown by a mean of 1.60, organizational structure involves an organization’s internal pattern of relationships, authority and communication as shown by a mean of 1.80 Organizational structure provides the concept, guideline, direction and support to the employee that is conducted by the steering committee as shown by a mean of 1.78 and finally risk management is primarily associated with the fluidity of organizational structures as shown by a mean of 2.10 the findings concurs with the arguments by Stank, Daugherty and Gustin (1994) believe that organizational structure involves an organization’s internal pattern of relationships, authority and communication

Table 8: Effects of risks culture on implementation of ERM

| | Frequency | Percentage |
|-------|-----------|------------|
| Yes | 26 | 65 |
| No | 14 | 35 |
| Total | 40 | 100 |

Source, Research (2013)

The study sought to determine whether risk culture affects implementation of Enterprise Risk Management in commercial banks, from the findings 65% of the respondents indicated that risk culture affect implementation of Enterprise Risk Management in commercial banks whereas 35% of the respondents were of contrary opinion this implies that respondents believed that risk culture affects implementation of Enterprise Risk Management in commercial banks

Table 9: Extent to which risk affect implementation of ERM

| | Frequency | Percentage |
|-------------------|-----------|------------|
| Very great extent | 16 | 40.0 |
| Great extent | 21 | 52.5 |
| Moderate extent | 3 | 7.5 |
| Total | 40 | 100 |

Source, Research (2013)

The study sought to establish the extent to which risk affects implementation of Enterprise Risk Management in commercial banks, from the findings 52.5% of the respondents indicated to a great extent, 40% of the respondents indicated to a very great extent whereas 7.5% of the respondents indicated to a moderate extent this implies that risk affect implementation of Enterprise Risk Management in commercial banks to a great extent

Table 10: Effects of risk culture on implementation of Enterprise Risk Management

| Statement | Strongly Agree | Agree | Moderate | disagree | Strongly disagree | Mean | Standard deviation |
|---|----------------|-------|----------|----------|-------------------|------|--------------------|
| There are several frauds in the organization | 10 | 24 | 6 | 0 | 0 | 1.90 | 0.25 |
| There is high culture of staff appreciation which helps in ERM implementation | 13 | 23 | 4 | 0 | 0 | 1.78 | 0.25 |
| Staff appreciation helps in reducing fraudulent case in the banks | 15 | 24 | 1 | 0 | 0 | 1.65 | 0.27 |
| Staff work as team which help in mitigating risk in the organization | 12 | 27 | 1 | 0 | 0 | 1.73 | 0.29 |

Source, Research (2013)

The study sought to determine the level at which respondents agree with the above statements which relate to effects of risk culture on implementation of Enterprise Risk Management in commercial banks , from the findings the study revealed that majority of the respondents agreed that Staff appreciation helps in reducing fraudulent case in the banks as

shown by a mean of 1.65, Staff work as team which help in mitigating risk in the organizations shown by a mean of 1.73 there is high culture of staff appreciation which helps in ERM implementation as shown by a mean of 1.78 and finally that there were several frauds in the organization as shown by a mean of 1.90.

Table 11: Effects of training affect implementation of Enterprise Risk Management

| | Frequency | Percentage |
|--------------|------------------|-------------------|
| Yes | 26 | 65 |
| No | 14 | 35 |
| Total | 40 | 100 |

Source, Research (2013)

The study sought to determine whether training affect implementation of Enterprise Risk Management in commercial banks, from the findings the study established that 65% of the respondents agreed to the statement whereas 35% of the respondents were of contrary opinion this implies that training affect implementation of Enterprise Risk Management in commercial banks

Table 12: Extent to which training affects implementation of Enterprise Risk Management

| | Frequency | Percentage |
|-------------------|------------------|-------------------|
| Very great extent | 14 | 35.0 |
| Great extent | 23 | 57.5 |
| Moderate extent | 3 | 7.5 |
| Total | 55 | 100 |

Source, Research (2013)

The study sought to establish the extent to which training affects implementation of Enterprise Risk Management in commercial banks, from the findings 57.5 % of the respondents indicated to a great extent, 35% of the respondents indicated to a very great extent whereas

7.5 % of the respondents indicated to a moderate extent this implies that training affects implementation of Enterprise Risk Management in commercial banks to a great extent,

Table 13: Effects of Training on Implementation of Enterprise Risk Management

| Statement | Strongly Agree | Agree | Moderate | Disagree | Strongly disagree | Mean | Standard deviation |
|--|----------------|-------|----------|----------|-------------------|------|--------------------|
| On-the-job training influence the implementation of ERM | 15 | 20 | 5 | 0 | 0 | 1.75 | 0.23 |
| The high quality of the training manual influence ERM implementation | 12 | 22 | 6 | 0 | 0 | 1.85 | 0.23 |
| It is inevitable that the success of an organization depends upon its staff or employees | 13 | 25 | 2 | 0 | 0 | 1.73 | 0.27 |
| Process of staff development and training should fulfill an organization's performance | 14 | 26 | 0 | 0 | 0 | 1.65 | 0.29 |
| The purpose of training is to improve knowledge, skills and attitudes which in turn increase confidence, motivation and job satisfaction | 10 | 28 | 2 | 0 | 0 | 1.80 | 0.30 |
| Risk manager should set up training sessions through the directorate manager for members of staff and through the risk management team for consultants | 15 | 18 | 7 | 0 | 0 | 1.80 | 0.21 |

Source, Research (2013)

The study sought to establish the level at which respondents agreed with the above statements relating to effects of training on implementation of Enterprise Risk Management in commercial banks, from the findings majority of the respondents agreed that process of staff development and training should fulfill an organization's performance as shown by a mean of 1.65, It is inevitable that the success of an organization depends upon its staff or employees as shown by a mean of 1.73, on-the-job training influence the implementation of ERM as shown by a mean of 1.75, The purpose of training is to improve knowledge, skills and attitudes which in turn increase confidence, motivation and job satisfaction, risk manager should set up

training sessions through the directorate manager for members of staff and through the risk management team for consultants, as shown by a mean of 1.80 in each case, and finally that The high quality of the training manual influence ERM implementation as shown by a mean of 1.85. The finding above concurs with the finding in another study conducted by Fill and Mullins, (1990), the purpose of training is to improve knowledge, skills and attitudes which in turn increase confidence, motivation and job satisfaction

Table 14: Effects of technology on implementation of Enterprise Risk Management

| | Frequency | Percentage |
|-------|-----------|------------|
| Yes | 27 | 67.5 |
| No | 13 | 32.5 |
| Total | 40 | 100 |

Source, Research (2013)

The study sought to determine whether technology affect implementation of Enterprise Risk Management in commercial banks from the findings the study established that 67.5% of the respondents agreed to the statement whereas 32.5% of the respondents were of contrary opinion this implies that technology affects implementation of Enterprise Risk Management in commercial banks.

Table 15: Extent to which technology affect implementation of Enterprise Risk Management

| | Frequency | Percentage |
|-------------------|-----------|------------|
| Very great extent | 12 | 30.0 |
| Great extent | 24 | 60.0 |
| Moderate extent | 4 | 10.0 |
| Total | 40 | 100 |

Source, Research (2013)

The study sought to establish the extent to which technology affect implementation of Enterprise Risk Management in commercial banks, from the findings 60% of the respondents

indicated to a great extent, 30% of the respondents indicated to a very great extent whereas 10% of the respondents indicated to a moderate extent this implies that technology affect implementation of Enterprise Risk Management in commercial banks to a great extent

Table 16: Effects of technology affect implementation of Enterprise Risk Management

| Statement | Strongly Agree | Agree | Moderate | disagree | Strongly disagree | Mean | Standard deviation |
|---|----------------|-------|----------|----------|-------------------|------|--------------------|
| information systems on which the critical business functions and processes depend on the computer technologies | 7 | 31 | 2 | 0 | 0 | 1.88 | 0.33 |
| Organizations need to consider IT as an important factor in the face of increasing competition, higher performance levels, globalization, and liberalization | 8 | 29 | 3 | 0 | 0 | 1.88 | 0.30 |
| IT plays a key role in achieving an organization's objectives | 11 | 26 | 3 | 0 | 0 | 1.80 | 0.28 |
| IT relates to all aspects of the business processes, including access to a shared infrastructure consisting of knowledge, human assets, core competencies, resource allocation, performance management, project tasking and communication support | 10 | 25 | 5 | 0 | 0 | 1.88 | 0.26 |

Source, Research (2013)

The study sought to establish the level at which respondents agree with above statements relating to technology, from the findings majority of the respondents agreed that; IT plays a key role in achieving an organization's objectives plays a s shown by a mean of 1.80, Organizations need to consider IT as an important factor in the face of increasing competition, higher performance levels, globalization, and liberalization ,information systems on which the critical business functions and processes depend on the computer technologies, IT relates to all aspects of the business processes, including access to a shared infrastructure consisting of knowledge, human assets, core competencies, resource allocation, performance management,

project tasking and communication support as shown by a mean of 1.88 in each case. The findings concur with the findings in the study conducted by (Mutsaers, Zee and Giertz, 1998). IT plays a key role in achieving an organization's objectives.

Table 17: Effects of organization structure on implementation of Enterprise Risk Management

| | Frequency | Percentage |
|-------|-----------|------------|
| Yes | 22 | 55 |
| No | 18 | 45 |
| Total | 40 | 100 |

Source, Primary Data

The study sought to establish whether organization structure affect implementation of Enterprise Risk Management in commercial banks, from the findings the study established that 55% of the respondents agreed to the statement whereas 45% of the respondents were of contrary opinion, this shows that organization structure affects implementation of Enterprise Risk Management in commercial banks.

Table 18: Extent to which organization structure affect implementation of ERM

| | Frequency | Percentage |
|-------------------|-----------|------------|
| Very great extent | 13 | 32.5 |
| Great extent | 23 | 57.5 |
| Moderate extent | 4 | 10.0 |
| Total | 40 | 100 |

Source, Research (2013)

The study sought to establish the extent to which organization structure affect implementation of Enterprise Risk Management in commercial banks, from the findings 57.5% of the respondents indicated to a great extent, 32.5% of the respondents indicated to a very great extent whereas 10% of the respondents indicated to a moderate extent this implies that

organization structure affect implementation of Enterprise Risk Management in commercial banks to a very great extent

Table 19: Effects of organization structure on implementation of Enterprise Risk Management

| Statement | Strongly Agree | Agree | Moderate | disagree | Strongly disagree | Mean | Standard deviation |
|---|----------------|-------|----------|----------|-------------------|------|--------------------|
| organizational structure involves an organization's internal pattern of relationships which influence the implementation of ERM | 9 | 31 | 0 | 0 | 0 | 1.78 | 0.34 |
| one of the most important aspects for effective risk management is organizational structure | 12 | 25 | 3 | 0 | 0 | 1.78 | 0.27 |
| Organizational structure provides the guideline, direction and support to the employee that is conducted by the steering committee in the implementation of ERM | 10 | 30 | 0 | 0 | 0 | 1.75 | 0.33 |
| Management's role is to recommend policies for managing risk | 13 | 27 | 0 | 0 | 0 | 1.68 | 0.30 |

Source, Research (2013)

The study sought to establish the level at which respondents agreed with the above statements relating g to effects of organization structure on implementation of Enterprise Risk Management in commercial banks, from the findings the study established that respondents agreed that Management's role is to recommend policies for managing risk as shown by a mean of 1.68, Organizational structure provides the guideline, direction and support to the employee that is conducted by the steering committee in the implementation of ERM as shown by a mean of 1.75 one of the most important aspects for effective risk management is organizational structure, organizational structure involves an organization's internal pattern of relationships which influence the implementation of ERM as shown by a mean of 1.78 in each case respectively. The above finding concurs with the finding in the study conducted by

Stank, Daugherty and Gustin (1994) believe that organizational structure involves an organization's internal pattern of relationships, authority and communication.

4.3 Estimated Model

Table 20: Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1 | .961 ^a | .924 | .886 | .01777 |

Source, Research (2013)

Adjusted R squared is coefficient of determination which tell us the variation in the dependent variable due to changes in the independent variable, from the findings in the above table the value of adjusted R squared was 0.886 an indication that there was variation of 88.6% on the Enterprise Risk Management implementation due to changes in the independent variable which are top management support , organization culture , risk culture, organization structure , training and information technology at 95% confidence interval . This shows that 88.6% changes in Enterprise Risk Management implementation could be accounted to changes in top management support, organization culture, organization structure, risk culture training and information technology. R is the correlation coefficient which shows the relationship between the study variable, from the findings shown in the table above there was a strong positive relationship between the study variable as shown by 0.961.

Table 21: Coefficients

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-------|------------------------|-----------------------------|------------|---------------------------|-------|------|
| | | B | Std. Error | Beta | | |
| 1 | Constant | .344 | .290 | | 1.213 | .001 |
| | Top Management Support | .219 | .010 | .244 | 1.792 | .023 |
| | Organization Culture | .164 | .020 | 1.278 | 8.176 | .000 |
| | Risk Culture | .166 | .010 | 1.152 | 6.722 | .001 |

| | | | | | |
|------------------------|------|------|------|-------|------|
| Organization Structure | .105 | .005 | .235 | 1.043 | .037 |
| Training | .201 | .005 | .093 | .314 | .004 |
| Information Technology | .113 | .001 | .683 | 2.336 | .018 |

Source, Research (2013)

The established regression equation was

$$Y = 0.344 + 0.219 \text{ TM} + 0.164 \text{ OC} + 0.166 \text{ RC} + 0.105 \text{ OS} + 0.201 \text{ TR} + 0.113 \text{ IT}$$

From the above regression equation it was revealed that holding top management support, organization culture, organization structure, risk culture training and information technology to a constant zero, Enterprise Risk Management implementation level would stand at 0.344, a unit increase in top management support would lead to increase in Enterprise Risk Management implementation level by a factors of 0.219, unit increase in organization culture would lead to increase in Enterprise Risk Management implementation level by factors of 0.165, unit increase in risk culture would lead to increase in Enterprise Risk Management implementation level by a factors of 0.166, a unit increase in organization structure would lead to increase in Enterprise Risk Management implementation level by a factors of 0.105, a unit increase in training would lead to increase in Enterprise Risk Management implementation level by factors of 0.201 and a unit increase in information technology would lead to increase in Enterprise Risk Management implementation level by a factors of 0.113.

4.4 Discussion

From the findings on the Adjusted R squared the study revealed that there was variation of 88.6% on the Enterprise Risk Management implementation due to changes in the independent variable which are top management support, organization culture, risk culture, organization structure, training and information technology. The study revealed that there was strong relationship between Enterprise Risk Management implementation and top management support, organization culture, organization structure, risk culture training and information technology as shown by correlation coefficient of 0.961. The study revealed that

there was a positive relationship between top management support, organization culture, organization structure, risk culture training and information technology and Enterprise Risk Management implementation. The study revealed that a unit increase in top management support would lead to increase in Enterprise Risk Management implementation, a unit increase in organization culture would lead to increase in Enterprise Risk Management implementation level, unit increase in risk culture would lead to increase in Enterprise Risk Management implementation level, a unit increase in organization structure would lead to increase in Enterprise Risk Management implementation level, a unit increase in training would lead to increase in Enterprise Risk Management implementation level and a unit increase in information technology would lead to increase in Enterprise Risk Management implementation level.

Ifinedo (2008) showed that top management support influences the success level of the organizational system. Zwikael (2008) argues that the high importance of top management support is considered to be among the Critical Success Factors for project management. Young and Jordan (2008) suggest that “the essence of top management support related to effective decision-making to manage risk and to authorize business process change”. Henriksen and Uhlenfeldt (2006), in one study, it is argued that an organization uses risk management to anticipate the probability of a negative impact and that risk management needs top-level management support. Risk management requires the acknowledgement that risk is a reality and the commitment to identify and manage risk (Galorath, 2006). Hofstede (2001) defines culture as “the collective programming of mind that distinguishes the members of one group or category of people from another”. According Hofstede’s definition, culture consists of patterns of values, ideas, thoughts and feelings and is transmitted by symbols as factors in shaping behavior.

Grabowski and Roberts (1999) suggest that Enterprise risk management requires the combination of several cultures that make the system into a cohesive whole in which the deep assumptions and espoused values of each of the member organizations can be built around the need for melding a culture of reliability. Stank, Daugherty and Gustin (1994) believe that

organizational structure involves an organization's internal pattern of relationships, authority and communication. Structure is comprised of formal lines of authority and communication and the information as well as data that flow along these lines. Hunter (2002) supports the idea that organizational structure provides the authority to predetermine the way employees work. Structure and processes of an organization are most effective when their design functions match their environment and have a positive impact upon the organization's strategies.

Grabowski and Roberts (1999) suggest that risk management is primarily associated with the fluidity of organizational structures. Responding in different ways and responding quickly in the face of changing conditions is a flexible approach. DeLoach (2004) focuses on enterprise-wide risk management process (EWRM) to manage risks and to create and protect enterprise value. Carey (2001) shows that the ability to respond to changing conditions in an organization's operations relates to a range of activities including the development of risk training courses and the involvement of staff in responding to early warning systems. IT relates to all aspects of the business processes, including access to a shared infrastructure consisting of knowledge, human assets, core competencies, resource allocation, performance management, project tasking and communication support (Mutsaers, Zee and Giertz, 1998).

Shin (1999) focuses on using IT to redesign business processes and to improve business profitability and productivity. IT relates to better information processing, sharing, fast responsiveness, and better coordination between separate units of an organization and across organizations. Xenomorph (2007) argues that "Effective risk management is impossible without effective information technology" and describes the IT architecture necessary for this. Rolland (2008) suggests using IT to drive effective risk management. IT can create an important link between risk management and corporate performance. IT provides data security by employee level, limiting a user's access by time, line of business, business activity and individual risk.

Aabo (2004) the study found a distinct difference between the two groups of companies in relation to actual risk management decisions which in turn have an effect on whether the risk management decisions will have a value addition or value retention effect on the company. Ifinedo (2008), the study sought to investigate the impact of contingency factors such as top management support, business vision, and external expertise, descriptive statistics were used in the analysis of data. The results show that top management support influences the success level of the organizational system. March and Shapira (1987) the study found that that managers see risk in ways less precise and different from risk as it appears in decision theory. The study finds three differences between managers perception of risk and decision theory.

4.5 Summary

From the findings on the Adjusted R squared the study revealed that there was variation of 88.6% on the Enterprise Risk Management implementation due to changes in the independent variable which are top management support , organization culture , risk culture, organization structure , training and information technology . The study revealed that there was strong relationship between Enterprise Risk Management implementation and top management support, organization culture, organization structure, risk culture training and information technology as shown by correlation coefficient of 0.961. The study revealed that there was a positive relationship between top management support, organization culture, organization structure, risk culture training and information technology and Enterprise Risk Management implementation. The study revealed that a unit increase in top management support would lead to increase in Enterprise Risk Management implementation, a unit increase in organization culture would lead to increase in Enterprise Risk Management implementation level, unit increase in risk culture would lead to increase in Enterprise Risk Management implementation level, a unit increase in organization structure would lead to increase in Enterprise Risk Management implementation level, a unit increase in training would lead to increase in Enterprise Risk Management implementation level and a unit increase in information technology would lead to increase in Enterprise Risk Management implementation level.

CHAPTER FIVE:

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

From the analysis and data collected, the following discussions, conclusion and recommendations were made. The responses were based on the objectives of the study. In particular section 5.2 reviewed the summary of the study, section 5.3 covered the conclusion , section 5.4 reviewed the limitation of the study and finally section 5.5 reviewed the recommendation for further research .

5.2 Summary Of The Study

The study revealed that commitment and support from top management affects implementation of Enterprise Risk Management. The study further revealed that commitment and support from top management affects implementation of Enterprise Risk Management in commercial banks to a great extent. The study found that most of the organization had ERM framework is well formulated across the business, with a clear timetable for implementation but implementation has not started the presence of a CRO is positively associated with implementation of ERM in the bank, the board of directors are involved in the ERM adoption process, top management supports external expertise which positively influence the implementation of ERM in the bank, the essence of commitment and support from top management supports the effective decision-making process to key risk issues, top management support staffing in the implementation of ERM, commitment and support from top management plays a key role in influencing the success in almost any initiative within an organization and top management support staffing in the implementation of ERM.

The study revealed that organization culture affects implementation of Enterprise Risk Management in commercial banks to a very great extent. The study establish that the collective programming of mind that distinguishes the members of one group or category of people from another, organizational structure involves an organization's internal pattern of

relationships, authority and communication, organizational structure provides the concept, guideline, direction and support to the employee that is conducted by the steering committee and risk management is primarily associated with the fluidity of organizational structures.

From the finding it was revealed that risk culture affects implementation of Enterprise Risk Management in commercial banks. The study further revealed that risk affects implementation of Enterprise Risk Management in commercial banks to a great extent. The study revealed that staff appreciation helps in reducing fraudulent case in the banks, staff work as team which help in mitigating risk in the organizations , there is high culture of staff appreciation which helps in ERM implementation and that there were several frauds in the organization.

It was established that training affect implementation of Enterprise Risk Management in commercial banks to a great extent. The study also established that process of staff development and training should fulfill an organization's performance, it is inevitable that the success of an organization depends upon its staff or employees, on-the-job training influence the implementation of ERM, the purpose of training is to improve knowledge, skills and attitudes which in turn increase confidence, motivation and job satisfaction, risk manager should set up training sessions through the directorate manager for members of staff and through the risk management team for consultants and that the high quality of the training manual influence ERM implementation.

It was revealed that technology affect implementation of Enterprise Risk Management in commercial banks to a very great extent. The study establish that IT plays a key role in achieving an organization's objectives plays, organizations need to consider IT as an important factor in the face of increasing competition, higher performance levels, globalization, and liberalization ,information systems on which the critical business functions and processes depend on the computer technologies, IT relates to all aspects of the business processes, including access to a shared infrastructure consisting of knowledge, human assets, core competencies, resource allocation, performance management, project tasking and communication support.

The study established that organization structure affect implementation of Enterprise Risk Management in commercial banks to a great extent. The study established that management's role is to recommend policies for managing risk, organizational structure provides the guideline, direction and support to the employee that is conducted by the steering committee in the implementation of ERM, one of the most important aspects for effective risk management is organizational structure, organizational structure involves an organization's internal pattern of relationships which influence the implementation of ERM.

5.3 Conclusion

From the findings the concludes that top management and commitment affect implementation of Enterprise Risk Management among commercial banks in Kenya to a great extent. The study also concludes that organization culture affects implementation of Enterprise Risk Management in commercial banks to a very great extent. The study revealed that risk culture affects implementation of Enterprise Risk Management in commercial banks. The study further established that risk affects implementation of Enterprise Risk Management in commercial banks to a great extent.

It was established that training affect implementation of Enterprise Risk Management in commercial banks to a great extent. The study revealed that technology affect implementation of Enterprise Risk Management in commercial banks to a very great extent. The study establish that IT plays a key role in achieving an organization's objectives plays and organizations need to consider IT as an important factor in the face of increasing competition. The study established that organization structure affect implementation of Enterprise Risk Management in commercial banks to a great extent.

5.4 Limitations of the study

In attaining its objective the study was limited to 44 commercial banks in Kenya from which only one respondent was picked from each. The study was also limited to the degree of precision of the data obtained from the respective respondents.

The study was also limited to determine the critical success factors of enterprise risk management among commercial banks in Kenya. The method used is descriptive research design whereby the variables cannot be controlled by the researcher. The study intended to use questionnaire as the instrument for collecting data. This is because time for the data collection will be limited to two weeks. The study was carried out in only one sector due to financial constraints of the researcher.

5.5 Recommendation For Further Research

From the findings the study recommends that there is need for commercial banks to consider the various factors affecting implementation of ERM in Kenya as it was revealed that top management support , risk culture , organization culture ,organization structure, training and information technology affect implementation of ERM to a great extent .There is need for commercial banks to enhance their organisation culture and structure as this will influence the implementation of ERM among the commercial banks. There is need for the management of commercial banks to create budget and resource allocation for implementation of ERM in the organization; this will enhance the implementation of ERM in the organization.

This study provides an initial base that can trigger additional research on ERM. The academic community is positioned to greatly contribute to this growing public policy need for more effective enterprise risk management and corporate governance in both the private and public sector organizations.

From the findings and conclusion, the study recommends and in-depth study to be carried out on the impact of enterprise risk management implementation on the performance companies listed at Nairobi Securities Exchange.

REFERENCES

- Aabo, Tom (2004), *Stakeholder Versus Shareholder Satisfaction in Corporate Risk Management*. Department of Management and International Business, Aarhus School of Business, Fuglesangs Alle 4, 8210 Aarhus V, Denmark.
- Allayannis, G & Weston, J. (2001). The Use of Foreign Currency Derivatives and Firm Market Value, *Review of Financial Studies*, 14, 243-276.
- Al-Tamimi, H.and Al-Mazrooei, F.M. (2007), “Banks’ risk management: a comparison study of UAE national and foreign banks”. *The Journal of Risk Finance*, Vol. 8(4), pp. 394-409
- Appiah-Kusi, J and Menyah, K. (2003). Return predictability in African stock markets. *Review of Financial Economics*, 12: 247-270.
- Barton, T.L., Shenkir, W.G., & Walker, P.L. (2002). “*Making enterprise risk management pay off: How leading companies implement risk management*”, Financial Times Prentice Hall, Pearson Education, Inc.
- Beasley, M.S, Clune, R & Hermanson, D.R. (2005). Enterprise risk management: An empirical analysis of factors associated with the extent of implementation, *Journal of Accounting and Public Policy*, Vol.24, pp 521–531.
- Boynton, A.C. and Zmud, R.W. (1984), “An Assessment of Critical Success Factors”, *Sloan Management Review*, vol 25(4), pp.17-27
- Bradley, K., Moles P. (2001). “The effects of exchange rate movements on non-financial UK firms”, *International Business Review*, Vol. 10, pp. 51-69.
- Bryman, A and Bell, E. (2003). *Business Research Methods*, Oxford University Press ©, Oxford.

Carey, A. (2001), "Effective risk management in financial institutions: the Turnbull approach", *Balance Sheet*, Vol. 9(3), pp. 24-7

Chowdhry, B. and Goyal, A., (2000), "Understanding the financial crisis in Asia", *Pacific-Basin Finance Journal*, Vol. 8, pp. 135–152

Chung, K.H. and Pruitt, S.W. (1994). A simple approximation of Tobin's q , *Financial Management* 23, 70-74.

Clutterbuck, D. and Hirst, S. (2002), "Leadership communication: A status report", *Journal of Communication Management*, Vol 6(4), pp.351-354

Collins, J.M. & Ruefli, T.W. (1992), "Strategic risk: an ordinal approach", *Management Science*, Vol. 38 pp.1707-31.

Committee of Sponsoring Organizations of the Treadway Commission (COSO), (2004), Enterprise Risk Management-Integrated Framework, [Online] Available: <http://www.coso.org>; retrieved Nov 18th 2009,.

Cronbach, L. (1951), Coefficient alpha and the internal structure of tests, *Psychometrika* Vol 16, 297–334.

Cumming, C.M & Hirtle, B.J (2001). The Challenges of Risk Management in Diversified Financial Companies, *Economic Policy Review*, Federal Reserve Bank of New York.

Cummins, J. D, Lewis, C M. and Wei, R. (2004), *The Market Value Impact of Operational Risk Events for U.S. Banks and Insurers*, [Online] Available; <http://ssrn.com/>; Retrieved on 15th August 2010.

Cyree, K. & Huang, P. (2004), "Bank Hedging and Derivatives Use: The Impact on and Sources of Shareholder Value and Risk," *Working paper*, University of Mississippi and Massey University.

- Davenport, E.W., & Bradley, L.M. (2001). Enterprise risk management: A consultative perspective, [Online] Available: <http://www.casact.com>; retrieved January 28, 2009
- Davies, D., Eckberg, C., & Marshall, A. (2006), "The Determinants of Norwegian Exporters' Foreign Exchange Risk Management", *The European Journal of Finance*, Vol. 12, No. 3, pp. 217-240.
- DeLoach, J. (2004), "The new risk imperative-an enterprise-wide approach", *Handbook of business strategy*, pp. 29-34
- Deloitte, (2004). Assessing the Value of Enterprise Risk Management, [Online] Available: <http://www.deloitte.com/>; retrieved on 19th January 2009,
- Deloitte, (2007), Enterprise Risk Management (ERM) Success through intelligent risk taking, [Online] Available: <http://www.deloitte.com/> ; retrieved on 19th January 2009,
- Dickinson, J.P & Muragu K. (1994). Market efficiency in developing countries: A case study of the Nairobi Stock Exchange. *Journal of Business and Accounting*, 21: 133-150.
- E.E Mazier (2001), CROs Must Go Beyond Numbers, *Property and Risk Causality/Risk and Benefits management*, pp.20
- Economist Intelligence Unit Limited and MMC Enterprise Risk.Inc, (2001), Enterprise Risk Management: Implementing new solutions, New York
- Economist Intelligence Unit Limited and MMC Enterprise Risk.Inc, (2009) After the Storm: A new era for risk management in financial services, New York
- Erden, F. (2003), "Optimal trust and teamwork: from groupthink to teamthink", *Work Study*, Vol. 52(5), pp.229-233
- Faulkender, M. (2005), "Hedging or Market Timing? Selecting the Interest Rate Exposure of Corporate Debt", *The Journal of Finance*, Vol. 60, No. 2, pp. 931-963.

- Fill, C. and Mullins, L. (1990), "The Effective Management of Training", *Industrial and Commercial Training*, Vol. 22(1), pp. 13-16
- Finniston, S.M. (1975), "Information communication and management", *Aslib Proceedings*, Vol 27 (8), pp. 346-361
- Freund, Y.P. (1988), "Planner's guide Critical Success Factors", *Planning Review*, Vol 16(4), pp. 20-23
- Füss, R. (2002). "The Financial Characteristics Between Emerging and Developed Equity Markets." *Paper presented at the Policy Modeling International Conference*, EcoMod Network, Brussels, and July 4–6.
- Grabowski, M. and Roberts, K. (1999), "Risk mitigation in virtual organisations" *Organisational Science*. Vol. 10(6), pp. 704-722.
- Halliday, S., Badenhorst, K. and Solms, R.V. (1996), "A business approach to effective information technology risk analysis and management", *Information Management & Computer Security*, Vol. 4(1), pp. 19–31
- Haubenstock, M. (1999). Organizing a Financial Institution to Deliver Enterprise-Wide Risk Management, *Journal of lending and Credit Management*, February 1, pp 46-52
- Hayashi, F. (1982), Tobin's marginal q and average q: A neoclassical interpretation." 50, 213-224.
- Hoyt, R.E., Moore, D. & Liebenberg, A.P (2008), *The Value of Enterprise Risk Management: Evidence from the U.S Insurance Industry*, [Online] Available: <http://www.soa.org/library/monographs/other-monographs/2008/april/mono-2008-m-as08-1-hoyt.pdf>; Accessed on 13th June 2010.
- Hughey, A.W. and Mussnug, K. J. (1997), "Designing effective employee training programmes", *Training for Quality*, Vol. 5(2), pp.52-57

Hunter, J. (2002), "Improving organizational performance through the use of effective elements of organizational structure", *International Journal of Health Care Quality Assurance incorporating Leadership in Health Services*, Vol. 15(3), pp. xii-xxi

Ifinedo, P. (2008), "Impacts of business vision, top management support, and external expertise on ERP success", *Business Process Management Journal*, Vol 14(4), pp.551-568

Innes, J., & Mitchell, F. (1990), "The process of change in management accounting: some field study evidence", *Management Accounting Research*, Vol. 1 No.1, pp.3-19

Ivancevich, D.M., Hermanson, D.R & Smith, L.M. (1998). The association of perceived disaster recovery plan strength with organizational characteristics, *Journal of Information Systems*, Spring, pp.31-40.

Jin, Y. & Jorion, P. (2004) "Firm Value and Hedging: Evidence from U.S. Oil and Gas Producers", Working paper, California State University at Northridge and University of California at Irvine.

Kleffner, A.E., Ryan, B.L & McGannon B. (2003). The effect of corporate governance of the use of enterprise risk management, *Risk Management and Insurance Review*, Vol.6, No.1, pp53-73.

Klimczak, K.M. (2007), *Risk Management Theory: A comprehensive empirical assessment*, [Online] Available; <http://mpa.ub.uni-muenchen.de/4241/>; Accessed on 07. November 2010

Kutner, M Nachtsheim, C & Neter, J (2004), *Applied Linear Regression Models*, 4th edition, McGraw- Hill Irwin, Boston.

Lam, J. (2000). Enterprise-wide risk management and the role of chief risk officer, *eRisk*, pp 1-5.

Lam, J. & Kawamoto, B.M. (1997) Emergence of the Chief Risk Officer, *Risk Management*, September: 30-34.

- Lang, L. & Stulz, R. (1994). Tobin's q, diversification, and firm performance, *Journal of Political Economy*, 102, 1248-1280.
- Liebenberg, A.P & Hoyt, R.E, (2003). The Determinants of Enterprise Risk Management: Evidence from the Appointment of Chief Risk Officer, *Risk Management and Insurance Review*, Vol.6, No.1, pp 37-52.
- Lindenberg, E.B. & Ross, A.S, (1981). "Tobin's q Ratio and Industrial Organization." *Journal of Business*, Vol.54, pp1-32.
- Lintner, J. (1965), "The Valuation of Risk Assets and Selection of Risky Investments in Stock Portfolios and Capital Budgets", *Review of Economics and Statistics*, Vol.47, pp.13-37.
- Lookman, A. (2004) "Does Hedging Increase Firm Value? Evidence from Oil and Gas Producing Firms," Working paper, Carnegie Mellon University.
- March, J.G. & Shapira, Z. (1987). "Managerial Perspectives on Risk and Risk Taking," *Management Science*, 33, 11, pp 1404-1418.
- Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995), "An integrative model of organizational Trust", *Academy of Management Review*. Vol. 20(3), pp. 709-734
- McAllister, D.J. (1995), "Affect- and cognition-based trust as foundations for interpersonal cooperation in organizations." *Academy of Management Journal*, Vol. 38 (1), pp. 24-59
- Meulbroek, L.L. (2002), Integrated Risk Management for the Firm: A Senior Manager's Guide, *Journal of Applied Corporate Finance*, Vol.14. pp 56-70.
- Modiglian, F & Miller, M.H, (1958). "The Cost of Capital, Corporation Finance, and the Theory of Investment, *The American Economic review* 48, pp 261 – 297.
- Mosadeghrad, A.M. (2006), "The impact of organizational culture on the successful implementation of total quality management", *The TQM Magazine*, Vol. 18(6), pp. 606-625

- Moss, G.D. (1997), "Effective training of trainers: the ATLS approach", *Education + Training*, Vol. 39(5), pp. 168–175
- Mossin, J. (1966). Equilibrium in a Capital Asset Market, *Econometrica* 34(4), pp 768 – 783.
- Mutsaers, E.J., Zee, H.V.D. and Giertz, H. (1998), "The evolution of information technology", *Information Management & Computer Security*, Vol. 6(3), pp. 115–126
- Nain, A. (2004). "The Strategic Motives for Corporate Risk Management," Working paper, University of Michigan.
- Oldfield, G.S & Santomero, M.A (1995). The Place of Risk Management in Financial Institutions, *Journal of Banking & Finance*. Vol. 19 (3-4), pp. 511-27.
- Panning, W.H. (2006). *Managing the Invisible: Measuring Risk, Managing Capital, Maximizing Value* [Online] Available: <http://www.ermsymposium.org/2006/pdf> ; Accessed on 3rd October 2010
- Pinto, J.K., Slevin, D.P. and English B. (2008), "Trust in projects: An empirical assessment of owner/contractor relationships", *International Journal of Project Management*,
- Pratt, J.W. (1964). Risk Aversion in the Small and in the Large, *Econometrica*, Vol. 32, p.122-36.
- PriceWaterhouseCoopers, (2007). Effective Risk Management in Financial Services, PricewaterhouseCoopers Global Financial Services Briefing Programme. Please include city of publication
- Quirke, B. (1996), "Putting communication on management's Agenda", *Journal of Communication Management*, Vol 1(1), pp.67-79
- Rochart, J.F. (1979), "Chief executives define their own data needs", *Harvard Business Review*, Vol 57 (2), pp. 81-93.

- Schanfield, A & Helming, D. (2008). 12 Top ERM implementation challenges, *Internal Auditor*, pp 41–44
- Servaes, H. (1996) The Value of Diversification During the Conglomerate Merger Wave, *Journal of Finance*, 51, pp 1201-25.
- Sharpe, W.F. (1964). “Capital Asset Prices: A Theory of Market Equilibrium Under Conditions of Risk”, *Journal of Finance*, Vol.19, pp.425-442.
- Shin, N. (1999), “Does information technology improve coordination? An empirical analysis”, *Logistics Information Management*, Vol. 12(1/2), pp.138-144.
- Smithson, C., Rutter, As & Betty J.S. (2005). Does Risk Management Add Value? A Survey of the Evidence, Oklahoma State University
- Standards and Poor's, (2007) Ratings Direct (November). Retrieved on 28th January 2009, www.standardandpoors.com/ratingsdirect.
- Stank, T.P., Daugherty, P.J. and Gustin, C.M. (1994), “Organizational Structure: Influence on Logistics Integration, Costs, and Information System Performance”, *The International Journal of Logistics Management*, Vol. 5(2), pp. 41-52
- Symons, J. (1995), “Making staff aware of risks”, *Health Manpower Management*, Vol. 21(4), pp. 15–19
- Tcankova, L. (2002), “Risk identification; basic stage of risk management”, *Environmental Management and Health*. Vol.13(3), pp. 290-297
- Tibachnick, B. G. & Fidell, L. S. (1996). *Using Multivariate Statistics (3rd edition)*. Harper Collins; New York.

Tillinghat-Towers, P. (2002), *Enterprise Risk Management in Insurance Industry – 2002 Benchmarking Survey Report*, [Online] Available: <http://www.towersperrin.com/> ; Accessed on 19th January 2011

Treven, S. (2003), “International training: the training of managers for assignment abroad”, *Education + Training*, Vol. 45(8/9), pp. 550-557

Tyler, T.R (2003), “Trust within organizations”, *Personnel Review*, Vol. 32(5), pp. 556-568

Vrijling, J.K., Hengel, W.V. and Houben R.J. (1995), “A framework for risk evaluation”, *Journal of Hazardous Materials*. Vol. 43(3), pp. 245-261

Wade, M. & Tomasevic, S. (2006). *Theories Used in IS Research - Contingency Theory* [Online] Available: <http://www.istheory.yorku.ca/cognitivefittheory.htm>; Retrieved on 28th January 2010.

Walker, P.L, Shenkir, W.G & Barton, T.L, (2002). *Enterprise Risk Management: Putting it all together*, Institute of Internal Auditors Research Foundation, Altamonte Springs, FL.

Wong, K.Y. (2005), “Critical success factors for implementing knowledge management in small and medium enterprises.” *Industrial Management & Data Systems*. Vol. 105(3), pp. 261-279

Yermack, D. (1996) Higher Market Valuation of Companies with a Small Board of Directors, *Journal of Financial Economics*, 40, pp 185-211.

Young, R. and Jordan, E. (2008), “Top management support: Mantra or necessity?”, *International Journal of Project Management*, Vol 26(7), pp. 713-725

Yow, S & Sherris, M. (2008). Enterprise Risk Management, Insurer Value Maximization and Market Frictions, *Astin Bulletin*, 38(1), pp 293-339.

Zwikael, O. (2008), "Top management involvement in project management A cross country study of the software industry", *International Journal of Managing Projects in Business*, Vol 1(4), pp.498-511

APPENDICES

Appendix I: Letter of introduction

From: Anisetu Rugendo Justus Makunyi

To: Respondent

Dear, Respondent

RE: Questionnaire

I am a student at University Of Nairobi pursuing Masters of Business Administration. I am carrying out a study on the A SURVEY OF CRITICAL SUCCESS FACTORS OF ENTERPRISE RISK MANAGEMENT AMONG COMMERCIAL BANKS IN KENYA.

You are kindly requested you to complete the attached questionnaire so as to enable me accomplish the study. Please, note that all the information given shall be treated purely and used for academic purposes and shall be treated as confidential. Thank you for taking your time to complete the questionnaire and for your time and cooperation.

Yours sincerely

Anisetu Rugendo Justus Makunyi

University Of Nairobi

| | |
|--|---|
| progress and a clear timetable for completing implementation. | |
| ERM framework is well formulated across the business and fully implemented | 6 |

4. What is your level of agreement with the following statements that relate to effect of top management on implementation of Enterprise Risk Management in commercial banks?
(1-Strongly agree, 2- Strongly agree, 3-Neutral,4- Disagree, 5 Strongly Disagree)

| Statement | 1 | 2 | 3 | 4 | 5 |
|--|---|---|---|---|---|
| Commitment and support from top management plays a key role in influencing the success in almost any initiative within an organization | | | | | |
| business vision positively influence the implementation of ERM in the bank | | | | | |
| Top management support staffing in the implementation of ERM | | | | | |
| The essence of commitment and support from top management supports the effective decision-making process to key risk issues | | | | | |
| Top management supports external expertise which positively influence the implementation of ERM in the bank | | | | | |
| The presence of a CRO is positively associated with implementation of ERM in the bank | | | | | |
| The board of directors are involved in the ERM adoption process | | | | | |

5. What do you think should be done in order to enhance implementation of ERM through the CRO?

.....
.....
.....

6. In your opinion, does organization culture affect implementation of Enterprise Risk Management in commercial banks?

Yes [] No []

7. To what extent does organization culture affect implementation of Enterprise Risk Management in commercial banks?

To a very great extent []

To a great extent []

To a moderate extent []

To a little extent []

To no extent []

8. What is your level of agreement with the following statements that relate to organization culture affect implementation of Enterprise Risk Management in commercial banks? (1- Strongly agree, 2- Strongly agree, 3-Neutral,4- Disagree, 5 Strongly Disagree)

| Statement | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| the collective programming of mind that distinguishes the members of one group or category of people from another | | | | | |
| organizational structure involves an organization's internal pattern of relationships, authority and communication | | | | | |
| Organizational structure provides the concept, guideline, direction and support to the employee that is conducted by the steering committee | | | | | |
| risk management is primarily associated with the fluidity of organizational structures | | | | | |

9. In your opinion, does risk culture affect implementation of Enterprise Risk Management in commercial banks?

Yes []

No []

10. To what extent does risk affect implementation of Enterprise Risk Management in commercial banks?

To a very great extent

To a great extent

To a moderate extent

To a little extent

To no extent

11. What is your level of agreement with the following statements that relate to effects of risk culture on implementation of Enterprise Risk Management in commercial banks? (1- Strongly agree, 2- Strongly agree, 3-Neutral,4- Disagree, 5 Strongly Disagree)

| Statement | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| There are several frauds in the organization | | | | | |
| There is high culture of staff appreciation which helps in ERM implementation | | | | | |
| Staff appreciation helps in reducing fraudulent case in the banks | | | | | |
| Staff work as team which help in mitigating risk in the organization | | | | | |

12. In your opinion, does training affect implementation of Enterprise Risk Management in commercial banks?

Yes

No

13. To what extent does training affect implementation of Enterprise Risk Management in commercial banks?

To a very great extent

To a great extent

To a moderate extent []

To a little extent []

To no extent []

14. What is your level of agreement with the following statements that relate to effects of training on implementation of Enterprise Risk Management in commercial banks? (1- Strongly agree, 2- Strongly disagree, 3-Neutral,4- Disagree, 5 Strongly Disagree)

| Statement | 1 | 2 | 3 | 4 | 5 |
|--|---|---|---|---|---|
| on-the-job training influence the implementation of ERM | | | | | |
| The high quality of the training manual influence ERM implementation | | | | | |
| It is inevitable that the success of an organization depends upon its staff or employees | | | | | |
| process of staff development and training should fulfill an organization's performance | | | | | |
| The purpose of training is to improve knowledge, skills and attitudes which in turn increase confidence, motivation and job satisfaction | | | | | |
| risk manager should set up training sessions through the directorate manager for members of staff and through the risk management team for consultants | | | | | |

15. In your opinion, does technology affect implementation of Enterprise Risk Management in commercial banks?

Yes []

No []

16. To what extent does technology affect implementation of Enterprise Risk Management in commercial banks?

To a very great extent []

To a great extent []

To a moderate extent []

To a little extent []

To no extent []

17. What is your level of agreement with the following statements that relate to does technology affect implementation of Enterprise Risk Management in commercial banks?
(1-Strongly agree, 2- Strongly agree, 3-Neutral,4- Disagree, 5 Strongly Disagree)

| Statement | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| information systems on which the critical business functions and processes depend on the computer technologies | | | | | |
| Organizations need to consider IT as an important factor in the face of increasing competition, higher performance levels, globalization, and liberalization | | | | | |
| IT plays a key role in achieving an organization's objectives | | | | | |
| IT relates to all aspects of the business processes, including access to a shared infrastructure consisting of knowledge, human assets, core competencies, resource allocation, performance management, project tasking and communication support | | | | | |

Organization structure

18. In your opinion, does organization structure affect implementation of Enterprise Risk Management in commercial banks?

Yes [] No []

19. To what extent does organization structure affect implementation of Enterprise Risk Management in commercial banks?

To a very great extent []

To a great extent []

To a moderate extent []

To a little extent []

To no extent []

20. What is your level of agreement with the following statements that relating to effects of organization structure on implementation of Enterprise Risk Management in commercial banks? (1-Strongly agree, 2- Strongly agree, 3-Neutral,4- Disagree, 5 Strongly Disagree)

| Statement | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| organizational structure involves an organization's internal pattern of relationships which influence the implementation of ERM | | | | | |
| one of the most important aspects for effective risk management is organizational structure | | | | | |
| Organizational structure provides the guideline, direction and support to the employee that is conducted by the steering committee in the implementation of ERM | | | | | |
| Management's role is to recommend policies for managing risk | | | | | |

Thank You

Appendix III: Licensed Commercial banks in Kenya

1. ABC Bank (Kenya)
2. Bank of Africa
3. Bank of Baroda
4. Bank of India
5. Barclays Bank
6. Brighton Kalekye Bank
7. CFC Stanbic Bank
8. Chase Bank (Kenya)
9. Citibank
10. Commercial Bank of Africa
11. Consolidated Bank of Kenya
12. Cooperative Bank of Kenya
13. Credit Bank
14. Development Bank of Kenya
15. Diamond Trust Bank
16. Dubai Bank Kenya
17. Ecobank
18. Equatorial Commercial Bank
19. Equity Bank
20. Family Bank
21. Fidelity Commercial Bank Limited
22. Fina Bank
23. First Community Bank
24. Giro Commercial Bank
25. Guardian Bank
26. Gulf African Bank
27. Habib Bank
28. Habib Bank AG Zurich

29. I&M Bank
30. Imperial Bank Kenya
31. Jamii Bora Bank
32. Kenya Commercial Bank
33. K-Rep Bank
34. Middle East Bank Kenya
35. National Bank of Kenya
36. NIC Bank
37. Oriental Commercial Bank
38. Paramount Universal Bank
39. Prime Bank (Kenya)
40. Standard Chartered Kenya
41. Trans National Bank Kenya
42. United Bank for Africa
43. Victoria Commercial Bank
44. Housing Finance