

**ANALYSIS OF THE ROLE OF INTERNAL AUDIT IN ENTERPRISE RISK  
MANAGEMENT (ERM) IN INSURANCE COMPANIES IN KENYA**

**BY**

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## **DECLARATION**

I declare that this project is my original work and has not been submitted for an award of a degree in any other university for examination / academic purposes.

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## **DEDICATION**

I dedicate this research project to my lovely spouse: Jones Otuke and our sons: Brayden and Aiden for their love, understanding, encouragement and support while conducting this study and throughout my study period. May The Lord bless you abundantly.

## **ACKNOWLEDGEMENT**

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## ABSTRACT

The importance to strong corporate governance of managing risk has been increasingly acknowledged. The objective of the study was to establish the role of internal audit in enterprise risk management in insurance companies in Kenya and if it is compliant with Institute of Internal Auditors' guidelines. The study adopted a descriptive cross-sectional survey. The study populations of the study were 50 insurance companies in Kenya as at 31<sup>st</sup> December 2015. The study used questionnaires to collect primary data.

The questionnaires were perused for completeness, incomplete questionnaires were discarded and only complete ones were used for analysis. Complete questionnaires were coded and keyed into SPSS. Data was presented in tables with percentages, means, standard deviations and frequencies. The information was displayed by use of bar charts and graphs. Content analysis was used to test data that is qualitative in nature or aspect of the data collected from the open ended questions. From the findings the study concludes that that internal audit plays a significant role in enterprise risk management in insurance companies in Kenya, which was compliant with Institute of Internal Auditors' guidelines.

The study established that the role of internal audit in enterprise risk management was to provide objective assurance that the major business risks are being managed appropriately and providing assurance that the risk management and internal control framework is operating effectively.

The study found out that top management plays a key role in influencing the success of ERM. The study found out that staff work as team which helps in mitigating risk in the organization and staff appreciation helps in reducing fraudulent cases in the company. The study found out that in the company training on risk improves employee knowledge on risk management and the process of staff training on risk management is to fulfill the organization's objective. The study revealed that technology plays a key role in achieving an organization's objectives on risk management; technology is considered as an important factor in the face of increasing risk. The top management should support external expertise which positively influences the implementation of ERM. The study recommends that there is need for Insurance Companies to consider the various factors affecting implementation of ERM in Kenya. There is need for Insurance Companies to enhance their organisation culture and structure as this will influence the implementation of ERM. There is need for the management of Insurance Companies to create budget and resource allocation for implementation of ERM in the organization.

# TABLE OF CONTENT

<b>DECLARATION.....</b>	<b>ii</b>
<b>DEDICATION.....</b>	<b>iii</b>
<b>ACKNOWLEDGEMENT.....</b>	<b>iv</b>
<b>ABSTRACT.....</b>	<b>v</b>
<b>LIST OF TABLES .....</b>	<b>ix</b>
<b>LIST OF FIGURES .....</b>	<b>x</b>
<b>LIST OF ABBREVIATIONS .....</b>	<b>xi</b>
<b>CHAPTER ONE .....</b>	<b>1</b>
<b>INTRODUCTION.....</b>	<b>1</b>
1.1 Background of the Study.....	1
1.1.1 Internal Audit.....	2
1.1.2 Enterprise Risk Management (ERM) .....	3
1.1.3 Role of Internal Audit in Enterprise Risk Management (ERM).....	5
1.1.4 Insurance Companies in Kenya .....	7
1.2 Research Problem.....	8
1.3 Research Objective.....	11
1.4 Value of the Study.....	11
<b>CHAPTER TWO .....</b>	<b>13</b>
<b>LITERATURE REVIEW .....</b>	<b>13</b>
2.1 Introduction .....	13
2.2 Theoretical Review .....	13
2.2.1 Agency Theory.....	13
2.2.2 Stewardship Theory.....	15
2.3 Determinants of Enterprise Risk Management .....	17
2.3.1 Internal Auditing .....	17
2.3.2 Top Management Support .....	18
2.3.3 Culture .....	19
2.3.4 Training .....	19
2.3.5 Technology.....	20

2.4 Empirical Review .....	21
2.5 Conceptual framework .....	26
2.6 Summary of the Literature .....	27
<b>CHAPTER THREE .....</b>	<b>28</b>
<b>RESEARCH METHODOLOGY .....</b>	<b>28</b>
3.1 Introduction .....	28
3.2 Research Design .....	28
3.3 Target Population .....	29
3.5 Data Processing and Analysis .....	30
3.5.1 Analytical Model .....	30
3.5.2 Test of Significance .....	31
3.6 Validity and Reliability .....	32
<b>CHAPTER FOUR.....</b>	<b>33</b>
<b>DATA ANALYSIS, RESULTS AND DISCUSSION.....</b>	<b>33</b>
4.1 Introduction .....	33
4.2 Descriptive Statistics .....	33
4.2.1 Demographic Information .....	33
4.2.2 Enterprise Resource Management in the Organization.....	36
4.2.3 Role of Internal Audit in Enterprise Risk management .....	40
4.2.4 Top Management Support for ERM.....	42
4.2.5 Organization Culture .....	44
4.2.6 Training .....	45
4.2.7 Technology .....	46
4.3 Regression Analysis .....	47
4.3.1 Model Summary .....	47
4.3.2 Analysis of Variance .....	47
4.3.3 Coefficients.....	48
4.4 Discussion of Findings .....	49

<b>CHAPTER FIVE .....</b>	<b>52</b>
<b>SUMMARY OF THE FINDINGS, CONCLUSIONS AND RECOMMENDATIONS..</b>	<b>52</b>
5.1 Introduction .....	52
5.2 Summary of the Findings .....	52
5.3 Conclusion.....	53
5.4 Limitations of the Study .....	55
5.5 Policy Recommendations .....	55
5.6 Area for Further Studies .....	56
<b>REFERENCES.....</b>	<b>57</b>
<b>APPENDICES .....</b>	<b>61</b>
Appendix I: Questionnaire .....	61
Appendix II: List of Registered Insurance Firms in Kenya .....	69
Appendix III: Regression Analysis Results .....	72



## LIST OF TABLES

Table 4.1: Level of ERM Implementation .....	35
Table 4.2: Risk Identification .....	36
Table 4.3: Risk Assessment .....	37
Table 4.4: Risk Mitigation .....	38
Table 4.5: Risk Monitoring.....	40
Table 4. 6: The Role of Internal audit in Enterprise Risk Management .....	41
Table 4.7: Top management and enterprise risk management .....	43
Table 4.8: Organization culture and implementation of enterprise risk management .....	44
Table 4.9: Effects of Training on Implementation of Enterprise Risk Management.....	45
Table 4.10: Technology in the Company.....	46
Table 4.11: Model Summary .....	47
Table 4.12: Analysis of Variance.....	47
Table 4.13: Coefficients.....	48

**LIST OF FIGURES**

Figure 2.1: Conceptual framework ..... 26

Figure 4.1: Length of time in operation in Kenya ..... 33

Figure 4.2: No of company branches ..... 34

Figure 4.3: Length of time that risk department has been in existence ..... 34

Figure 4.4: Top Management Support and Commitment on implementation of ERM ..... 42

## **LIST OF ABBREVIATIONS**

<b>ANOVA</b>	Analysis of Variance
<b>BOD</b>	Board of Directors
<b>COSO</b>	Committee of Sponsoring Organisation
<b>CRO</b>	Chief Risk Officer
<b>EAC</b>	East African Community
<b>ERM</b>	Enterprise risk management
<b>IAD</b>	Internal Audit Department
<b>IASB</b>	International Accounting Standards Board
<b>IIA</b>	Institute of Internal Auditors
<b>IRA</b>	Insurance Regulatory Authority
<b>IT</b>	Information Technology
<b>NASD</b>	National Association of Securities Dealers
<b>NYSE</b>	New York Stock Exchange
<b>RBA</b>	Risk Based Auditing
<b>RMD</b>	Risk Management Department
<b>SECP</b>	Security of Exchange Commission of Pakistan
<b>SOX</b>	Sarbanes – Oxley Act
<b>SPSS</b>	Statistical Package for Social Science

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background of the Study

The significance to solid corporate administration of overseeing danger has been progressively recognized. Entities are under pressure to distinguish all the business dangers they confront; social, moral and natural and in addition money related and operational, and to clarify how they oversee them to an adequate level (Bailey, 2007). In the meantime, the utilization of big business hazard administration systems has extended, as associations perceive their points of interest over less planned ways to deal with hazard administration. Inner evaluating, in both its confirmation and its counseling parts, adds to the administration of hazard in an assortment of ways. Associations attempt hazard administration exercises to distinguish survey, oversee, and control a wide range of occasions or circumstances. These can run from single activities or barely characterized sorts of hazard, e.g. showcase hazard, to the dangers and openings confronting the association in general (Francis, 2014).

The Committee of Sponsoring Organization (COSO) system characterizes (ERM) as a procedure affected by an component's overseeing body, organization and other staff, associated in methodology venture, expected to recognize potential events impacting the substance, and administer danger to be inside its risk longing for, to give sensible assertion regarding the achievement of element destinations. Henceforth it is an organized, reliable and nonstop process over the entire association for distinguishing, evaluating, settling on

reactions to and giving an account of chances and dangers that influence the accomplishment of its targets (COSO, 2004).

In Insurance business there is no way of avoiding risk without giving up the opportunity to gain profits. The insurance industry in Kenya is highly regulated and with the introduction of risk based supervision by the Insurance Regulatory Authority in 2016, insurance companies are required to have robust risk management mechanisms. Firms become competitive when they identify risks early and avoid them.

### **1.1.1 Internal Audit**

Inside inspecting is an inward capacity of a company built up by the administration to fortify corporate administration. Since interior examiners invest all their energy with one organization their insight about the organization's operations and inner controls is much more prominent than that of outer inspectors. Interior reviewing is an autonomous, unbiased, guarantee and checking action intended to enhance worth and advance on a company's processes. It aids an organization realize its goals by means of an organized and controlled method to assess and advance the usefulness of peril administration, mitigation and authority processes (Institute of Internal Auditors of America (IIA), 2005).

Alens (1997), contends that the part of the inside reviewer has expanded drastically in the previous quite a long while essentially in light of the expanded size and many-sided quality of numerous organizations. As the part of the inner examiner grows there has been a change of introduction of what he should do. The inside inspector is moving from focusing on operational usefulness to giving a more tactical contribution. This has put weight on the inner

examiner to grow new sorts of aptitudes including business investigation, vital administration, basic leadership and additionally human relationship abilities.

Inside review action gives certification that inner controls are set up and that they are sufficient to moderate the dangers; hierarchical objectives and targets are met and that corporate administration procedures are compelling and productive. Robertson (1998) argues that, many internal auditors are shifting their focus from control based auditing to Risk Based Auditing (RBA). In RBA, internal auditors have the responsibility to review management's risk assessment processes and to make a risk assessment of their own. Inside evaluating is an autonomous, target confirmation and counseling action. Its center part gives target affirmation to the board on the effectiveness of hazard administration. Undoubtedly, studies have demonstrated that top managerial staff and interior evaluators concur that the two most critical ways that inside reviewing gives esteem to the association are in giving target certification that the significant business dangers are being overseen properly and giving confirmation that the hazard administration and inward control system is working successfully (Francis, 2014).

### **1.1.2 Enterprise Risk Management (ERM)**

(Kleffner and Rashid 2003) characterize ERM as the administration of operational and monetary dangers at the same time keeping in mind the end goal to augment the cost adequacy of hazard administration inside the requirements of the association's resistance for hazard. Despite the fact that this definition includes operational dangers, it neglects to value that organizations are presented to different dangers like vital and reputational dangers furthermore neglects to distinguish who is in charge of hazard administration in association. The definition likewise neglects to demonstrate the linkage of hazard administration to the

association's targets. COSO (2004) then again portrays ERM as "a methodology, influenced by a substance's top administrative staff, organization and other work drive, associated in strategy setting and over the wander, proposed to recognize potential events that may impact the component, and regulate risk to be inside its peril longing for, to give sensible affirmation concerning the achievement of component goals"

From the diverse meanings of ERM, the hidden standards of ERM appear to be an incorporated way to deal with hazard administration crosswise over storehouses, supported by corporate hazard rationality or technique with the point of expanding association esteem (COSO, 2004). Venture hazard administration has gotten phenomenal worldwide consideration as of late. Because of developing desires for viable hazard administration over the whole venture, numerous top associations were deserting their customary way to deal with overseeing dangers by storehouses, where dangers ranges were overseen in separation from each other, and were embracing an endeavor chance administration approach (Lam, 2000). Along these lines, in numerous associations, "hazard administration" was changing into ERM. As today's organizations arrange their hazard administration systems, the late enormous insolvencies and titanic shareholder misfortunes are without a doubt on the psyches of corporate partners. Various hazard issues surfaced as a consequence of outrages in organizations, for example, Enron and WorldCom, leaving numerous stakeholders, administrators, and directors pondering own associations may confront. Present hazard environment can best be described by the oft-rehashed decree, (Walker, 2003).

Inside this climate of interminably growing corporate helplessness, Enterprise Risk Management developed to oversee hazard. Rather than depending on a customary, intra-departmental technique, range embraces particular dangers, ERM embraces a more broad perspective that fuses and encourages danger organization over the entire affiliation. Undertaking was lastly planned in ensuring improvement esteem of partner. Enterprise Risk Management simply accomplishes hence incorporate hazard administration (Walker, 2003). As showed by ERM Framework, different research made by COSO, ERM was a methodology moreover planned to "distinguish occasions which were potential in influencing substance watching hazard in its hazard craving, giving affirmation with respect to element destinations accomplishment."

### **1.1.3 Role of Internal Audit in Enterprise Risk Management (ERM)**

Inner inspecting is an autonomous, target confirmation and counseling action. Center part is giving target confirmation to the board on the sufficiency of hazard administration. For sure, investigations have demonstrated that board executives and interior reviewers concur that the two most vital ways that inner inspecting gives esteem to the association are in giving target certification that the significant business dangers are being overseen suitably and giving confirmation that the hazard administration and inside control system is working adequately (Fraser and Henry, 2007). The key variables to consider while deciding inward inspecting's part are whether the action raises any dangers to the interior review movement's autonomy and objectivity and whether it is probably going to enhance the association's hazard administration, control and administration forms (Ahlawat & Lowe, 2014).



Inside examining may give counseling administrations that enhance an association's administration, chance administration, and control forms. The degree of inside evaluator's counseling in ERM will rely on upon alternate assets, interior and outer, accessible to the directors and on the hazard maturity of the association and it is probably going to differ after some time (Fraser and Henry, 2007). Inside evaluator's proficiency in considering dangers, in comprehending the associations amongst dangers and administration and in help imply that the inward review action is all around fit to be also venture administrator for Enterprise Risk Management, particularly in the first phases of presentation (Ahlawat and Lowe, 2014). As the association's hazard development increments and hazard administration turns out to be more implanted in business activities, inner evaluating's part in championing ERM may diminish. Essentially, if an association utilizes the administrations of a hazard administration master or capacity, inner examining will probably give esteem by focusing on its certification part, than by undertaking the additionally counseling exercises (Fraser & Henry, 2007).

The key consideration in choosing whether counseling roles are perfect with the certification part is to figure out if the inner evaluator is accepting any administration accountability. On account of ERM, interior inspecting can give counseling administrations in as much as it has no part in overseeing dangers which is an administration's obligation and that senior administration embraces and backs ERM (Fraser and Henry, 2007). Ahlawat and Lowe, 2014 affirms that, at whatever point the interior review movement assist administration group in enhancing hazard administration forms, its arrangement of work ought to incorporate a reasonable methodology and course of events for relocating the obligation regarding these administrations to individuals from the administration group (Ahlawat & Lowe, 2014).

Inner examiners and hazard supervisors share some learning, abilities and qualities. Both, comprehend corporate administration necessities; have task supervision, investigative and expedition abilities and esteem having an equilibrium of hazard as opposed to extraordinary hazard taking or shirking practices. Though, peril supervisors serve just as the administration of the association and don't need to give autonomous and unbiased confirmation to the review board. Nor ought interior examiners who try to develop their part in ERM to think little of the hazard supervisors' expert territories of learning, which are outside the assortment of information for most inward reviewers (Fraser and Henry, 2007). Any inward inspector who can't show the suitable abilities and information ought not to attempt work in the territory of hazard administration. Besides, the head of interior review ought not give counseling administrations here if satisfactory abilities and learning are not accessible inside the inner review action and can't be acquired from somewhere else (Brody and Lowe, 2010).

#### **1.1.4 Insurance Companies in Kenya**

The insurance industry in Kenya has seen various changes being presented and embraced. It is in any case, stressing to attest that eight protection organizations go under. These include: - (Kenya National Assurance, United Insurance , Lake Star Assurance , Standard Assurance, Access Insurance , Stallion Insurance, Invesco Assurance and Blue Shield Insurance Company). In light of this pattern, the legislature of Kenya reacted by setting up the (IRA) which is the prudential controller protection business in Kenya. IRA got to be independent on first May, 2007 through an Act of Parliament. IRA is likewise in charge of administering and building up the protection business as a team with different partners, for example, operators and specialists.

Kenya's insurance industry leads inside the East Africa Community and is a key player in the COMESA locale. Business utilizes more than 10,000 individuals. As per Ndung'u (2012), the Kenyan protection industry recorded KShs 100 billion of Gross Direct Premiums in the year 2011. It has developed a normal rate of 16% p.a. throughout most recently. Kenya presently has 50 authorized agencies. This business can expand enormously if the administration gets resources into the business rather than just assuming the part of control. AKI estimate additional increase of the business by an average of 6% in the following three years individually. Regular market convention of the (EAC) makes a major market loaded with circumstances. As indicated by (Ndung'u, 2012), the future pattern of the protection and reinsurance showcase in Africa was to be spread crosswise over nations with free development and with the chance to adventure full cross-fringe development.

## **1.2 Research Problem**

Kenya's Insurance market have seen a number of Companies such Invesco, Blue Shield Insurance Company and Standard Assurance having collapsed due to factors that are attributable to failed systems and inadequate risk management controls. Besides, the Kenyan Industry is currently facing stiff competition with local and foreign owned firms competing for the slowly growing market (Kenya Insurance Report, 2015). Therefore, to maximize the returns, the companies need not only to take considerable and controlled risks, but also minimize the losses that may arise from operational lapses within their routine processes. Consequently, prudent management of risks would help the companies achieve a competitive edge by minimizing loss of revenue due to loss of customers to competition (IRA, 2015).

One of the concerns encompassing ERM is the part of inside inspecting capacity in ERM procedures. Since inward review proficient gauges adopt a hazard based strategy, the inner review work has a huge enthusiasm for the undertaking's danger administration procedures, as it influences inside review's proficient obligations (IASB, 2014). Inner evaluating's center part as to ERM is to give unbiased confirmation to the directors on the efficiency of hazard administration. Studies have demonstrated that top managerial staff and inside evaluators concur that the most critical ways that interior inspecting gives esteem to the association are in giving target certification that the significant business dangers are being overseen fittingly and giving affirmation that the hazard administration and inner control system is working viably.

Insurance agencies in the 21st century confront a considerable cluster of dangers. The worldwide protection industry has been encountering major auxiliary changes in the most recent two decades (Mahlberg and Url, 2013). The Kenya's protection industry has thrived as far as its individuals and premiums. Total premium recorded by business in 2015 was Kshs. 116.9 billion with life business contributing 35% while non-life business contributed 65%. This showed a 152% development from Kshs.76.9 billion in 2010. In any case, insurance entrance proportion (GDP share to premium) was 3% in 2010 (AKI, 2015); it was a change from 2.5% in 2010 when contrasted with the propelled UK, Japan and Hong Kong economies to infiltration apportion of 8.1, 11 and 11.4% individually.

Despite industry growth, a few challenges incurred going from misrepresentation, low capitalization, poor administration and poor open view of insurance (IRA, 2008). Some insurance companies have been placed under receivership because of failure to adhere to policy holders. Companies placed under statutory management include; (Access Insurance ,

Kenya National Assurance, Lakestar Insurance, Liberty Insurance, Stallion Insurance, United Insurance, Invesco Insurance, Standard Insurance and BlueShield Insurance Company Limited).

Empirical studies done in Kenya on Enterprise Risk Management have not addressed the insurance sector, Odoyo, Omwono and Okinyi (2014) did an investigation of the part of interior review in executing hazard administration in state organizations in Kenya. The study found that administration of State Corporation needs to make a situation bridle duty and support to inside review in the event that it is to adequately play out its obligation of giving confirmation that hierarchical dangers are overseen successfully. Murithi (2009) conducted a review of the part of inside inspectors in big business wide hazard administration for recorded organizations in Kenya; the study set up that inner examiner assumed the part of affirmation in big business wide hazard administration for recorded organizations in Kenya. Kibet (2008) led a review of the part of interior review in advancing great corporate administration in state possessed undertakings, the study set up inside review decidedly impact corporate administration in state claimed endeavors. Wanjohi and Ombui (2014) did a study on the impacts of hazard administration rehearses on the execution of protection firms in Kenya, an instance of AIG insurance agency restricted, the study found that the underlying causes of operational risk losses are not always initially observable. Obudho (2014) conducted research among financial risk and financial execution of insurance companies. The study found monetary execution changes of insurance companies in Kenya represented changes in capital management risk, financial risk, solvency risk, liquidity risk and size of the company.

In the past most insurance companies did not have risk department, hence the internal auditors were the ones who were handling risk management. Two years ago IRA made it mandatory that all insurance companies should have separate risk department managed by qualified risk officers. Therefore it has been challenging to differentiate the roles of an internal auditor from the risk officer's roles. The study tried to fill hole on the part of inward review in big business hazard administration (ERM) in insurance agencies in Kenya, this study looks to set up the part of inside review in big business chance administration and to what degree is it agreeable with Institute of Internal Auditors' rules. This study addressed the question; what is the role of internal audit in ERM in insurance companies in Kenya and is it compliant with Institute of Internal Auditors' guidelines?

### **1.3 Research Objective**

Goal of research was to establish the role of internal audit in ERM in insurance companies in Kenya and if it is compliant with Institute of Internal Auditors' guidelines.

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

Research findings will be of importance to the management of Insurance companies in Kenya, internal audit role in ERM will be understood in insurance companies. This will assist them in risk management in their organization through the internal audit functions. The study finding will assist internal auditor in insurance companies in understanding their role in the risk management, this will help them in executing their assurance and consulting activity in the organization with the aim of adding value and improving on an organizations' operations.

The finding will be of significance to shareholders in insurance companies in Kenya's they will get to know auditor internal role ERM, this will assist in safeguarding shareholder's wealth in the company, through risk mitigation.

The findings of the research will be of significance to the makers of policy in insurance industry as they will understand ERM role, this will assist them in designing policies to enhance of auditor internal role in implementing enterprise risk management framework.

Research will add to information on internal audit role in enterprise administration hazard.

The study finding will provide future references and literature review.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This section focuses on analysis of literature. The applicable theories on the role of internal audit are discussed here. The next section focuses on a review of internal audit role in ERM followed with an empirical review of literature. Last section summarizes the chapter and presents the gap in literature.

#### **2.2 Theoretical Review**

There are two sorts of parts anticipated from an inner reviewer. This area centers the discourse on the affirmation and counseling parts particularly in the ERM. The inner examiners' affirmation parts are speculated to mirror the organization hypothesis point of view, while the inward reviewers' counseling parts are to consider the stewardship hypothesis viewpoint. In both, the inward reviewers were the board's and administration's delegate seen as operator in office hypothesis viewpoint also stewardship hypothesis point of view. The shareholders remain directors (Mohd, 2011).

##### **2.2.1 Agency Theory**

Hypothesis of organization was led by Stephen Ross and Barry Mitnick in 1972. The association speculation is a supposition that clears up the relationship among principals and administrators in business. Agency Theory reveals how to best organize associations in which one get-together chooses the work while another social occasion makes the fundamental strides. (Jensen and Meckling, 1976) As indicated by the organization hypothesis, an organization comprises many agreements among proprietors of financial



assets and supervisors accused of utilizing and maintaining assets. Office hypothesis sets that specialists access much data than principals and that this data antagonistically influences capacity of principals to screen acts of agents as to whether they are or not benefitting the principals. Besides, a supposition of office hypothesis was that principals and specialists behave normally hence utilize contracting to increase their riches. Result supposition might be the "ethical risk" issue (Jensen and Meckling, 1976), where to amplify sole particular riches; operators confront the situation of doing contrary to the principal's benefits. Principals don't have admittance to accessible data during choice making by a specialist, they can't figure out if the operator's activities are to the greatest advantage of the firm (Sarens & Abdulmohammadi, 2011).

Lessening probability of issue (adverse selection) and ethical risk issue, principals and operators take part in contracting to accomplish pareto-optimality, including foundation of observing procedures, for example, inner inspecting (Adams, 1994). In particular, interior evaluating was viewed as a holding cost borne by operators to fulfill the principals' requests for responsibility (Watts, 1988). Maintaining business cost, the cost of the interior review capacity was paid by principals to secure monetary advantages. As it were, administrators put resources into the interior review capacity to show to the governing body (speaking to the proprietors of the organization), that they have the organization under control. All the more particularly, directors need to demonstrate that they have a sufficient and successful hazard administration and inside control framework (Sarens & Abdulmohammadi, 2011). Administration conduct concerning ERM implementation could be clarified utilizing the theory

ERM acts as checking system in securing benefits of the principal. Presence of inside evaluators is seen as observing component to guarantee appropriate usage of Enterprise Risk Management by administration. Usage of Enterprise Risk Management administered components includes huge speculations in financial and non-fiscal assets and inward reviewer screens, hence watch organization of assets to guarantee great benefit of stakeholders. So also, the inside inspectors are additionally anticipated that to play out their confirmation parts in the Enterprise Risk Management in organizations that intentionally actualize the Enterprise Risk Management (Mohd , 2011).Auditing internally work assumes a critical part in lessening data asymmetries amongst principals and specialists. We contend that the more the data asymmetry, the more noteworthy the requirement for individuals going up against an observing part, therefore the more the association would contract inward evaluators. More investment in the inner review work implies that there was moderately more staff in the association whose real obligation was effectively observing the association.

### **2.2.2 Stewardship Theory**

Stewardship theory was pioneered by Schoorman and Donaldson in 1997. Stewardship theory is based on the analysis of the theory in modern corporations where the owner's and managerial functions are separated. Theory gets foundations from brain research and human science characterized by (Davis, Schoorman and Donaldson ,1997) as "shareholders wealth are boosted by steward through organization execution, on grounds of amplification. In view of this, stewards are association authorities. Not in any manner like office speculation, stewardship theory stresses not on the perspective of freedom (Donaldson and Davis, 1991), yet rather with respect to top organization being as stewards, consolidating their destinations

as a part of the affiliation. The stewardship perspective recommends that stewards are satisfied and influenced when various leveled accomplishment is refined.

(Agyris, 1973) claims that association theory views a worker or people as a budgetary being, which smothers an individual's own specific desires. Regardless, stewardship hypothesis sees the immensity of structures that enable the steward and offers most over the top self-governance in perspective of trust (Donaldson and Davis, 1991). It weighs on the position of specialists or directors to act all the more self-governing so that the shareholders' advantages are extended. Ironically (Daily,2003) claimed that to ensure their notorieties for being pioneers in affiliations, heads and supervisor were slanted to run the firm to exploit money related execution and moreover shareholders' favorable circumstances. In this sense, it was accepted that the alliance's execution can unmistakably impact point of view of their individual execution.

(Fama 1980) contend officials together with directors were moreover managing their occupations remembering the true objective viewed as successful association stewards, while, (Shleifer, 1997) demands administrators return back to monetary masters to develop a fair reputation so that market re-entry of fund occurs.. In addition, theory suggests binding the function CEO and chairperson hence decreasing price of office hence noticeable affiliation. Apparently best protecting of shareholders enthusiasm. It's exactly got benefits speculations consolidated than isolated (Donaldson and Davis, 1991).

Nevertheless, the inward inspectors' counseling parts in the ERM recommend an alternate point of view. The inner examiners serve as business accomplice to administration particularly in giving exhortation to administration on execution of Enterprise Risk Management. Counseling parts by inside evaluators in the ERM are imperative particularly

organizations expecting to execute ERM. Functions of the inside evaluators in giving a serious direction can assist administration group set up Enterprise Risk Management unit (Mohd, *et al*, 2011).

### **2.3 Determinants of Enterprise Risk Management**

The principal part of inward review is to help administration to accomplish association's objectives. It additionally gives confirmation that the administration has executed an agreeable interior control framework for hazard counteractive action. In aggregating, inside review gives inward counseling administrations to the entire association regarding help, advices, preparing and directs (IIA, 2011). As per IIA (1999); "Inside review is an autonomous, impartial guarantee and checking action intended to complement worth and advance an organization's processes. It helps an association complete its goals by bringing an exact, instructed approach to manage survey and upgrade reasonability of peril organization.

#### **2.3.1 Internal Auditing**

According to the IIA (2009) auditing internal focuses on areas diverse; risk management, corporate governance and internal control. Internal auditors are important in giving advice and confirmation to the administrators that all is well. Previously, IIA issued "The Role of Internal Auditing (ERM)" as a track to know their work in ERM procedure. Lately, IIA report portrays four essential exercises for inward inspector to be responsible, which are; organizing ERM exercises, hence evaluating and identifying ERMs framework management developing support strategy of hazard administration.

Inner review assumes a serious part of hazard administration system in associations. Inner review assumes a basic part in observing the hazard profile of an association. Additionally, it

ought to arrange territories keeping in mind the end goal to give better hazard administration techniques (Lindow and Race, 2002). An inward review can oblige for partnership in distinguishing and assessing dangers and lay the calling at the bleeding edge of the hazard administration (Walker et al., 2003). Also, Kwan (2009) clarifies that inside an organization, improvement of a hazard based culture is crucial keeping in mind the end goal to develop a solid authoritative duty for hazard administration i.e. the improvement of a coordinated hazard administration system.

### **2.3.2 Top Management Support**

The senior administration can allocate their duties to their juniors as per the interior control to the inner review work (San and Govindarajan, 1984). Interior review likewise assumes a part of inside administration system in associations. From the office perspective, the part of solid administration inside a firm is laid by adjusting the administration interests to the partners so as to minimize office costs (Cohen, 2002). Autonomous seat, free executives on the board, inside review, outer review and successful review council are diverse corporate administration components used to screen conduct of the administration (Cohen et al., 2004). As per The mind boggling collaborations inside these administration systems resemble a "corporate administration mosaic" (Cohen., 2004).

Earlier research has demonstrated the significance of top administration support and duty as a main consideration in ERM usage. (Basu 2009) found that top administration support and responsibility assume a noteworthy part in giving adequate assets and inspiration to actualize effectively. Such as setting up controlling board to decide the bearing of the ERM venture, to draw in the ERM extend group and screen the usage advance. Beat administration needs to

openly convey the ERM extend as a top need and designate important assets to satisfy the goals of ERM execution.

### **2.3.3 Culture**

The importance of culture has been delineated from different viewpoints. Geert Hofstede is outstanding for culture hypothesis. Hofstede (2001) characterizes culture as "mind programming which identifies individuals differently". Agreeing Hofstede's definition, culture comprises examples of qualities, musings, contemplations and feelings transmitted by variables in forming conduct. Conviction results, states of mind abilities influencing considerations, feelings and activities.

Grabowski and Roberts (1999) recommend that Enterprise hazard administration requires the mix of a few societies making system into a solid whole in which the significant presumptions and embraced estimations of each of the part associations by merging a culture. Specifically circumstances, directing gatherings searching agreement with the end goal for administration to succeed. The significance of culture inside big business hazard administration is that information transference obliges people to meet up to connect, and impart learning mutually.

### **2.3.4 Training**

Powerful usage of web innovation requires broad adjustment of the client's present business procedures to have the capacity to completely use the ability of the new innovation (Treven, 2003). New abilities and new procedures required when for association overhaul obliges representatives to learn new methodologies, along these lines making information hindrances. New innovation at times requires complex understanding and mental capacity

that might be hard to secure because of the constrained ability of human workers (Hughey & Mussnug, 1997). (Sumner, 2000) found that interest in preparing the clients to comprehend ERM framework was higher than anticipated in ERM extend usage. Successful execution of ERM frameworks requires broad adjustment of the representative's present business procedures to have the capacity to completely use the ability of the new frameworks. New aptitudes and new procedures required when associations overhaul things to utilize ERM frameworks oblige workers to learn new things (Treven, 2003). New innovation once in a while requires complex understanding and mental capacities that might be hard to control because of the restricted ability of human workers (Sumner, 2000).

### **2.3.5 Technology**

Halliday, Badenhorst and Solms (1996) characterize (IT) as comprising parts: " data frameworks (counting data) basic business capacities procedures depend the PC advancements (equipment and programming) bolstering handling, stockpiling and dissemination of the organization's information and data". Information is given by being connector from one person to information and another (Wong, 2005).

Associations need to consider IT as an imperative figure the substance of expanding rivalry, higher execution levels, globalization, and progression. IT assumes a key part in accomplishing an association's destinations. IT identifies with all parts of the business forms, including access to a mutual framework including learning, center capabilities, asset distribution, administration, extend entrusting and correspondence (Mutsaers, 1998). (Shin, 1999) concentrates utilizing IT to update business forms and enhancing business gainfulness and efficiency. IT conforms data preparing, sharing, brisk responsiveness, and better

coordination among autonomous units of an affiliation and across over associations. IT relates to decreasing costs, such as, documentation price, choice information and savvy checking. Xenomorph (2007) contends that "Powerful hazard administration is outlandish without successful data innovation" and portrays the IT design fundamental for this.

## **2.4 Empirical Review**

Various researches on audit role internal ERM are published. Empirical research on audit role internal ERM insurance is minimal.

### **2.4.1 International Evidence**

Saud (2015) did a study on the role of internal audit in organization goals achievements: a security of exchange commission of Pakistan (SECP) Perspective. The paper aims at examining the relation between internal audit and organization goals. In this paper, at first, the conceptual approach of internal audit, which could be used as a mechanism of risk management, corporate governance and internal control, is analyzed. Then, integrated categorization of the responses received from the SECP internal audit staff is depicted in three different tables (i.e. coded in common), word frequencies and linked table. After that the role of internal audit in organization's goals explanatory model presented. Finally, I suggest, internal control and corporate governance play crucially in business survival and success.

Therese (2015) did a study on ERM process: interviews of ERM process champions. Utilizing meetings and reviews of ERM associations, research gives rich bits of knowledge into ERM execution. Meetings uncovered associations were well on the way to embrace an



ERM usage to address key issues regularly persuaded by support for the procedure from the directorate (BOD) and review board, with couple of protests raised. The ERM procedure ordinarily started with a rundown of dangers created with senior administration info, and ERM regularly brought about hierarchical changes with new obligations majorly widely recognized. Few of the associations had a formal meaning of hazard hunger, with numerous depicting the craving definition as incorporated into vital goals or techniques.

Lindnér (2013) did a study on actualizing undertaking hazard administration in Swedish Corporations: an investigation of motivating forces and snags. The study was intended to take a gander at why organizations choose to actualize ERM and what snags are confronted in the execution procedure. In view of meetings with CROs of 12 Swedish non-money related firms that unequivocally claim to have ERM, the study reasons that controls on corporate administration and enhanced venture basic leadership are the two primary drivers of ERM-usage. The study distinguished arrangement of deterrents incorporating a contention in who the hazard proprietor is, troubles to total subjective and quantitative dangers, hindered imagination because of ERM and that the character of the usage is reliant on the CRO's experience. The study recommended that the usage should be possible more productive if went before by an arranging and correspondence stage, and that the execution procedure itself can be esteem including by enhancing inside participation and diminishing interior issues.

Chih-Yang (2007) conducted a study on inner control, venture hazard administration, and firm execution. Firms with powerless inner controls are recognized as those that unveil material shortcomings in inside controls in intermittent filings from August 2002 to March

2006, as required by SOX. The observational results, in light of an example of 708 firm years with the revelations of material shortcomings, demonstrate that organizations with feeble inner controls have bring down market-esteem. Expanding on the' endeavors for SOX to enhance inner controls, increasingly firms are beginning to receive Enterprise Risk Management (ERM), on the grounds that sound interior control framework lays on satisfactory and complete investigation of big business wide dangers.

#### **2.4.2 Local Evidence**

Gathogoh (2014) did an examination concerning the part of inner evaluating capacity in big business hazard administration, with concentrate on co-agent school of Kenya. Solid information was gathered and got from this foundation, particularly concerning interior reviewing and hazard administration. Consequently, the accompanying perspectives were examined: The present part of inside reviewers in agent Kenyan College and circumstance of hazard administration agent Kenyan College. This request helped with deciding the main inward evaluating and venture hazard administration issues in agent Kenyan College. After that, reasonable arrangements were measured against the details and necessities. The consequences of this examination offered path to the proposal that endeavor hazard administration in agent Kenyan College ought to be overseen by College Council and administration. Besides, inward reviewers could help in recognizing, assessing and writing about every conceivable hazard encompassing the agent Kenyan College.

Odoyo, Omwon and Okinyi (2014) did an examination of the part of inside review in actualizing hazard administration in state partnerships in Kenya. The study was completed to overview where populace was 99 participants from companies working under State Corporations Act. Discoveries, found that administration of State Corporation needs to make

a situation that will outfit duty and support to inside review in the event that it is to viably play out its obligation of giving confirmation that authoritative dangers are overseen adequately. This might be conceivable if people inside associations know about the part and significance of inner review work in usage of big business chance administration.

Murithi (2009) conducted a survey of the role of internal auditors in enterprise-wide risk management for listed companies in Kenya. To achieve the objective set, a survey involving all the internal audit departments of the sampled companies was conducted, data analysis was done, and with a response rate of 65%, it was concluded that the outcome of the study fairly represented the Kenyan industrial and allied sector internal auditors understanding of their role in risk management. From the findings, the study found that Kenya 's industrial and allied sector companies are yet to adopt ERM and the internal auditor is doing the bulk of the ERM work instead of all the stakeholders being involved in risk management. The study established that majority of the internal auditors of the responding companies were well aware of their core roles in risk management as evidenced by the high ratings given to the core internal auditors roles as identified by IIA (2003), the internal auditors were expending too much time on roles which they should go slow on (legitimate roles) as identified by IIA (2003) due to the lack of RMDs in their companies.

(Kibet, 2008) did a study on the part of inner review in advancing great corporate administration in state claimed undertakings. The purpose of this was to establish the role of internal audit in promoting good corporate governance in state owned enterprises. The study used exploratory research and primary data was collected via a questionnaire. The population

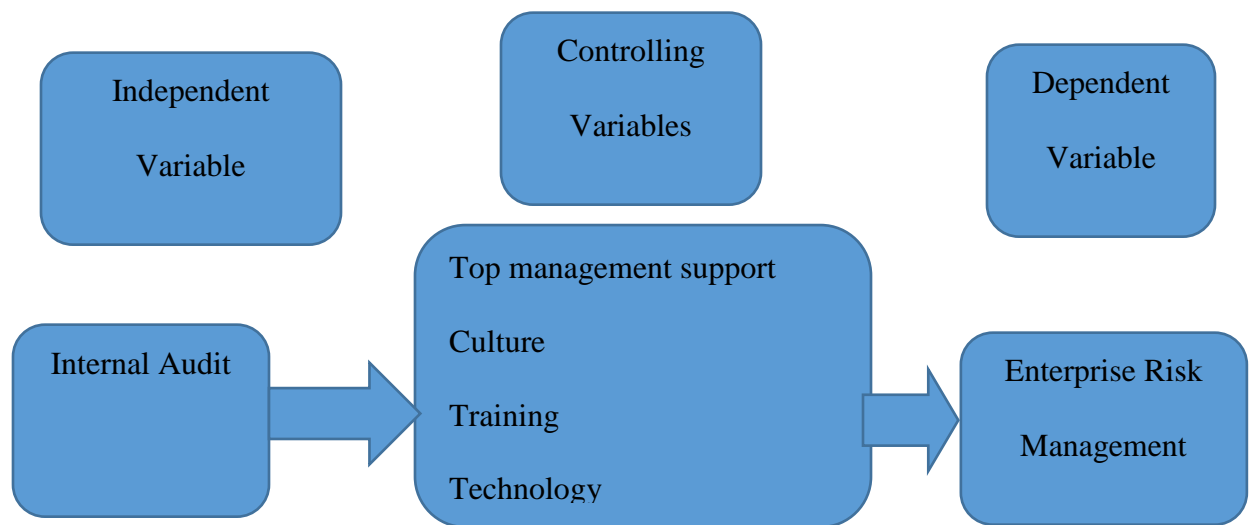
comprised of all state owned enterprises headquartered in Nairobi. Twenty-nine responses were received representing sixty-seven percent of the sample size. The study found that to enhance the independence of the internal audit function, it should report to the board or the audit committee and that internal audit staff be dismissed after the approval of the audit committee. The primary action of inside review, is assessing the amplexness of inner controls, giving confirmation about the accomplishment of the association's destinations with respect to unwavering quality of monetary reporting and consistence to relevant laws and directions. Leng'ongu (2000) conducted a study on review inside control capacity and its suggestion for hazard evaluation by the outside an instance of cited organizations. A structured questionnaire addressed to audit managers of both quoted companies and audit firms collected necessary information. The analysis found out that. though, in relative terms, internal audit departments of firms in financial investment sector was rated strongest, there was no significant differences in the strength of internal audit departments across industries implying that auditors should rely equally on the systems emanating from this department if internal controls are sensitive to strength of internal audit departments. However, except in two cases, there was no evidence that there was any significant difference in the extent to which external auditors relied on the internal controls of firms across sectors.

Wanyoike (2007) did data analysis, and with response rate of 52%, it was concluded that the outcome of the study fairly represented the banking industry internal auditors' practices and perception of risk management. The findings indicated that seven banks out of twenty-one (33%) had not established a separate risk management department. It also emerged that only 14% of the internal auditors could clearly list the distinct role of IAD and those of RMD. For institutions both departments, a conflict was already brewing between IAD and RMD in 29%

of the institutions. The conflict centered mainly on lack of clarity on the distinct roles to be played by those two departments in the whole ERM process. The roles of risk management department in summary include, creating or recommending enterprise wide risk policies and procedures, developing and implementing methodology for measuring risks across the institution in a consistent and uniform manner.

## 2.5 Conceptual framework

Mugenda and Mugenda (2003) observed that a reasonable system is a conjectured representation that distinguishes the model under study and the relationship between the reliant and autonomous factors. Kombo and Tromp (2006) characterize a theoretical system as an arrangement of wide thoughts and standards with significant enquiry field which are utilized in structuring consequent analysis. Figure 2.1 below represents the conceptual model that is applied for this study.



**Figure 2.1: Conceptual framework**

**Source: Author 2016**

## **2.6 Summary of the Literature**

Insurance companies exist to achieve specific goals and objectives. The inward review action ought to screen and assess the viability of the association's hazard administration framework. Various hazard came as aftereffect of the embarrassments at organizations, for example, Enron and WorldCom, leaving numerous shareholders, administrators, loads up pondering their associations. Inside evaluating is an autonomous, target certification and counseling movement. Its center part is giving target affirmation to enhance hazard administration.

From theoretical review, theories have been advanced that explain internal audit role in ERM insurance companies. The theories are agency theory and stewardship theory. In this study, it is important to understand which theory may better explain audit internal role in ERM in insurance companies. Experimental survey demonstrates various universal research which have analyzed inward review part in ERM. The outcomes indicate blended results and in this way uncertain. Empirical research done in Kenya include; Odoyo, *et al* 2014; Murithi, 2009; Kibet, 2008 and Wanyike, 2007. To the researcher knowledge none of these study has sought to determine internal audit role in (ERM) insurance companies, gap which this study seeks to fill.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

The part includes; research structure, populace target, instruments of collecting data, and analysis of information.

#### **3.2 Research Design**

Is used in answering questions of research. It is a structure for indicating the connections among factors of study and also blue print that frameworks every technique from the speculation to the investigation of information (Kerlinger, 2007). Research adopted a descriptive cross-sectional survey. According to Cooper and Schindler (2006), cross sectional studies are carried out once. (Mugenda & Mugenda, 2008). Creswell and Clark (2003) suggest that a descriptive research design deals with the what, how and who of a phenomenon which is the concern for this study. This claim was later echoed by Berg (2008), who argued and allows a room for generalizability and flexibility of the findings.

This research design is thus most appropriate since the objective of the study was to establish the role of internal audit in ERM in Insurance companies and if it is compliant with Institute of Internal Auditors' guidelines. Descriptive cross sectional in nature is a method of social affair data by scrutinizing those people who are the protest of the exploration and having a place with an agent test, through an institutionalized addressing strategy with the point of contemplating connections between variables at a particular time (Saunders *et al*, 2007).

### **3.3 Target Population**

As per Ngechu (2004), a study populace is an all-around characterized or indicated set of individuals, gathering of things, family units, firms, administrations, components or occasions which are being examined. Along these lines the populace ought to fit a specific determination, which the analyst is concentrating on and the populace ought to be homogenous. (Keya 1989) states that for peoples that fit an analyst detail, the populace can be separated into sets, populace or strata and which are fundamentally unrelated. The study populations were 50 insurance companies in Kenya as at 31<sup>st</sup> December 2015 (Appendix II). The respondents were Head of internal audit. (Mugenda and Mugenda, 2003), clarify that the objective populace ought to have some discernible attributes, to which the scientist means to sum up the aftereffects of the study.

### **3.4 Data Collection Instrument**

As per Ngechu (2004), there are numerous techniques for information gathering. The decision of an apparatus and instrument depends for the most part on the qualities of the subjects, explore theme, issue address, targets, outline, expected information and results. Donald (2006), noticed that there are two noteworthy wellsprings of information utilized by respondents; essential and optional information. Essential information will be data accumulated straightforwardly from respondents and for this study the scientist utilized surveys.

The study used questionnaires (Appendix I) to collect primary data. The questionnaires were dropped and picked later from the head of internal audit in the insurance companies. Secondary data were collected and analyzed from published material.



### **3.5 Data Processing and Analysis**

Completeness for questionnaires was perused; incomplete questionnaires were discarded and only complete ones were used for analysis. Complete questionnaires were coded and keyed into SPSS. Data was presented in tables with rates, means, standard deviations and frequencies. Data showed utilization of bar diagrams. Content examination was utilized to test information that is subjective in nature or part of the information gathered from the open finished inquiries. As per Baulcomb, (2003), content investigation utilizes an arrangement of classification for making legitimate and replicable deductions from information to their unique circumstance. All the variables in the study were measured using data collected from the questionnaire.

#### **3.5.1 Analytical Model**

The following multiple regression equation was shown in this study,

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \varepsilon$$

Where:

$\beta_0$ , the intercept of equation

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$ : Coefficients for independent variables.

Y: is the enterprise risk management, was measured by the comprehensiveness of enterprise risk management level of implementation by Insurance Companies, this was measured using various statements on Likert scale on enterprise risk management (risk identification, risk assessment, risk mitigation risk monitoring).

X1: internal audit role in ERM, was measured by comprehensiveness of internal audit role in ERM, this was measured using various statements on Likert scale on enterprise risk management.

X2: is the 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. This was measured using various statements on Likert scale on top management support.

X3: is the organization culture, was measured by the severity of fraud in the organization and culture of staff appreciation within the organization. This was measured using various statements on Likert scale on risk culture.

X4: is training of employee on ERM, was measured by training experience, specialized training, training workshop and seminars on ERM. This was measured using various statements on Likert scale on training.

X5: is 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. This was measured using various statements on Likert scale on technology.

$\epsilon$  it = Error term

### **3.5.2 Test of Significance**

(ANOVA) was utilized in regression model level of significance at 95% confidence degree and 5 % significance degree. F-test and T-test was used to test for any significant difference between internal audit and enterprise risk management. Adjusted R squared was used to determine variation change in dependent and independent variables.

### **3.6 Validity and Reliability**

Pre-test of questionnaires was done a pilot study for validation. As per Cooper and Schindler (2003), the pilot gathering can extend from 15 to 100 subjects contingent upon the strategy to be tried however it doesn't should be factually chosen. This was in accordance with a quantitative research plan philosophy utilized in this examination project.

As indicated by (Somekh, and Cathy 2005) legitimacy is example of test things speaks to substance test is intended to gauge. Content legitimacy utilized by research is gauge of how much data accumulated using a particular instrument addresses a particular area or substance of a specific idea.

Mugenda and Mugenda (2008) battle that the standard strategy in surveying the substance legitimacy of a measure is to utilize an expert or master in a specific field. To set up the legitimacy of the examination instruments the analyst looked for the feelings of specialists in the field of concentrate particularly the instructors in the bureau of back and bookkeeping. This encourages the vital update and alteration of the examination instrument subsequently upgrading legitimacy. As per Walliman (2001), unwavering quality alludes to the consistency of estimation and is habitually surveyed utilizing the test–retest dependability technique. Unwavering quality is expanded by including many similar things on a measure, by testing a differing test of people and by utilizing uniform testing systems.

## CHAPTER FOUR

### DATA ANALYSIS, RESULTS AND DISCUSSION

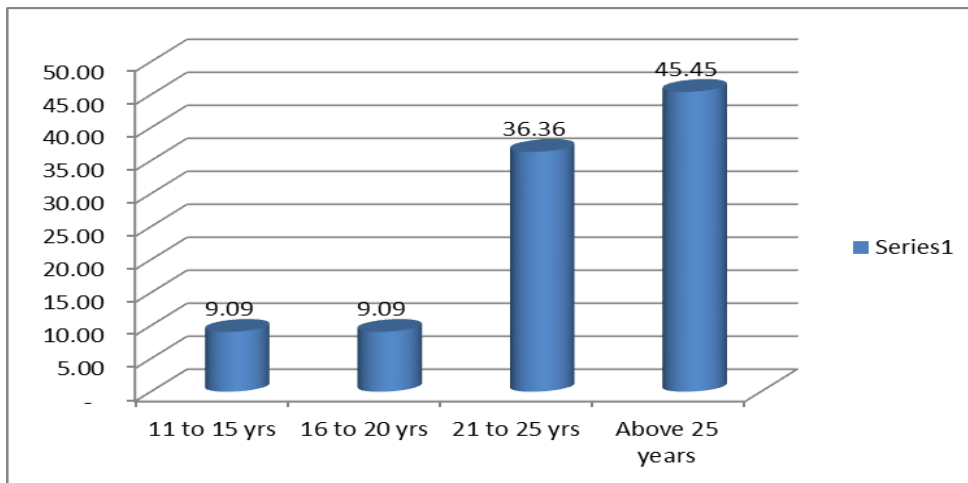
#### 4.1 Introduction

This part analyses information examination, results and discourse. The discoveries of examination depend on destinations of research. Clear insights utilized talk about the discoveries of research. The study focused on a specimen size of 50 respondents from which 33 filled in and gave back the polls making a reaction rate of 66%. The reaction rate was illustrative. As per Mugenda and Mugenda (1999), a reaction rate of half is satisfactory for investigation and reporting; a rate of 60% is great and a reaction rate of 70% and over is superb. In view of the affirmation, the reaction rate was thought to be excellent.

#### 4.2 Descriptive Statistics

##### 4.2.1 Demographic Information

###### Length of time in operation in Kenya



**Figure 4.1: Length of time in operation in Kenya (Source: Research Data)**

The study sought to determine the time period the companies have been operating. As shown in chart 4.1, majority of the companies have been in operation for more than 25 years (45.45%), followed by between 21 and 25 years (36.36%) and 9.09% have been in operation for both 16 to 20 years and 11 to 15 years while none of the companies under the study have been in operation for less than 10 years.

### No of Company branches

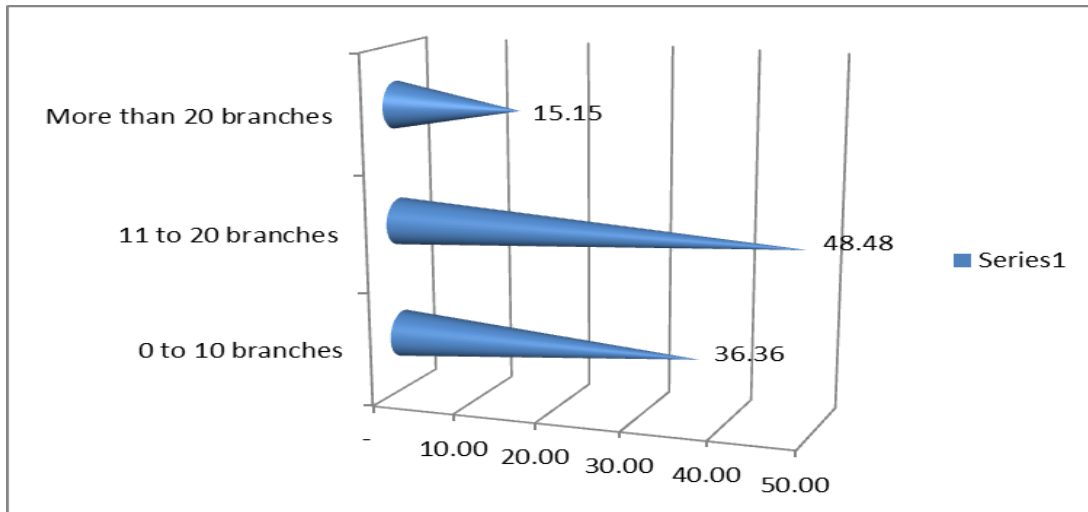


Figure 4.2: No of company branches

Source: Research Data

As shown in chart 4.2, most of the companies have between 11 and 20 branches (48.48%), 10 branches (36.36%) and more than 20 branches (15.15%). This indicates that the companies have a wide branch network and hence risk management is important to enable the companies to manage risks.

### Length of time that risk department has been in existence

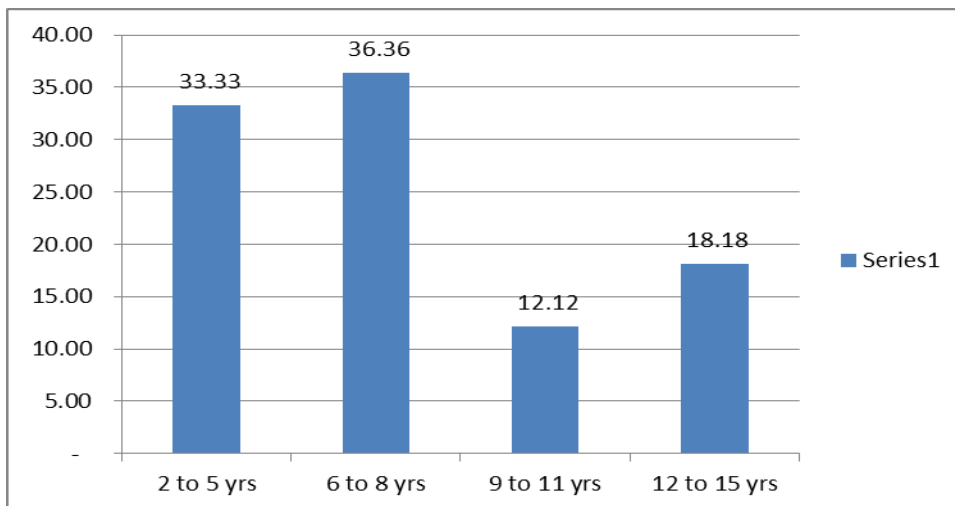


Figure 4.3: Length of time that risk department has been in existence

Source: Research Data

The research also sought to find out the duration of time that the companies have had a risk department in operation. As shown in chart 4.3 most of the companies have had a risk department in existence for between six and eight years (36.36%), two to five years (33.33%), twelve to 15 years (18.18%) and nine to 11 years (12.12%).

### Level of ERM Implementation

**Table 4.1: Level of ERM Implementation**

Level	Frequency	Percent	Valid Percent	Cumulative Percent
There is no ERM structure and there no intentions to start one	0	0	0	0
There is no ERM structure is in place but there are intentions to start one soon	0	0	0	0
The ERM structure is a partly established idea and there is no clear schedule for execution	12	36.4	36.4	36.4
The ERM structure is well framed throughout the company, with a clear schedule for execution but execution has not yet taken off.	11	33.3	33.3	69.7
The ERM structure is well framed throughout the company, with execution in progress and a clear schedule for finishing execution.	10	30.3	30.3	100.0
The ERM structure is well framed throughout the company and completely executed	0	0	0	0

**Source: Research Data**

From table 4.1 the research findings indicate that most of the companies (36.4%) have a partially developed ERM framework but with no clear timetable for implementation of ERM; 33.3% have a well formulated ERM framework with a clear implementation timetable but implementation of ERM is yet to start and the remainder (30.3%) have a well formulated ERM framework with ERM implementation under progress. None of the companies have a well formulated and fully implemented ERM framework and at least each company has a partially developed ERM framework implying that there is need to improve the implementation.

## 4.2.2 Enterprise Resource Management in the Organization.

### 4.2.2.1. Risk Identification

**Table 4.2: Risk Identification**

	N	Mini mum	Maxi mum	Mean	Std. Deviation
In our organization we recognize possible dangers to the attainment of the goals	33	1.00	3.00	1.7879	.59987
Diverse risk information sources are considered during risk identification	33	1.00	3.00	1.7273	.62614
In our organization risk identification is done by risk manager /staff in conjunction with the other managers	33	1.00	3.00	1.6364	.69903
In our organization roles and responsibilities for risk identification are clearly defined	33	1.00	3.00	1.7576	.56071
In our organization financial statement analysis enhances risk identification	33	1.00	3.00	1.8485	.56575
In our organization there are established standards to enhances risk identification	33	1.00	3.00	1.5758	.56071
In our organization risk rating and collateral enhances risk identification	33	1.00	2.00	1.6364	.48850
Fresh and evolving risks are regularly recognized in a well-timed and hands-on way	33	1.00	3.00	1.8182	.58387
Valid N (listwise)	33				

**Source: Research Data**

From the respondents' extent of concurring with the above statements in relation to risk identification in the organization, the findings revealed that most of the respondents agree that organizations ascertain possible threats to the realization of the company goals (Mean = 1.7879); that various risk information sources are considered during risk identification (Mean = 1.7273); risk identification is done by risk manager and staff in conjunction with other managers (Mean = 1.6364); there is a clear definition of the roles and responsibilities for risk identification (Mean = 1.7576); financial statement analysis enhances risk identification (Mean = 1.8485); organizations have established standards which enhance risk identification

(Mean = 1.5758); organizations use risk rating and collateral which enhances risk identification (Mean = 1.6364); and fresh and evolving threats are regularly recognized in a well-timed and hands-on manner (Mean = 1.8182). Means range between 1.5758 and 1.8485 which lie at agree implying that all companies considered under this study have adopted efficient ways of identifying risks.

#### 4.2.2.2 Risk Assessment

**Table 4.3: Risk Assessment**

	N	Mini mum	Maxi mum	Mean	Std. Deviation
In our organization we determine the risk appetite of the organization	33	1.00	3.00	2.3636	.69903
Risk appetite and acceptance for every important risk are properly and unmistakably demarcated and sanctioned by the Board	33	1.00	3.00	2.2424	.66287
Risk appetite is made known to all the staff in the company	33	1.00	3.00	2.1818	.68258
In our organization we assess the impact of risk	33	1.00	3.00	1.6970	.58549
In our organization we assess the likelihood of the threat occurring	33	1.00	2.00	1.7576	.43519
In our organization risks are evaluated with assumptions and uncertainties being clearly considered and presented.	33	1.00	2.00	1.5152	.50752
In our organization risk is evaluated in terms of both quantitative and qualitative value.	33	1.00	3.00	1.7879	.48461
Risks are measured on a gross and residual basis	33	1.00	2.00	1.5152	.50752
In our organization risks are subdivided into individual levels for further analysis	33	1.00	2.00	1.2727	.45227
Valid N (listwise)	33				

**Source: Research Data**

From the findings on the respondents' extent of concurring with statements relating to enterprise resource management in risk assessment in the organization, the respondents agreed that their organizations determine the risk appetite of the organization (Mean = 2.3636); the organizations' boards clearly define and approve the risk appetite and tolerance for each key risk (Mean =2.2424); all staff are informed of the risk appetite (Mean = 2.1818);



the organization assesses the impacts of risks (Mean = 1.6970); the organizations assess the likelihood of threats occurring (Mean = 1.7576); assumptions and uncertainties are clearly considered and presented in the evaluation of risks (Mean = 1.5152); organization risks are evaluated in both quantitative and qualitative terms (Mean = 1.7879); risks are measured on both gross and residual basis (Mean = 1.5152) and strongly agree that risks are subdivided into individual levels for further analysis (Mean = 1.2727). Means of 1.2727 to 2.3636 indicate that the risk assessment according to the companies is done in the correct way as all the respondents either strongly agree or agree to the statements which relate to risk assessment.

#### 4.2.2.3. Risk Mitigation

**Table 4.4: Risk Mitigation**

	N	Minimum	Maximum	Mean	Std. Deviation
In our organization there are adequate controls both in design and effectiveness in place to address the various risks	33	1.00	3.00	1.6364	.69903
The suitable risk reaction plan is recognized by bearing in mind the risk implication, risk appetite and acceptance	33	1.00	3.00	1.8485	.50752
Risk responses have clear accountability and timelines and these are implemented in good time	33	1.00	3.00	1.5152	.66714
Our organization insures different types of risks but not all risks	33	1.00	3.00	2.2424	.66287
Our organization does not insure catastrophic risks	33	1.00	5.00	3.2121	1.21854
The organization has a mechanism for estimating potential losses at the time of entering into insurance contracts	33	1.00	3.00	1.5152	.71244
The company trains insured parties on ways to avoid or minimize the chances of losses occurring	33	2.00	5.00	3.5758	.90244
Our organization has a mechanism for transferring certain risks to third parties	33	1.00	3.00	1.8788	.78093
Risk taking by the company is associated with its main capabilities and risk appetite	33	1.00	2.00	1.6364	.48850
Valid N (listwise)	33				

From the respondents' extent of agreement with statements relating to risk control in the company, the results show that the respondents agree that there are adequate controls both in design and effectiveness in place to address the various risks in the organizations (Mean = 1.6364); a suitable risk reaction plan is recognized by bearing in mind the risk implication, risk appetite and acceptance (Mean = 1.8485); risk responses have clear accountability and timelines and these are implemented in good time (Mean = 1.5152); the organizations insure different types of risks but not all risks (Mean = 2.2424); are neutral on whether the organizations do not insure catastrophic risks (Mean = 3.2121) signifying a weak risk mitigation effort; agree that the organizations have mechanisms for estimating potential losses at the time of entering into insurance contracts (Mean = 1.5152); are neutral on whether their organizations train insured parties on ways to avoid or minimize the chances of losses occurring (Mean = 3.5758); agree that organizations have mechanisms for transferring certain risks to third parties (Mean = 1.8788); and agree that the companies' risk taking is associated with its main capabilities and risk appetite (Mean = 1.6364).

#### **4.2.2.4. Risk Monitoring**

From the responses on the extent of agreement with the statements regarding risk monitoring by organizations; the results in table 4.5 show that the respondents strongly agree that the organizations centrally monitor and coordinate the risk management processes and the outcomes (Mean = 1.2727); risk owners continuously review, update, monitor and analyse risks (1.4848); serious peril data is conveyed to the directors and senior administration in an intermittent or instant way in line with the risk procedures (Mean = 1.1515); and that there are regular reviews and reports of risk management efforts to senior management (Mean = 1.3939); the respondents also agree that the organizations communicate information on risk status and actions in a regular manner at all levels in the company (Mean = 1.6364); employees are properly trained on risk monitoring policies of the firm (Mean = 1.5152) and controls are in place to evaluate the efficiency of the risk management program (Mean = 1.5152).

**Table 4.5: Risk Monitoring**

	N	Mini mum	Maxi mum	Mean	Std. Deviation
In our organization we centrally monitor and coordinate the risk management processes and the outcomes	33	1.00	2.00	1.2727	.45227
The risks are continuously reviewed, updated, monitored and analyzed by risk owners	33	1.00	2.00	1.4848	.50752
In our organization we communicate information on risk status and actions in a regular way at all levels in the company	33	1.00	3.00	1.6364	.69903
Serious peril data is conveyed to the directors and senior administration in an intermittent or instant way in line with the risk procedures	33	1.00	2.00	1.1515	.36411
In our organization employees are properly trained on risk monitoring policies of the firm.	33	1.00	2.00	1.5152	.50752
Controls are in place to evaluate the efficiency of the risk management program.	33	1.00	3.00	1.5152	.71244
In our organization regular reviews of risk management efforts and reporting to senior management.	33	1.00	2.00	1.3939	.49620
Valid N (listwise)	33				

**Source: Research Data****4.2.3 Role of Internal Audit in Enterprise Risk management**

From the responses on the extent of concurring with the statements regarding the role of internal audit in ERM by organizations; the results in table 4.6 show that the respondents strongly agree that internal audit gives assurances on risk management processes (Mean = 1.2727); gives assurance that risks are correctly evaluated (Mean = 1.1515); evaluates risk management processes (Mean = 1.0303); and evaluates reporting of key risks (Mean = 1.0303). The findings further show that the respondents agreed that internal audit facilitates identification and evaluation of risks (Mean = 1.7576); coaches' management in responding to risks (Mean = 2.0); coordinates Enterprise Resource Management activities (Mean = 1.8788); consolidates reports on risks (Mean = 1.6364); and champions the establishment of ERM (1.7576). The respondents also disagree that internal audit develops and maintains Enterprise Risk Management framework (Mean = 3.5758); develops risk management

strategies for board approval (Mean = 3.9394); sets risk appetite (Mean = 4.3030); imposes risk management processes (Mean = 4.3030); and manages assurance on risks (Mean = 4.4242).

**Table 4. 6: The Role of Internal audit in Enterprise Risk Management**

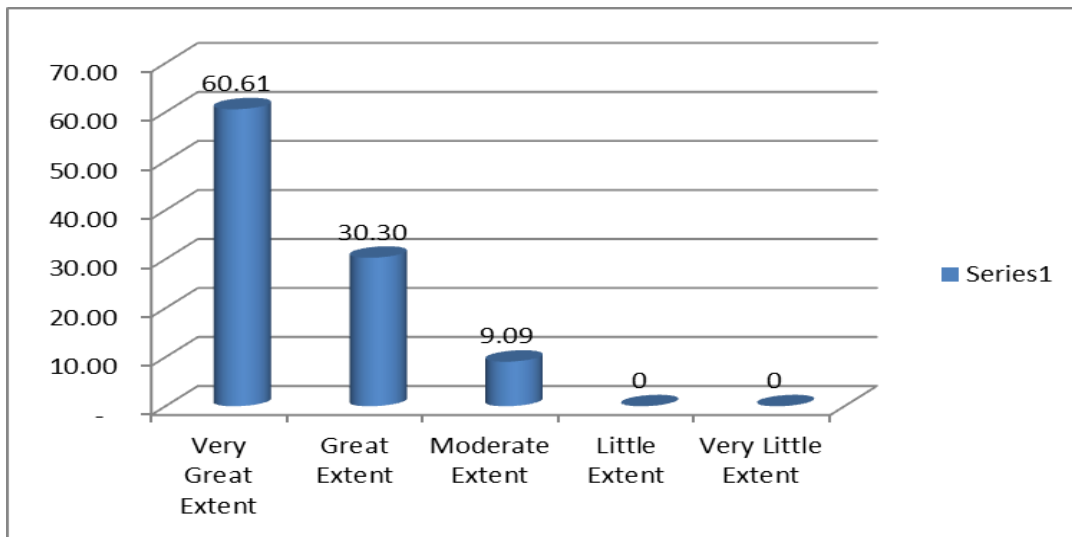
	N	Mini mum	Maxi mum	Mean	Std. Deviation
Internal Audit gives assurances on risk management processes	33	1.00	2.00	1.2727	.45227
Internal audit gives assurance that risks are correctly evaluated	33	1.00	2.00	1.1515	.36411
Internal audit evaluates risk management processes	33	1.00	2.00	1.0303	.17408
Internal audit evaluates reporting of key risks	33	1.00	2.00	1.0303	.17408
Internal audit facilitates identification and evaluation of risks	33	1.00	3.00	1.7576	.66287
Internal audit coaches' management in responding to risks	33	1.00	4.00	2.0000	1.00000
Internal audit coordinates Enterprise Resource Management activities	33	1.00	3.00	1.8788	.78093
Internal audit consolidates reports on risks	33	1.00	2.00	1.6364	.48850
Internal audit develops and maintains Enterprise Risk Management framework	33	2.00	5.00	3.5758	.75126
Internal audit champions establishing the ERM	33	1.00	3.00	1.7576	.66287
Internal audit develops risk management strategies for board approval	33	2.00	5.00	3.9394	.78817
Internal audit sets risk appetite	33	2.00	5.00	4.3030	.80951
Internal audit imposes risk management processes	33	2.00	5.00	4.3030	.80951
Internal audit manages assurance on risks	33	2.00	5.00	4.4242	.83030
Internal audit takes decisions on risk responses	33	2.00	5.00	4.6667	.64550
Internal audit implements risk responses on behalf of management	33	2.00	5.00	4.9091	.52223
Internal audit is accountable for risk management	33	2.00	5.00	4.6667	.64550
Valid N (listwise)	33				

**Source: Research Data**

The respondents also strongly disagree that internal audit takes decisions on risk responses (Mean = 4.6667); implements risk responses on behalf of management (Mean = 4.9091) and is accountable for risk management (Mean = 4.6667). Means of 3.5758 to 4.9091 indicate that respondents disagree or strongly disagree to the statements relating to the role of internal audit indicating it is not involved in these activities because they are not allowed to perform them as per the Institute of internal auditors' guidelines.

#### 4.2.4 Top Management Support for ERM

**Figure 4.4: Top Management Support and Commitment on implementation of ERM**



**Source: Research Data**

The research sought to find out the extent to which commitment and support from top management affects implementation of enterprise risk management in the company. From the research findings, management support and commitment leads to successful implementation of ERM by majority (60.61%) agreeing that top management backing leads to successful implementation of ERM to a very great extent; 30.30% to a great extent and 9.09% by a moderate extent. This signifies that top management support is important in the effective implementation of ERM in a company.

From the responses on the extent of concurring with the statements regarding the role of top management in the implementation and success of ERM by organizations; the results in table 4.7 show that the respondents strongly agree that top management plays a key role in influencing the success of ERM (Mean = 1.3939); supports external expertise which positively influences the implementation of ERM (Mean = 1.2727); and the board of directors are involved in the ERM adoption process (Mean = 1.3939). In addition, the results show that the respondents agree that business vision of the company positively influences the implementation of ERM in the company (Mean = 1.7576); top management provide support in staffing during the implementation of ERM (Mean = 1.6364); provide support which helps in effective decision-making process to key risk issues (Mean = 1.5152); and the existence of a chief risk officer is certainly related with implementation of ERM (Mean = 1.5152).

**Table 4.7: Top management and enterprise risk management**

	N	Mini mum	Maxi mum	Mean	Std. Deviation
Top administration plays a major role in influencing the success of ERM	33	1.00	2.00	1.3939	.49620
Our company business vision positively influences the implementation of ERM in the company	33	1.00	3.00	1.7576	.66287
In our company there is top management support for staffing during the implementation of ERM	33	1.00	2.00	1.6364	.48850
In our company backing from top management helps in active policymaking practice to key risk issues	33	1.00	2.00	1.5152	.50752
In our company top management supports external expertise which positively influence the implementation of ERM	33	1.00	2.00	1.2727	.45227
In our company existence of a chief peril manager is definitely related with implementation of ERM	33	1.00	2.00	1.5152	.50752
In our company the board of directors are involved in the ERM adoption process	33	1.00	2.00	1.3939	.49620
Valid N (listwise)	33				

**Source: Research Data**

#### 4.2.5 Organization Culture

From the responses on the extent of concurring with the statements regarding the effect of organization beliefs on the execution and success of ERM by organizations; the results in table 4.8 show that respondents strongly agree that organizational culture of a company supports risk management (Mean = 1.2727); there are enough internal controls to mitigate risk (Mean = 1.3939); and that there is an extraordinary culture of staff appreciation of peril controlling (Mean = 1.3939).

**Table 4.8: Organization culture and implementation of enterprise risk management**

	N	Mini mum	Maxi mum	Mean	Std. Deviati on
In our company the collective programming of mind towards risk management	33	1.00	3.00	1.7576	.66287
Our company organizational culture supports risk management	33	1.00	2.00	1.2727	.45227
In Our company there are enough internal controls to mitigate risk	33	1.00	2.00	1.3939	.49620
In our company risk management is mainly related with the flexibility of organizational beliefs	33	1.00	3.00	2.0000	.50000
There is high culture of staff appreciation of risk management	33	1.00	2.00	1.3939	.49620
Staff appreciation helps in reducing fraudulent case in the company	33	1.00	3.00	1.6364	.69903
Staff work as team which help in mitigating risk in the organization	33	1.00	3.00	1.7576	.66287
Valid N (listwise)	33				

**Source: Research Data**

The results also show that respondents agreed that there is collective programming of mind towards risk management in the companies (Mean = 1.7576); risk management is mainly related with the flexibility of organizational beliefs (Mean = 2.0000); staff appreciation helps in reducing fraudulent case in the company (Mean = 1.6364); and that teamwork among staff helps in mitigating risk in the organization (Mean = 1.7576). These results show that

organizational culture is important in determining the success of peril controlling and the execution of the enterprise risk structure in organizations.

#### 4.2.6 Training

From the responses on the extent of concurring with the statements regarding the influence of training on the implementation and success of ERM by organizations; the results in table 4.9 show that respondents strongly agree that there is on-the-job training, which influence the implementation of ERM in the companies (Mean = 1.4848); training on risk improve employee knowledge on risk management (Mean = 1.3939); and that risk managers set up training sessions for staff (Mean = 1.3939). The results also show that the respondents agree that the companies have high quality training manuals, which influence ERM implementation (Mean = 1.5152); and that the aim of staff training on risk management is to fulfill the objectives of the organization (Mean = 1.5152)

**Table 4.9: Effects of Training on Implementation of Enterprise Risk Management**

	N	Mini mum	Maxi mum	Mean	Std. Deviation
In our company there is on-the-job training, which influence the implementation of ERM	33	1.00	3.00	1.4848	.56575
In our company there is high quality training manual, which influence ERM implementation	33	1.00	2.00	1.5152	.50752
The process of staff training on risk management is to fulfill organization objective	33	1.00	2.00	1.5152	.50752
In our company training on risk improve employee knowledge on risk management	33	1.00	2.00	1.3939	.49620
In our company risk manager set up training sessions for staff	33	1.00	2.00	1.3939	.49620
Valid N (listwise)	33				

**Source: Research Data**



#### 4.2.7 Technology

From the responses on the extent of concurring with the statements regarding the use of technology in the company and also in peril controlling; the results in table 4.9 show that respondents strongly agree that information systems are critical business functions in their companies and that processes depend on the computer technologies (Mean = 1.00); companies consider technology as an significant aspect in the face of growing risk (Mean = 1.00); technology plays a crucial part in attaining an organization’s goals on risk management (Mean = 1.2727); and that technology relates to all aspects of the business risk management (Mean = 1.2727). Again, the results show that respondents are neutral (neither agree nor disagree) on whether the Risk Management Information System in place in the companies is fully utilized (Mean = 3.0909).

**Table 4.10: Technology in the Company**

	N	Mini mum	Maxi mum	Mean	Std. Deviation
In our company information systems are crucial business utilities and operations depend on the computer technologies	33	1.00	1.00	1.0000	.00000
Our company consider technology as an significant aspect in the face of growing risk	33	1.00	1.00	1.0000	.00000
In our company technology plays a key role in achieving an organization’s objectives on risk management	33	1.00	2.00	1.2727	.45227
In our company technology relates to all aspects of the business risk management	33	1.00	2.00	1.2727	.45227
There is a Risk Management Information System in place that is fully utilized	33	1.00	5.00	3.0909	1.28364
Valid N (listwise)	33				

**Source: Research Data**

### 4.3 Regression Analysis

#### 4.3.1 Model Summary

**Table 4.11: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.919 <sup>a</sup>	.844	.815	.04853

**Source: Research Data**

Adjusted R squared is coefficient of assurance which shows the changes 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 0.815 an indication that there was variation of 81.5% on the enterprise risk management due to changes in the independent variable which are internal audit, top management support, organization culture, training and information technology at 95% confidence interval. This shows that 81.5% changes in enterprise risk management could be accounted to changes in internal audit, top management support, organization culture, and 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 0.919.

#### 4.3.2 Analysis of Variance

**Table 4.12: Analysis of Variance**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.343	5	.069	29.164	.000 <sup>a</sup>
	Residual	.064	27	.002		
	Total	.407	32			

**Source: Research Data**

From the ANOVA statistics, the processed data, which is the population parameters, had a significance level of 0.000 which shows that the data is ideal for making a conclusion on the

population's parameter as the value of significance (p-value) is less than 5%. The p-value of 0.000 was less than 0.05, an indication that the model was statistically significant.

### 4.3.3 Coefficients

The study sought to analyse the role of internal audit in enterprise risk management for insurance companies in Kenya. The established regression equation was

$$Y = 0.571 + 0.074X_1 + 0.128X_2 + 0.115X_3 + 0.148X_4 + 0.267X_5$$

From the above regression equation it was revealed that holding internal audit, top management support, organization culture, training and information technology to a constant zero, enterprise risk management would stand at 0.571. That is, 0.571 is a constant. A unit increase in internal audit function would lead to an increase in enterprise risk management by a factor of 0.074, that is internal audit positively impacts ERM. A unit increase in top management support would lead to increase in enterprise risk management by a factor of 0.128, a unit increase in organization culture would lead to increase in enterprise risk management by a factor of 0.115, and a unit increase in training would lead to increase in enterprise risk management by a factor of 0.148.

**Table 4.13: Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.571	.112		5.120	.000
Internal Audit	.074	.026	.257	2.906	.007
Top Management Support	.128	.053	.221	2.396	.024
Organization Culture	.115	.066	.162	1.751	.091
Training	.148	.077	.239	1.925	.065
Information Technology	.267	.063	.395	4.229	.000

**Source: Research Data**

In addition, a unit increase in information technology would lead to an increase in enterprise risk management by a factor of 0.267. The findings further show that internal audit and technology, top management support, training and organizational culture positively influence the success of ERM. The p-values for internal audit (.007); top management support (.024); and information technology(.000) indicate that the impacts of internal audit, top management support and information technology on ERM are also statistically significant as evidenced by p-values of less than 0.05 ( $p < 0.05$ ). The p-values for organization culture (.091); and training (.065) are greater than 0.05 ( $p < 0.05$ ) indicating that there are less significant or statistically insignificant in determining the success of ERM in insurance companies.

#### **4.4 Discussion of Findings**

The research findings show that most of the insurance companies have been in operation for more than 25 years (45.45%) implying that they are well developed. Also, none of the companies have been in operation for less than 10 years. Most of the companies also have between 10 and 20 branches (48.48%), implying that the companies have a wide branch network and also that the risk exposure is more due to the many branches. The results also show that most insurance companies have had a risk department in existence for less than 8 years (six and eight years (36.36%), two to five years (33.33%)) implying that the risk management for many is still new and needs to be developed further. Furthermore, most companies have a partially developed ERM framework but with no clear timetable for implementation of ERM (36.4%).

On ERM, companies have adopted efficient ways of identifying risks as evidenced by means ranging from 1.5758 to 1.8485. Risk assessment is also correctly done as evidenced by means of 1.2727 to 2.3636. On risk mitigation, companies have put measures to ensure that risks are properly managed with most of the means lying between 1.5152 and 2.2424 implying that the respondents agreed that the companies followed the best practices. However, companies do not train insured parties on ways to avoid or minimize the chances of losses occurring (Mean = 3.5758) nor are they particular about avoiding catastrophic risks (Mean = 3.2121). Risks are also efficiently monitored by the insurance companies with

means of between 1.1515 and 1.6364. Generally, the results show that ERM in the companies is being properly conducted.

The study established that the role of internal audit on ERM is positive (.074). The findings are in agreement with Walker *et al.* (2003) who recommends that internal audit enables organizations to identify and evaluate risks and thus enable firms to manage risks. The internal auditors' roles are also consistent with the Institute of Internal Auditors' guidelines. Senior management has a significant part in influencing the success of ERM. Their impact on ERM is positive (.128). The study findings show that top management support influences performance by a very great extent (60.61%). The means of the different functions of management in ERM also lied between 1.2727 and 1.7576 indicating that top management can cause firms to successfully implement ERM. These findings are in line with Basu *et al.* (2009), who established that senior management backing and assurance has a major impact in providing necessary means and incentive to effectively execute ERM. For example, a company might establish a piloting committee to define the course of the ERM scheme, to involve the ERM scheme group and assess the execution development.

The study findings also show that organization culture positively (.115) impacts on the success of ERM. With means of between 1.2727 and 2.0000 for various questions on the role of culture on ERM, the findings show that organizational culture is important in determining the success of peril controlling and the implementation of the ERM in organizations. The study findings are in line with Grabowski and Roberts (1999) who suggested that enterprise peril controlling requires the blend of numerous values that turn the system into a unified whole in which the profound traditions and embraced values of every member organizations can be constructed around the need for molding a culture of dependability. In specific circumstances, solidarity can cultivate some conduct by sharing separate beliefs, leading gatherings and looking for agreement in order for administration to succeed.

Staff training also positively (.148) contributes to the success of ERM. The various statements on how trainings influence ERM, the means ranged from 1.3939 to 1.5152 which implies that training plays an important part in ERM implementation. These findings are consistent with Sumner (2000) who states that outlay in training the operators to comprehend

ERM system was more than anticipated in ERM project execution. Active execution of ERM systems involves wide acclimatization of the staff's existing procedures to as to wholly exploit the ability of the innovative structures. The study revealed that the usage of technology in organizations certainly (.267) influences on ERM. This is in agreement with Mutsaers et al. (1998) who show that technology is an important factor in increasing the productivity of businesses and improving processes such as ERM. The means of most of the factors of technology apart from the utilization of the risk information system lied between 1.000 and 1.2727 indicating that technology is important in the ERM implementation. However, there is underutilization of technology in ERM as evidenced by a mean of 3.0909 for the full utilization of Risk Management Information System indicating moderate utilization.

## **CHAPTER FIVE**

### **SUMMARY OF THE FINDINGS, CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 Introduction**

This part presents the discussion of key data findings, conclusion drawn from the findings highlighted and recommendation made there-to. The deductions and recommendations drawn were focused on addressing the objective of the study which was to establish the role of internal audit in enterprise risk management in insurance companies in Kenya and if it is compliant with Institute of Internal Auditors' guidelines.

#### **5.2 Summary of the Findings**

The study established that internal audit positively contributes to the ERM. Although there are limitations on the role of internal audit in that it is not accountable for peril controlling; does not implement risk responses on behalf of management; does not make decisions on risk responses; does not impose risk management processes, does not set risk appetites; does not develop risk management strategies for board approval nor develop and maintain an Enterprise Risk Management framework; as respondents strongly disagreed that those roles are done by internal auditors which affects the execution of the ERM as the auditors have better knowledge on the risks which if they are allowed to participate in the management, they can improve ERM, the roles of internal auditors are also in line with the guidelines set by the Institute of Internal Auditors.

The study likewise found out that senior administration has a major part in persuading the triumph of ERM. The boards of directors are involved in the ERM adoption process, the principal peril manager positively contributes to the implementation of ERM, top management supports external expertise which positively influences the implementation of ERM, and they also set the business vision which positively influences the implementation of ERM in the company. Generally, backing from senior administration helps in active policymaking procedure to key peril issues and thus causes ERM to be successful for insurance companies in Kenya. The role of organizational culture on ERM is also positive

and significant. The study found out that staff work as team which helps in mitigating risk in the organization, staff appreciation helps in reducing fraudulent cases, there is collective programming of mind towards risk management, peril controlling is mainly related with the flexibility of organizational beliefs, the company organizational culture supports risk management, there is high culture of staff appreciation of risk management and that there are enough internal controls to mitigate risk in the company.

Training on risk management also positively impacts on ERM with the study findings showing that training on risk improves employee knowledge on risk management, the process of staff training on risk management is to fulfill organizational objectives, there is on-the-job training, which influence the implementation of ERM, the risk managers set up training sessions for staff, and that there are high quality training manuals. The research also discovered an affirmative association amongst information technology and ERM. On many aspects, technology is vital in the risk management of the organization as it is important in the achievement of organizational objectives on risk management, companies use them in reducing risk in the very risky environment, information systems are critical to organizations and most business processes and functions use computer technologies. However, most companies have not fully utilized the Risk Management Information System leading to gaps. The study findings also show that the impacts of internal audit, top management support and information technology on ERM are statistically significant as their p-values are less than 5% ( $p < 0.05$ ); whereas organization culture and training on risk management have effects which are statistically insignificant on ERM as their p-values are more than 5% ( $p > 0.05$ ).

### **5.3 Conclusion**

Most of the insurance companies have been in operation for more than 25 years with no company operating for fewer than 10 years. Most of the businesses also have between 10 and 20 branches which implies that risk exposure is more. Additionally, most insurance companies have had a risk department in existence for less than 8 years signifying that more improvements and developments of risk management are necessary. Most companies have also partially developed ERM framework but with no clear timetable for implementation of ERM. On ERM implementation, companies have adopted efficient ways of identifying risks,



correctly conduct risk assessment, and have proper risk mitigation practices although the companies do not train insured parties on ways to avoid or minimize the chances of losses occurring do they emphasize avoidance of catastrophic risks. Risks are also efficiently monitored by the insurance companies. In a nutshell, the ERM processes in the companies follow the best practices of risk management.

The study found also out that the role of internal audit on ERM is positive, which is agreement with Walker *et al.* (2003) who established that internal audit enables organizations to identify and evaluate risks and thus enable firms to manage risks. The internal auditors' roles are also consistent with the Institute of Internal Auditors' guidelines. Top management has a major part in influencing the success of ERM. Their impact on ERM is positive, with support of top management influencing the success of ERM by a very great extent (60.61%). These findings are in line with Basu *et al.* (2009), who found that top management support and commitment play a major role in providing sufficient resources and motivation to implement successfully.

The study findings also show that organization culture positively impacts on the success of ERM which is consistent with Grabowski and Roberts (1999) who suggested 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 molding a culture of reliability. Staff training also positively contributes to the success of ERM which is consistent with Sumner (2000) who states that the benefits of investment in training the users to understand ERM system were higher than expected in ERM project implementation. The study also found out that the use of technology in organizations positively impacts on ERM which is consistent with Mutsaers *et al.* (1998) who show that technology is an important factor in increasing the productivity of businesses and improving processes such as ERM. However, the results reveal an underutilization of Risk Management Information Systems in the organizations.

#### **5.4 Limitations of the Study**

The study covered ERM for insurance companies only, thus the results may not be applicable to other sectors as other sectors have different risk exposures and different characteristics.

The study also used qualitative data only hence it would not state the financial impacts of internal audit in ERM which are also important determinants.

The data was collected from chief internal auditors of organization only but did not also collect information from other members of the internal audit team in the organization or members of management to avoid bias.

The study covered only five determinants of the success of ERM (internal audit, technology, top management support, training and organizational culture) which may not be a comprehensive coverage of the factors which determine success of ERM.

#### **5.5 Policy Recommendations**

The top management should support external expertise which positively influences the implementation of ERM. The top management should ensure that the company organizational culture supports risk management and high culture of staff appreciation of risk management. The company risk manager should set up training sessions for members of staff on enterprise risk management.

From the findings the study recommends that there is need for Insurance Companies to consider the various factors affecting implementation of ERM in Kenya as it was revealed that internal audit, top management support, organization culture, training and information technology affect implementation of ERM to a great extent. Internal auditors should also be allowed to participate in offering solutions on risk management an ERM implementation.

There is need for Insurance Companies to enhance their organization culture and structure as this will influence the implementation of ERM. There is need for the management of Insurance Companies to create budget and resource allocation for implementation of ERM in the organization; this will enhance the implementation of ERM in the organization. More efforts should also be put to ensure that the Risk Management Information Systems are fully

utilized by the companies. The study also recommends that insurance companies should find ways of reducing risks such as avoiding catastrophic risks by transferring them to third parties and also training insured parties on risk management.

### **5.6 Area for Further Studies**

This study sought to establish role of internal audit in enterprise risk management (ERM) in insurance companies in Kenya. The study recommends that the study should also be replicated on other sectors such as the banking industry. Another study should also be conducted to cover other factors which affect the implementation of the ERM as well as cover the quantitative aspects of ERM. This study also recommends that a study should be conducted on which questionnaires are distributed to various members of the organization such as management and other employees of the organization to determine the clear picture of the ERM process in the organizations.

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## APPENDICES

### Appendix I: Questionnaire

#### Part A: Demographic/General Data

1. The company been in operating in Kenya for how long?

1 - 5 years                                  5 -10 years           

11 - 15 years                              16 - 20 years       

21 - 25 years                              25 and above       

2. How many branches does the company have?

0 -10               

11 -20             

Above 20         

#### Part B: Business Information

##### Enterprise Risk Management

3. For how long has the risk department been in existence in your company

0 - 1 year                                  2 - 5 years           

12 - 15 years                              Above 15             

4. What is the level of ERM implementation in your organization?

Level	Tick
There is no ERM structure and there no intentions to start one	1
There is no ERM structure is in place but there are intentions to start one soon	2
The ERM structure is a partly established idea and there is no clear schedule for execution	3
The ERM structure is well framed throughout the company, with a clear schedule for execution but execution has not yet taken off.	4



The ERM structure is well framed throughout the company, with execution in progress and a clear schedule for finishing execution.	5
The ERM structure is well framed throughout the company and completely executed	6

5. What is your level of agreement with the statements below relating to enterprise resource management in your organization? (1-Strongly agree, 2- Agree, 3-Neutral, 4- Disagree, 5 strongly Disagree)

<b>Risk Identification</b>	1	2	3	4	5
In our organization we recognize possible dangers to the attainment of the goals					
Diverse risk information sources are considered during risk identification					
In our organization risk identification is done by risk manager /staff in conjunction with the other managers					
In our organization roles and responsibilities for risk identification are clearly defined					
In our organization financial statement analysis enhances risk identification					
In our organization there are established standards to enhances risk identification					
In our organization risk rating and collateral enhances risk identification					
Fresh and evolving risks are regularly recognized in a well-timed and hands-on way					
<b>Risk Assessment</b>					
In our organization we determine the risk appetite of the organization					
Risk level and acceptance for each key risk are properly and unmistakably demarcated and ratified by the Board					

Risk appetite is made acknowledged by all the staff in the firm					
In our organization we assess the impact of risk					
In our organization we assess the likelihood of the threat occurring					
In our organization risks are evaluated with assumptions and uncertainties being clearly considered and presented.					
In our organization risk is evaluated in terms of both quantitative and qualitative value.					
Risks are measured on a gross and residual basis					
In our organization risks are subdivided into individual levels for further analysis					
<b>Risk Mitigation</b>					
In our organization there are adequate controls both in design and effectiveness in place to address the various risks					
The suitable risk reaction approach is recognized by in view of the risk implication, risk appetite and acceptance					
Risk responses have clear accountability and timelines and these are implemented in good time					
Our organization insures different types of risks but not all risks					
Our organization does not insure catastrophic risks					
The organization has a mechanism for estimating potential losses at the time of entering into insurance contracts					
The company trains insured parties on ways to avoid or minimize the chances of losses occurring					

Our organization has a mechanism for transferring certain risks to third parties					
Risk taking by the company is associated with its main capabilities and risk level					
<b>Risk Monitoring</b>					
In our organization we centrally monitor and coordinate the risk management processes and the outcomes					
The risks are continuously reviewed, updated, scrutinized and investigated by departmental heads					
In our organization we communicate information on risk status and actions in a regular way at all stages in the business					
Serious peril information is conveyed to the board and top management in an intermittent or instant way in line with the risk procedures					
In our organization employees are properly trained on risk monitoring policies of the firm.					
Controls are in place to evaluate the efficiency of the risk management program.					
In our organization regular reviews of risk management efforts and reporting to senior management.					

## Role of Internal Auditor in Enterprise Risk management

6. What is your level of agreement with the statements below relating to the role of internal audit in Enterprise Risk Management (1-Strongly agree, 2- Agree, 3-Neutral,4- Disagree, 5 Strongly Disagree)

STATEMENT	1	2	3	4	5
Internal Audit gives assurances on peril controlling procedures					
Internal audit gives assertion that perils are properly assessed					
Internal audit assesses peril controlling procedures					
Internal audit evaluates recording of main perils					
Internal audit facilitates identification and evaluation of risks					
Internal audit coaches management in countering perils					
Internal audit coordinates Enterprise Resource Management activities					
Internal audit consolidates reports on risks					
Internal audit develops and maintains Enterprise Risk Management framework					
Internal audit champions establishing the ERM					
Internal audit develops risk management strategies for board approval					
Internal audit sets risk appetite					
Internal audit imposes risk management processes					
Internal audit manages assurance on risks					
Internal audit implements resolutions on peril reactions					
Internal audit implements risk responses on behalf of management					
Internal audit is accountable for risk management					

### Top Management Support for Enterprise Risk Management

7. To what extent does assurance and backing from senior administration affect implementation of enterprise risk management in your company?

To a very great level [ ]

To a great extent [ ]

To a moderate extent [ ]

To a little extent [ ]

To no extent [ ]

8. What is your level of agreement with the statements below relating to top management and enterprise risk management? (1-Strongly agree, 2- Agree, 3-Neutral,4- Disagree, 5 Strongly Disagree)

Statement	1	2	3	4	5
Top administration plays a major role in influencing the success of ERM					
Our company business vision positively influences the implementation of ERM in the company					
In our company there is top management support for staffing during the implementation of ERM					
In our company backing from top management helps in active policymaking practice to key risk issues					
In our company top management supports external expertise which positively influence the implementation of ERM					
In our company existence of a chief peril manager is definitely related with					

implementation of ERM					
In our company the board of directors are involved in the ERM adoption process					

**Organization Culture**

9. What is your level of agreement with the following statements that relating to organization culture and implementation of enterprise risk management? (1-Strongly agree, 2- Agree, 3-Neutral,4- Disagree, 5 Strongly Disagree)

Statement	1	2	3	4	5
In our company the collective programming of mind towards risk management					
Our company organizational culture supports risk management					
In Our company there are enough internal controls to mitigate risk					
In our company risk management is primarily associated with the flexibility of organizational culture					
There is high culture of staff appreciation of risk management					
Staff appreciation helps in reducing fraudulent case in the company					
Staff work as team which help in mitigating risk in the organization					

**Training**

10. What is your level of agreement with the following statements that relate to effects of training on implementation of enterprise risk management in your company? (1-Strongly agree, 2- Agree, 3-Neutral,4- Disagree, 5 Strongly Disagree)

Statement	1	2	3	4	5

In our company there is on-the-job training, which influence the implementation of ERM					
In our company there is high quality training manual, which influence ERM implementation					
The process of staff training on risk management is to fulfill organization objective					
In our company training on risk improve employee knowledge on risk management					
In our company risk manager organises training sessions for staff					

**Technology**

11. What is your level of agreement with the following statements that relating to technology in your company? (1-Strongly agree, 2- Agree, 3-Neutral,4- Disagree, 5 Strongly Disagree)

Statement	1	2	3	4	5
In our company information systems are serious corporate utilities and procedures depend on the use of computers					
Our company consider technology as an significant aspect in the face of growing risk					
In our company technology helps in achieving an organization's goals on peril controlling					
Technology relates to all aspects of the business peril controlling					
There is a Peril Management Information System in place that is fully utilised					

**Thank You**

## **Appendix II: List of Registered Insurance Firms in Kenya**

### **Life Insurance Companies**

- 1 APA Life Assurance Company
- 2 Capex Life Assurance Company
- 3 CIC Life Assurance Company
- 4 Ga Life Assurance Limited
- 5 ICEA Lion Life Assurance Ltd
- 6 Kenya Orient Life Assurance
- 7 Liberty Life Assurance Kenya
- 8 Metropolitan Life Assurance
- 9 Old Mutual Assurance Company
- 10 Pan Africa Insurance Company
- 11 Pioneer Assurance Company
- 12 Prudential Life Assurance Kenya
- 13 UAP Life Assurance Company

### **General Insurance Companies**

- 14 Aar Insurance Kenya
- 15 African Merchant Assurance
- 16 AIG Insurance Company
- 17 Allianz Insurance Company
- 18 APA Insurance Company
- 19 Britam General Insurance Ltd



- 20 CIC General Insurance Company
- 21 Directline Assurance Company
- 22 Fidelity Shield Insurance
- 23 Ga Insurance Company
- 24 Gateway Insurance Company
- 25 Heritage Insurance Company
- 26 ICEA Lion General Insurance
- 27 Intra-Africa Assurance
- 28 Invesco Assurance Company
- 29 Kenya Orient Insurance
- 30 Mayfair Insurance Company
- 31 Occidental Insurance Company
- 32 Pacis Insurance Company
- 33 Phoenix Of East Africa
- 34 Resolution Health Insurance
- 35 Tausi Assurance Company
- 36 Trident Insurance Company
- 37 UAP Insurance Company
- 38 Xplico Insurance Company

### **Composite Insurance Companies**

- 39 British American Insurance Ltd
- 40 Cannon Assurance Company
- 41 Corporate Insurance Company
- 42 First Assurance Company
- 43 Geminia Insurance Company
- 44 Jubilee Insurance Company
- 45 Kenindia Assurance Company
- 46 Madison Insurance Company
- 47 Saham Assurance
- 48 Takaful Insurance Of Africa
- 49 The Kenyan Alliance Insurance
- 50 The Monarch Insurance

Source: AKI (2015)

### Appendix III: Regression Analysis Results

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.919 <sup>a</sup>	.844	.815	.04853

a. Predictors: (Constant), Information Technology , Internal Audit, Top Management Support, Organization Culture , Training

**ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.343	5	.069	29.164	.000 <sup>a</sup>
	Residual	.064	27	.002		
	Total	.407	32			

a. Predictors: (Constant), Information Technology , Internal Audit, Top Management Support, Organization Culture , Training

b. Dependent Variable: Enterprise Risk Management

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.571	.112		5.120	.000
	Internal Audit	.074	.026	.257	2.906	.007
	Top Management Support	.128	.053	.221	2.396	.024
	Organization Culture	.115	.066	.162	1.751	.091
	Training	.148	.077	.239	1.925	.065
	Information Technology	.267	.063	.395	4.229	.000

a. Dependent Variable: Enterprise Risk Management