

**EFFECT OF RISK BASED AUDITING ON INTERNAL CONTROL
SYSTEMS IN SELECTED PUBLIC UNIVERSITIES IN KENYA**

BY

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DECLARATION

I declare that this research project is my original work and has not been presented for any degree in any other university.

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SUPERVISOR:

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

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DEDICATION

This research project is dedicated to my beloved mother Dorine, sister Christine and to my daughters Jane Shila and Christine Sheila. I LOVE YOU ALL.

ABSTRACT

Risk based internal auditing being a methodology that links internal auditing to an organization's overall risk management framework, provides risk management process, annual audit planning and internal audit capacity which improves the efficiency of the internal control system of an organization. Existing literature demonstrate that RBA has capacity of risk identification and reduction planning. Having been implemented by public institutions, including public universities in Kenya, it requires analysis of its contribution in maintaining efficiency and effectiveness. Whereas public universities apply risk based auditing as a tool of internal control system, available information reveal that a number of the universities still face critical challenges with internal control system. The purpose of this study was to analyse the effect of risk based internal auditing on Internal Control Systems in public universities in Kenya. Specifically the study sought to establish the effect of risk management on internal control systems, to determine the effect of annual risk based planning on internal control systems and to analyse the effect of internal audit capacity on internal control systems. This study adopted correlation research design which provides for description, correlation and regression as it's expected by the focused relations. The target population for the study constituted 35 correspondents, comprising finance officers, deputy finance officers and internal auditors in the selected public universities in Kenya. A pilot study was carried out on 5 respondents leaving 30 respondents for the main study. The study administered questionnaires to all the respondents since it was the most appropriate tool to gather information. One way ANOVA was used to test hypothesis and regression analysis model to establish the relationship between the effects of RBIA elements on ICS. The study established that there is significant effect of risk management, internal audit planning and internal audit capacity on ICS with R^2 of 0.737, 0.308 and 0.504 respectively at $P = 0.003$, 0.036 and 0.017 all $p < 0.05$. This implies that risk management, Internal audit planning and internal audit capacity accounts for 73.7%, 30.8% and 50.4 % respectively on ICS. The multiple regression results on explanatory power reveal that risk management coefficient was 0.026, annual risk based was 0.011 while internal audit capacity was 0.056 to change in ICS. The study reveals that whereas planning puts audit resources into logical schedules, while capacity defines that ability to apply audit resources according to the established plan, the greatest outcome of RBA is accounted for by management process. The results suggest need to analyse the loading factor in the RBA sequencing the description. Explore possibly of institutional factors affecting RBA productivity for each organization.

TABLE OF CONTENTS

TITLE PAGE	I
DECLARATION	II
ACKNOWLEDGEMENT	III
DEDICATION	IV
ABSTRACT.....	V
TABLE OF CONTENTS.....	VI
ABBREVIATIONS AND ACRONYMS	IX
DEFINATIONS OF TERMS.....	X
LIST OF TABLES	XI
LIST OF FIGURES	XII
CHAPTER ONE	1
INTRODUCTION.....	1
1.1: Background of the study	1
1.2 Statement of the Problem.....	3
1.3 Objectives of the Study.....	4
1.3.1 General Objective.....	4
1.3.2 Specific Objectives.....	4
1.3.3 Research Hypothesis.....	5
1.4 Significance of the Study.....	5
1.5 Scope of the Study	5
1.6 Conceptual Framework.....	5
CHAPTER TWO	7
LITERATURE REVIEW	7
2.1 Theoretical review	7
2.1.1 Agency Theory.....	7
2.1.2 Transaction Cost Economics Theory (TCE)	8
2.2 Concept of Risk Based Audit (RBA).....	9
2.3 Risk Based Auditing Practices.....	10
2.3.1 Risk Management.....	10
2.3.2 Annual Risk Based Planning.....	11

2.3.3 Internal Auditing capacity	12
2.4 Internal Control systems (ICS).	14
2.5 Empirical Review.....	15
CHAPTER THREE	18
METHODOLOGY	18
3.1: Research Design.....	18
3.2: Study Area	18
3.3: Target Population.....	18
3.4: Sampling Strategy.....	19
3.5: Data Collection Methods	19
3.5.1: Data Sources.....	19
3.5.2: Data Collection Procedures	20
3.5.3: Data Collection Instruments.....	20
3.5.4: Reliability Tests and Validity Tests	20
3.6: Data Analysis and Presentation.	20
3.6.1: Model Specification.	20
CHAPTER FOUR.....	22
RESULTS AND DISCUSSIONS	22
4.1: Demographic Information.....	22
4.1.1: Gender	22
4.1.2: Level of Education	22
4.1.3: Length of Service in the Organization	23
4.1.4: Challenges in the Internal Control Systems.....	23
4.1.5 Challenges addressed in time	24
4.1.6 Support from the Top Management	24
4.2. Practice of Risk Based Internal Auditing.....	24
4.2.1. Effects of RM on ICS.....	24
4.2.2. Internal Audit Risk Assessment	25
4.2.3. Effects of RM on ICS.....	26
4.2.4 Regression Results of RM on ICS	27
4.3: Effects of RBP on ICS	29
4.3.1. Effect of Quality of Services and Sufficiency of Staff.....	29
4.3.2. Effect of Annual Risk Based Planning on ICS	30
4.3.3 Regression Results of ARBPAnnual on ICS.....	31
4.4 Effect of IAC on Internal Control Systems.....	33
4.4.1. University Organogram.....	33
4.4.2 Training Intervals	33
4.4.3. Effects of IAC on Efficiency of ICS	34

4.4.4 Regression Results of IAC on ICS	35
4.5. Hypotheses Testing.....	38
4.6. Regression Analysis.....	39
CHAPTER FIVE	41
SUMMARY OF THE FINDINGS, CONCLUSIONS AND.....	41
RECOMMENDATIONS.....	41
5.1. Summary of the findings.....	41
5.2. Conclusions of the study.....	42
5.3. Recommendations.....	42
5.4. Limitation of the study.....	42
5.5. Suggestions for Further Research	42
REFERENCE.....	43
APPENDICES.....	46
Appendix 1: Letter of Introduction.....	46
Appendix II: Questionnaire	47

ABBREVIATIONS AND ACRONYMS

IIA	Institutes of Internal Auditors
RBIA	Risk Based Internal Auditing
IR	Inherent Risk
ICS	Internal Control Systems
CR	Control Risk
OLS	Ordinary Least Square
TCE	Transaction Cost Economics Theory
KNAO	Kenya National Audit Office
GOK	Government of Kenya
RBA	Risk Based Auditing Approaches
PFMR	Public Finance Management Reform
OECD	Organization for Economic Co-operation and Development

DEFINATIONS OF TERMS

- Annual Risk Based Planning:** This is a process that establishes the audit universe, produce audit programmes and review the audit process.
- Inherent Risk:** The risk posed by an omission or error in the financial statements due to a factor other than a failure of control.
- Internal Control System:** This is a process for assuring achievement of an organization's objectives in operational effectiveness and efficiency, reliable financial reporting and compliance with laws, regulations and policies.
- Control Risks:** This is the risk that occurs due to failure of a control system.
- Public Universities:** These are universities that are predominantly funded by the public means through a national or sub national government.
- Risk Appetite:** It is the amount of risk that an entity (on broad level) is willing to accept within its overall Capacity.
- Risk Based Auditing:** This is a methodology that links internal auditing to an organization's overall risk management framework, providing risk management process, annual audit planning and internal audit capacity.
- Risk Management:** A process of identification, analysis and acceptance or mitigation of uncertainty in investment decisions.

LIST OF TABLES

Table 3.1: Summary of the targeted population.....	19
Table 4.1: Gender.....	22
Table 4.2: Level of Education.....	22
Table 4.3: Duration of Service in the University	23
Table 4.4: Challenges on ICS	23
Table 4.5: Timely address of the challenges.....	24
Table 4.6: Support from Top Management.....	24
Table 4.7.1: RBIA in the Universities	25
Table 4.7.2: Frequency of Risk Assessment.....	25
Table 4.7.3: Extent of Application of RM	26
Table 4.7.4: RM Model summary b.....	27
Table 4.7.5: RM ANOVA ^b	27
Table 4.7.6: RM Coefficients ^a	28
Table 4.8.1:Quality of Services and Sufficiency of Staff on ICS	29
Table 4.8.2: Descriptive results on effect of ARBP on ICS.	30
Table 4.8.3: ARBP Model summary.....	31
Table 4.8.4: ARBP ANOVA ^b	31
Table 4.8.5: ARBP Coefficients ^a	32
Table 4.9.1: Descriptive Data on Audit capacity	33
Table 4.9.2: Frequency of Training	34
Table 4.9.3: IAC elements on ICS Efficiency	34
Table 4.9.4: IAC model summary.....	35
Table 4.9.5: IAC ANOVA ^b	36
Table 4.9.6:IAC Coefficients ^a	36
Table 4.10: Hypothesis Testing as a confirmatory diagnostics.	38
Table 4.11: Coefficients ^a	39

LIST OF FIGURES

Figure 1.1: Conceptual Framework	6
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CHAPTER ONE

INTRODUCTION

1.1: Background of the study

Over the last few years, the need to manage risks has become recognized as an essential part of good corporate governance practice (IIA, 2014). This has put organizations under increasing pressure to identify all the business risks they face and to explain how they manage the risks. In fact, the activities involved in managing risks have been recognized as playing a central and essential role in maintaining a sound system of internal control. While the responsibility for identifying and managing risks belongs to management, one of the key roles of internal audit is to provide assurance that those risks have been properly managed (IIA, 2015). It is for this reason that there has been a dramatic shift in the focus of internal audit over the years, from systems based auditing to process based auditing and the current emphasis is on Risk Based Internal Auditing (IIA, 2009)

Risk Based Internal Auditing (RBIA) is defined as a methodology that links internal auditing to an organization's overall risk management framework (IIA, 2014). It allows internal audit to provide assurance to the board that risk management processes are managing risks effectively, in relation to the risk appetite. Prinsloo (2008) in his study of the development and evaluation of risk-based Audit approaches found out that the prominent corporate failures in the United States and Europe (i.e Enron Ltd and Worldcom Ltd), indicated the importance of an efficient and effective audit approach. The credibility crisis that followed these failures shows that the auditing profession should continue to develop and evaluate its methods and approaches (Prinsloo, 2008). The only defense auditors have against the anger (or frustration) of stakeholders in instances of corporate failures is sufficient, appropriate audit evidence that proves their innocence (*ibid*). This audit evidence will be the result of a well-planned and performed audit. An audit approach which will reduce the frustrations of the stakeholders. This study therefore was to determine the effect of annual risk based planning on internal control systems in the selected public universities.

In Kenya RBIA was adopted in March 2004 following an Internal Audit Consultative Forum. This was in response to a joint IMF/World Bank report that highlighted the weaknesses of Kenya's internal audit function (Financial Management Anchor, 2008). The adoption had

several achievements amongst which were identification and resolving of civil servant payroll weaknesses to eliminate ghost staff thereby streamlining payments in a cost saving manner. It also increased law courts' revenue collection of between 33% and 166% in 2007(*ibid*). Risk- based audit approach is one of the Public Finance Management Reform (PFMR) in Kenya aimed at ensuring transparency, accountability and good governance within the Central Government operations. In spite of the above achievements, the Kenya National Audit Office (KNAO) has continually raised significant issues concerning laid down financial regulations; in respect of books inaccuracies especially in seven public universities in Kenya of which four of the universities were rendered technically insolvent in the year 2013 according to the auditor general report (Mutai, 2014). These demonstrate less than optimal realization of RBA expectations of improved efficiency and effectiveness. Ability to manage the risk through appropriate control lead organization to achieved its objective (Shamsuddin and Johari, 2014). It is therefore important to establish the effect of risk management on internal control systems.

Several studies about risk based internal auditing and internal controls have been conducted by different scholars. Ayagre (2014) found out that RBA helps organizations to focus on high risks priority areas where as the main reasons for non-adoption of risk based internal auditing were lack of skills and resource constraints. Kasiva (2012), studied the effect of risk based auditing on financial performance of the banks in Kenya', noted that risk based auditing through risk assessment, risk management, annual risk based planning, internal auditing standards and internal auditing capacity should be enhanced. The author argued that this would enable the firm to be able to detect risks on time and concentrate on high-risk areas leading to increased transparency and accountability, hence enhancing financial performance. Lutta (2012), studying the determinants of adoption of risk based audit in public sector in Kenya established that risk based audit enhances transparency, accountability and responsiveness to public expenditure policy priorities; and it virtually covered all aspects of public financial management. From the studies it is evident that RBA is able to improve the organizations overall corporate governance of which effective Internal Control System is a means to achievement of the organization's objectives. Being a control process designed by university's in providing reasonable assurance on the achievement of objectives in respect of effectiveness and efficiency of operations, reliability of financial reporting, compliance with applicable laws and regulations, it requires functional attention.

Nyarombe *et al* (2015), on the other hand established that Risk based Audit Approach are used in Uasin Gishu County. The results indicated that RBA influence ICS in the government departments, improves bank reconciliation statements and statement of assets and liabilities, prompt surrender of Imprests, safeguarding departmental and greater adherence to the government financial regulations.

The Treadway Commission report of 1987 recommended that public companies establish an internal audit function to be fully supported by top management and have effective reporting relationships. This was to ensure that the internal auditors' qualifications, staff, status within the company, reporting lines, and relationship with the audit committee of the board of directors must be adequate to ensure the internal audit function's effectiveness and objectivity (Treadway Commission, 1987). The report urged that the internal audit function be "staffed with an adequate number of qualified personnel appropriate to the size and the nature of the company (Treadway Commission, 1987,). Being that RBA had been adopted by the public universities and some still experience financial challenges, the study was to analyze the effect of internal audit capacity on internal control systems in the selected public universities.

Ayagre (2014), observed that lack of skills and resource constrains hindered the adoption of RBIA while Kasiva (2012) argued that RBIA would enable the firm to be able to detect risks on time and concentrate on high-risk areas leading to increased transparency and accountability, hence enhancing financial performance. Nyarombe *et al*, (2015) on the other hand found out that RBAA influence ICS in the government departments by improving bank reconciliation statements and statement of assets and liabilities, prompt surrender of Imprests, safeguarding departmental and greater adherence to the government financial regulations. However, no study has been done on the effect of risk based auditing in the public universities. Therefore, the study was to analyze the effect of Risk Based Internal Auditing on Internal Control Systems in selected public universities in Kenya.

1.2 Statement of the Problem

Adoptions of Risk based Auditing (RBA) in organizations including public sector has potential of improving ICS; with improved objective achievements, compliance with laws and regulations, safeguarding of business assets to timely and reliable financial reporting. In Kenya RBIA was adopted in March 2004 following an Internal Audit Consultative Forum, which was a response to weaknesses of Kenya's internal audit function. The adoption had several achievements in the public sector in general. Despite the achievements, available

information reveals that public universities in Kenya still experience financial regulations' challenges; as evidenced in the Auditor general reports on the financial statements which isolated seven public universities facing critical challenges and rendering four of the universities technically insolvent. The universities performance reflected less than optimal realization of RBIA potential. This therefore makes it important to determine the effects RBIA on the overall performance of the universities which depends on the efficiency of internal control system. Subsequently, it is critical for Universities to establish the effect of risk management on internal control systems to enable execution of appropriate audit strategies, the effect of annual risk based planning on the Internal Control systems and Internal Audit Capacity on Internal Control system. Studies have been conducted on risk based internal auditing and internal controls. However, the studies lack clarity on how the Risk Based Internal Auditing specific elements affect Internal Control System in the public universities. This study therefore was to analyze the effect of Risk Based Internal Auditing on Internal Control Systems in selected public universities in Kenya.

1.3 Objectives of the Study

1.3.1 General Objective

The main objective of this study was to analyze the effect of risk based internal auditing on Internal Control Systems in selected public universities in Kenya.

1.3.2 Specific Objectives

The study was guided by the following specific objectives:

- i. To establish the effect of risk management on internal control systems in selected public universities.
- ii. To determine the effect of annual risk based planning on internal control systems in selected public universities.
- iii. To analyse the effect of internal audit capacity on internal control systems in selected public universities.

1.3.3 Research Hypothesis

- i. H₀₁: There is no significant effect of risk management on ICS in selected public universities.
- ii. H₀₂: There is no significant effect of internal audit planning on ICS in selected public universities.
- iii. H₀₃: There is no significant effect of internal audit capacity on ICS in selected public universities.

1.4 Significance of the Study

This study is paramount in that it will enable Universities' Councils and management at large to appreciate the importance of risk based internal auditing practices and assists them in rating their level of compliance against those of their competitors or the entire market, and in determining whether these practices improve ICS. This may not be applicable to universities only but may also be used by government of Kenya in policy making regarding Risk Based Internal Auditing and its effects on the ICS. The policy maker will know how well to incorporate the sector effectively to ensure its full participation. The academicians will be furnished with relevant information regarding the relationship between risks based internal auditing and Internal Control Systems; contributing to the general body of knowledge and form a basis for further research.

1.5 Scope of the Study

The sample for the study consisted of the Internal Audit staff, Finance Officers and Deputy Finance Officers of Maseno University, University of Kabianga, Meru University of Science and Technology and Rongo University College that are well acquainted with organizational risks and structure. These four universities has been selected because of the qualification of their financial reports for the year ending 2013 rendering them technically insolvent.

1.6 Conceptual Framework

This study analyzed the effect of RBIA on ICS. The study focused on RBIA as the independent variable in which risk management, annual risk based planning and internal auditing staffing will be studied. The dependent variable will be internal control systems in which the expectations are: Effectiveness and efficiency of operations, reliability of financial reporting and compliance with applicable laws and regulations. Employee working conditions and top management support were the intermediary variables, as shown in figure 1.1.

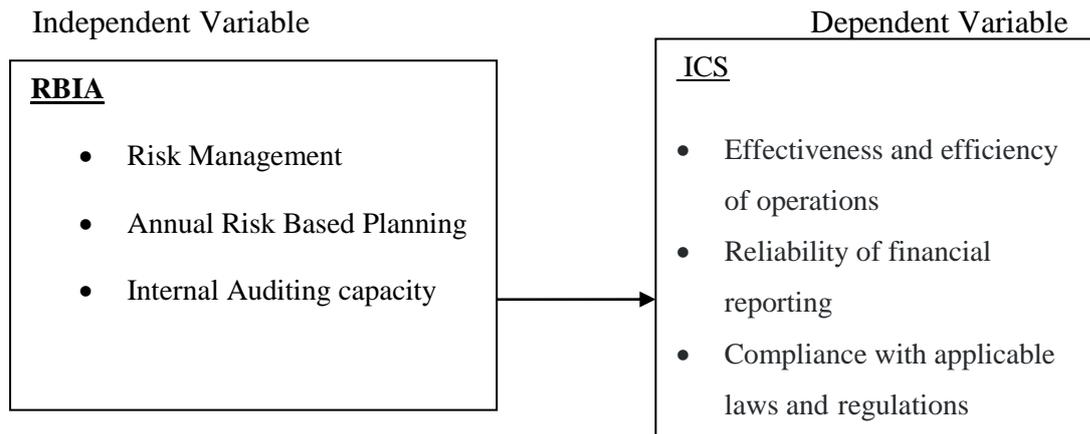


Figure 1.1: Conceptual Framework

Source: Adopted and modified (2016).

CHAPTER TWO

LITERATURE REVIEW

This chapter entails previous studies done that are relevant to the effectiveness of internal control system and RBA.

2.1 Theoretical review

2.1.1 Agency Theory

An agency relationship arises when one or more principals (e.g. an owner) engage another person as their agent (or steward) to perform a service on their behalf. Performance of this service results in the delegation of some decision-making authority to the agent (Adams, 1994). This delegation of responsibility by the principal and the resulting division of labour are helpful in promoting an efficient and productive economy. Agency model suggests that, as a result of information asymmetries and self-interest, principals lack reasons to trust their agents and will seek to resolve these concerns by putting in place mechanisms to align the interests of agents with principals and to reduce the scope for information asymmetries and opportunistic behavior (*ibid*). Agency theory is concerned with resolving problems that occur as a result of conflict of goals and desires between the principal and agent and the expensive and difficult process experienced by the principal to verify the agent actions (Elsenhardt, 1989). Jensen and Mecklin (1976) confirms that agency theory attempts to deal with how to align the goals of principal so that they are not in conflict (agency problem) and that the principal and agent receives different tolerance for risk (Jensen and Meckling, 1976).

Agency theory assumes that agents have more information than principals and that this information asymmetry adversely affects the principals' ability to monitor whether or not their interests are being properly served by agents. Furthermore, an assumption of agency theory is that principals and agents act rationally to maximize their own wealth. A consequence of this assumption may be the "moral hazard" problem (*ibid*). Agents may face the dilemma of acting against the interests of their principals. Since principals do not have access to all available information, they are unable to determine whether the agent's actions are in the best interest of the firm. To reduce the likelihood of this problem, principals and agents engage in contracting to achieve optimality, including the establishment of monitoring processes such as internal auditing (Adams, 1994). Specifically, internal auditing is

considered a bonding cost borne by agents to satisfy the principals' demands for accountability (Sherer and Kent, 1983). This argument suggests that there is more need for internal auditing in large multidivisional companies than in smaller ones. It is more difficult for top management in larger firms to oversee the firm, which creates a greater demand for internal auditing to compensate for the loss of control (Khalik, 1993). For this reason the internal auditor should ensure that it adopts an approach which will reduce the information asymmetry and ensure that Internal Control systems are efficient and effective hence the adoption of RBA in public universities. The research was therefore to analyze the effect of risk based auditing on internal control systems in public universities in Kenya.

2.1.2 Transaction Cost Economics Theory (TCE)

The TCE attempts to bring out the concept of cost of doing business in a very wide perspective and looks at how to monitor them. One of the ways proposed by this theory for monitoring internal costs of doing business is use of internal monitoring. The objective of TCE is to explain different forms of organization based on the differences in transaction costs. Firm is seen as a governance structure, rather than as a production function (Williamson, 1996). The firm is not seen as a black box as in neoclassical economics. It is described as an organizational construct in different hierarchies, market, hybrids (Williamson, 1981). In addition, TCE tries to identify and mitigate contractual hazards (Williamson, 1996) and links the possible hazards to behavioral assumptions. The first assumption relates to bounded rationality, Simon, (1976), the notion that decision makers' capabilities are bounded in terms of formulating and solving problems and processing all information during the decision-making process.

The second assumption deals with opportunism or possible conflicts because individuals are promoting their own self-interest. Opportunism is a variety of self-interest seeking, but extends simple self-interest seeking to include self-interest seeking with guile. It is not necessary that all agents be regarded as opportunistic in identical degree. It suffices that those who are less opportunistic than others are difficult to ascertain and that, even among the less opportunistic, most have their price, (Williamson, 1979). These behavioral assumptions lead to incomplete contracting and as a consequence, monitoring of the contract is required to prevent or to handle conflicts. Governance is the economizing response to infuse order and to realize mutual gains, (*ibid*). Asset characteristics may take the form of physical, human, site-specific, dedicated assets or investments and brand name capital. Uncertainty or risk indicates

the predictability of the environment and sight on possible disturbances to which transactions are subject. Uncertainty also has a behavioral component, in the sense of potential non-disclosure, manipulation of information. Frequency denotes the recurrence of transactions. Depending on these characteristics, TCE analyses the most economic, value preserving governance structure to infuse order, thereby to mitigate conflict and realize mutual gain (Williamson, 2002).

Within a firm there is more administrative control to govern transactions than within a market. Also, within a firm the disputes about incomplete contracts will first be solved within a firm, while in the market any disputes need to be taken to court. Williamson argues that an internal monitor has an advantage over external monitors, as he has greater freedom of action, a wider scope, understands the language of the firm and can rely on less formal evidence (Williamson, 1975). It is therefore important for the internal auditor to improve on its approach on monitoring the organizations businesses to improve its effectiveness and efficiencies of the internal control systems.

2.2 Concept of Risk Based Audit (RBA)

RBA is a process, an approach, a methodology and an attitude of mind rolled into one. The simplest way to think about RBA conceptually is to audit the things that really matter to your organizations (Griffith, 1999). It involves high-level risk profiling of the audit portfolio over time; thus, it facilitates strategic use of scarce audit resources, aligns audit efforts with management objectives, facilitates institutional development and reduces risk exposure by focusing attention on areas of weakness. RBIA therefore is a term derived from the Institute of International Audit (IIA); a research foundation based in the USA (IIA, 2004). The institution's reveals that a significant gap existed between available guidance and current practice of internal auditing, and that a new framework was needed to carry the profession into the 21st century (IIA, 2004). Ideally, in pre-audit, management abdicated their responsibilities to internal audits; there were no audit reports and no review of the system by management. On the other hand, systems audit was passive and reactive control based audit with no involvement of management in audit planning. Therefore, for internal audit to be effective and efficient, RBA was introduced (IIA, 2004).

Every organization is different, with a different attitude to risk, different structure, different processes and different language. RBA seeks at every stage to reinforce the responsibilities of management and the board for managing risk. If the risk management framework is not very

strong or does not exist, the organization is not ready for RBA. More importantly, it means that the organization's system of internal control is poor. Internal auditors in such an organization should promote good risk management practice to improve the system of internal control (Lutta, 2012). Risk Based Internal auditing basically involves execution of an audit plan which is developed with inputs from strategic analysis and risk assessment. Risk based internal auditing is a kind of auditing approach based on determining and evaluating organization's risk characteristics, through strategic analysis and risk assessment and designing the auditing process in line with risk matrix (Ayvaz a & Pehlivanli, 2010).

2.3 Risk Based Auditing Practices

2.3.1 Risk Management

Risk management is the process of identification, analysis and acceptance or mitigation of uncertainty in investment decisions. Effective risk management and internal control is an important driver of business performance and one of the best defenses against business failure (McNancy and Tophoff, 2014). The board has ultimate responsibility for risk management and internal control, including for the determination of the nature and extent of the principal risks it is willing to take to achieve its strategic objectives and for ensuring that an appropriate culture has been embedded throughout the organization (Financial Reporting Council Ltd, 2014). The separation of ownership and management functions and the presence of information asymmetry introduce the possibility of principal-agent conflicts (Haniffa and Hudaib, 2006); it also incurs risks to stakeholders in the organization management, shareholders and creditors (Spira and Page, 2003). Those agency conflicts, agency costs and risks are now managed within the corporate governance framework through accountability mechanisms, such as internal control and audit (Haniffa and Hudaib, 2006). Stakeholders now compete to participate in corporate governance to seek power in organizations by asserting their own conceptions of risk and how it should be managed, and a focus on risk management has become central to this competition since it defines the accountability of the management of the organization (Spira and Page, 2003). Good risk management is based on a well-planned, logical, comprehensive and documented strategy. This strategy provides general policy guidance, and plans and procedures that can be used as part of the organization's everyday work to manage risk (OECD, 2005). The Risk Based Internal Auditing (RBA) approach involves management to a far greater extent. RBA emphasizes management's responsibility for managing risks.

The risk management and internal control systems encompass the policies, culture, organization, behaviors, processes, systems and other aspects of a company that, taken together: facilitate its effective and efficient operation by enabling it to assess current and emerging risks, respond appropriately to risks and significant control failures and to safeguard its assets; help to reduce the likelihood and impact of poor judgment in decision-making; risk-taking that exceeds the levels agreed by the board; human error; or control processes being deliberately circumvented; help ensure the quality of internal and external reporting; and help ensure compliance with applicable laws and regulations, and also with internal policies with respect to the conduct of business (Spira and Page. 2003). The internal control system relies on the risk management system to identify the main risks that need to be controlled (Autorite Des Marches Financiers, 2010).

2.3.2 Annual Risk Based Planning

Planning is generally considered a vital internal audit activity and it includes preparing a strategic plan, annual plans and programs for individual risk based audit assignments. To develop a risk-based plan the auditor needs to consider two aspects of risk which are individual events/risks and how these may impact the achievement of the organization's objectives and generic risk factors that may suggest a higher or lower level of risk and which can be used to determine the priority that should be given to a single audit within the audit universe. Where an organization has already put in place risk management processes the auditor can examine risk registers to see what individual risks have been identified by management and the action being taken to address the risks. Where there is no risk management process in place the auditor will need to identify possible events that may generate risks and assess these in terms of impact and probability.

The operational standard of the Internal Audit, dealing with the planning aspects of the internal audit, requires the preparation of a strategic plan – usually a five-year plan, a periodic (annual) plan and plans for individual audit assignments (Karapetrovic, 1999). Most organizations' internal audit offices do not develop a strategic plan, the exercise of which would have enabled the audit staff to evaluate risk and identify high-risk areas that deserve audit attention. It could also have been an exercise by which the head of internal audit ensures the appropriateness of resources by projecting requirements in a timely fashion thus enhancing good governance.

The Internal Audit Office of many institutions prepares annual plans for their operations. Nonetheless, an annual plan prepared as a subset of a strategic plan is more useful (Sanda, Milkailu and Garba, 2005). An effective internal audit function requires the head of the internal audit office to periodically report to senior management on the internal audit activity's purpose, authority, responsibility and performance relative to its plan. In some situations where there is poor governance, there is no such practice and the Internal Audit Office communicates with top management only via annual audit plans and the reports on individual audit assignments (Wade, 2002). Proper planning enables accomplishment of a large number of audits in a given period by improving efficiency. In some cases the numbers of the audit engagements are completed in the budgeted time and the number of actual audits performed in a period is usually less than the number of audits stated in the annual audit plan (Sanda, Milkailu and Garba, 2005). This is usually caused by adhoc audit assignments by the management and urgent requests by external parties. Adhoc audit assignments signify the relevance of internal audit to management and reflect positively on audit effectiveness and also in good governance. The supply side argument suggests that during the audit planning stage, auditors assess corporate governance risk and plan procedures or charge risk premiums based on their assessment (Karapetrovic, 1999). When planning the engagement, the internal auditor is not required to design procedures specifically to gather information to report to the governance body (*ibid*). Rather, matters to be communicated are those which come to the auditor's attention in the course of the engagement and which the auditor deems to be significant and relevant to the governance body. To make clear the scope of the work and their responsibilities regarding communication, the internal auditors may elect to include this information in an engagement letter.

2.3.3 Internal Auditing capacity

Treadway Commission in 1987 recommended that public companies establish an internal audit function to be fully supported by top management and have effective reporting relationships. The report urged that the internal audit function be "staffed with an adequate number of qualified personnel appropriate to the size and the nature of the company (Treadway Commission, 1987,). The internal auditors generally have more knowledge about the company's procedures, policies, and business environment than do the external auditors. The internal audit activity should evaluate and contribute to the improvement of risk management, control, and governance processes using a systematic and disciplined

approach." Internal audit quality, which is determined by the internal audit department's capability to provide useful findings and recommendations, is central to audit effectiveness (COSO 2009). Internal auditors are required to possess the knowledge, skills and other competencies needed to perform their responsibilities (IIA, 1999). It is therefore impliedly that public universities carry out a continuous skill upgrade to achieve a high level of technical proficiency. In order for the public universities to achieve their core objectives, auditors must comply with minimum continuing education requirements established by their relevant professional organizations and standards.

The internal auditors generally have more knowledge about the company's procedures, policies, and business environment than do the external auditors. However, external auditors must reconcile the advantages of relying on internal auditing with the need to maintain both the appearance and reality of independence as defined for external auditors (Gramling, Maletta, Schneider and Church, 2004). According to Norman Marks (2007), emerging request from boards is that internal auditors review and comment on the organization's governance policies, processes, and practices. The IIA recognizes this in its International Standards for the Professional Practice of Internal Auditing (Standards). Standard 2100 states (emphasis added) "The internal audit activity should evaluate and contribute to the improvement of risk management, control, and governance processes using a systematic and disciplined approach."

Internal audit quality, which is determined by the internal audit department's capability to provide useful findings and recommendations, is central to audit effectiveness. Internal audit has to prove that it is of value to the organization and earn a reputation in the organization. Internal audit has to evaluate its performance and continually improve its service. According to Ziegenfus, (2000), audit quality is a function of the level of staff expertise, the scope of services provided and the extent to which audits are properly planned, executed and communicated.

The IIA's standard, 1210 on proficiency of the auditor require that the internal auditors possess the knowledge, skills and other competencies needed to perform their responsibilities (IIA, 1999). The auditors' should be interested in attending courses for the purpose of gaining professional qualification, such as for certification as an internal auditors and the employer can provide financial support. Since, internal audit work requires knowledge and experience on a wide range of systems and operations, it is imperative to deploy auditors with extensive professional skills and to upgrade their skills.

2.4 Internal Control systems (ICS).

Internal Control Systems comprises those elements of an organization (including its resources, systems, processes, culture and structure) that support people in the achievement of the organization's objectives. They facilitate the effective and efficient operation of companies by enabling them to respond appropriately to significant business, operational, financial, compliance and other risks. (COSO Framework (1992) and The Turnbull Report (1999)). This includes safeguarding assets from inappropriate use or from loss and fraud, and ensuring that liabilities are identified and managed. Furthermore, internal controls help ensure the quality of internal and external reporting which also includes procedures for reporting immediately to appropriate levels of management any significant control failings or weaknesses that are identified together with details of corrective action. Finally, internal controls help ensure compliance with applicable laws, regulations and internal policies. It is important to note that a sound system of internal control provides reasonable, but not absolute, assurance that a company will not be hindered in achieving its business objectives by circumstances which may reasonably be foreseen.

International guidelines state that boards are ultimately responsible for the system of internal control. The board should, at least annually conduct a review of the effectiveness of the system of internal control, a responsibility that is often delegated to the audit committee. The Turnbull Report (1999) states that effective systems of internal control are embedded into a company's operations, form part of the corporate culture and are capable of adapting to evolving risks arising from changes within the company and in the business environment. Many national corporate governance reports and reforms include recommendations for internal controls and reporting on internal controls.

Risks are circumstances which threaten objectives, ICS are processes which manage risks, it is therefore the duty of internal auditors therefore to provide opinions on management of risks by the ICS to acceptable levels (Griffith, 2006) It is for this reason that there has been a dramatic shift in the focus of internal audit over the years, from systems based auditing to process based auditing and the current emphasis is on Risk Based Auditing (IIA UK and IRELAND., 2003). Risk-based internal auditing (RBA) is all about providing an opinion as to whether the internal controls are managing risks to an acceptable level. Traditional audits focus primarily on compliance with rules and procedures, and their recommendations were not giving management enough information about the achievement of organizational goals.

RBA involves high-level risk profiling of the audit portfolio over time; thus it facilitates strategic use of scarce audit resources, aligns audit efforts with management objectives, facilitates institutional development and reduces risk exposure by focusing attention on areas of weakness. This impliedly means that it is the duty of the Internal Auditors to adopt an audit approach which will improve the effectiveness of the internal control systems. An audit approach, currently a risk-based audit approach, is therefore a crucial component in the performance of an audit (Prinsloo, 2008).

2.5 Empirical Review

This section will look at research already done to evaluate RBA on the effectiveness of internal control systems. The section will also look at research already done that brings out the evidence of the effect of risk based internal auditing and risk management on the effectiveness of internal audit. Kiptoo and Muthoni (2013), of carried out a study to evaluate the internal audit functions' role in financial reporting in Eldoret municipal council in 2012. The study was published in the Journal of Emerging Trends in Economics and Management Services in September 2013. The study used a questionnaire to survey 197 employees of the municipality. The study concluded that internal audit played an effective role in financial risk management in the municipal

Kasiva (2012), in the study project for the MBA degree of the university of Nairobi titled, "The effect of risk based auditing on financial performance of the banks in Kenya" it was concluded that risk based auditing through risk assessment, risk management, annual risk based planning, internal auditing standards and internal auditing should be enhanced. The author argued that this would enable the firm to be able to detect risks on time and concentrate on high risk areas leading to increased transparency and accountability, hence enhancing financial performance. The author further argued that proper planning improves efficiency, accuracy, completeness, timeliness, convenience and clarity. The study found that credible audit reports, auditor independence to identify and rectify audit errors, effective implementation of audit recommendations, financial management and compliance with accepted audit standards, effective internal audit staff and independent audit committee influence financial performance in commercial banks. From the findings, the study recommended that management in commercial banks in Kenya should adopt effective risk based audit practices such as risk assessment, risk management, annual risk based planning,

internal auditing standards and internal auditing staffing to enhance effective and efficient financial performance.

Wery and Lambin (2012) carried out a study titled 'enhancing the internal audit function through the internal audit maturity model'. They explained that the internal audit maturity model is based on the level of documentation, planning and risk management capabilities. They suggested that level one maturity is when auditing is adhoc; the role of internal audit is not documented in an audit charter and current practice is not adopted immediately. Level five maturities is the opposite and in between are other levels. The authors argued that a mature internal audit function will add value to the organization. This study suggested that mature internal audit functions are more effective than immature internal audit functions. Ongeru and Okionga (2011) carried out a study to assess the effectiveness of internal audit systems in management of decentralized funds in Kisii Local Authority in 2011. The study surveyed 124 upper and middle cadre employees and councilors. The study concluded that internal audit effectiveness was average due to lack of professional proficiency on the part of internal auditors, lack of independence where internal audit reported to another department which was one of the auditees and poor supervision of internal auditors.

Okibo & Kamau (2011) carried out a study to explore the compliance with internal audit quality assurance standards in state owned corporations. The study concluded that internal audit departments in state owned corporations in Kenya did not comply with quality assurance standards as required by the institute of internal auditors.

Cohen & Sayag, (2010) carried out a study titled the effectiveness of internal auditing; an empirical examination of its determinants in Israeli organization. The target population for this study was managers and internal auditors from all Israeli organizations that conduct internal audits. Questionnaires were mailed to 292 organizations that met this criterion, based on a list compiled by the Institute of Internal Auditors in Israel. Each organization received two questionnaires, one for the general manager and one for the internal auditor. The data collection process took about nine months, with numerous reminders sent to each of the organizations. At the end of the collection process, 108 organizations' general managers and internal auditors had both responded to the questionnaires. The study found that there were very high correlations between perceptions of top management support and the auditing effectiveness. No significant correlations were found between professional proficiency and career advancement and auditing effectiveness.

Lutta, (2012) carried out the study on the determinants of adoption of risk based audit in public sector in Kenya. The study focused on five determinants:-Role of Internal Audit Function, Top Management Commitment, Training, Policy Framework and Communication process. Findings showed that Risk based audit enhances transparency, accountability and responsiveness to public expenditure policy priorities and it virtually covered all aspects of public financial management. Perception on the role of internal audit function was seen to affect the adoption of RBA to a great extent. The Internal Audit function was expected to ensure that proper audit procedures were followed. For RBA to be adopted successfully, top management had a great role to play as they had to ensure that resources were available for the internal audit function. Their support was essential as they are the drivers of the RBA process.

Nyarombe, Musau, Kawai and Kipyegon (2015) studied the effect of Risk Based Audit Approach on internal control systems in government departments in Uasin Gishu County and the findings indicated that Risk based Audit Approach are used in Uasin Gishu County Government departments and influence internal control systems in the government departments since bank reconciliation statements are up to date, statement of assets and liabilities are reflective of the true position, Imprests are surrendered promptly, departmental assets properly safeguarded and greater adherence to the laid down government financial regulations.

CHAPTER THREE

METHODOLOGY

This chapter presents the research design and methodology that was used to carry out the research. It presented the research design, the population, sampling, data collection and data analysis.

3.1: Research Design

Research design refers to the way the study is designed, that is the method used to carry out the research (Mugenda and Mugenda (2003). This study adopted correlation research design which provides for description, correlation and regression as it's expected by the focused relations. A descriptive research was used to collect data from members of the population and helped the researcher to get the existing descriptive phenomena by asking individuals about their perception, attitudes, behavior or values. A descriptive study describes characteristics associated with the subject of study. A cross sectional and descriptive survey attempts to describe or define a subject often by creating a profile of a group of problems, people or events through the collection of data and tabulation of the frequencies on research variables or their interaction.

3.2: Study Area

This study was conducted in selected public universities in Kenya; Maseno University, University of Kabianga, Meru University of Science and Technology and Rongo University College. All of which are public universities which had their financial statements for the year 2012-2013 qualified by the Auditor general.

3.3: Target Population

The target population was 35 people consisting of 26 Internal Audit Staff, 4 Finance Officers and 5 Deputy Finance Officers out of which 5 were used in the pilot study leaving 30 for the study. A census was conducted on all the remaining portion of the target population elements

Table 3.1: Summary of the targeted population

	Maseno University	University of Kabianga	Meru University of Science and Technology	Rongo University College	Total
Internal Audit Staff	7	6	5	8	26
Finance Officers	1	1	1	1	4
Deputy Finance Officers	2	1	1	1	5
TOTAL					35

Source: Survey Data (2016)

3.4: Sampling Strategy.

A sample is a subsection of population that will be chosen in such a way that their characteristics reflect those of a group from which they were chosen (Henn, Weinstein and Ford, 2006). Purposive sampling was applied and resulted in selection of respondents who include; internal audit staff, finance officer and deputy finance officers. This is because they form part of senior management that own risk management processes in public sector organizations. They are also involved in both audit planning as well as in implementation of audit findings and are in a position to respond effectively and provide relevant information for this study.

3.5: Data Collection Methods

3.5.1: Data Sources

Both primary and secondary data was used for the study. Primary data which consist of a collection of original data collected by the researcher were collected through structured questionnaires. Secondary data comprising of information that has been collected for a purpose other than the current research project was collected using data schedules. These data

were obtained from audit reports and other relevant records available within the university and supplemented with internal and government circulars.

3.5.2: Data Collection Procedures

The questionnaires were administered using drop and pick method. The questionnaires were used because it allowed the respondents who were auditors, finance officers and their deputies to give their responses in a free environment. Secondary data consisting of the internal and external circulars, audit reports and financial statements were collected using data schedules.

3.5.3: Data Collection Instruments

Questionnaires were used to obtain important information about the population. According to Sproul (1998), a self-administered questionnaire is the only way to elicit self-reports on people's opinion, attitudes, beliefs and values. The questionnaire contained closed-ended questions.

3.5.4: Reliability Tests and Validity Tests

Piloting was carried out to test the validity and reliability of the instruments. Validity indicates that degree to which the instrument measures the constructs under investigation (Mugenda & Mugenda, 2003). There are three types of validity test which include content, criterion and related construct validity. This study used content validity because it measures the degree to which the sample of the items represents the content that the test is designed to measure. Reliability test was done through Cronbach's alpha tests. A pilot study was conducted by the researcher administering the questionnaires to staff working in the audit department in the public universities at random. From this pilot study the researcher was able to detect questions that need editing and those that were ambiguous.

3.6: Data Analysis and Presentation.

The raw data obtained from the field was first coded into categories to hasten analysis and thereafter analyzed using SPSS to generate frequency tables, one way ANOVA to test the hypotheses and multivariate regression analysis model to establish the relationship between the effects of RBIA elements on ICS.

3.6.1: Model Specification.

To test the relationship between the RBIA practices and Internal Control system, multivariate regression model was used in data analysis, which is a regression technique suited to analyze

limited (censored) dependent variables (Kutner, Nachtsheim, Neter, & Li). Prior research has examined the effect RBIA on financial performance using linear regression models (Kasiva, 2012). The relationship equation is represented in the linear equation below.

$$Y_1 = \alpha + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_{3i} + \dots + \epsilon$$

Where;

- Y Internal Control Systems
- α Constant Term
- β Beta Coefficients.
- X_1 Risk Management
- X_2 Annual Risk Based Planning
- X_3 Internal Auditing Capacity
- ϵ Error term.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

This chapter discusses the interpretation and presentations of the findings. The objective of this study was to determine the effect of risk-based audit on Internal Control Systems in selected public universities in Kenya. It is sequenced into demographic information, Practice of Risk Based Internal Auditing, Effects of Risk Based Planning on Internal Control Systems, Effect of Internal Audit Capacity on Internal Audit Capacity on Internal Control Systems and Regression Analysis.

4.1: Demographic Information

4.1.1: Gender

Table 4.1 below summarizes the responses when respondents were categorized by their gender.

Table 4.1: Gender

Gender	F	%
Female	17	56.7
Male	13	43.3
Total	30	100

Source: Research data 2016

From table 4.1 above, the findings indicates that when categorized by gender, majority (56.7%) of the respondents were female while 43.3% were male. This is indicative that the predominant gender of the staff in the target population was females.

4.1.2: Level of Education

The respondents were then asked to indicate their level of education. Table 4.2 shows the summary of the respondents.

Table 4.2: Level of Education

Level of Education	F	%
University	20	66.7
Middle Level College	10	33.3
Total	30	100

Source: Research Data 2016

From table 4.2 above it can be deduced that when categorized by level of education, majority (66.7%) of the respondents were university graduates while another 33.3% had attained middle level college qualifications. These findings signify that the staff working in these departments had the minimum technical competence required of them to effectively execute their mandate.

4.1.3: Length of Service in the Organization

Table 4.3 below summarizes the responses when the respondents were categorized by the duration of service in the universities.

Table 4.3: Duration of Service in the University

Duration of Service in the University	F	%
2-5 years	16	53.3
6-10 years	8	26.7
Less than 2 years	5	16.7
Over 10 years	1	3.3
Total	30	100

Source: Research data 2016

From table 4.3, it is evident that majority (53.3%) of the respondents had worked in the respective universities for a period spanning two to five years, 26.7% had served for six to ten years, and 16.7% had served for less than two years while another 3.3% had over ten years of service. It can be deduced from the findings that most (80.0%) of the respondents had worked in the universities for years ranging from two to ten years hence gained the requisite competence either through or training or experience.

4.1.4: Challenges in the Internal Control Systems.

The respondents were first asked whether they had experienced any challenges on the Internal Control System in the University. Their responses are shown in table 4.4 below.

Table 4.4: Challenges on ICS

	F	%
Experienced challenges	28	93.3
Not experienced any challenges	2	6.7
Total	30	100

Source: Research data 2016

Table 4.4 above indicates that most (93.3%) respondents stated they had indeed experienced challenges on the Internal Control System in their respective universities while 6.7% indicated they had not experienced any challenges at all.

4.1.5 Challenges addressed in time

The respondents were then asked whether the challenges on Internal Control Systems alluded in the table above were addressed in time after they had been communicated to the relevant departments. Their responses are outlined in table 4.5.

Table 4.5: Timely address of the challenges

Duration of Addressing ICS Challenges	F	%
Addressed in time	20	66.7
Not addressed in time	9	30.0
Not applicable	1	3.3
Total	30	100

Source: Research Data 2016

The findings reflected in table 4.5 show that majority (66.7%) of the respondents were of the opinion that the challenges communicated to relevant departments had been addressed in time, 30.0% stated the challenges were not addressed in time whilst 3.3% felt the said challenges were not applicable to them. Those who felt this was did apply to them indicated that their decision was informed by the fact that they had not experienced any challenges on their respective Internal Control System in the first place.

4.1.6 Support from the Top Management

The respondents were asked if they did receive support from the Top Management of their respective Universities. A summary of their responses are listed in table 4.6 below.

Table 4.6: Support from Top Management

Support from Top Management	F	%
Do receive support	21	70.0
No support received	9	30.0
Total	30	100

Source: Research data 2016

From table 4.6 indicates that majority (70.0%) of the respondents confirmed that they did receive support from the top management of their respective universities while 30.0% stated they receive no support.

4.2. Practice of Risk Based Internal Auditing.

4.2.1. Effects of RM on ICS

Table 4.7.1 below show the response with regard to the questions that sought to find out whether the university was practicing risk based internal auditing, involvement is assessment

at the universities and the audit plan being based on the risk identified during the assessment process.

Table 4.7.1: RBIA in the Universities

Question	% Response					
	Yes		No		Not Stated	
	F	%	F	%	F	%
Is your university practicing risk based internal auditing?	28	93.3	1	3.3	1	3.3
Are you involvement in Risk Assessment at the University?	21	70.0	8	26.7	1	3.3
Is the Audit plan based on risks identified during the assessment process?	29	96.7	0	0.0	1	3.3

Source: Research Data 2016

With regard to the universities practicing risk based internal auditing, the findings in table 4.7.1 above are indicative that most,(93.3%) of the respondents affirmed that their respective universities were practicing risk based internal auditing, 3.3% stated they were not practicing while another 3.3% did not comment. When further asked whether they were involved in the risk assessment at the universities, majority (70.0%) of the respondents confirmed that they were indeed involved; 26.7% stated they were not involved while 3.3% did not comment. Consequently, when the respondents were asked whether the audit plan was based on risks identified during assessment process, the findings depicts that most (96.7%) of the respondents agreed that the audit plan was based on the identified risks while 3.3% did not comment. It was however, difficult to ascertain the reason behind the overwhelming agreement on the issue of audit plan being based on risks identified during risk assessment process even by those whose universities were not practicing risk based internal auditing.

4.2.2. Internal Audit Risk Assessment

The respondents were asked how frequently they performed Internal Audit Risk Assessment.

Table 4.7.2: Frequency of Risk Assessment

Frequency of Performing Internal Audit Risk Assessment	F	%
Annually	22	73.3
Semi-annually	4	13.3
Quarterly	3	10.0
Once every two years	1	3.3
Total	30	100

Source: Research data 2016

Table 4.7.2 illustrate that majority, (73.3%) of the respondents stated that internal audit risk assessment was being undertaken on annual basis, 13.3% wrote Semi-annually, while 10.0% and 3.3% indicated that this was being done on quarterly and once every two years respectively. These findings reinforce the fact that regardless of the frequency, risk based internal auditing was being practiced in all the universities sampled.

4.2.3. Effects of RM on ICS.

This objective was executed by analyzing respondents opinions on the established risk management on a likert scale of 5, as they contribute to ICS.

Table 4.7.3: Extent of Application of RM

Risk Management Factor	N	% Extent of Application				Mean	Std Dev.
		VGE	G E	A E	LE		
Consideration of risk assessment in the detection of errors	30	46.7	40.0	13.3	0.0	1.67	.711
The auditors understanding of the University's risk	30	36.7	56.7	6.7	0.0	1.70	.596
Cost ascertainment in assessment process	30	40.0	46.7	13.3	0.0	1.73	.691
University auditor's involvement by management in risk evaluation process.	30	40.0	40.0	16.7	3.3	1.83	.834
The university auditors identification of changes that have influence on efficiency	30	53.3	36.7	6.7	3.3	1.60	.770
Auditors recognition of work environment risk assessment.	30	36.7	53.3	10.0	0.0	1.83	.874

Research Data 2016.

From table 4.7.3 above it is evident that 46.7% of the respondents were of the opinion that consideration of risk assessment in the detection of errors was being applied to a very great extent, 40.0% felt this was to great extent while 13.3% stated this was applicable to an average extent. With regard to auditors understanding of their respective university's risk, the findings show that majority (56.7%) of the respondents understood it to a greater extent, 36.7% to a very greater extent while 6.7% were of the opinion it was to an average extent. On cost ascertainment in assessment process, 46.7% of the respondents stated that this factor was being applied to a greater extent, 40.0% stated this was applicable to a very great extent while 13.3% wrote it was averagely being applied. When asked about the extent to which university auditor were involved by management in risk evaluation process, 40.0% each of the respondents were of the opinion this was either being applied to a very great extent or to a great extent respectively, 16.7% felt this was done to an average extent while 3.3% stated it

was to a low extent. The table further illustrate that majority (53.3%) of the respondents stated that the factor on the university auditors' identification of changes that have influence on efficiency was being applied to a very great extent, 36.7% wrote this was to a great extent, 6.7% indicated average extent while 3.3% stated it was to a low extent. On the question that sought opinion on auditors recognition of work environment risk assessment, majority (53.3%) of the respondent stated the factor was being applied to a great extent, 36.7% indicated the application was to a very great extent while 10.0% stated this was to an average extent.

These findings evince that most ($\geq 80.0\%$) of the respondents were of the opinion that all the six risk management factors were being applied to a greater extent by their respective departments as internal control system process. This view is further strengthened by the means of all the factors and whose values ranged between 1.60 to 1.83, a confirmation that most respondents were in concurrence that the factors influenced the ICS to a greater extent. A look at the standard deviations also reveals that all the values were below 1.00 which signifies minimal variability among the responses with a tendency towards the means.

4.2.4 Regression Results of RM on ICS

Table 4.7.4: RM Model summary b

					Change statistics					
Model	R	R ²	Adjusted R Square	Std error of estimate	R ² Change	F Change	df 1	df2	Sig F Change	Durbin Watson
1	.737 ^a	.543	.424	.199	.543	4.563	6	23	.013	1.877

Predictors (Constant). Risk Management Factors

Dependent Variable. ICS

Source: Research data 2016

The results reveal an R coefficient of 0.737, which means that Risk Management has high positive correlation association with internal control systems considered under this study. R square value of 0.543 indicates that the extend variation in the depended variable (ICS) accounted for by the analyzed Risk Management factors is 54.3%. This implies that 47.7% of the variation in internal control system is explained by other factors not considered under the study.

Table 4.7.5: RM ANOVA b

Model	Sum of Squares	Df	Mean Square	F	Sig
1Regression	1.087	6	.181	4.563	.013 ^a
Residual	.913	23	.040		
Total	2.000	29			

Source: Research data 2016

- a. Predictors: (Constant), Risk Management Factors
- b. Dependent Variable: ICS

Table 4.7.5, ANOVA results helps to determine significance of the predictor. The results in this table indicate that the regression model significantly predict the dependent variable. The statistical significance is revealed by P value where $P=0.000 < 0.05$.

Table 4.7.6: RM Coefficients^a

Model Factor	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	VIF
	B	Std. Error	Beta			
(Constant)	1.075	.223	-	4.821	.000	
Consideration of risk assessment in the detection of error(X ₁)	.039	.059	.105	.661	.082	1.299
Understanding of the University's risk(X ₂)	.045	.096	.103	.469	.009	2.382
Cost ascertainment in assessment process(X ₃)	.225	.076	.593	2.961	.014	2.043
Involvement by management in risk evaluation process.(X ₄)	-.011	.078	-.035	-.141	.292	3.057
Identification of changes that have influence on efficiency(X ₅)	.040	.051	.119	.784	.008	2.145
Recognition of work environment risk assessment.(X ₆)	.201	.064	.668	3.141	.016	2.309

Predictors* (Constant), Risk Management Factors.

Dependent Variables* Internal Control System

Research data 2016

The coefficient table 4.7.6, provides prediction power of each variable to the dependent variable; in which case,

$$Y = 1.075 + 0.036X_1 + 0.045X_2 + 0.225X_3 - 0.011X_4 + 0.040X_5 + 0.201X_6 + 0.424$$

Risk assessment(X₁) account for 3.6% to changes in internal control system (ICS) and is singly not significant at $P=0.082 > 0.05$. Understanding of University Risk(X₂) singly explains changes in internal control system by 4.5%. This is significant at $P=0.009 < 0.05$. Cost ascertainment in assessment process (X₃) singly explains changes in ICS by 22.5%. This is significant at $P=0.014 < 0.05$. Involvement by management in risk evaluation process(X₄) singly explains changes in ICS by -1.1%. This is not significant at $P= 0.292 > 0.05$. Identification of changes that have influence on efficiency(X₅) by 4.0% which is significant

at $P=0.008 < 0.05$ and finally Recognition of work environment in risk assessment(X6) singly explains changes in ICS by 20% at $P=0.016 < 0.05$.

In both descriptive analysis and regression analysis the findings depicts that there is a very significant effect of risk management on the effectiveness of internal control system. This is in accordance with the AMF reference framework on risk management and internal control systems which indicate that the internal control system relies on the risk management system to identify the main risks that need to be controlled (Autorite Des Marches Financiers, 2010). According to Financial Reporting Council Ltd, 2014 the risk management and internal control systems should be embedded in the operations of the company and be capable of responding quickly to evolving business risks, whether they arise from factors within the company or from changes in the business environment. These systems should not be seen as a periodic compliance exercise, but instead as an integral part of the company's day to day business processes. Shamsuddin & Johari,(2014) argues that risk management would help in identification of risks which would help set up control procedures at every level of transaction and balance to ensure the company meets the transparent and timely objectives.

In conclusion Risk management is a very good and effective factor of risk based auditing because it helps in improving the internal control system hence achievement of the university's overall objectives. The results therefore have adopted the alternative hypothesis that states that there is significant effect of risk management on ICS.

4.3: Effects of RBP on ICS

The respondents were first asked whether their university audit planning did affect the quality of services in their departments and additionally if they had enough staff as per the organogram. They were then asked to indicate the extent to which annual audit planning elements influence Internal Control System in the universities. Their responses are shown in tables 4.11 and 4.12 below.

4.3.1. Effect of Quality of Services and Sufficiency of Staff

Table 4.8.1:Quality of Services and Sufficiency of Staff on ICS

Question	% Response					
	Yes		No		Not Stated	
	F	%	F	%	F	%
Does the university audit planning affect the quality of services in your department?	28	93.3	1	3.30	1	3.30
Do you have enough staff as per the organogram?	27	90.0	2	6.70	1	3.30

Source: Research data 2016

Table 4.8.1 above manifest that most (93.3%) of the respondents were of the view that university audit planning did affect the quality of services, 3.3% were of the opinion this did not impact on the quality of services while another 3.3% did not comment. Most (90.0%) of the respondents affirmed that the staff numbers were as per the organogram, 6.7% stated the numbers were not as the organogram while 3.3% did not comment

4.3.2. Effect of Annual Risk Based Planning on ICS

Table 4.8.2: Descriptive results on effect of ARBP on ICS.

Annual Audit Planning Element	N	% Extent of Influence					Mean	Std Dev
		V G E	G E	AE	LE	NS		
Risk Based Audit Reporting time	30	33.3	56.7	10.0	0.0	0.0	1.77	.626
Assessment of risks	30	36.7	50.0	10.0	3.3	0.0	1.80	.761
Risk Based audit Annual plans with the Management	30	50.0	23.3	13.3	0.0	13.3	1.37	.890
Auditing process	30	53.3	40.0	6.7	0.0	0.0	1.53	.629
Action audit queries on time	30	56.7	30.0	10.0	0.0	3.3	1.47	.730
Implementation of audit recommendation by the Management	30	46.7	40.0	13.3	0.0	0.0	1.67	.711
Adequate auditing staff	30	46.7	33.3	13.3	6.7	0.0	1.80	.925
Achieving the Plan's objective	30	33.3	56.7	10.0	0.0	0.0	1.77	.626

Source: Research data 2016

Table 4.8.2 shows that most (90.0%) respondents were of the opinion risk based audit reporting time influence Internal Control System to a greater extent in their respective universities while 10.0% did not comment. Assessment of risks was found to greatly influence ICS by most (86.7%) of the respondents, 10.0% stated the influence was to an average extent while 3.3% wrote it was to a low extent. With regard to risk based audit annual plans with the management, the findings signify that majority (73.3%) of the respondents stated that this greatly influence ICS, 13.3% indicated it was to an average extent while another 13.3% did not comment. Most (93.3%) of the respondents held the view that auditing process did influence ICS to a greater extent while 6.7% stated it was to an average extent. In relation to auctioning audit queries on time, the findings reveal that most (86.7%) of the respondents stated this influenced ICS to a greater extent while 10.0% felt impacted to a low extent. Most (86.7%) of respondents indicated the implementation of audit recommendation by the Management influenced ICS to a greater extent while 13.3% wrote average extent. Adequate auditing staff was viewed to influence ICS to a greater extent most

(80.0%) of the respondents, 13.3% stated this was to an average extent while a further 6.7% indicated it was to a low extent. Achieving the plan's objective greatly influenced ICS according to 90.0% of the respondents while 10.0% stated its impact was to an average extent. The means of all the seven audit planning elements ranged between 1.37 to 1.80 which confirms that most respondents had indeed concurred that the said elements influenced the ICS to a greater extent. This is further amplified by the standard deviations of the elements falling below 1.00, an indication that there were limited variations in the responses. This view is further strengthened by the means all whose values ranged between 1.60 to 1.83, a confirmation that most respondents were in concurrence that the elements influenced the ICS to a greater extent. A look at the standard deviations also reveals that all the values were below 1.00 which signifies least variability among the responses with a tendency towards the means.

4.3.3 Regression Results of ARBP Annual on ICS:

Table 4.8.3: ARBP Model summary ^b

Model	R	R ²	Adjusted R Square	Std error of estimate	Change statistics					
					R ² Change	F Change	df 1	df2	Sig F Change	Durbin Watson
1	.555 ^a	.308	.044	.257	.308	1.167	8	21	.0364	1.462

a. Predictors (Constant). Annual Risk Based Audit Planning Elements

b. Dependent Variable. ICS

Source: Research data 2016

The results reveal an R coefficient of 0.555; which means that Risk Based Audit Planning has moderate association with ICS; R square value of 0.308 indicates that RBAP components considered under this study aggregately accounts for only 30.8% variation in ICS. This implies that 69.2% of the variations in ICS is accounted for by other factors outside these factors.

Table 4.8.4: ARBP ANOVA ^b

Model	Sum of Squares	Df	Mean Square	F	Sig
1 Regression	.615	8	.077	1.167	.0364 ^a
Residual	1.385	21	.066		
Total	2.00	29			

Source: Research data 2016

a. Predictors (Constant). Annual Risk Based Audit Planning Elements

b. Dependent Variable. ICS

The statistics indicate that the regression model does not significantly predict the dependable variable. This is revealed by P values, where $P=0.364 > 0.05$.

Table 4.8.5: ARBP Coefficients^a

Model Element	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	VIF
	B	Std. Error	Beta			
(Constant)	1.409	2.78		.507	.000	-
Audit Reporting time(X ¹)	.008	.094	.020	.085	.085	1.524
Assessment of risks(X ²)	.111	.080	.322	1.387	.179	1.625
Sharing Annual plans with the Management(X ³)	.008	.070	.027	.075	.908	1.694
Auditing process(X ⁴)	.099	.107	.238	.925	.365	2.005
Action audit queries on time(X ⁵)	.028	.080	.077	.035	.732	1.487
Implementation of recommendation by the Management(X ⁶)	.085	.118	.230	.720	.481	3.109
Adequate auditing staff(X ⁷)	.064	.095	.225	.674	.406	3.366
Achieving the plan's objective (X ⁸)	.182	.128	.433	1.422	.171	2.826

Predictors* (Constant): Annual Risk Based Audit Planning Elements.

Dependent Variables*: Internal Control System

Source: Research data 2016

From the table the model does not significantly predict the dependent variable with P values > 0.05 and therefore it adds no value to analyze individual predictor power.

In the descriptive analysis the findings reveals that Risk based Internal Audit Planning has a very significant on the effectiveness of the ICS. The findings were similar to that of Kasiva (2012) which indicated that annual audit planning at the commercial banks in Kenya affected the financial performance of commercial banks in Kenya. This also concurred with the findings of Sanda, Milkailu and Garba, (2005) in their study of Corporate governance mechanisms and firm financial performance in Nigeria who argued that proper planning enables accomplishment of a large number of audits in a given period by improving efficiency which will eventually result into an effective control system hence meeting the organization core objectives. The findings above reject the null hypothesis and adopted the alternative hypothesis that state that there is significant effect of internal audit planning on the ICS.

4.4 Effect of IAC on Internal Control Systems

4.4.1. University Organogram

Table 4.9.1 summarizes the responses given with regard to questions that sought information on whether the organogram reflected the true capacity on internal control system, having enough staff as per the organogram, and further if the university did both internal and external continuous training to the internal audit staff.

Table 4.9.1: Descriptive Data on Audit capacity

Question	% Response					
	Yes		No		Not Stated	
	F	%	F	%	F	%
Does the organogram reflect the true capacity required for the department?	7	23.3	22	73.3	1	3.3
Do you have enough staff as per the organogram	1	3.3	28	93.3	1	3.3
Does the university do both internal and external continuous assessment training to the internal audit staff?	18	60.0	11	36.7	1	3.3

Source: Research data 2016

From table 4.9.1 above, the findings depicts that in relation to organogram reflecting the true capacity required for the departments, Majority (73.3%) of the respondents were of the opinion this was not the case in their respective universities, 23.3% confirmed this was the case while 3.3% did not comment. With regard to there being enough staff as per the organogram, the findings demonstrate that most (93.3%) of the respondents stated this was not the case, 3.3% confirmed the staff were enough while another 3.3% did not comment. On the issue of the universities conducting both internal and external continuous assessment training to the internal audit staff, the findings show that majority (60.0%) of the respondents confirmed this was being undertaken, 36.7% stated this was not being done while 3.3% did not comment.

4.4.2 Training Intervals

Table 4.9.2 below shows the responses with regard to the question that sought to find out how often the trainings were.

Table 4.9.2: Frequency of Training

Frequency of Training	F	%
Not Applicable	12	40.0
Annually	11	36.7
Semi-annually	3	10.0
Quarterly	2	6.7
Once every two years	2	6.7
Total	30	100

Source: Research data 2016

From the findings in table 4.9.2 above, it is evident that when categorized by the interval at which they were carried out, 36.7% of the trainings were conducted annually, 10.0% were semi-annual, 6.7% each were conducted quarterly and once every two years respectively while 40.0% of the respondents stated this did not apply to them.

4.4.3. Effects of IAC on Efficiency of ICS

When asked to indicate the extent to which the audit capacity elements affect the efficiency of the ICS in the universities, the responses are summarized in table 4.16.

Table 4.9.3: IAC elements on ICS Efficiency

Audit Capacity	N	% Extent of Application					Mean	Std Dev
		VGE	GE	AE	LE	VLE		
University Auditors technical and professional skills	30	26.7	60.0	10.0	0.0	3.3	1.77	.679
University Auditors Readiness to embrace change	30	53.3	30.0	13.3	0.0	3.3	1.53	.776
Quality audit reports	30	56.7	33.3	6.7	0.0	3.3	1.43	.679
Quality criteria to measure internal auditors performance	30	60.0	26.7	10.0	0.0	3.3	1.43	.728
Adequate and effective Audit Staff	30	60.0	33.3	6.7	0.0	0.0	1.47	.629
Active and effective capacity	30	56.7	40.0	3.3	0.0	0.0	1.47	.571
Auditors compliance with the accepted audit standards	30	50.0	36.7	10.0	0.0	3.3	1.53	.730

Source: Research data 2016

The findings in table 4.9.3 above indicate that most (86.7%) of the respondents held the view that university auditors' technical and professional skills did affect the efficiency of internal

control system, 10.0% stated the effect was to an average extent whilst 3.3% felt the impact was to a very low extent. In relation to university auditors readiness to embrace change, most (83.3%) of the respondents stated this did affect the efficiency of the ICS to a greater extent, 13.3% said the effects were to an average extent while 3.3% were of the opinion the effects were of a very low extent nature. Quality audit reports were also found to greatly impact on the efficiency of ICS according to most (90.0%) of the respondents, 6.7% stated the impact was of an average nature while 3.3% wrote the effect was of a very low extent. With regard to effect of quality criteria to measure internal auditors' performance on ICS, the findings reveals that most (86.7%) of the respondents stated the effects were to a great extent, 10.0% wrote average extent while 3.3% cited very low extent impact. Most (93.3%) respondents viewed adequate and effective audit staff to affect the efficiency of ICS to a great extent while 6.7% stated the impact was of an average extent. Active and effective capacity was found to greatly affect the efficiency of ICS by most (96.7%) of the respondents while 3.3% stated the effects were of an average extent.

The findings also show that auditors' compliance with the accepted audit standards was found to greatly affect the efficiency of ICS by most (86.7%) of the respondents, 10.0% stated the effects were of an average extent while 3.3% wrote very low extent. From these findings, it is evident that most respondents were of the view that all the audit capacity elements did greatly impact on the efficiency of internal control systems. This is also revealed by the values of the means, which were in the range of 1.43 to 1.77, which signify that majority of the responses were in the range of 1.00 to 2.00 i.e. very great extent to great extent respectively whilst standard deviation values, all of which were below 1.00 depict a tendency of the responses toward their respective means and thus least dissimilarity.

4.4.4 Regression Results of IAC on ICS

Table 4.9.4: IAC model summary ^b

Model	R	R ²	Adjusted R Square	Std error of estimate	Change statistics					
					R ² Change	F Change	df 1	df2	Sig F Change	Durbin Watson
1	.710 ^a	.504	.346	.212	.504	3.192	7	22	.017	2.302

a. Predictors (Constant). Internal Audit Capacity Elements

a. Dependent Variable. ICS

Source: Research data 2016

The result reveals an R coefficient of 0.710, which means that internal audit capacity has high association with ICS; R square value of 0.504 indicates that IAC components considered

under this study aggregately accounts for only 50.4% variation in ICS. This implies that 49.6% of the variation in ICS is accounted for by other factors outside these factors.

Table 4.9.5: IAC ANOVA ^b

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Residual	1.008	7	.144	3.192	0.007
	.992	22	.045		
Total	2.00	29			

b. Predictors (Constant). Internal Audit Capacity Elements

c. Dependent Variable. ICS

Source: Research data 2016

The ANOVA results help to determine significant of predictors. The results in this table indicate that regression model significantly predict the dependent variable. The statistical significance is revealed by P value where $P=0.007 < 0.05$.

Table 4.9.6: IAC Coefficients^a

Model Element	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	VIF
	B	Std. Error	Beta			
(Constant)	1.256	.153		8.21	.000	-
Technical and professional skills(x_1)	-.108	.106	-.278	-1.018	.023	3.357
Readiness to embrace change(x_2)	-.396	.234	-1.171	-1.692	.005	21.222
Quality audit reports(x_3)	.900	.327	2.327	2.752	.012	31.776
Quality criteria to measure internal auditors performance(x_4)	-.585	.442	-1.623	-1.323	.199	66.527
Adequate and effective Audit Staff(x_5)	.062	.292	.149	.213	.038	21.630
Active and effective capacity(x_6)	-.062	.226	.352	-.274	.008	10.765
Auditors compliance with the accepted audit standards(x_7)	.154	.287	.429	.536	.596	28.166

Source: Research data 2016

Predictors* (Constant), Internal Audit Capacity.

Dependent Variables* Internal Control System

$$Y_1 = \alpha + \beta_1x_1 + \beta_2x_2 + \beta_3x_3 + \dots + \hat{\epsilon}$$

The coefficient table 4.9.5, provides prediction power of each variable to the dependent variable; in which case,

$$Y = 1.256 - 0.108x_1 - 0.396x_2 + 0.900x_3 - 0.585x_4 + 0.062x_5 + 0.154x_7 + 1.74$$

The constant coefficient i.e. Y intercept (1.256) is significantly different since the p value is .000 which is less than the alpha of .05 significance level. This would imply that for every unit increase in Audit Capacity Elements, there is a net aggregate 1.256 unit effect on Internal Control System. However, the table shows that all the p values with the exception of Quality criteria to measure internal auditors' performance(x_4) and Auditors compliance with the accepted audit standards(x_7) were less than alpha value of .05 which in essence indicates there were statistically significantly different. Furthermore, the table also show that for every unit increase in Audit Capacity Elements namely; Technical and professional skills, Readiness to embrace change, Quality criteria to measure internal auditors performance and Active and effective capacity, there is a corresponding decrease in the effectiveness ICS by a-.108,-.396,-.585 and -.162 respectively. The negative effects on the internal control systems may be explained by the fact that as the universities continue to invest more on Technical and professional skills, Readiness to embrace change, Quality criteria to measure internal auditors performance and Active and effective capacity; Internal control system will be efficient and effective but at the same time the cost of the investment will be higher compared to the benefit derived from it.

The descriptive analysis results revealed that there was significant effect of Internal Audit capacity on the internal control systems. This was also confirmed by the fact that 40% of the respondents were of the opinion that the internal audit staffs were not being trained frequently on the current issues. This could have been one of the reasons why the financial statements were qualified for the universities in the study. This finding was concurrent to that of Kasiva (2012) which indicated that poor training can lead to lack of commitment to proper work procedures, poor supervision and demoralized job holders. It can mean that the level of service being given in the organization is not up to the standard and changes are necessary. The findings was also similar with that of Ayagre (2014) in his study of the adoption of risk based internal auditing in developing countries which concluded that as RBIA is gaining popularity in developing countries, it is important that management invest in developing the skills set in the use of RBIA approaches in order to derive maximum benefits of RBIA. In conclusion the study rejects the null hypothesis and adopts the alternative hypothesis that states that there is significant effect of internal audit capacity on ICS.

4.5. Hypotheses Testing

Table 4.10 below outlines the data output with regard to one way ANOVA on three hypotheses that had assumed there being; i. no significant effect of risk management factors on ICS, ii. No significant difference in the effects of internal audit planning elements on ICS, and iii. No significant effect of internal audit capacity elements on efficiency of ICS.

Table 4.10: Hypothesis Testing as a confirmatory diagnostics.

	Source of Variation	SS	Df	MS	F	Sig
Risk Management	Between Groups	1.01	2	0.504	0.884	0.0444
	Within Groups	15.39	27	0.570		
	Total	16.40	29		0.884	0.0444
Audit Planning	Between Groups	1.19	2	0.592	1.281	0.0443
	Within Groups	14.93	27	0.462		
	Total	16.12	29		1.281	0.0443
Audit Capacity	Between Groups	0.53	2	0.263	0.539	0.0482
	Within Groups	13.18	27	0.488		
	Total	13.71	29		0.539	0.0482

Research data 2016

With regard to Null hypothesis that there is no significant effect of risk management factors on internal control system, table 4.10 above shows that the calculated value of F is 0.884 which is greater than the table value of 0.444 at 5% level with df being 2 for between samples and 27 for within samples and hence could not have arisen by chance. This analysis therefore does not support the null hypotheses of there being no difference in sample means. It can thus be concluded that the difference in the effects of risk management factors on internal control systems is significant and not just a matter of chance. In relation to the hypotheses that sought to confirm the assumption that there was no significant difference in the effects of internal audit planning elements on Internal Control System, the findings in table 4.15 above indicate that the calculated value of F was 1.281 which is greater than the table value of 0.443 at 5% level with df being 2 for between samples and 27 for within samples and hence could not also have arisen by chance. The analysis therefore does not support the null hypotheses of there being no difference in sample means. It can thus be concluded that the difference in the effects of audit planning elements on internal control systems is significant and not just a matter of chance. For this reason the null hypotheses is rejected whilst accepting the alternative hypotheses that there is significant effect of audit planning elements on internal

control systems in the universities. With regard to Null hypothesis that there was no significant effect of internal audit capacity elements on efficiency of internal control system, table 4.10 above shows that the calculated value of F is 0.539 which is less than the table value of 0.582 at 5% level with df being 2 for between samples and 27 for within samples. The findings thus support the null hypotheses of there being no significant difference in sample means which might have arisen due to chance. It can thus be concluded that indeed, there was no significant effects of internal audit capacity on efficiency of internal control systems.

It is noteworthy however, that from the foregoing findings, whereas there is a confirmation that there are significant effects of both risk management factors and internal audit planning elements on internal control system, the effects of internal audit capacity on efficiency of the Internal control system is depicted to be insignificant thus alluding to the negative effects of the internal audit capacity elements in the study.

4.6. Regression Analysis

A summary of the data output for on multivariate regression model that sought to test the relationship between the effects of RBIA elements on ICS in selected public universities in Kenya are given in table 4.11 below.

Table 4.11: Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	VIF
	B	Std. Error	Beta			
(Constant)	1.374	.567		2.433	.042	
Risk Management	.026	.616	.013	.042	.038	2.039
Annual Audit Planning	.011	.035	.814	.314	.028	2.204
Audit Capacity	-.056	.401	-.663	1.397	.022	26.206

Research data 2016

Predictors* (Constant), Risk Management, Annual Risk Based Planning and Internal Audit Capacity.

Dependent Variables* Internal Control System

The logistic regression used in this model was;-

$$Y_1 = \alpha + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_{3i} + \epsilon$$

Where; Y = Internal Control Systems

α = Constant Term

β = Beta Coefficients.

- X₁ = Risk Management
- X₂ = Annual Risk Based Planning
- X₃ = Internal Auditing capacity
- ε = Error term

$$Y_1 = 1.374 + 0.026x_1 + 0.011x_2 + -0.056 x_3 + 0.567$$

The aggregate coefficients reveal that the three variable Risk Management, Annual Risk Based Internal Audit Planning and Internal Audit Capacity have significant contribution of ICS; Risk management accounts for 26% to changes in the internal control system and is singly significant at $P=0.038 < 0.05$. Annual Risk Based Planning accounts for 11% to changes in ICS and is singly significant at $P=0.028 < 0.05$ and finally Internal Audit Capacity is accounts for 5.6% change on the ICS.

CHAPTER FIVE

SUMMARY OF THE FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

This chapter presents a summary of the study findings, conclusions and recommendations based on the major findings.

5.1. Summary of the findings.

The objective of the study was to determine the effect of risk-based audit on internal control system in the selected public university. The study addressed risk based audit practices which included risk management, Risk based audit annual planning and internal audit capacity.

Objective one, whose purpose was to establish the effect of Risk Management on Internal Control System, established that the predictors were cumulatively significant and explain the changes in Internal Control Systems. The predictors all have significant positive explanatory coefficients except for involvement by management in risk evaluation process; which essentially loads additional cost element to the process.

Objective two was to determine the effect of annual risk based planning on internal control systems reveals that the predictors significantly explained the changes in the internal control systems. Action on audit queries on time were very significant in influencing the efficiency and effectiveness of the internal control system.

Objective three, whose purpose was to analyze the effect of internal audit capacity on internal control systems, established that the predictors were cumulatively significant and explain the changes in internal control system. Proper planning enabled accomplishment of a large number of audits in a given period by improving efficiency. Implementation of audit recommendation by the management, sharing risk based audit annual plans with the management, risk based audit reporting in time and adequate auditing staff affected the internal control systems of the universities.

Thus the internal audit activity collectively must possess or obtain the knowledge, skills, and other competencies so as to improve the efficiency and effectiveness of the internal control systems.

5.2. Conclusions of the study

The study reveals that whereas planning puts audit resources into logical schedule, while capacity defines the ability to apply audit resources according to the established plan, the greatest outcome of Risk Based Auditing is accounted for by the management process. Its therefore important that the public universities to practice Risk based internal auditing through risk management and annual risk based planning should be enhanced to be able to detect risks on time and concentrate on high risk areas leading to effectiveness and efficiency of operations, reliability of financial reporting and Compliance with applicable laws and regulations which are the indicators of an effective and efficient ICS.

5.3. Recommendations

From the findings, the study recommends that management of public universities in Kenya should enhance risk based audit practices such as risk management; annual risk based planning and internal auditing capacity to enhance effective and efficient ICS in public universities in Kenya.

5.4. Limitation of the study

The main limitation of the study was inability to include other public sector organizations. This study was limited to selected public universities. The study would have covered more institutions across all sectors so as to provide more broad based analysis.

5.5. Suggestions for Further Research

The results suggests need to analyze the loading factor in Risk Based Auditing sequencing the descriptors and explore possibility of institutional factors affecting Risk Based Productivity for each organization.

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APPENDICES

Appendix 1: Letter of Introduction

Appendix II: Questionnaire

The questionnaire seeks to collect information on risk based auditing and effectiveness of internal control systems in the selected public universities in Kenya.

PART A: GENERAL INFORMATION

- 1) Name of the respondent (optional).....
- 2) Gender Male [] Female []
- 3) What is your level of education?

Primary [] Middle level college []

Secondary [] University []
- 4) For how long have you worked in the University?

a) Less than two years [] c) 6-10 years []

b) 2-5 years [] d) Over 10 years []
- 5) Have you experienced any challenges on the Internal Control Systems in the University?

Yes [] No []
- 6) Were the challenges addressed in time after communication to the relevant departments?

Yes [] No []
- 7) Do you receive support from the Top management of the University?

Yes [] No []

SECTION B: RISK BASED AUDIT PRACTICES. (For Internal Audit Staff Only)

8. Is your University practicing Risk Based Internal Auditing?

Yes []

No []

9. Are you involved in Risk Assessment at the University?

Yes []

No []

10. How often do you perform an internal Audit Risk Assessment?

[1] Once every two years [2]. Annually [3]. Semi-annually [4]. Quarterly.

11. Is your Audit Plan based on the Risks identified during the assessment process?

Yes []

No []

12. Does the University Audit planning affect the quality of the services in your department?

Yes []

No []

13. Do you have an Internal Audit organogram in the University?

Yes []

No []

14. Does your organogram reflect the true capacity required for the department?

Yes []

No []

15. Do you have enough staff as per the organogram?

Yes []

No []

16. Does the university do continuous assessment training to the internal audit staff, both internal and external assessment?

Yes []

No []

17 How often is the training?

[1]. Once every two years [2]. Annually [3]. Semi-annually [4]. Quarterly.

SECTION C: RISK BASED AUDIT AND INTERNAL CONTROL SYSTEMS

18. For the following risk management factors, give your opinion on the extent to which they are applied by your department as Internal Control System Process. The opinion scale runs from 1-5; where 1 = Very Great Extend, 2 = Great Extend 3 = Average Extend 4 = Low Extend and 5 = Very Low Extend.

Risk management	1. Very Great Extend	2. Great Extend	3. Average Extend	4. Low Extent	5. Very Low Extend
i. Consideration of risk assessment in the detection of errors					
ii. The auditors understanding of the University's risk					
iii. Cost ascertainment in assessment process					
iv. University auditor's involvement by management in risk evaluation process.					
v. The University auditors identification of changes that have influence Efficiency					
vi. Auditors recognition of work environment in risk assessment					

19. Indicate the extent of the following annual audit planning elements in influencing Internal Control Systems in the University? Use a scale of 1 to 5 where: 1 = Very Great Extend, 2 = Great Extend 3 = Average Extend 4 = Low Extend and 5 = Very Low Extend

Annual Audit Planning	1. Very Great Extend	2. Great Extend	3. Average Extend	4. Low Extend	5. Very Low Extend
i. Risk Based Audit Reporting time					
ii. Assessment of risks					
iii. Risk Based audit Annual plans with the Management					
iv. Auditing process					
v. Action audit queries on time					
vi. Implementation of audit recommendation by the Management					
vii. Adequate auditing staff					
viii. Achieving the plan's objective					

20. To what extent do the following audit capacity elements affect the efficiency of the internal control system in the University?

Audit Capacity	1. Very Great Extend	2. Great Extend	3. Average Extend	4. Low Extend	5. Very Low Extend
i. University Auditors technical and professional skills					
ii. University Auditors Readiness to embrace change					
iii. Quality audit reports					
iv. Quality criteria to measure internal auditors performance					

v.	Adequate and effective Audit Staff					
vi.	Active and effective capacity					
vii.	Auditors compliance with the accepted audit standards					

Thank You.