

**EFFECT OF COMPUTERIZED ACCOUNTING SYSTEMS ON RISK
BASED INTERNAL AUDITING IN HOMA BAY COUNTY
GOVERNMENT, KENYA**

BY

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DECLARATION

Student Declaration

This research as my original work and has not been presented to any other institution or university for examination purposes

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Supervisor's Declaration

I declare this research project to be submitted for examination with my endorsement as the University Supervisor.

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DEDICATION

My special devotion goes to my dearest wife Linet Akinyi for her prayers and her encouragement to me. To my lecturers who worked without complains to ensure the timely finish of the research paper. May this work inspire all my family members, friends and my religious benefactors for their prayers and patience during my absenteeism in my endeavors to seek knowledge. I also express my sincere gratitude to my employer the national treasury for allowing me time and space in undertaking this project. God bless each one of you abundantly.

ABSTRACT

For several centuries, internal auditing has been believed to be helping firms in protecting financial resources and assess recognized internal control measures with the key concentration being control awareness and monitoring. Similarly, internal auditors are endured, and have not been treated with esteem in most organizational control. The advent of contemporary operational and commercial risks has obligated various companies to articulate policies and to upraise the standing of internal audit. Though a change of internal auditing from system based internal auditing to risk based internal audit has been applied extensively with the developed nations in the centre stage, previous research in internal audit has explored objectivity issues in relation to computerized accounting systems. The financial performance requires suitable risk based internal audit practices hence efficient and effective internal audit. In this study the researcher sought to find the effect of computerization in relation to RBIA in the county government of Homa Bay, Kenya. This study adopted descriptive survey research for it best explains the explicit occurrence in its contemporary tendencies, modern measures and connections among dissimilar aspects at the present. The target population for the study constituted of 60 respondents who were finance officers, internal auditors, the information technology officers, relationship officers/managers and accountants. The study administered questionnaires which comprised of structured and unstructured queries to all the respondents since it was the best suitable instrument to collect data. From the findings, the study concludes that RBIA over risk valuation/assessment, risk profiling, and yearly risk based audit planning and auditing staffing should be enhanced transparency and accountability in computerized environment, hence enhancing financial procedures. The study recommends that policy makers in the county government of Homa Bay in Kenya should adopt effective computerized accounting systems in implementation of risk based internal audit practices such as risk profiling, risk assessment, annual risk based audit scheduling, internal auditing standards/policies and auditing recruitment to enhance effective and efficient financial performance.

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LIST OF ABBREVIATIONS

AIG –	Internal Auditor General
CAS -	Computerized Accounting System
CAAS –	Computer Aided Audit Technique
CFO -	Chief Finance Officer
CobIT -	Control Objectives for information and related Technology
EDP –	Electronic Data Processing
EDPAA -	Electronic Data Processing Auditors Association
ERP –	Enterprise Resource Planning
ICT -	Information and Communication Technology
IIA –	Institute of Internal Auditing
IFMIS –	Integrated Financial Management Information System
IR -	Inherent Risk
ISACA -	Information Systems Audit and Control Association
IT -	Information Technology
ITA –	Information Technology Auditing
KACC –	Kenya Anti-Corruption Commission
LATF –	Local Authority Transfer Fund
NHIF –	National Hospital Insurance Fund
OP –	Office of the President
PFMS –	Public Financial Management System
PPOA –	Public Procurement Oversight Authority
RBIA –	Risk Based Internal Auditing
SPSS -	Statistical Package for Social Science
USAID -	United States Agency for International Development

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

IT evolution in auditing and accounting is believed to have started several decades slightly over 50 years in the past with the first functioning commercial computer (Fadzil et al., 2005). Accounting techniques of several public and private entities whether large or small have been computerized. Additionally, it is claimed that there ought to be thorough considerations of the controls in a high-tech situation, and their influence on the auditor's valuation of risk, and the consequent internal audit techniques. The above-mentioned measures are thought to frequently comprise using computer-assisted audit techniques (CAATs) as stipulated by ACCA (2011). Jones and Young (2006), argued that electronic data process (EDP) auditors later formed the independent audit body known as the Electronic Data Processing Auditors Association (EDPAA). Key objective of the association formed was to formulate policy guidelines, control procedures, and internal audit principles for electronic data processing auditors.

Heidenhof, 2002 in his study asserted that, "In early 1990s, African countries began to focus on the improvement of public finance specifically, on budget and expenditure management reforms". The foregoing is said to have been occasioned by donors' concerns. African countries commenced a critical review of hitherto existing systems and processes in their governments. Due to the realization that the existing systems and processes were outdated, integrated financial management systems (IFMIS) was recommended for piloting. IFMISs is an oracle application software tool tailored to suit financial management tools that incorporate the use of computerized systems. According

to a report by the United States Agency for International Development (USAID, 2008), the scope and scale of IFMIS can vary.

Jones and Young (2006) in their study argued that EDP auditor molded the EDPAA. The objective of the association was to yield measures, policies and morals for EDP auditors. The initial edition of (control Objectives) was published in the year 1977, this publication is now known as, “Control Objectives for information and related Technology (CobiT)”. It is the set of commonly recognized information technology control goals for information technology auditors. In 1994, EDPAA was integrated to (Information Systems Audit and Control Association) ISACA.

What marks this research stimulating is due to numerous academicians who are swift to argue out the necessity for internal auditors to adopt to variations brought about with information technology development, however acknowledging how these variations impacted on internal auditors have not been adequately investigated. While some papers view computerized accounting systems as increasing audit related risk, it is essential to understand how these changes in the accounting process can develop the work of the internal auditors or else this proves that actually there is a necessity to evaluate and study other studies.

1.1.1 Computerized Accounting System

According to Weber (2011), “Computerized accounting system (CAS) involves the use of computers in processing accounting data into information to facilitate quick decision making through timely preparation of financial reports and financial reporting in this case refers to the way in which financial information is recorded, processed and conveyed to the end users of this information in particular”.

Accounting system use to be manual process using paper, books and documents for business information, however accounting in the recent past has been computerised i.e. it involves the use of computers to process the financial transactions. Advances in information communication technology (ICT) have generated substantial changes in the field of business operations in conjunction to software in accounting. It has been proved that a computerized accounting system has several advantages such as speed, accuracy and reliability of financial information compared to a manual accounting system Osmond (2011). Before the advent of ICT in accounting practice, these bookkeeping practices were being executed manually. Nevertheless, nowadays several certified public accountant and data capturing clerks choose to use accounting software to record, report and analyse their organisation's financial information. This information is collected from transactions and is compiled into financial reports (Weber, 2011).

1.1.2 Risk Based Internal Auditing

RBIA stems basically from models that accept inherent risk (risk of a substantial misrepresentation in the business financial reports ascending as a result of error or omission as a consequence of factors other than failure of controls) and control risk (risk of a substantial misstatement in the financial statements ascending due to lack or failure in the implementation of appropriate controls) are separate models that inherent risk ascends from components of the audit atmosphere that are absolutely autonomous of attributes that control the level of control risk. Operationalizing the distinction between inherent risk (IR) and control risk (CR) has however, proved problematic. It seems to be a slight agreement concerning aspects that may recognize inherent risks and there is slight circulated indication concerning how inherent risk is considered by specialists. Also, it is not hitherto clear neither does it make noble reasonable sense to try to isolate (IR) and (CR) in the way required by standard setters (DeZoort et al, 2002).

The RBIA role in Kenya especially in government departments, state owned agencies, county governments among others faces a perception and, to some level, a integrity problem as a value component of the organization indicating that internal audit in public organization's has not sufficiently implemented its functions as anticipated in financial management due to escalation in the number of public financial losses. For instance, there is the 2005 Anglo-Leasing Scandal, EURO Bond and the National Youth Service (NYS) Scandals, which are all indicators of ineffectiveness in public internal auditing. Consequently, it is important that a study be carried out to assess the challenges affecting internal audit performance in business management in the county government of Homa Bay. Risk based internal auditing incorporates risk management and has been implemented by commercial State Corporations with a view to achievement of effective financial control and return.

Local studies on impact of risk based internal audit on computerized accounting system in the county governments are scanty with a few focusing on the role of auditing and governance in Government. For instance, Maiteka (2010) undertook a study of the impact of RBIA on corporate governance in the public sector in Kenya concentrating on designated Ministries and found that risk based internal auditing assessed risks facing Government Ministries on financial management and focussed on very risky areas in order to surge accountability and transparency, hence improving decent governance.

1.1.3 Computerized Accounting System and Risk Based Internal Auditing

In relative to discovering the influence of computerized accounting techniques on risk based internal auditing, quality of financial reports in the county government of Homa Bay is the main concern. Internal Auditors have a role of determining whether the

commercial statements of the county fairly characterise the reasonable view of the county's financial operations. This can only be achieved where the internal controls set in place are efficient and working as in this case, computerization of the accounting system. The risk assessment needs to be in line with computerization to help in facilitating audit trail of the transactions. Internal auditors are therefore mandated to apply computer aided audit tools (CAAT) in order to be relevant in the computerized environment.

The study therefore seek to link the two aspects i.e. computerized accounting system and the risk based internal auditing in the county government of Homa Bay.

1.1.4 County Government of Homa Bay

The county Governments came as a result of devolution in the recently newly promulgated constitution of Kenya 2010 being among the 47 counties. Homa Bay county government is situated along the Lake Victoria within Nyanza region comprising of eight (8) sub counties, under the leadership of the Governor, Deputy Governor, County Secretary and Chief Officers.

The county government of Homa bay started by undertaking their financial transactions through partial computerization of financial transactions in the financial year 2013/2014 where most of the transactions were carried out manually i.e. drawing of cheque, Cash Book entries, Final Accounts among others. From the financial year 2014/2015, the county government of Homa Bay adopted computerized accounting system i.e. IFMIS and Internet Banking. Internal Audit as a department in the County Government of Homa Bay plays role of financial advisory in matters relating to risk assessment, evaluation and their mitigation.

1.2 Research Problem

Computerized systems appear in different forms such as IFMIS, EDP, CAATs, DSA, EMCP, and CSRP etc. The assertion is that there are variations in both auditing and accounting system which started more than fifty years ago (Fadzil et al., 2005). Additionally, it is observed that accounting systems of several government agencies irrespective of their dimensions are computerized. ACCA (2011) recommends for the incorporation of computer-assisted audit techniques in organizations as a way of managing risks.

According to KACC (2008) absence of suitable control mechanisms and audit tracks have shaped opportunities for corrupt activities in Kenya's public sector. The same problem is also evident in some organizations which in spite of having computerized systems have not separated functional duties between IT operations and other departments such as finance. This is in line with the allegation that while computerization provides unquestionable benefits, it also conveys considerable risks to business and information security. Therefore, when the internal audit system is fragile or lacking completely, financial losses are likely to be incurred through corrupt activities of unscrupulous auditors and financial managers. As KACC exemplifies that there exists instances where organizations have a revenue collection system that does not have audit trails and standard access controls mechanism, a situation that creates proliferation of swindling of public funds. The foregoing affects the services that are supposed to be funded by the government through its agencies. Ultimately, the socio-economic expansion of the nation is bound to be negated.

Control function, such as that implemented by internal audit can lead to improved organisation's performance. However, despite this assertion, the scanty use of computerized accounting systems to process financial transactions has led to several audit queries. External auditors report for the financial year end 2013/2014 for Homa Bay county raised several issues relating to efficiency, accuracy, reliability and accountability which all points out that internal controls set by the county government of Homa Bay are weak and inefficient. This raises the concern of whether internal auditors have role to play in risk detection and their influence in financial controls. The assertion suggests that their applicability or suitability to County Government is not fully developed and exploited. Apart from some limited implementation in successful Central Government, no known studies have been reported relating to their impact in with regard to the risk base internal auditing and the extent of adoption within the county government of Homa Bay in Kenya. The study therefore sought to scrutinize the outcome of computerized accounting systems on risk based internal auditing in the County the Government of Homa Bay.

1.3 Research Objective

The general objective of the research is to evaluate the consequence of high-tech accounting systems on risk based internal audit in County the Government of Homa Bay.

1.4 Value of the Study

The research is considered valuable to the policy makers because on its completion, it will offer insights into the relevance of high-tech accounting systems on audit risk management in enhancing corporate governance and as a result, improving financial performance in county Governments. In particular Chief Officers and Management have appreciated the importance of computerization on risk based internal audit and have

assisted them in rating their level of compliance against those of other counties, and in determining whether computerized accounting systems affects audit risk management in improving financial performance of County Government of Homa Bay in Kenya.

To the County Government

Chief Officers have learned various mechanisms through which they can now exercise their control. Residence of Homa Bay have also benefit as they are able to determine the accountability, Governance and value additive projects to be implemented in the county.as they are able to make informed investment decisions. County Government officers have gained insight on critical role of computerized accounting systems on risk based internal auditing in financial performance of County Government of Homa Bay. The policy maker have known how well to incorporate audit risk management in computerized accounting systems in County Government of Homa Bay.

To academicians

The study will provide a useful basis upon which further studies on risk-based internal auditing in relation computerised accounting systems in the county governments. This research will mark an impact to the academic literature on the arena of information technology auditing in Kenya where very little is known about its structure and application.

The findings of the study will provide some insights to developing countries that benchmark with Kenya on the challenges in roll out of RBIA in computerized environment and hence formulate timely and appropriate interventions to mitigate the risks.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

The literature review summarizes the information from various scholars who have undertaken the research in the similar ground. More weight has been laid on the relationship between risk based internal auditing and computerized accounting systems in the public sector focusing on the County Government. The study will cover theoretical review, empirical review and summary of literature review.

2.2 Theoretical Review

This research was guided by theories discussed under this section which include system theory, risk theory, risk management and risk based internal audit theory.

2.2.1 System Theory

Wang (2005) in his Systems theory, “Refers to information in the sense that assuming information does not necessarily involve any conscious mind, and patterns circulating (due to feedback) in the system can be called information”. Simply we can conclude that information is somewhat hypothetically alleged to be a symbol, although not produced or offered for that purpose. Kang’ethe (2002) defines a system as, “A group of related and interacting components, which work together to achieve a desired purpose or set of objectives”. Kang’ethe (2002) in his study additionally perceives the necessity to have regulator essentials to ensure that the procedure gives the anticipated level of outcome and dodge or decrease waste. IT is a overall term that explains any IT that assists to manipulate, produce, store, communicate, and/or distribute financial information. The need for effectiveness and efficiency consequently conveys out extra need of guaranteeing harmony and combined effect amongst the human resource as the

fundamental assets that pedals other resources on the one hand and the other outfits of business, in specific modern ICT on the other hand so as to realize the objectives of office secretarial management. Therefore, there is perfect necessity to comprehend the attitude and perception of human resource and areas which are prone to clash in the course of interaction between the human resource and modern ICT. Combining computer and communication technologies translate into the information technology systems, or "InfoTech". Apparently, when talking about IT entirely, it is eminent that the usage of computers and information are interconnected.

2.2.2 Risk Theory

The theory of Risk endeavours to explain the choices individuals tend to make when the future is uncertain. Ideally, a state where risk theory may be appropriate includes numerous factors in the domain, probable choices and appropriate result for every blend of state and conclusion. Risk theory tries to forecast a decision in relation to the spreading of probable outcomes it will yield. The risk theory is believed to be vital for individuals who make choices whose achievement stems on the way the risks in the universe turn out to be. Just to mention some few cases, individuals partnering with insurance companies, where their achievement majorly depends on predicting the frequency and degree of claims, use risk theory to help determine their optimal exposure to risks.

Generally, at any point of time any choice an individual make about the future must have element of future uncertainty. Cases where an individual would like to make investment choices about companies that may default the price the investor will be ready to pay will be affected with ambiguity. Some individual believe uncertainty can make the variation on whether or not an individual should take an action at all.

2.2.3 Risk Management

According to Haniffa and Iludaib (2006), Ownership and top management tasks separation and the existence of information irregularity present the likelihood of principal-agent conflicts. In Risk based internal audit comprehensive risk management strategies which are forward looking and helps to improve business decisions (Fatemi and Glaum. 2000). The issue at the moment is not fair evading or minimizing financial or business losses, but about dealing absolutely with prospects. It is an influential tool for public sector administrators (Drzik, 2000). Moral risk management is centered on a carefully planned, coherent, complete and documented strategy. The policy delivers overall financial policy regulation, and internal audit plans and procedures that can be used as part of the department's daily activity to manage risk (OECD, 2005).

RBIA approach comprises top management to a far much greater level. According to (Millichamp. 2002), "The risks to be covered in audits will exist in all parts of the organization and audits will therefore involve managers in departments never visited before". Numerous risks will be great fully substantial to the enterprises and the conversation of their controls will involve more senior managers and directors than might be involved in old-style financial orientated internal audits as stated by (Al-Tamimi, 2002).

Winograd, Gerson & Berlin, (2000) has stated that, "the internal auditing risk management orientation has given the audit role increased reliability across the enterprise and greater acceptance by management". According to Fatemi & Glaum,(2000), through risk based internal audit, sound risk management strategies which are forward looking and help to advance business decisions can be achieved.

Internal Audit requires several risk management practices including; determining processes and their objectives, recognizing risks that hinder the processes with management, tests and controls to mitigate the risks, reporting in areas where business risks are not adequately alleviated by internal controls and assuring top management that financial risks are mitigated to an acceptable level. This has been made easy with adoption of RBIA in the public sector (Millichamp, 2002).

In Odoyo et al.'s (2014), "Analytical study on the role of internal audit in risk management implementation in Kenya's state corporation", it is alleged that in spite of the Kenya Railways operating in the lucrative transport sector and being a key player in Kenya's economic development, it has been facing internal financial and operational challenges. The foregoing problems, arguably, are occasioned by poor governance of the state corporation. The implications of the financial mismanagement that was so monumental that the national government of Kenya had to contract the Rift Valley consortium, a private entity, to run the corporation. The study further laments that, despite receiving financial assistance from the National Treasury, most State Corporation in Kenya have been reporting financial deficits at the end of every financial year. The scholars cite other state firms that have collapsed, have collapsed and been revived, or have ever been on the brink of collapse. Such include, Agricultural Finance Corporation (AFC) and Kenya Meat Commission (KMC).

2.2.4 Risk-Based Internal Audit Theory

This theory of RBIA was proposed by Alexander (1991). He posited that top management precise knowledge increases an auditor's capacity to evaluate future consumer risks precisely. Although, previous study in psychology submits that people tend to overlook knowledge when challenged with present risk appetite which clashes with the level of know-how. Bell et al.1997; Bell et al. 2005; Bell & Solomon, (2002) argues that, "Risk based audit theory in regards to internal auditor's evaluation during the audit becomes more effective with client-specific experience". In line with this theory, the obligation of recognising and management of risks fits to top management, though one of the crucial roles of internal audit is to offer an independent and objective assurance that those risks have been properly managed (Alexander, 1991). Skilled internal audit activity can best realize its mission as a keystone of governance by placing its effort in the setup of the Organisation's individual risk administration framework. This comprises looking at the manner managers assess, identify, respond to and report risks, as well as how well managers monitor whether reactions to risks are functioning.

2.3 Determinants of Risk Based Internal Auditing

There are internal and external factors which influence the risk based internal auditing of specific organisations. These include top level management commitment, size of liabilities, training, policy framework, state of information technology, risk level, management quality, size of organisation, ownership and the like. The key drivers of risk based internal auditing are discussed below.

2.3.1 Internal Audit Function

Several individuals do not clearly comprehend the role of IA function hence internal audit function remains a mystery and should be demystified. This is evident from the

history and existence of internal audit function. In Kenya, internal audit activity has been in existence in the government departments prior to independence. It was discontinued because of the Economic Commission Report of 1962 and reintroduced in 1984 when it was evidently concluded that its nonexistence had resulted to great negligence in the financial management of public resources, compliance with pertinent regulations, laws, procedures and lack of an operational and efficient internal control system. In 1995, the internal audit was rebranded as Audit Inspectorate, where internal auditors were separated from the management functions and grouped in clusters from where they would discharge audit inspectorate activities, an approach that was found to be ineffective and expensive to the government. The role of internal auditors was redefined and was decentralized to become an integral part of management in the year 1997.

2.3.2 Commitment of Top Management

To motivate internal audit staff to effectively discharge their duties, Top management commitment was prerequisite for success. Dynamic management support strong and improved governance structures were also some of the motivating factors according to the study carried out in the county government of Homa Bay. According to the study by Van Gansberghe, (2005), the agreement and active participation of the head of internal audit, senior management, audit staff, accounting officers and senior operational management must be secured in a climate that fosters independent, but valued evaluation of the effectiveness of risk management, control and governance processes.

The policy of IS for the departments is implemented by top level administration where their involvement whereby they impact on the ecological choices most likely to secure attention in the organization as stated by (Sandelands, 1994). They are also required to

provide appropriate, accurate and timely feedback concerning the county Government operations and the financial performance of individual departments within the county, which the auditor will use to provide assurance on.

2.3.3 Training

The study by Kimwele (2011) argued that, in the public sector there is overall scarcity of skillful labor, and struggles to improve talents in government are often discouraged by migration of labor to the private sector for greater pay when workers have attained adequate skills. Risk management and risk based internal audit in corporate sector, is considered as a highly skilled activity or craft while it is an emergent discipline in government organizations in public sector and need adequate training to enhance employee skills in the relevant field.

2.3.4 Policy Framework

The study by Pollitt and Bouckaert, (2004) suggested that the public sector reform management has become a “global” tendency from the start of early 1980s but “local” (i.e. country-level) reactions have created greatly segregated routes and outcomes. This has resulted to certain distinction between the contents of what was suggested by a spectacle of reform laws and the real dissemination of the matching business management outfits. Still there appears to be an even greater distinction between the ordinary occurrence and the real use of the business management outfits.

Pollitt and Bouckaert, (2004) argued that the culture of governance as far as audit reforms are concerned is extremely legitimate. From other bases of strategy advice, internal audit have been partially distended, from nearly entirely internal to a blend of internal and external bases. Most structures like the quasi-federal structure or the low horizontal coordination, they further argued that to point out evidently the course of obstructing

essential and widespread restructurings, whereas additional aspects like the majoritarian resolutions of governance

2.3.5 Communication Process

In adopting risk based internal audit process, communication facets ought to be stressed. Several studies suggest that communication is main aspect for the successful implementation of risk based internal audit and its adoption. Communicating with workers regarding matters associated to the RBIA is regularly hindered. In this study, several groups or organizations are facing several challenges key of which is lack of organization of an open ended communication platform that would accept and asks queries from staffs about matters concerning the articulated strategy. Further, it's argued that in conjunction to inability, inadequate communication causes more harm as the staffs are not well educated about fresh desires, responsibilities and actions to be executed by the selected personnel, and further shield the motive behind reformed conditions.

2.4 Empirical Review

The segment addresses the empirical analysis of the study. Both international empirical studies and local empirical studies have been reviewed. Fadzil et al (2005) in his study concluded that the technology insurgency in auditing and accounting originated in the early 1954 where the first working commercial computer. General electric is accredited with the initial working computerized financial system, a UNIVAC computer, in the year of 1954.

The key objective of enterprise risk management audit and control according to a study by Lorenzo (2001) is aimed at providing a combined, widespread valuation of all the risks that an organization is visible to and an objective and reliable attitude to handling

them. Additionally, the firm's dimension and complication makes it tougher to realize the firm's overall view of risk based internal auditing. The scholar further asserted that, the magnitude and complication of large firms make computerized auditing more important.

Several studies have been advanced laying more emphasis in Kenyan perspective. According to the study by Peterson et al (1996) he stated, "Four propositions emerge about the impact of computers on the accounting systems. First and surprisingly, the initial impact of computers is indirect. Their primary impact is to strengthen the manual accounts, which the Counties continue to rely upon. Second, computers promote effectiveness reforms by changing procedures, rather than efficiency reforms by accelerating the throughput of data with existing procedures. Third, computers do not initially promote document processing but initially do improve data processing and fourth, computers do promote rudimentary analysis".

Burch and Grudnitski (1986) argued that organizational information essentially require three attributes consisting of accuracy, timeliness and relevance. If information is to justify these attributes, it entails in nearly all circumstances to be processed and repackaged in a layout that will permit for its swift, vibrant and extreme consumption. This ideally can't be actualized over the manual method. In reaction to this integral ineffectiveness, several technologies have been invented for the managing of information resources. It is these that are referred to as information technologies. Moll (1983) in his definition stated that, "IT refers to the various technologies used in the creation, acquisition, storage, dissemination, retrieval, manipulation and transmission of information". Information Technology is rapidly changing the global financial markets. According to Cosserat, (2000) is altering not only the way in which business is carried out, but also the way in which information is retrieved.

A study on influence of CAS on audit risk management in public enterprises conducted by Otieno and Oima (2013) in their international journal argues that, “The administration and board of a company trust on the internal audit team that works in union with the audit committee to report on the financial wellbeing of the organization. Just like the external auditors the internal auditors require the appropriate skill set to effectively audit such environments”. The study should be a suitable controller in planning the control procedures in relation to the Enterprise Risk Management System (ERMS). In addition, being mindful of the possible risks, the internal audit group will identify the suitable extent of participation in ERP strategy and application.

Oyugi (2005) in her study, “Fiscal decentralization in Kenya” recognized numerous challenges impeding the application of decentralization. The study focuses on effective functions of audit department as some of the monitoring section in the administration of the then Local Authority Transfer Fund (LATF). The study discovered that, LATF did not meet its goals of enhancing business management. Rono (2006) further researched on the effectiveness and efficiency of the in-house control system in financial administration in Kenya’s public universities taking a case of Egerton University. It was deduced that, assessment of the usefulness of the in-house control systems in Egerton depend on the type of the departments (academic and non-academic). It was established that, internal control systems at the university under study, were effective because of the strongly constituted departments charged with the obligation of applying the internal controls as they undertake the business procedures.

The Public Procurement Oversight Authority (PPOA, 2007) conducted a valuation of the procurement system in Kenya. The assessment pinpointed several factors which have

contributed positively to reinforcing the control systems of Kenya's procurement system in recent years. One of the factors identified was the compliance with the established sound internal audit mechanism. It was revealed that, the Internal Auditor General (IAG) is duly answerable for the internal audit roles in all the government departments in Kenya, as well as in the area of procurement. It is noted that the IAG assumes IC in entirely government bodies, apart from parastatals which are overseen by the State Corporations Inspectorate that reports directly to the Office of the President (OP). A study on the effect of integrated financial management information system (IFMIS) on performance of Kenya's government sector (Njonde & Kimanzi, 2014) revealed that, IFMIS has stood effective in financial transacting in state owned agencies, budgeting, and internal controls. Yet, it was acknowledged that, indeed internal controls faced challenges.

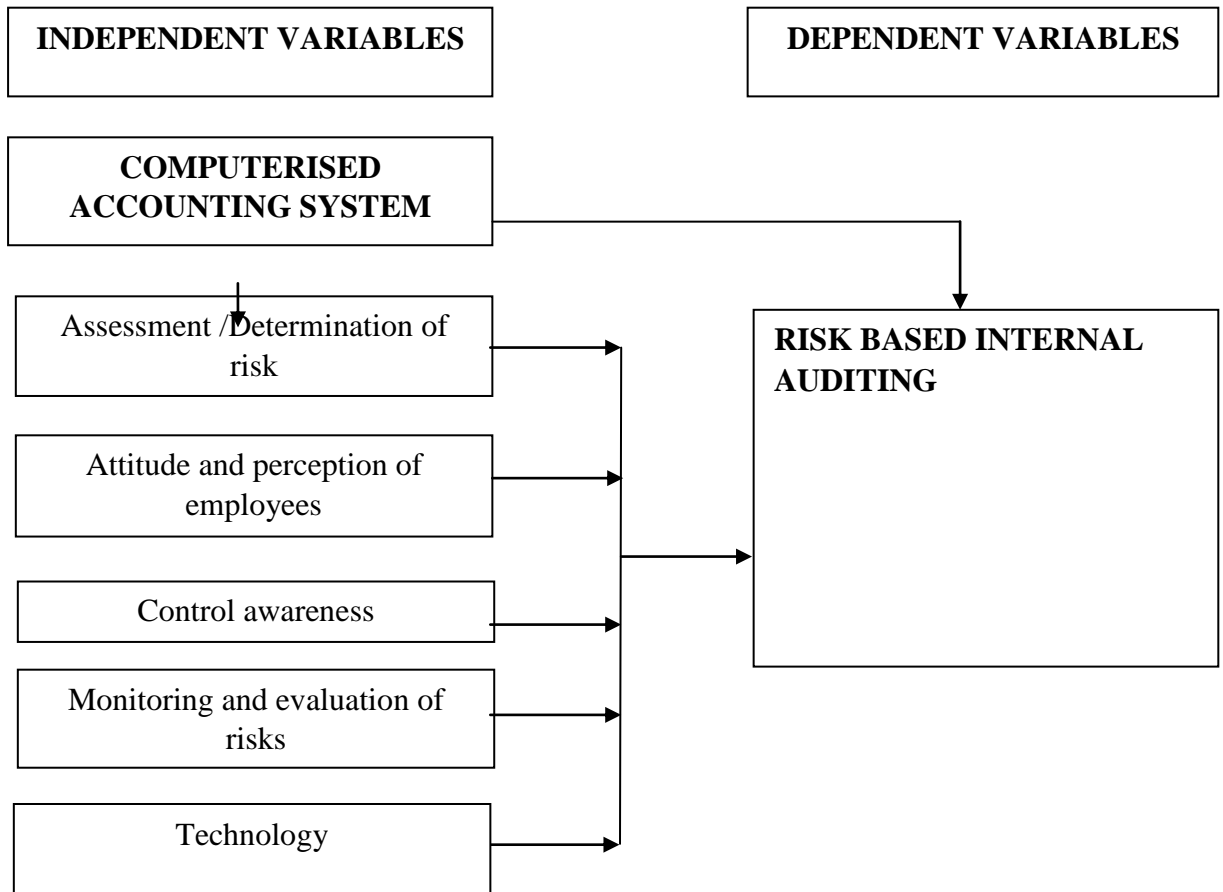
KACC (2008) argued that, "lack of proper control mechanisms and audit trails have created avenues for corrupt activities in Kenya's public sector". Similar problem is also apparent in other companies which despite of having electronic systems have not detached functional duties between IT operations and other departments such as finance. As KACC exemplifies that there exists instances where organizations have a revenue collection system that does not have audit trails and standard access controls mechanism, a situation that creates proliferation of swindling of public funds. The foregoing affects the services that are supposed to be funded by the government through its agencies. Ultimately, the socio-economic growth of the state is bound to be negated.

2.5 Conceptual Framework

The study aimed at establishes the effect of computerized accounting system on the application of RBIA in the county government of Homa Bay. The researcher had

conceptualized computerized accounting systems as the independent variables; Attitude and perception of employees, Risk Management/assessment of risks, Internal Controls and use of Information Technology. The dependent variable will be implementation of Risk Based Internal Auditing.

Figure 1 Conceptual Framework



Source: (author 2016)

2.6 Summary of Literature Review

Although research projects have been done on effects of computerized accounting systems in the government departments, none has concentrated on the consequence of CAS on RBIA in the county government of Homa Bay. This research therefore was an attempt to investigate the connection between risk based internal auditing and computerized accounting systems of the County Government of Homa Bay. To

understand the Effects of computerized accounting systems on risk based audit, the researcher will examine whether use of computerized accounting systems in risk based internal audit, risk assessment, annual risk planning and audit staffing affects internal audit risk management of County Government of Homa Bay. Computerized accounting system is viewed as the modern accounting system where manual paper work has been illuminated to the great extent in the county. However internal auditors have been faced with challenges of how best and effective to carry out their internal audit activities based on the risk assessment and fraud mitigation. Risk based internal auditing though efficient, has not managed to effectively help the chief officers of the county government of Homa Bay as more queries are still being raised and the public outcry of gross financial misconduct. The study therefore seeks to study the connection between RBIA and computerized accounting systems in County Government of Homa Bay.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This section provides numerous sections which helped to achieve research objectives. Precisely the below appended sub titles are included; design, data collection, and data analysis.

3.2 Research Design

According to Mugenda & Mugenda, (2003), “Research design refers to the way the research is organised/developed i.e. the technique used to carry out the research”. The study assumed descriptive survey which pursues to find information that best explains the current occurrences by querying subjects about their perceptions, attitude, behaviour or values (Mugenda & Mugenda, 2003). Descriptive research portrays an accurate profile of persons, events, or situations. This design describes the characteristic of the population or phenomenon. The design is deemed to portray clear pictures of the affiliation between CAS and risk based internal auditing in the County Government of Homa Bay.

3.3 Research Population

Hair (2003) defines population as, “an identifiable total group or aggregation of elements (people) that are of interest to a researcher and pertinent to the specified information problem”. According to Kothari (2006), population refers to the, “entire group of individuals, events or objects that have a common observable characteristic. It refers to all elements that meet certain criteria for inclusion in a given universe”. The target sample size of this study is 60 comprising of all the entire county staff in the finance, accounting, audit and IT.

3.4 Data Collection Methods

The selection of instrument and tools rely mostly on the aspects of the individuals, research topic, problem question, objectives, design, expected data and results. Secondary data was collected by way of review of published materials and the published Annual Reports from the departments within Homa Bay County. The works reviewed and the applicable content to be used in this study was recognized purposively.

The data was gathered by a self-administered questionnaire a long side structured interview questions in the appendix II attached. However, in cases where it proved challenging for the respondents to finish the questionnaire immediately, the researcher left it with the respondents and came to pick them up later. Each questionnaire was coded and only the researcher was able to know which person responded

Listed below are some of the data collection tools used during the study.

3.4.1 Questionnaire

A questionnaire is defined as a set of questions which are frequently sent to the particular respondents to answer at their own appropriate time and return back the filled questionnaire to the researcher. Flick (2009), considers this tool best employed to collect a lot of data being admissible for use in a qualitative study. In this study, questionnaires were used to collect information from respondents.. A questionnaire is preferred because it allows the respondents who are auditors and financial officers to give their responses in a free environment. A sample questionnaire is attached in Appendix I.

3.4.2 Interview

According to (Kothari, 2006), “an interview is a set of question administered through

oral or verbal communication or is a face to face discussion between the researcher and the interviewee respondent”. Both group and individual interviews were conducted with respondents. Interviews enabled the researcher to get supplementary information obtained by using questionnaires.

3.4.3 Documentation

Documentation technique was incorporated because it facilitates the researcher to get ready-made data and information by passing through various documents such as; books, magazine, journals and research reports concerning the topic in question. This method helped the researcher to simplify the task of the researcher by providing ready-made statistical information.

3.5 Data Analysis and Processing

Data was gathered by applying techniques recorded above, the data was then reduced into summary information. The summary was processed by using Software Package for Social Scientists (SPSS version 21) and MS Excel. The study findings were prearranged and presented in the form of words, numbers and percentages by using tables, histograms, charts and graphs.

Quantitative and qualitative data collected using questionnaires was inspected for errors and gaps. The data was then appropriately studied and tested for accuracy and comprehensibility. After inspection, the data was coded and analysed by the usage of descriptive statistics by SPSS.

3.6 Data Analysis Module

The research used the Likert type scale as the rating scale in both questionnaires and structured interview. Mugenda and Mugenda (2003) argued that Likert scales are often

used with matrix questions. The items that are used in Likert scales are usually declarative in form. Kumar (2005) claims that Likert scales are the easiest to construct and are based upon the postulation that each statement/item on the scale has identical attitudinal value, importance or weight in terms of shimmering an attitude towards the issue in question. The numbers in a Likert scale are ordered such that they indicate the presence or absence of a characteristic being measured. Data collected were mostly quantitative in nature and were analysed by descriptive analysis techniques using tools such as Statistical Package for Social Sciences (SPSS). Qualitative data was analysed descriptively. Below is a description of the key characteristics and terms of measurement for each variable. This study focused on Audit Quality characteristics namely Years of experience, gender of employees, knowledge on computerized accounting and type of the software package being implemented, Independence of the Auditor, Qualifications of the audit team and the auditor's experience and how they affect Risk Based Internal Auditing. Dependent and independent variables were grouped into components; namely, independent variables which consist of; Technology, monitoring and evaluation of risks, control awareness, attitude and perception of employees and dependent variables which consist of risk based internal auditing.

The model specification is as follows

$$Y = a + P_1X_1 + P_2X_2 + P_3X_3 + P_4X_4 + P_5X_5 + \epsilon$$

Where;

Y= Risk Based Internal Auditing

X1= Assessment/determination of risk

X2= Attitude and Perception of employees

X3= Control Awareness

X4= Monitoring and Evaluation

X5= Technology

e= error term

po coefficient

a= constant

3.7 Data Validity and Reliability

The study has high validity if the research only covers what one needs to research. Validity is sub-divided into three sub clusters namely; construct validity, internal and external validity. Construct validity refers to data collection procedure. The primary data collection was directed towards senior management representatives in the county government of Homa Bay implementing RBIA.

“Data reliability refers to the extent to which the data collection techniques or analysis procedures yield consistent findings”. This definition was given by (Saunders et al, 2009). Research data was examined and interpreted based on theoretical framework and research was associated to empirical evidence.

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

The researcher documents and discusses data analysis, presentation and interpretation of the data that was collected from the respondents as set out in the research methodology in this chapter. The major reason of the research was to scrutinize the responses on the consequence of risk based internal audit on Computerized accounting systems in Homa Bay County Government Kenya. The study targeted 60 respondents who are all employees of the county government where the response rate was 100% meaning entirely all responded by filing and returned the questionnaires making a response rate of 100%. This is considered an excellent response rate and was achieved through persistent follow-up by the researcher

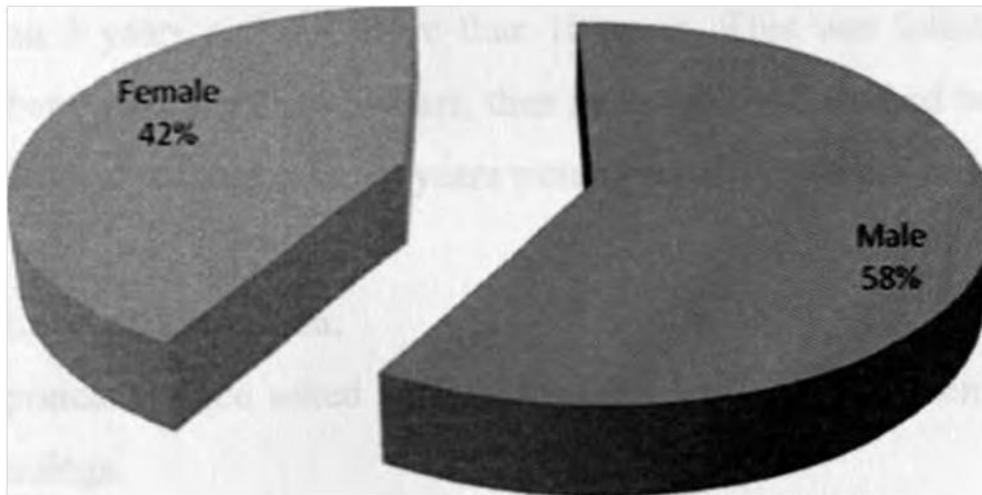
4.2 Descriptive Statistics

The respondent's answers are presented in this section and attributed to the likert scaled questions used in this research. The outcomes are analyzed in charts, graphs and tables as suitable.

4.2.1 Gender

The research sought to determine the gender of respondents involved in the study. The information obtained was summarized and documented as shown in the char and the table below;

Figure 4.1 Gender Profile



Source: Researcher 2016

The respondents were asked to disclose their gender and it was noted that the male respondents were higher (58%) than that of their female counterpart (42%)

Table 4.1 Gender

	No. of Respondents	Percentage (%)
Male	35	58
Female	25	42
Total	60	100

Source: Researcher (2016)

From the findings summarized in the table 4.1 above, it is clear that majority of the respondents were male representing 58% of respondents whereas 42% of respondents were females.

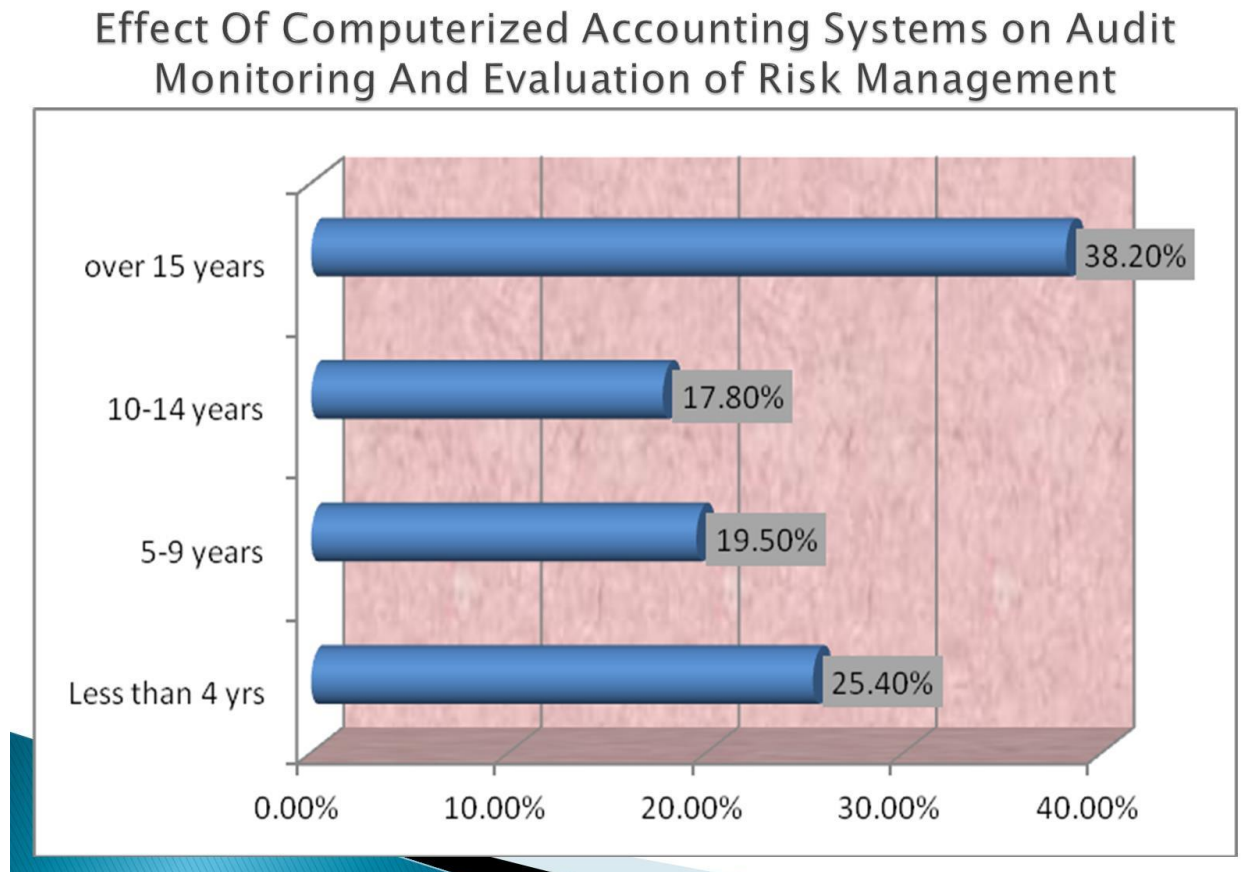
4.2.2 Age of experience

The study was aimed at establishing the number of years that the respondents have been in operation with a view of assessing the extent to which the respondent's responses were

based on experience or events occurring within the county government of Homa Bay.

Their responses are presented below in a bar chart format

Figure 4.2: Number of years in Active Employment



Source: Research Findings 2016

From above, it can be seen that 25.40% of the respondents have been in operation for 1- 5 years, 19.50% have been running for 5 – 10 years while 17.8% have been in existence for 10-15 while 38.20% have been in existence for more than 15 years. This indicates that the respondents were in a good position of offer valid information on the extent to which selected risk based internal audit practices are applicable to their organization’s based on experience.

4.2.3 Level of education

The study aimed at establishing the level of education of respondents involved the study.

The result generated from the respondents is as summarized in the table 4.2 below

Table 4.2: Level of education

Level	No. of Respondents	Percentage (%)
Primary	0	0%
Secondary	0	0%
Certificate	5	8%
Diploma	27	45%
Under graduate(Degree)	20	34%
Post graduate (Masters)	5	8%
PHD	3	5%
TOTAL	60	100

Source: Researcher's Analysis (2016)

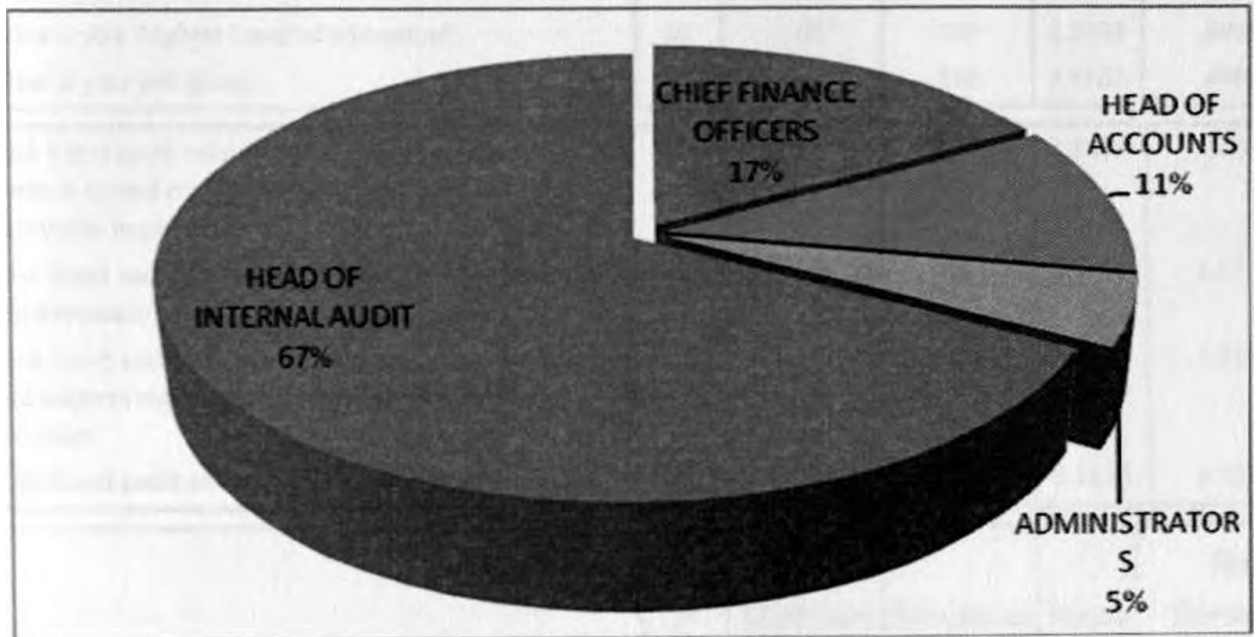
Findings above show none had KCPE or KCSE, while 8% have certificate from middle level colleges, 45% of respondents have diplomas, 34% have degree, and 8% have Postgraduate (masters) while 5% have PHD

4.2.4 Job Category

The research was carried out in order to establish the job category of each respondents involved the study. The information of the respondents were summarized and presented in the figure 4.4 below

Figure 4.3 Job Category

Figure 4.4: Job Category

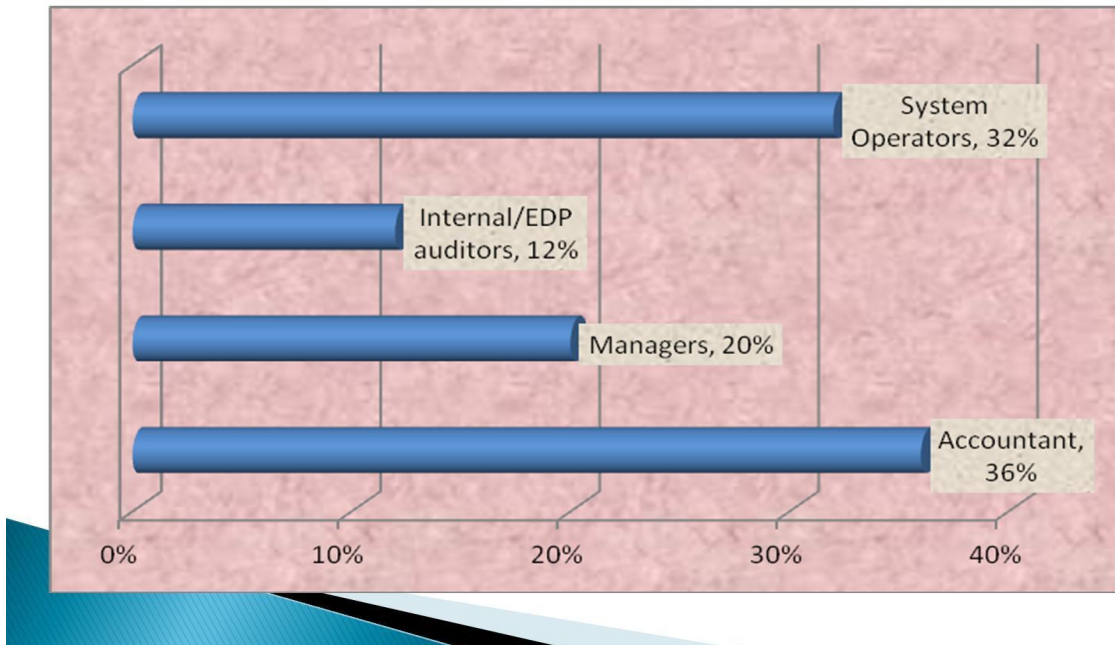


Source: Field data (2016)

Senior management was involved in establishing job category. This is because they own the risk management process and are involved both in audit planning as well as implementation of audit findings. 67% of the respondents were heads of internal audit function in public sector organizations, while the chief finance officers were 17%, the other respondents included head of accounts with 11% and 5% from administrators and other technical heads.

Figure 4.4: The level of using CAS in Risk Management and Evaluation

Professional Background of Respondents



Source: Field data (2016)

4.2.5 Level of awareness of respondents on application of RBIA in CAS

The researcher analysed the level of awareness of respondents on applications of CAS in payroll processing, and the feedback is tabulated in table 4.3 below

Table 4.3: Level of awareness of respondents on application of RBIA in CAS

	Number of respondents	Percent (%)
Totally aware	36	60
Not aware	19	32
Partially aware	5	10
Total	60	100

Source: Researcher (2016)

It is indicated in the table above that 60% of respondents were totally aware of applications of RBIA in computerized accounting systems, 32% were not aware and finally 10% of respondents were partially aware of applications of risk based internal auditing in computerized accounting systems.

4.3 Extent of adoption of RBIA in Computerized Accounting Systems.

4.3.1 Type of Computerized Accounting Systems used

The study sought to establish the response on the type of accounting systems in use. The summarized information from the study was analysis and documented as shown in the table 4.4 below

Table 4.4: Type of Computerized Accounting Systems used

	Frequency	Percentage (%)
IFMIS	40	67
Internet Banking	17	28
VMS (Vote Book Management System)	3	8
Total	60	100

Source: Researcher data (2016)

The information summarized in the table above indicates that 67% of respondents use IFMIS, 28% of respondents' use internet banking, 8% of respondents use VMS

4.3.2 Adoption of RBIA in CAS

The study sought to analyses the feedback of respondents on whether their departments had adopted the application of RBIA in Computerized accounting systems. The

information from the field data were documented and analyses as shown in the table 4.5 below

Table 4.5 Adoption of RBIA in Computerized Accounting Systems

	Frequency	Percentage (%)
Strongly Agree	38	63
Agree	15	25
Not Sure	0	0
Disagree	7	12
Strongly Disagree	0	0
Total	60	100

Source: Researcher (2016)

In the table above, 63% of respondents strongly agreed, 25% of respondents agreed while 12% disagreed that they have adopted risk based internal auditing in computerised accounting systems.

4.3.3 Frequency of using CAS in relation to RBIA

The researcher analysed the feedback of respondents on how often they use CAS in Risk based internal auditing implementation. The information obtained from the respondents were analysed and represented in the table 4.6 below

Table 4.6: Frequency of using CAS in implementing RBIA

	Frequency	Percent (%)
All the time	35	58
Frequently	21	35
Once in a while	3	5
Seldom	1	2
Not at all	0	0
Total	60	100

Source: Researcher (2016)

The summarized information in the table above indicates that 58% of respondents use CAS in implementation of RBIA all the time, 35% of respondents uses CAS frequently, 5% of respondents use CAS once in a time, 2% of respondents use CAS seldom.

4.3.4 Effectiveness RBIA after adoption of CAS

The study sought to analyze the feedback of respondents on the effectiveness of RBIA after the adoption of CAS. The summarized information was analyzed documented in the table 4.7 below

Table 4.7 Effectiveness of RBIA after adoption of CAS

	Frequency	Percentage (%)
Very effective	38	64
Effective	20	33
Less Effective	2	3
Total	60	100%

Source: Research data (2016)

In the summarized information above, it is evident 64% of respondents responded that risk based internal auditing became very effective or effective after adoption of CAS, 33% of respondents said risk based internal auditing became effective, while 3% were of the opinion of less effective or not effective.

4.3.5 Impact of CAS on implementation of RBIA

The researcher analyzed the feedback of respondents on whether the adoption of CAS has contributed to the increased performance of Risk based internal in the County Government of Homa Bay, The data collected from the study were analyzed and documented as tabulated in the table 4.8 below

Table 4.8: Impact of CAS on performance of RBIA

	Frequency	Percent (%)
Strongly agree	44	74
Agree	11	18
Not sure	2	3
Disagree	3	5
Total	60	100

Source: Author (2016)

The summarized information in the above table indicates that 74% of respondents strongly agreed that the adoption of CAS has improved performance of risk based internal auditing, 18% of respondents agreed, 3% of respondents were not sure, 5% of respondents disagreed.

4.4 Positive impacts of CAS on Risk Based Internal Auditing

4.4.1 Simplification of risk based internal auditing

The researcher analyzed the feedback of respondents on whether adoption of CAS in accounting helps to simplify risk based internal auditing implementation. The data collected was summarized and documented in the table 4.9 below

Table 4.9: Simplification of risk based internal auditing

	Frequency	Percent (%)
Strongly agree	50	83
Agree	9	15
Not sure	1	2
Disagree	0	0
Total	60	100

Source: Researcher (2016)

The summarized information above indicates that 83% of respondents strongly agreed, 15% of respondents agreed while 2% of respondents indicated that they were not sure.

4.5 Negative impacts of CAS on Risk Based Internal Auditing

4.5.1 Risk of fraud

The research sought to determine the feedback of respondents on whether adoption of Computerized Accounting Systems exposes users to risk of fraud. The findings from the analysis were evaluated and tabulated in the table 4.10 below

Table 4.10 : Risk of fraud

	Frequency	Percent (%)
Strongly agree	43	72
Agree	12	20
Not sure	2	3
Disagree	3	5
Strongly disagree	0	0
Total	60	100%

Source: Researcher (2016)

The summarized information in the table findings above indicates that 72% of respondents indeed strongly agreed that the adoption of CAS in the county government of Homa Bay exposes users to risk of fraud, 20% of respondents agreed, 3% were not sure while 5% disagreed.

4.5.2 Requires additional costs

The study sought to determine from the respondents on whether adoption of Risk Based Internal Auditing in CAS requires additional costs to the user departments. The data collected was summarized and tabulated in the table 4.11 below

Table 4.11 Requires additional costs

	Frequency	Percent (%)
Strongly agree	51	85
Agree	7	12
Not Sure	2	3
Disagree	0	0
Total	60	100

Source: Researcher (2016)

The summarized information from the table above clearly indicates that 85% of respondents strongly agreed, 12% of respondents agreed, 3% of respondents were not sure.

4.5.3 Requires additional training

The study was carried out to determine the feedback of respondents on effect of adoption of Risk Based Internal Auditing in CAS especially if it requires additional training for users within the departments. The collected data was analyzed and tabulated in the table 4.12 below

Table 4.12 Requires additional training

	Frequency	Percent (%)
Strongly Agree	48	80
Agree	8	13
Not Sure	1	2
Disagree	2	3
Strongly disagree	1	2

Total	60	100
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Source: Researcher (2016)

The summarized information from the table above indicates that 80% of respondents strongly agreed, 13% of respondents agreed, 2% of respondents were not sure, 3% of respondents disagreed and 2% of respondents strongly disagreed.

4.5.4 Risk of data loss

The research sought to analyse the responses of the respondents on whether adoption of Computerized Accounting Systems puts the County Government of Homa Bay at a risk of data loss due to computer malfunction. The findings from the analysis were documented in the table 4.13 below;

Table 4.13: Risk of data loss

	Frequency	Percentage (%)
Strongly agree	41	68
Agree	12	20
Not sure	2	3
Disagree	4	7
Strongly disagree	1	2
Total	60	100

Source: Researcher (2016)

The summarized data in the table above proved that 68% of respondents were strongly in agreement, 20% agreed, and 3% of respondents were confused hence could not decide, 7% disagreed while only 2% strongly disagreed.

4.5.4 Risk of entry of wrong data

The study sought to evaluate the feedback of respondents on their perception of adoption of CAS in Risk Based Internal Auditing and whether it may result in risk of entry of wrong data. The information was tabulated in the table 4.14 below

Table 4.14: Risk of entry of wrong data

	Frequency	Percent (%)
Strongly Agree	21	35
Agree	5	8
Not Sure	1	2
Disagree	30	50
Strongly disagree	3	5
Total	60	100

Source: Researcher (2016)

The summarized information from the above tabulated table indicates that 35% of respondents were strongly in agreement that it generated wrong data entry, 8% of respondents agreed, 2% of respondents were indifference, 50% of respondents disagreed indicating that adoption CAS in RBIA does not lead to wrong data entry, while 5% of respondents strongly disagreed.

Table 4.15: Correlation Table

<u>Variables</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>
RBIA*	1.000 (.000)					
Risk Assessment	.638 (.036)	1.000(.000)				
Monitoring and evaluation	.446 (.065)	.426(.421)	1.01 (.000)			
Control awareness	.365 (.355)	.288 (.033)	.575 (.0438)	1.000 (.000)		
Attitude and Perception	.283 (.463)	.433 (.024)	.460 (.0328)	.449 (.0367)	1.000 (.000)	
<u>Technology</u>	<u>.341 (.327)</u>	<u>.269 (.026)</u>	<u>.437 (.044)</u>	<u>.693 (.0436)</u>	<u>.651(.058)</u>	<u>1.000 (.000)</u>

Source: Researcher (2016)

The summarized information in the above correlation table 4.15 risk based internal auditing is significantly linked to risk assessment and determination of risks ($r = .638$; $p < .036$), monitoring and evaluation of risk follows immediately where ($r = .445$; $p < .064$), third in the same order is control awareness where ($r = .364$; $p < .354$), Fourth in the ascending order is technology where ($r = .340$; $p < .328$) lastly but not least in the order is attitude and perception of employees where ($r = .282$; $p < .462$). The summarized information in the above correlation table is a clear indication showing that departments studied have laid emphasis on internal controls in relation to financial reporting. There is also need to have frequent internal checks and financial reporting. Monitoring as may be overlooked but is highly relevant in the internal audit functions.

Table 4.16: Summary model

Model	R	R ²	Adjusted R ²	Std error of the Estimate
1	.986(b)	.972	.972	.13624

Table 4.16, above indicates that the general involvement of the changing states (variables) in relation to the dependent variable (Risk Based Internal Auditing). From the summary model R denotes the general figure of correlation coefficient while R² indicates how much of changeability of the dependent variable is described by the predictors. This reflects that risk management systems predictors under study impact on the audit planning practices. Hunton et al (2011) in his study asserted that,

“knowledge internal audit risks associated with ERP Organizations and differences between information systems audit experts and financial auditors extremely relate positively and considerably”.

4.6 Descriptive statistics

The study sought to establish relevant statistics including the mean. Standard deviation and variance .A summary of the data is as below;

Table 4.17: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
Gender	60	1.00	2.00	1.4833	.50394	.254
Department	60	1.00	4.00	2.6102	.91004	.828
No of years you have worked in your department	60	1.00	4.00	2.9167	.82937	.688
What is your highest level of education?	60	1.00	3.00	2.2333	.69786	.487
What is your job group?	60	1.00	2.00	1.6167	.49030	.240
Risk based audit call for careful design, sequencing and implementation	60	1.00	5.00	2.4833	1.17158	1.37
Risk based audit covers virtually all aspects	60	1.00	5.00	2.1833	1.37152	1.88
To what extent does training affects adoption of RBIA	60	1.00	5.00	3.8000	1.62397	2.64
Do you agree/disagree that training ensures RBA approach is adopted with of ease	60	1.00	5.00	2.8000	1.41181	1.99
Do you agree/disagree that training instills	60	1.00	5.00	2.8000	1.41181	1.99

knowledge to staffs						
Do you agree/disagree that training leads to efficient and accurate reporting	60	1.00	5.00	3.516	1.32117	1.74
To what extent does policy framework affect the adoption of RBIA	60	1.00	5.00	1.2167	069115	.47
To what extent does communication process affects the adoption of RBIA	60	1.00	4.00	2.1000	1.21711	1.48
Do you agree/disagree that poor communication influence the adoption of RBA	60	1.00	5.00	4.0167	1.15702	1.33
To what extent does your perception of the role of internal audit affects the adoption of RBA	60	1.00	3.00	1.3167	.50394	.254
Do you agree that Internal Audit usually ensure that proper audit procedure are followed	60	1.00	4.00	1.7000	1.03006	1.06
Do you agree that top management should ensure availability of resources for the I. A function for the success of adoption of RBA	60	1.00	5.00	1.9333	1.20545	1.45
To what extent does top management commitment affects the adoption of RBIA?	60	1.00	5.00	2.8000	1.41181	1.99
Do you agree that top management committed is key to ensure adoption of RBIA	60	1.00	5.00	1.9833	1.24181	1.54
Do you agree that top management should ensure availability of resources for the adoption of RBIA	60	1.00	2.00	1.2667	.44595	.199

Source: Research data (2016)

The table above provides processed data of the sixty respondents that responded to this study. The mean result provided above is composite of the various responses of

individuals .The standard deviation and the variance were used to measure how spread out the responses were and how far the set of responses in individual questions were set.

From the research data shown in the above table, most respondents agreed to the statement that adoption of risk based internal audit approach called for careful design, sequencing and implementation (m= 4.833), risk based audit reform is a composite procedure which inclines to spread over several years for its effective application (m=4.0224) and RBIA increases transparency, accountability and responsiveness to public expenditure policy priorities (m=1.8833). Respondents were asked whether training affected the extent it affected adoption of RBIA. The response provided resulted in a mean of 3.8000.a standard deviation of 1.62397 and a variance of 2.64.

Table 4.18: Regression ‘R’ and Coefficient of Determination ‘R2’ Analysis

Model	R	R²	Adjusted R²	Std. Error of the Estimate
1	.265^a	.070	-0.016	.619

Predictors: (Constant)

The study sought to determine the relationship amongst the dependent variable (RBIA) and the independent variables; (role of IA function, top management commitment. Training, policy framework and communication process) as provided for in the regression model used in this study. From the analysis provided for in the table above ‘R’ depicted a positive but weak relationship of 26.5% variation in RBIA.

Coefficient of Determination ‘R2’ was used to measure the extent of variability or change with which independent variables accounted for the value of the dependent variable (RBIA). It was found that the independent factors i.e. Role of the Internal Audit function, commitment of top management, training, policy framework and communication process,

only accounted for 7% of the change in adoption of Risk Based Audit in computerized accounting systems in the county government of Homa Bay. It therefore means that 93% of other factors which are not part of the regression model used in the study were responsible and account for the change in RBIA.

Table 4.19 Test of Significance of the Model

ANOVA^b

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	1.559	5	.312	.815	.544 ²
Residual	20.669	54	.383		
Total	22.228	59			

Source: Researcher (2016)

Predictors: (Constant)

A test of significance was done using ANOVA. Using the fishers test, significance of a model is attained when its result, F critical tends towards zero (0).In this study F was .815 with a significance level of .544. The above results show that the regression model was not significant.

Table 4.20 Correlation Analysis

Correlation								
		Do you agree/disagree that training ensures RBA approach is adopted with of ease	Do you agree/disagree that training instils Knowledge to staffs	Do you agree/disagree that training leads to efficiency and accuracy in reporting and auditing	Training	To what extent does policy framework affect the adoption of RBIA in CAS	To what extent does communication process affects the adoption of RBIA	Do you agree/disagree that poor communication influence the adoption of RBIA
Do you agree/disagree that training instils knowledge to Staffs	Pearson Correlation	1.000	1	0.420	0.942	0.01	-0.215	-0.195
	Sig. (2-tailed)	0.000		0.001	000	0.937	0.099	0.135
	N	60	60	60	60	60	60	60
Training	Pearson Correlation	0.942	0.942	0.699	1	-0.175	-0.212	-0.168
	Sig. (2-tailed)	0.000	0.000	0.000		0.182	0.103	0.199
	N	60	60	60	60	60	60	60
To what extent does policy framework affect the adoption of RBIA	Pearson Correlation	0.010	0.010	-0.496	-0.175	1	0.034	0.101
	Sig. (2-tailed)	0.937	0.937	0.000	0.182		0.795	0.441
	N	60	60	60	60	60	60	60
To what extent does communication process affects the adoption of RBIA	Pearson Correlation	-0.215	-0.215	-0.117	-0.212	0.034	1	0.252
	Sig. (2-tailed)	0.099	0.099	0.373	0.103	0.795		0.053
	N	60	60	60	60	60	60	60

Do you agree/disagree that poor communication influence the adoption of RBIA	Pearson Correlation	-0.195	-0.195	-0.039	-0.168	0.101	0.252	1
	Sig. (2-tailed)	0.135	0.135	0.767	0.199	0.441	0.053	
	N	60	60	60	60	60	60	60
Correlation is significant at the 0.01 level (2- tailed).								

Source: Survey data (2016)

The table above provides results that indicate the level of correlation between variables. Correlation coefficient describes the extent of relationship between variables. It ranges from -1 to +1, with -1 showing a perfect negative correlation. +1 showing a perfect positive correlation, and 0 indicating no correlation at all. This Correlation matrix is used to evaluate the degree to which variations in the value of a characteristic is related with variations in another characteristic .The data for a correlation analysis contains two (bivariate) input columns. Each column contains values for one of the attributes of interest. When a value is greater than 0.5 then the variable is said to be con-elated and when values are less than -0.5 then the values for are not correlated. Linearity is the term used to explain the dependence of one variable to other. The table 4.4 shows that there is high positive correlation of RBIA against training, the role of the internal audit function, top management commitment policy framework and communication process.

4.7 Estimated Model

Table 4.21 Regression model

Model	Unstandardized coefficient	Standardized coefficient	T	Sig
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		B	Std. Error	Beta		
1	Constant	1.973	.487		4.051	.000
	Internal Audit Function	-.090	.084	-.148	-1.073	.288
	Top management commitment	-.080	.125	-.089	-.635	.528
	Training	.030	.070	.058	.428	.670
	To what extent does policy framework affect the adoption of RBIA	.014	.119	.015	.114	.910
	Do you agree/disagree that poor communication influence the adoption of RBIA in CAS	.093	.071	.176	1.315	.194

Source: Researcher (2016)

Predictors :(Constant), Role of I.A Function, Top management commitment, Training, Policy framework, Communication process

The relationship between RBIA and the independent variables is as follows:

$$Y = 1.973 - 0.148X_1 - 0.089X_2 + 0.058X_3 + 0.015X_4 + 0.0176X_5 + 0.487$$

$$\text{Thus RBA} = 1.973 - 0.148X_1 - 0.089X_2 + 0.058X_3 - K + 0.015X_4 + 0.0176X_5 + 0.487$$

4.8 Discussion

Respondents encountered challenges and often misunderstood how auditors performed some of the audit procedures during implementation of audit engagements. These included; penetrating into organization's activities, involvement in management reconnaissance and identifying unlawful acts and/or fraud. There was high expectation

from users of audit reports which when not addressed by audit findings created dissatisfaction. General censure and litigation against internal auditors indicate that there is missing link between society's expectations of auditors and auditor's performance as perceived by the organizations.

Commitment of top management was viewed to be paramount throughout the county for effective implementation of RBIA. Employees at all levels of the departments are only committed to a system that was not driven, supported, and believed-in by top management but by all. Respondents recommended internalising the principles of strategic risk management to allow all employees to become more effective.

Poor training can lead to lack of commitment to proper work procedures, poor supervision, lack of technical knowhow in the computerized environment and demoralized officers. It can mean that the level of service being given in the organization is not up to the standard and hence changes are necessary. The management teams often have limited understanding of communication dynamics within their departments. This can result to a climate of communal mistrust rather than trust, with more strength dedicated to resolving internal struggles.

The coefficient of determination "the percentage variation in the dependent variable being explained by the changes in the independent variables" R^2 equal to 0.070 i.e. Role of I.A activities, Top Management Commitment, Training, Policy Framework and Communication process .A great number of factors of 93 percent were unexplained. The F- value of 0.815 (more than 0.05) shows that the model of Risk Based Internal Auditing is not significant at the 95% confidence level.

4.9 Summary

There was a high positive correlation between Role of I.A Function, Policy Framework, top management Commitment, Training, and Communication process. Effective internal auditing was found to be a basic pre-requisite for the functionality of every department yet most departments had not adopted it effectively.

Top management should ensure availability of resources for adoption of RBIA in computerized environment as this will ensure attainment of objective by auditors. Training is also essential since it affects the adoption of RBIA. Effective training ensures RBA approach is adopted with ease instils knowledge in staff and leads to efficiency and accuracy in reporting and auditing. Policy framework affects adoption of RBIA moderately.

The role of IA function, policy framework, training, top management commitment and communication process were not the only factors that determine the success of adoption of RBIA in computerised accounting systems as provided in the analysis as 93% remained unexplained.

CHAPTER FIVE: CONCLUSION AND RECOMMENDATION

5.1 Discussion of major findings

The topic contains the summarized findings, conclusion and recommendations and suggestions for further studies. Section 5.2 Overall findings, section 5.3 provides recommendations; section 5.4 presents conclusions 5.5 provides areas for further study.

5.1.1 The use of a CAS on implementation of Risk Based Internal Auditing

The study showed that the Homa Bay County Government actually make use of CAS as it has been evidently concluded from the feedbacks obtained from the respondents. The respondents were in general agreement or in disagreement concerning implementation of the computer information approach in Homa Bay County. Areas where CAS has been implemented include data processing, data entry, data security and data reproduction or reporting such as the generation of financial statements, water billing, and payroll report.

5.2 Overall Findings

From the findings summarized above, it indicates that adoption of Risk based internal auditing in CAS has both, positive and negative impacts. The positive impacts include; allocating more time and resources to high risk areas, timely preparation of reports, accuracy of financial transactions and quality audit reports. The negative impacts include; risk of fraud and requirement of additional training for users and additional costs.

5.3 Recommendations

Routine system maintenance should be put in place in order for the system to be able to get rid of unwanted programmes such as viruses, fraud among others that may affect the system operations;

this should be done so that the system can operate to the expectation of management and other users.

Administratively, it is important that staffs handling transactions are trained so as to improve on the accurateness and promptness in posting of data. Due to enhanced improvements and versions of accounting packages, staffs needs constant and continuous training by the authorized dealers of the packages so that they remain well acquainted with the knowledge and experience of the package. In addition to the training, it is important to constantly appraise the staff to check which staffs are failing the system as regards reporting unbiased financial information.

Although there is accuracy and speed in transmitting information concerning financial transactions between other departments and the national Treasury, the top management should keep updating with new information technology.

5.4 Conclusion

The study concludes that Risk based audit was a complex process that takes a long period for its successful implementation, and that computerized accounting systems has very little impact on its implementation. It demands for cautious design, sequencing and execution. RBIA improves transparency; answerability and receptiveness to public expenditure policy priorities and it nearly cover all facets of community commercial management.

Training ensures RBIA approach is adopted with ease instils knowledge to staffs and leads to efficiency and accuracy in reporting and auditing processes. A policy framework provides the right balance between required control steps and the amount of professional judgment that auditors exercise and good communication influences the adoption of RBIA.

In adoption of RBIA, all the determinants; top management commitment, training, policy framework and communication, are essential and affect RBIA at a level that can averagely be said to be low based on the results provided in the study. There has to be every aspect of each of them put together with other factors not mentioned in the report to ensure an effective and efficient adoption of RBIA approach. Overall the regression model was found not to be suitable for this study meaning that there are other factors that determine the effective implementation of RBIA.

Solution lies in increase of the level of the auditor's independence and responsibilities with punitive measures with a view to reduce corporate reporting scandals thereby paving the way for increased audit quality and hence reduce the audit expectation gap by users of audit reports. Further studies of the impact of RBIA on computerized accounting systems in the county government of Homa Bay will help financial managers to effectively deal with risk management in the computerized environment.

5.5 Areas of Further Studies

From the finding in this study, the researcher is of the opinion that there is necessity to determine whether it is simply the qualitative characteristics that define the quality of audit reports in relation to economic reporting or other factors are also present. If there are, such factors also must to be recognized. Additional study ought to be carried out about how the CAS can be implemented besides the risk based internal auditing. Generally, it is argued that the CSA alone is very vulnerable. Hence, there is necessity to examine how the dual systems can be implemented simultaneously and perhaps a study to determine the responsibilities of management in upholding the excellence of business performance reporting in Homa Bay county government will be a great contribution to the Society.

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APPENDICES

Appendix I: Questionnaire

The questionnaire drafted herewith is meant to collect data to be used purely for academic purposes. The information given shall be handled with stringent confidentiality. Names or persona identification should not be inserted in this questionnaire. *Answer all questions as shown by either filling in the blank or ticking the option that applies.*

SECTION I: BIO DATA

1. Gender

Male []

Female []

2. Department/Ministry.....

3. How many years have you been working in the Department/ministry?

1-5 years 5- 10 years 10-15 years more than 15

years

4. Your highest Level of education

Primary Secondary PhD Other

Graduate Postgraduate

5. What is your job group-----

6. What is your Job Category?

Head of Internal Audit Chief Finance Officer Head of accounts

Administrator Accountant Internal Auditor IT

7. What is your level of agreement that the adoption of computerized accounting system has helped to simplify risk based internal audit tasks

Strongly agree Agree Not Sure Disagree

Strongly disagree

8. What kind of computerized accounting system does your department use?

IFMIS Internet Banking VMS

Part B: Assessment and determination of risk

9. To what extent does assessment and determination of risks affect the implementation of RBIA in the County government of Homa Bay?

No extent at all Great extent

 Little extent Very great extent

 Moderate extent

10. To what level do you agree with the statements that relate to the risk assessment and determination in RBIA at the County government of Homa Bay?

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
--	----------------	-------	---------	----------	-------------------

Moderate extent []

17. Show your level of agreement with the statements that relate to the effect of monitoring and evaluation in the adoption of RBIA in computerized accounting system?

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Monitoring and evaluation ensures RBIA approach is adopted with ease in regards to computerization of accounting transaction					
Monitoring and evaluation instils some sanity as at enhances follow ups and close supervision for data capturing staffs					
Monitoring and evaluation leads to efficiency and accuracy in data capturing and reporting of financial transactions					

18. What are some of the implication of inadequate implementation of monitoring and evaluation in the adoption of RBIA?

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

19. In your opinion what do you suggest need to be done with regard to monitoring and evaluation in the adoption of RBIA in computerized accounting systems?

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

Part E: Control awareness

20. To what extent does control awareness affect the adoption of RBIA?

- | | | | |
|------------------|-----|-------------------|-----|
| No extent at all | [] | Great extent | [] |
| Moderate extent | [] | Very great extent | [] |
| Little extent | [] | | |

21. In your opinion what do you suggest need to be done with regard to the control awareness in your department to enhance the adoption of RBIA?

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

Part F: Information Technology

22. To what extent does information technology adoption affect the computerized accounting system in your department?

- | | | | |
|------------------|-----|-------------------|-----|
| No extent at all | [] | Great extent | [] |
| Little extent | [] | Very great extent | [] |

Moderate extent []

23. Show your level of agreement with the statements that relate to the effect of the computerized accounting system in your department?

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Adoption of computerized accounting system has made it more difficult to carry out RBIA					
Accounting information processed through electronic means may not reveal violation of internal controls put in place					

24. What are the implications of adoption of information technology in RBIA?

.....

25. In your opinion what do you suggest need to be done with regard to the way information Technology should be carried out in your department to enhance the adoption of RBIA?

.....

26. Indicate your level of agreement with the statements that relate to the risk management in the effect of computerized accounting system in RBIA?

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Disclosures about technology risk and risk management					
Risk assessment is undertaken					
Risk management is embraced					
Risk identification is carried out					
Risk monitoring is carried out to identify errors in financial reporting					
There is consideration of risk assessment in the detection of errors					

Appendix 2: Interview Questions

- 1) To what extent is your level of awareness on implementation of RBIA in computerised accounting systems?

Totally aware Not aware partially aware

2) What is your level of experience in using computerized accounting systems?

3) How often do you use computerized accounting systems in implementation of RBIA?

All the time Frequently Once in a while seldom

4) How effective has Risk based internal auditing implementation become after adoption of computerized accounting system?

Very Effective Effective Less Effective

5) Has the adoption of computerized accounting system helped implementation of risk based internal auditing within your department?

Strongly agree [] Agree [] Not Sure [] Disagree [] strongly disagree []

6) Has the adoption of computerized accounting system helped to facilitate timely preparation of financial reports? Yes [] No []

7) Has the adoption of computerized accounting system helped to improve accuracy of financial records? Yes [] No []

8) Has the adoption of computerized accounting system helped to improve performance of RBIA? Yes [] No []

9) Has the adoption of computerized accounting system helped to save cost and time in RBIA? Yes [] No []

10) What is your level of agreement that the adoption of computerized

accounting system has resulted in fraud

Strongly agree Agree Not Sure Disagree

Strongly disagree

11) To what extent do you agree that the adoption of computerized accounting system necessitated the need for additional training for staff members?

Strongly agree Agree Not Sure Disagree

Strongly disagree

12) What's your perception that the adoption of computerized accounting system resulted in additional costs?

Strongly agree Agree Not Sure Disagree

Strongly disagree

13) What is your level of agreement that the adoption of computerized accounting system has resulted in loss of data through theft, fire or human error?

Strongly agree Agree Not Sure Disagree

Strongly disagree

14) To what extent do you agree that the adoption of computerized accounting

system has resulted in wrong data entry?

Strongly agree Agree Not Sure Disagree

Strongly disagree

15) What measures have been taken by your organization to overcome the challenges faced in adopting computerized accounting system in payroll?

16) Have those measures mentioned above helped your organization to overcome the challenges?

THANK YOU