

**EVALUATION OF RISK-BASED AUDIT FACTORS AFFECTING PERFORMANCE
OF INTERNAL AUDIT IN THE PUBLIC SECTOR: A CASE OF SOUTH-RIFT
REGION, KENYA**

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**A Research Project Submitted to the Graduate School in Partial Fulfillment of the
Requirements for the Award of the Degree of Master of Business Administration of
Egerton University**



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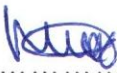

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DEDICATION

This work is dedicated to my daughter Precious

ACKNOWLEDGEMENT

This work would not have been completed with my effort alone. My most heartfelt gratitude goes to God for His provision, strength and enablement. I know if it were not for Him I would not have completed this project.

Many people gave me support, recommendations and encouragement. Though I may not mention all, a few are worth noting. My sincere gratitude and appreciation goes to my supervisors, Fredrick Kalui and James Mwangi of Egerton University for their guidance, encouragement and support. Their positive criticism and patience made this work what it is. I also appreciate the contribution of the Internal Auditors who participated in the research.

May God bless and shine His face upon you all.

ABSTRACT

Internal Audit departments that have adopted Risk Based Audit (RBA) have been envisaged as key in achieving proper management of financial and non-financial resources in public sector. Nevertheless, not much is known on how Risk Based Audit factors have contributed towards the performance of Internal Audit departments. This study sought to evaluate Risk Based Audit factors affecting performance of internal audit departments in public sector. The specific objectives were to determine: the extent in which the listed RBA factors have been applied in Internal Audit in public sector, the level of performance achieved by Internal Audit in public sector and the effects of RBA factors on performance of internal audit in public sector. The study adopted cross-sectional survey research design to achieve the objectives. The study employed a census of all the 36 district Internal Audit units in central government and 20 internal audits in local authorities in South Rift, Rift Valley province. Primary data was collected from the study respondents using structured questionnaires administered by the researcher. Data was analyzed with the help of the Statistical Package for Social Sciences (SPSS) computer software. Descriptive statistics such as mean, median, mode and percentages were used to analyze and present the data. Correlation analysis was used to analyze the relationship of variables. Results from data analysis support the following key findings; RBA factors has been moderately applied in internal audit in public sector within South Rift region; the overall internal audit performance in terms of Timeliness, Cost, and auditee demands was generally high, the RBA factors are positively correlated to and significantly influenced internal audit performance; and external factors such as the Government Regulations and Professional Standards had some influence on internal audit performance in public sector. This study recommended the need to strengthen particular aspects of RBA in the internal audit in public sector; effective application of RBA factors in order to achieve measurable improvement in the internal audit performance and address the influence of external factors such as the Government regulations and Professional Standards on performance of internal audit in public sector.

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LIST OF ABBREVIATIONS AND ACRONYMS

AIE:	Authority to Incur Expenditure
GOK:	Government of Kenya
IAS:	International Accounting Standards
IFRS:	International Financial Reporting Standards
IIA:	Institute of Internal Auditors
INTOSAI:	International Standards of Supreme Audit Institutions
IPSAS:	International Public Sector Accounting Standards
ISA:	International Standards of Auditing
RBA:	Risk-Based Audit

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

For most of its history, internal audit served as a simple administrative procedure comprised mainly of checking documents, counting assets, and reporting on past events to various types of management. It began as a one person clerical function that consisted primarily of performing independent verification of bills before payment (Walter & William, 1991). These approaches to internal auditing are the so-called “control-type”, compliance-based and control-based approaches. These approaches are the old, traditional ways of auditing, usually long and time-consuming, using an extremely high number of samples (if not 100 percent), based on gut-feel or intuition of the auditor, which often lead to adverse and counterproductive relationships with the auditees (or audit customers), (Walter & William, 1991).

Over the years, internal auditing has evolved into a highly professional activity that extended to the appraisal of the efficiency and effectiveness of all phases of a organization’s both financial and non-financial. In recent times, a combination of forces has led to a quiet revolution in the profession (Walter & William, 1991). The issues of globalization, transparency, integrity and improvement of government service delivery increase the need for governance and accountability. Consequently, this phenomenon leads the interest to internal audit function in organizations. Dittenhofer, (2001) and Goodwin, (2004) argued that internal auditing is emerging as an important component of management and a governance mechanism both in private and public sectors. Internal audit helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control and governance processes” (IIA, 2001)

As companies or organizations grow and evolve in today’s rapidly changing business environment, they continuously face new sets of risks and challenges. To help executive teams address these changes, internal audit departments can no longer afford to employ traditional audit approaches. Internal audit teams need to be flexible and innovative in their approach by utilizing their resources to focus on the critical areas of the business (e.g. higher risks), (Szipirglas, 2006).

New demands from the board, executive management and regulators, have triggered a shift in focus beyond regulatory compliance issues (Colbert & Alderman, 1995). In this environment, the industry leaders recognize the need for internal audit to play a larger role in the organization – one that expands on its historic focus on value preservation (control focus) to encompass activities related to value creation (performance focus), (Gramling et al, 2004).

Some organizations have criticized internal auditing for being too focused on the past (COSO, 2004). This characterizes the internal auditor as one who renders advice and recommendations based on examinations of the historical transaction record and the historical operation of the internal control system. To extend more value to clients and the organization, internal auditors must shift their focus from the past to the future. If the auditor focuses on risks, the audit is more likely to address the full range of issues that concern management. For most auditors, the shift will be subtle. Instead of identifying and testing controls, the auditor will identify risks and test the ways management manages those risks (Funston, 2003). The majority of risk management techniques will still involve controls; but the auditor will test how well are these risks being managed rather than are the controls over these risks adequate and effective. Controls themselves do not necessarily guarantee success.

The Risk-Based Audit (RBA) is the latest “best practice” in the evolution of internal auditing, aimed at maximizing the impact of audit by focusing on the major strategic, regulatory, reputational, financial and operational risks factors that confront an organization (Griffith, 2006). This approach targets high risk areas and helps the auditors achieve maximum value for the organization from their efforts. It involves challenging existing structures and processes to identify areas for improvement and propose value-adding changes to the organizations, (Riverback, 2000). This approach is not an option; rather, RBA is mandated by the Institute of Internal Auditors’ (IIA) International Professional Practice Framework (IPPF), which covers the International Standards for the Professional Practice of Internal Auditing (ISPPA) or the Standards.

Risk Based Internal Audit identifies, measures, and prioritizes risks so that focus is placed on the auditable areas of greatest significance. In individual audits, RBA identifies the most important

areas within the audit scope. RBA allows the auditor to design an audit program that tests the most important controls, or to test the controls at greater depth or with more thoroughness (Hass *et al*, 2006). Instead of looking at the business process in a system of internal control, the internal auditor views the business process in an environment of risk. An audit focusing on risk adds more value to the organization than an audit focusing only on controls (Marks, 2001; Spira and Page, 2003).

Major institutions with hundreds of transaction controls have lost hundreds of millions by failing to understand the risk that some traders may not enter all of their commitments and transactions into the system. Each control added to the system costs more resources to operate. If auditors continue to audit and recommend new and strengthened controls without removing any, the weight of these controls will drag the business process down, (Koutoupis, 2006). Achieving superior management of public resources would greatly depend on the performance of internal audit function. Internal audit contributes to a good control environment by assisting management in monitoring the effectiveness of other control policies and procedures. The objective of internal auditing is to assist members of an organization in the effective discharge of their responsibilities (Banham, 2004). Internal audit helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control and governance processes” (IIA, 1999a)

1.2 Statement of the Problem

Risk Based Audit is a new approach adopted by internal audit departments in public sector organizations with a view to improve performance. Research undertaken has established a positive link between RBA factors and performance of internal audit departments Kunkel, (2004), COSO (2004). RBA has been implemented by internal audit department in the public sector to improve performance by shifting the function from control activity to one that contributes effectively to managing risk and achieving wider organizational goals, (GOK, 2005). However, the extent to which risk based audit factors have influenced performance of internal audit in public sector has received little research attention. This study therefore, sought to evaluate the effects of RBA factors on performance of Internal Audit departments in public sector in South Rift.

1.3 Purpose of the Study

The purpose of this study was to evaluate Risk Based Audit factors affecting performance of internal audit departments in public sector within the south rift region of Rift valley province, Kenya.

1.4 Research Objectives

The broad objective of this study was to evaluate Risk Based Audit factors affecting performance of internal audit departments in public sector within the south rift region of Rift valley province, Kenya.

The specific objectives included:

- i. To determine the extent to which the listed RBA factors have been applied in Internal Audit in the public sector
- ii. To establish the level of performance achieved by Internal Audit in the public sector
- iii. To determine the effect of RBA factors on the performance of Internal Audit in the public sector.

1.5 Research Questions

- i. To what extent has RBA factors been applied in Internal Audit departments in the public sector?
- ii. What is the level of Internal Audit department performance achieved in the Public sector?
- iii. What is the effect of RBA factors on the performance of Internal Audit in the public sector?

1.6 Significance of the Study

The study results may be useful for proper planning and decision-making in public sector and improve effective performance of internal audit in public sector in Kenya and most importantly achieving vision 2030. The Ministry of Finance may use the study results in policy issues that may be aimed at improving effectiveness of internal audit which would ensure proper management of public funds. The internal audit function may use the results of the study in providing appropriate services to government departments within the districts and councils, hence promoting effectiveness in management of public resources.

RBA, according to best practices provides assurance that business risks are identified, evaluated and treated in a consistent and continuous way. The system of internal controls and the ongoing management monitoring activities over internal controls are well designed and operate effectively, efficiently and economically in managing those risks according to directions provided (or approved) by the management or board of directors. This ensures the timeliness of audit assignments and audit reports and proper use and allocation of resources to audit assignments.

Furthermore, this study was significant because it allows for identification of the concept and framework of RBA factors that takes into account the nature of work and environment of the IA in public sector. The study findings also generated awareness in public organizations on the importance of having adopted RBA framework as a vehicle to effective performance of Internal Audit function. The findings of this study added to knowledge and understanding of the subject of Risk Based Audit and its application by public sector. The study forms a basis for further research on how to enhance effective performance of not only Internal Audit but other government departments. This leads to the generation of new ideas for the better and more efficient management of public resources in Kenya and globally.

1.7 Scope of the Study

The study focused on the Central and Local Government Departments as part of the vast public sector. The study was further limited to examination of Risk-Based Audit factors in Internal Audit function in Central and Local Government departments located in South Rift region of Rift Valley Province, Kenya. The study covered the district, municipal and council internal auditors within South Rift region with particular focus on those in central and local government who audit ministries departments, commissions, constituency development funds, municipalities and local authorities. The study sought information from auditors because they were in better position to give accurate information to be relied on by the researcher. The study focused on the current system of regionalization of districts and local authorities within a province since the new system of county regions had not been operational at the time of the study. However, the new regionalization of county regions and

national government could not have affected the study findings since the operations and the role of Internal Auditors would have remained the same.

The study was limited on the following risk based audit factors; Business focus , Stakeholders Focus, Continual Risk Assessment Coverage, Process Improvement, Participates in strategic planning, Goal focus, continual process monitoring and Continual risk management measures (IIA, 1998). There are many factors that could have been looked at as a measure of performance of internal audit however; the study was confined to measurable indicators of the Risk-Based Audit. This study only focused on just a few of them which included; Timeliness of audit assignments and reports, cost and the demands of the auditee. The period for which data refers was from 2005 to 2009 when the internal audit manual (G.O.K, 2005) was issued.

1.8 Limitations of the Study

A variety of issues impacted on the study. Some internal auditors were unwilling to fill in the questionnaires without giving any reasons. The researcher, therefore, took the necessary steps and measures to ensure that clear communication was made on the purpose of the study and assured the respondents of confidentiality of the use of information provided. Time was a challenge given that most of the target respondents had very busy schedules, and did not have time to complete the questionnaires. Consequently, the researcher carefully planned and scheduled activities so that the study was accomplished within the specified period. Confirmation of availability (bookings) ensured that time was not wasted in tracking down respondents.

1.9 Assumptions of the Study

It was assumed that the respondents would give their frank feelings to the questions posed to them. The researcher assumed that environmental factors such as locality of the internal audit, category and size of the size of internal audit department, and type of the auditee had no significant influence on the performance of internal audit in public sector.

1.11 Operational Definitions of Terms

Internal Audit

IIA defines Internal Auditing as “an independent, objective assurance and consulting activity designed to add value and improve an organization’s operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control and governance processes”

Performance

The measure of how much success the department has and how much progress is made relative to the objectives. Process of setting measurable objectives, evaluate progress, monitor trends, make improvements, and support decision making.

Public Sector

The part of the economy concerned with providing basic government services. It’s that part of an economy that consists of state-owned institutions, including nationalized industries and services provided by local authorities. In this research the public sector refers to central government and local authorities

Risk

Risk is any event that could prevent an organization from achieving its objectives. The chance of something happening that will have an impact on the organization or one of its unit’s objectives. It is measured in terms of impact and likelihood.

Risk Assessment

This refers to the identification of risk, the measurement of risk, the classification of risk, and the process of communicating about risks. It is a systematic process for assessing and integrating professional judgments about probably adverse conditions and/or events.

Risk Based Audit Factors

In this study this refers to the characteristics of risk based audit that differentiate it from traditional audits

Risk Classification

This is part of the risk assessment process that categorizes risks, typically into high, medium, low, and intermediate values.

Risk Factors

These are measurable or observable characteristics of a process that either indicates the presence of risk or tends to increase risk exposure.

Risk Management

This is the culture, processes and structures that are directed toward the effective management of potential opportunities and adverse effects. It involves making decisions about how to treat risks that have been previously identified and their effects mitigated. Options for risk management may include risk avoidance, risk reduction, risk transfer or risk acceptance.

Risk Measurement

This is the evaluation of the magnitude of risk which usually involves developing a set of risk factors that are observed and measured to detect the presence of risk.

Risk-Based Auditing

RBA is an approach that focuses upon how an organization responds to the risks it faces in achieving its goals and objectives; it aims to provide assurance on the management of the identified risks within the context of the organization corporate plans and aims. Unlike other forms of audit approach, RBA starts with business objectives and their associated risks rather than the need for controls. It aims to give independent assurance that risks are being managed to an acceptable level and to facilitate improvements where necessary.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter examines the literature to develop a framework for this study. It is organized under the following subheadings: Historical development of internal audit practice, Risk Based Internal Auditing; Business focus, Stakeholders focus, Continual risk assessment coverage, Process improvement, Strategic planning and analysis, Goal focus, Continual monitoring and Continual Risk management measure, Risk Based Audit Approach methodology; Materiality levels and Internal controls, Performance Evaluation of Internal Audit; Evaluating the Planning of Audits and Developing the Audit Plan under RBA, The Relationship of RBA on Performance of Internal Audit departments and Empirical studies. Finally this chapter gives a summary and highlights gaps and issues raised and issues reviewed as well as the conceptual framework of the study.

2.1 Historical Development of Internal Auditing Practice

The traditional internal audit model, developed over 100 years ago, has been transaction-based and cost-driven. Today, internal audit is undergoing significant change in migrating from a reactive, historically-focused function to a proactive group that takes a risk-based focus. Leading organizations are looking for the internal audit function to assume a leadership role in assessing and managing their strategic risks, adding value to the organization and identifying operational improvement opportunities.

The origins of internal auditing were in ancient times (Chun, 1997). However, it was not until the 1940s that the practice of internal auditing began to assume an important role in organizational strategy and management (Jin'e and Dunjia, 1997; Dittenhofer, 2001). The professionalization of internal auditing has continued steadily since then. Chapters of the Institute of Internal Auditors (the internal audit profession's recognized authority and principal educator) have been established around the world. The standards provided by IIA are the only formal guidance for the internal auditing profession. For many years, internal auditing in Kenya was confined to assisting organizations safeguard assets and check established control procedures. The main focus was on

monitoring and controls (GOK, 2005). Internal auditors were tolerated, but were not deemed essential in organizational control (Spira and Page, 2003). However, the emergence of new business risks has compelled many organizations to reformulate strategies and to elevate the status of internal auditing (Szpirglas, 2006). Thus, risk-based internal auditing has emerged as an important contributor to effective risk management (Allot, 1996). This has accorded internal auditors a more influential role in organizations (Krogstad et al, 1999).

The focus of internal audit work has shifted over the last decade from systems-based auditing to process-based auditing to risk-based auditing (IIA – UK and Ireland, 2003). Internal auditors have responded strongly to management concerns about business risks (Selim and McNamee, 1999). The work of internal auditors has shifted from being control-driven to being business risk-driven. Lindow and Race, (2002) noted that internal auditors should play a key role in monitoring a company's risk profile.

In the Government of Kenya (GOK) the Internal Audit Department is one of the departments within the Treasury. It supports Accounting Officers and AIE Holders in the Ministries, Departments, and Districts in the effective discharge of their responsibilities by measuring, evaluating and reporting on the effectiveness of the internal control systems, implemented by the Accounting Officers and AIE Holders to ensure: The appropriate assessment of risk and adoption of strategies to manage risks to within acceptable levels, Compliance with applicable policies, procedures, laws and regulations, The reliability of internal and external reporting and accountability processes; and, Compliance with the relevant codes of conduct and ethical guidelines.

The Internal Auditing function is geared towards assessing and advising on risk management, control and governance processes in Ministries, Departments and Districts. Its objective is to provide quality assurance and consulting services designed to add value to government operations (GOK, 2005). GOK had been active on the public financial management reform front. In 2003, GOK enacted the Government Financial Management Act to improve accountability of government financial management practices. In 2004, a new Public Audit Act was enacted to strengthen the independence and operational capacity of the Controller and Auditor General, and

an Internal Auditor General was appointed to improve internal audit functions in GOK ministries. In addition, Parliament passed the Anti-Corruption and Economic Crimes Bill, establishing an anticorruption commission, and the Public Officer Ethics Bill, requiring the declaration of wealth by public officers. Recognizing that efficient use of public resources is a precondition for economic development, GOK prepared strategic plans for all ministries, with specific performance targets, and with performance contracts to be signed by the Permanent Secretaries to make them accountable for use of public funds. In this context of performance measurement and accountability, Permanent Secretaries and other senior officials began seeking greater inputs from internal audits to ensure effective risk management and use of public resources, and to provide support for improving performance by identifying areas of weaknesses (GOK, 2005).

Currently, Internal Audit is an independent review function set up within the Civil Service as stipulated in the Government Financial Management Act 2004 Section 9(1) (c) as a service to all levels of management. The Internal Auditor General is responsible for effective review of all aspects of risk management and control throughout the Civil Service of the Republic of Kenya as stipulated in the Exchequer and Audit Act CAP 412, Subsection 2 and 3 of Section 4. Internal Auditing provides a support function to the Permanent Secretary, Treasury, by: Reviewing the existing procedures; and, Monitoring of compliance by Ministries, Departments, and Districts with the stipulated financial laws, regulations, instructions, and accounting procedures (GOK, 2005).

Internal Auditors work closely with Accounting Officers, AIE Holders and other relevant Officers to improve the economy, efficiency, effectiveness and accountability of Public Sector programs and operations. The scope of work of the Internal Audit Department is to determine whether the risk management systems, control environment and governance processes, as designed and maintained by the relevant Officers, are adequate and functioning in a manner that ensures: Programs are delivered in an efficient and effective manner, and objectives are achieved, Resources are adequately protected, used economically and effectively applied against stated objectives and priorities, The Legislative, regulatory and contractual requirements are recognized and met, All expenditure and receipts are dealt with in accordance with the governing

legislation, Adequate and reliable financial and operating information is provided to the Accounting Officers and other relevant officials for decision-making and accountability, Risks are appropriately identified, analyzed and managed (GOK, 2005).

2.2 Risk-Based Internal Auditing

Risk-based internal auditing focuses on strategic analysis and business process evaluation (Lorenzo, 2001; Gronli and Xystros, 1999; Campbell et al., 2006); and on assessing the goals, risks and controls that must coalesce for an organization's success (Rivenbark, 2000). By assessing and managing a company's risk, internal auditing helps assure that resources are adequate and focused on priorities (Kunkel, 2004). Generally, risk-based auditing assesses areas of heightened risk (Griffiths, 2006), and, importantly, conducts continuous risk assessments (O'Regan, 2002; Maynard, 1999; Marks, 2001). The knowledge gained from a comprehensive annual risk assessment, as well as from risk assessments undertaken at the outset of every internal audit engagement, should be shared with management and the board (Jackson, 2005).

This approach is not an option; rather, RBA is mandated by the Institute of Internal Auditors' (IIA) International Professional Practice Framework (IPPF), which covers the International Standards for the Professional Practice of Internal Auditing (ISPPIA) or the Standards. It is interesting to note that even ISACA – a global professional association of information systems (IS) audit and control professionals – is also requiring its members and CISA (Certified Information Systems Auditor) certification holders to “develop and document a risk based approach” under IS Auditing Standards No. 5 on Planning (S5.04) and “to evaluate IS function” using “risk-based approach” under IS Auditing Standards No. 10 on IT Governance (S10.07). The traditional auditing methods were characterized as; audit focus, transaction-based, financial accountant focus, compliance objective, policies and procedures focus, multiyear audit coverage, policy adherence, budget cost center, reactive (after the fact, discontinuous, observers of strategic planning initiatives) and the methodology was focused on policies, transactions and compliance. The RBA is characterized as; business focus, Stakeholders focus, risk assessment, process improvement objective, risk management focus, continual-risk-reassessment coverage, change facilitator, accountability for performance improvement results, opportunities for other management positions, co-active (real-time, continuous monitoring, participates in strategic

planning) and the methodology focuses on goals, strategies and risk assessment and management processes (IIA, 1998).

2.2.1 Business Focus

Besides, focusing on the level of risk the risk-based method helps to evaluate and build value into the financial reporting process and the clients company. In order to do this the auditor must have an up to date insight of the clients business and activities. This knowledge is gained through the way the client operates their business, management and internal and external environments. The knowledge gathered can help to design the audit program that includes the most effective and efficient combination of tests responsive to each client's unique circumstances (Grobstein and others, 1985). For this reason, the risk-based audit is then superior to traditional auditing methods.

The size and complexity of the company, its business processes, and business units, may affect the way in which the company achieves many of its objectives. The size and complexity of the company also might affect the risks of misstatement and the controls necessary to address those risks. Scaling is most effective as a natural extension of the risk-based approach and applicable to the audits of all companies. Accordingly, a smaller, less complex company, or even a larger, less complex company might achieve its control objectives differently than a more complex company (Auditing Standard, 5). For each control selected for testing, the evidence necessary to persuade the auditor that the control is effective depends upon the risk associated with the control. The risk associated with a control consists of the risk that the control might not be effective and, if not effective, the risk that a material weakness would result (Auditing Standard, 5).

To evaluate the level of risk related to specific areas of the audit, three components can help. The first is Inherent risk, where environmental factors, (background knowledge of the client and where past audits indicate no difficulties) are considered against whether or not they would lead to a material error, before considering the 'function of internal controls'. Next is Control risks where the 'system of internal controls' is assessed against the possibility of preventing material error, or detecting it in time using internal controls. Last is Detection risk where the auditors

procedures may fail to detect a material error not picked up by the internal controls (Griffiths, 2006).

2.2.2 Stakeholders Focus

RBA ensures internal audit understand the expectations of its primary stakeholders - senior management and the audit committee – and align its activities accordingly. This alignment ensures that internal audit functions and key stakeholders share the same priorities when it comes to applying internal audit resources to risk management and control. RBA assists internal audit to align itself with the priorities of its key stakeholder. RBA ensures internal audit priorities continue to match those of its key stakeholders as they evolve (Griffiths, 2006).

2.2.3 Continual Risk Assessment Coverage

Risk assessment in internal auditing identifies, measures, and prioritizes risks so that focus is placed on the auditable areas of greatest significance. In individual audits, risk assessment is used to identify the most important areas within the audit scope. Risk assessment allows the auditor to design an audit program that tests the most important controls, or to test the controls at greater depth or with more thoroughness (Allegrini et al, 2006). Through RBA instead of looking at the business process in a system of internal control, the internal auditor views the business process in an environment of risk. An audit focusing on risk adds more value to the organization than an audit focusing only on controls (IIA – UK Ireland, 2003).

The Committee of Sponsoring Organizations of the Treadway Commission (COSO) helped to define “risk” as any event that can keep an organization from achieving its objectives. According to the COSO model, risk is viewed in four major areas: operational (processes and procedures), financial (data rolling up to internal/external statements), regulatory (federal, state, local, organizational policy), reputation (institutional). There are several ways in which risk assessments in these areas can be conducted. These include the use of: focus group to assist in the identification of risks, interviews of key leadership and the board, surveys, reviews of previous audit findings, external audits conducted in the organization, and identifying what is occurring within the industry and the local market (COSO, 2004).

Once risks have been identified, a prioritization process is needed to identify the likelihood of the risk occurring, the ability of management to mitigate risk (i.e. are there controls in place for risk, regardless of the likelihood of those risks of occurring?), and the impact of risk on the organization. Risk prioritization is an ongoing process and should include periodic reviews during the year to ensure that previous prioritization methods, when applied in real time, are still applicable for the risk. It is important that senior leadership participate in, and agree with, the determination of the high-risk priorities for the audit and monitoring plan. This will ensure management buy-in and focus on risk priorities. Also, with managers involved at the development stage of the plan, they will be educated as to the type of activities being planned and the resources needed to conduct these activities. Hence, during the plan year, if there are changes, management will understand the need for additional resources or a change in focus in the plan as the business environment and priorities may change (COSO, 2004).

Assessing the risk of material misstatement at the financial statement level as well as at the planning stage, adds to and clarifies the direction on performing a combined assessment of inherent, and control risk, leaving the ability for the auditor to assess other risk factors in an audit. RBA has also changed the view of substantive procedures performed by auditors. For example, the use of statistical sampling has significantly reduced, but remains an important part of auditor's substantive procedures and what they wish to ensure is efficiency and effectiveness. In order to improve the risk-based audit, ways must be identified in which auditors' judgment of inherent risk and control risk can become more accurate and consistent. Most risk models use risk factors such as impact, likelihood, materiality, asset liquidity, management competence, quality of and adherence to internal controls, degree of change or stability, timing and results of last audit engagement, complexity, and employee and government relations (Griffiths, 2006).

Risk assessment includes the procedures that internal audit divisions use in order to identify and evaluate main and secondary risks related to audit universe on an inherent and residual level and based on their impact and likelihood to the achievement of relevant objectives.

Risk assessment consists of risk identification and risk analysis. Risk identification includes examining external factors such as technological developments, competition, economic changes, etc. and internal factors such as personnel quality, entity's nature of activities, the characteristics

of information system processing, etc. Risk analysis involves estimating the significance of risk, assessing the likelihood and impact of the risk occurring, and considering how to manage risk. Risk assessment allows internal audit functions to consider how potential events might affect the achievement of set objectives. The risk assessment process begins by defining the audit universe (Lindow and Page, 2002).

Evidence from a recent research (Koutoupis, 2005), demonstrated that the vast majority of Greek banks do not follow a documented risk-based approach, and development of risk based audit plans; however all of them state that they are taking into consideration the assessment of risks. In fact, all listed Greek banks internal audit divisions state that they consider risks when developing their long term plan (if applicable) and annual audit plan; however, this is based on relevant experience (auditors view of risk, past audits, time elapsed since last audit, fraud events, etc.) instead on the modern risk based audit theory and practice. Performance standard 2010 (Standards 2004) requires the chief audit executive to establish risk based audit plans to determine the priorities of the internal audit activity, consistent with the organizational goals. With respect to risk assessment and audit planning paper, *basel* requires an audit plan to be developed based on a relevant risk assessment which will include the timing and frequency of planned internal audit work. An important step is that risk assessment methodology should be written and appropriately followed by internal audit division.

2.2.4 Process Improvement

The Risk Based Audit, which focuses on both recorded and unrecorded risk, improves financial statement assurance and the financial statement reporting process. The Risk Based Audit focuses on business risk and the processes for controlling these risks. The higher the risk area, the more audit time and client controls are required. In order to identify business risks, the auditor must obtain a thorough understanding of organizations controls, financial condition, sources of revenues, expenditures, competition and other business risks. The first goal of the Risk Based Audit is to identify when an organization has failed to consider an important risk, economic event or transaction. The second goal is to assure that organization have focused on emerging risks that may not yet be well understood or managed (Griffiths, 2006).

The Risk Based Audit requires a greater understanding of the organization and more knowledge of the organization's business environment than required in a traditional audit. Whenever possible, the Risk Based Audit approach tests and relies upon the organization's process for controlling risks that could affect the financial statements. In traditional audits, the auditor substantiates account balances after the fact rather than relying on an organization's controls. This means that the auditor should evaluate the effectiveness of your internal control system and place reliance on your control system whenever possible (Griffiths, 2006).

By focusing on the client's control processes, the Risk Based Audit approach should add value to the organization by: addressing risks affecting the organization and their financial reporting; providing services that help the organization manage its business and risks; communicating with the organization on important issues; improving identification of financial statement misstatement; improving assessment of the organization business viability; improving identification of fraud; and improving quality and timeliness of reporting (Bou-Raad, 2000).

2.2.5 Strategic Planning and Analysis

It has been argued that strategic analysis overcomes the alleged deficiencies of the traditional approach towards understanding the client business by treating the financial statements as the end product of the client's strategy and the business processes used to implement such a strategy (Salterio and Weirich, 2001). Strategic analysis views a client entity as an open system that is able to adapt to changes in the external and internal environment by coordinating its business processes in order to attain its goals (Jackson, 1991). Thus, Strategic analysis allows for the creation of an explicit mental model of a client's business. This model includes the impact of the business risks on the client's business processes, and ultimately, through identification of unmitigated risks, on the client's financial statements (Choy and King 2002; Knechel, 2001). The auditor evaluates how well the client's strategic planning process matches environmental threats with corporate capabilities. To assess Clients Business Risks, the auditor evaluates and documents macro-economic, industry-level, and firm-specific strategic risk factors, as well as management's reactions to those risks. Therefore, Strategic Analysis should allow an auditor to understand the potential relationship of a client's strategy to their accounting choices, estimates, and financial statement disclosures (Eilifsen et al. 2001; Knechel 2001; Bell et al. 2002). The auditor's

assessment of Clients Business Risks impacts judgments regarding the risk of material misstatement. Assessments of Clients Business Risks and risk of material misstatement influence detection risk, which in turn affects the audit plan. Auditors reduce audit risk to an acceptable level by making choices regarding the nature, timing, and extent of substantive tests (e.g., tests of transactions, analytical procedures, and tests of account balances). Thus, if Strategic analysis enhances audit effectiveness, the improvement should exhibit itself through more accurate entity-level risk assessments and audit plans that more appropriately address the areas of potential misstatements within the client entity's business processes (Lemon et al. 2000; Salterio and Weirich 2001).

2.2.6 Goal Focus

In a changing regulatory and business environment, internal audit needs to find new ways to deploy its risk- and control-based skills to help the organization achieve its strategic objectives and thereby enable value creation. IA can help increase stakeholders value through efforts to manage risk, prioritize goals and activities, promote behavioral change, improve processes, reduce costs, eliminate complexity and redundancy, and enhance the organization's recognition in the marketplace (Bou-Raad, 2000).

2.2.7 Continual Monitoring

Top management should ensure the establishment of an effective and efficient internal audit process to assess the strengths and weaknesses of the quality management system. The internal audit process acts as a management tool for independent assessment of any designated process or activity. The internal audit process provides an independent tool for use in obtaining objective evidence that the existing requirements are fulfilled, since the internal audit evaluates the effectiveness and efficiency of the organization (ISO 9004:2009 Clause 8.3.3).

Internal auditing is an effective tool for identifying problems, risks and nonconformities, as well as for monitoring progress in closing previously identified nonconformities (which should have been addressed through root cause analysis and the development and implementation of corrective and preventive action plans). Verification that the actions taken have been effective can be determined through an assessment of the improved ability of the organization to fulfill its objectives. Internal auditing can also be focused on the identification of good practices (that can

be considered for use in other areas of the organization) as well as on improvement opportunities (Marks, 2001). Risk-based auditing and monitoring is ongoing and dynamic with the needs of the organization. Effectiveness in the development and execution of the risk-based audit and monitoring plan will be determined by the integrity and characteristics of the overall audit and monitoring process. Effective audit and monitoring activities will assist in the identification of weaknesses in controls, management's action to correct those weaknesses, and follow-up to ensure that timely mechanisms have been put in place to strengthen controls for mitigating the business risks (Marks, 2001).

2.2.8 Continual Risk Management Measures

Risk management is a dynamic approach that firms use to minimize their level of risk (Busman and Zuiden, 1998). Risk Management is a structured, consistent and continuous process across the whole organization for identifying, assessing, deciding on responses to, and reporting on, opportunities and threats that affect the achievement of its objectives (Matyjewicz and D'Arcangelo, 2004). Risk management involves making decisions about how to treat risks that have been previously identified and their effects mitigated. Options for risk management may include risk avoidance, risk reduction, risk transfer or risk acceptance. Risk management looks holistically at all the risks an organization faces, and considers how those risks affect the accomplishment of goals. Risk management seeks to better handle risks and to achieve the greatest gains at the lowest cost (Chapman, 2001). It permits organizations to assess risk continually, and to identify the steps and resources needed to overcome or mitigate risk (Funston, 2003).

Fuente and Vega, (2003) argued that risk management in non-finance companies is characterized by the absence of techniques that allow inherent risks to be managed. In contrast, risk management in finance companies has developed strongly over recent years, mainly because existing regulation encourages organizations to strengthen control and risk management systems (Alzuela, 2003). With the benefit of hindsight, given the implosion of major financial institutions throughout the world in 2008, those risk management systems appear to have been inadequate. Standards and Practice Advisories provided by the IIA encourage the involvement of internal audit in risk management, such as Practice Advisory 2100-3: Internal Auditing's Role in the Risk Management Process and Practice Advisory 2100-4: Internal Auditing's Role in Organizations

without a Risk Management Process. The latter, issued in March 2001, Risk-based internal auditing provides internal auditors with guidance in determining their role in entities that do not have an established risk management process (IIA, 2001).

2.3 Risk Based Audit Approach Methodology

According to IIA, (2009), initially, group audit for international business audit teams should acquire a deep knowledge of business at the local level (either at branches, or subsidiaries), especially strategic and business objectives. This will help internal auditors to understand the significant risks related to the achievement of objectives and motivate management to identify them. The main output of this step is the risk compiled by senior management (with the assistance of internal audit). This step is considered the cornerstone of RBA. It is a prerequisite that enables internal audit to target its efforts more effectively towards the areas, with risks that matter the most. It also requires a high level of input from both management and staff. It is therefore essential that staffs from different levels are involved, as far as this is practicable.

The second stage involves collecting information on management's assessment of the previously identified risks and determining how these are currently being managed by the entity. This, in effect, entails a preliminary assessment of the control environment. The point of this stage is to gain management input on the assessed level of the previously identified risks, and on their management approach. This enables internal audit to filter and prioritize risks, in order to develop its periodic audit plan. In other words, at the end of this stage, the internal audit teams should be able to decide which risks should be reviewed to ensure that are properly managed, when and how they should be reviewed. As a result, the risk register at this point does not only contain a complete list of previously identified risks, but it can also be filtered to produce a list of risks that will be subject for review by internal audit. The group audit committee will be presented with a consolidated report regarding the internal audit plans, in order to approve or amend it, accordingly (IIA, 2009).

Internal audit provides assurance on the effectiveness of risk management for those risks that are considered to be high. To carry out this, risks will be prioritized and grouped into a series of audit assignments, according to the internal audit resources availability. The final stage of group

audit work consists of carrying out individual internal audit assignments, based on the periodic audit plan. The objective of each assignment will be to assess the effectiveness of internal controls and management monitoring activities of selected risks within the audit universe. The results of each audit assignment are to be fed back into the risk register. Such results may include the identification of new risks, an updated assessment of risk levels based on audit findings etc. By utilizing these results, audit team will be able to periodically inform the audit committee of any changes in the risk profile of all business operations, risks that remain above specified tolerance levels, as well as pending corrective actions management has agreed to. A flexible risk register, continuously updated, permits the internal audit team to remain focused on the high level risks (IIA, 2009).

A periodically updated audit plan contributes to the effectiveness of the internal audit function, since it takes internal audit away from the traditional, cyclical, compliance-based testing and closer to working based on the risks inherent in each entity. If compliance-based work is required, it is classified as “management request” work. The audit division develops a generic risk framework, which is basically a high-level categorization of all risks a financial institution can face. All internal audit teams/internal auditors are invited to use this in the risk identification process. Risk framework is combined with a categorization of the High-level processes/functions within a financial institution. Taken together, these two lists form a double-entry table where risks are linked to operational activities (i.e. in compliance with COSO enterprise risk management principles). Recently the risk-based approach has become as valued as auditing standards and adopted by most. The reason for it becoming so popular is that this audit approach helps the auditor to evaluate the level of risk to a particular area of the audit, i.e. specific accounts and transactions. Consequently, auditors can avoid both over-auditing and under-auditing and can distribute work more evenly throughout the year (IIA, 2009).

The internal audit acts as a feedback mechanism for the top management; it can give top management, and other interested parties, assurance that the system meets the requirements of ISO 9001. How the internal audit process is managed is a key factor to ensuring the effectiveness of a quality management system. ISO 9001 clause 8.2.2 states as follows: “An audit programme shall be planned, taking into consideration the status and importance of the processes and areas

to be audited, as well as the results of previous audits". This requirement is intended to focus the internal audit programme on those processes and areas where past history indicates that problems have occurred, or where problems are likely to be ongoing, and/or are likely to occur (because of the nature of the processes themselves). These problems may result from issues such as human factors, process capability, measurement sensitivity, changing customer requirements, changes in the work environment, etc. The processes with high levels of risk of deficiencies or non conformities should have priority in the internal audit programme. Special attention should be given to processes where the high level of risk is influenced by factors such as: severe consequences of failure on process capability, customer dissatisfaction and non compliance with product (or process) statutory and regulatory requirements.

23.1 Materiality Levels

During audit planning auditors must identify and assess the risk of not discovering material items. If an item is discovered, auditors must consider the context and presentation of the item and then decide whether it affects the true and fair view of the company accounts. The Statements of Auditing Standards, SAS 220 states that 'Auditors should consider materiality and its relationship with audit risk when conducting an audit'. IIA, (1999) suggests, in order to avoid materiality, it should be taken into account at the planning stage of an audit and re-evaluated if the outcomes of tests, enquiries or examinations differ from expectations. IIA, (2009) also suggests that materiality is fundamental to accounting and is a matter of professional judgment with both quality and quantity dimension

Auditing materiality is also known as tolerable error. Tolerable error is considered the maximum error in a population (sample size) that auditors are prepared to except and still conclude that the audit objectives have been achieved. The level of tolerable error is normally determined at the planning stages. Throughout the audit, tests are then carried out on these levels; they provide evidence that the actual errors in the population are less than the tolerable error (Auditing Standard, 320). Sampling methods are used to draw conclusions from a large set of data. The objective of audit sampling is to establish with reasonable confidence that a number of factors are free from material misstatement. This means drawing conclusions from an entire set of data that may be a set of account balances (population) and then testing a representative sample of items (sampling units). Nonetheless, it is not required of auditors to check all transactions and

balances of a business, but they must be practical and be aware of materiality. It would take too long to complete a check; because by the time they had reached the public they would be history. In some cases a 100% check is still necessary, for example high-risk areas (Woolf, 1988).

When deciding on the appropriate sample sizes for any given population there are several factors to consider. Confidence levels must be taken into consideration when looking at the extent to which the auditor is justified in believing that the sample drawn at random reflects (with a stipulated range) the attributes of the population from which it was taken. (Woolf, 1988). Therefore, from the sample results and a given level of confidence we can be reasonably assured that the error rate lies within certain boundaries, in addition this means that the auditor can never be 100% certain and confidence levels are seen to be complimentary to risk. Furthermore, because an auditor cannot be 100% certain, there must be a measure for the potential error rate in the population. Determining the precision area depends on the auditor's own assessment of the situation, since confidence levels and precision are strongly interconnected (Woolf, 1988).

2.3.2 Internal Controls

A direct relationship exist between the degree of the risk that a material weakness could exist in a particular area of the company's internal control over financial reporting and the amount of audit attention that should be devoted to that area. In addition, the risk that a company's internal control over financial reporting will fail to prevent or detect misstatement caused by fraud usually is higher than the risk of failure to prevent or detect error. The auditor should focus more of his or her attention on the areas of highest risk. On the other hand, it is not necessary to test controls that, even if deficient, would not present a reasonable possibility of material misstatement to the financial statements. The complexity of the organization, business unit, or process, will play an important role in the auditor's risk assessment and the determination of the necessary procedures (Auditing Standard, 5).

2.4 Performance Evaluation of Internal Audit

When evaluating internal audit processes, we should evaluate issues such as: the competencies that are needed for and applied to the audit, the risk analysis performed by the organization in planning internal audits, the degree of management involvement in the internal audit process, the

guidance provided by ISO and the way the outcome of the internal audit process is used by the organization to evaluate the effectiveness of its operations and to identify opportunities for improvements (Gronli & Xytros, 1999). There should be evidence that the internal audit department: has identified the competence requirements for its internal auditors, has provided appropriate training, has in place a process for monitoring the performance of its internal auditors and audit teams, includes personnel on its audit teams that have appropriate sector specific knowledge (so that they are able to identify where the likelihood that a deviation in a particular process or activity could lead to a significant consequence for product quality). An assessment should also be made of whether the internal auditors understand the inherent risk to the reliance that can be placed on the outcome of the audit process, if they fail to consider something which is material to the outcome of the audit, select an inappropriate sampling regime, weight the evidence collected inappropriately, or deviate from the audit plan and internal audit procedures (Gronli & Xytros, 1999).

2.4.1 Evaluate the Planning of Audits;

The Internal audit department should be able to maximize the use of available resources during the conduct of internal audit activities. This is facilitated by the adoption of a risk-based approach to the planning of internal audits. It should be ascertained whether the internal audit department has considered the use of a risk based approach in developing the internal audit plan, in order to ensure the effective and efficient use of resources. This should also ensure that the inherent risks of audit failure in the audit process, and to audit outcomes, are minimized. Once the common framework for the risk-based auditing and monitoring program has been established, four key tasks must be performed: Assessment and management of risks, and development of a risk-based auditing and monitoring plan, Execution of a corrective action plan developed by management to mitigate risks and/or resolve risks, Periodic assessment of the overall process for effectiveness (Bou-Raad, 2000).

2.4.2 Developing the Audit Plan under RBA

The International Standards for the Professional Practice of Internal Audit (IIA), Standard 2120 states that "The internal audit activity must evaluate the effectiveness and contribute to the improvement of the risk management processes." This is done through the development and execution of the risk-based auditing and monitoring plan. Risk assessments and management are

important elements in the development of risk-based auditing and monitoring plan. Considerations related to the plan should also include: Review of other business areas in the organization which may be conducting an audit or monitoring activity in this area; if so, could the department leverage this resource for assistance in completing the stated activity, or utilize their activity and integrate the results into the overall plan? Resources available to implement plan; Do the department have the appropriate resources for the subject matter as needed? (If not, is there subject matter expertise somewhere else in the organization?) If subject matter requires outsourcing, budget considerations and overall risk priorities may need to be re-evaluated, Hours needed to complete the plan, Projected timeframes, Defined auditing or monitoring activities and determination as to whether they are outcomes or process oriented, Flexibility incorporated into the plan to address changes in risk priorities and possibly unplanned compliance risks/crises which may need an immediate audit or monitoring to occur (Bou-Raad, 2000).

IIA Standard number 2120.A1 identifies the focus of the risk assessment process: "The internal audit activity must evaluate risk exposures related to the organization's governance, operations, and information systems regarding the: Reliability and integrity of financial and operational information, Effectiveness and efficiency of operations, Safeguarding of assets, Compliance with laws, regulations, and contracts. The process of risk assessment continues through the execution of the plan where the engagement objectives would reflect the results of the risk assessment. Sarbanes-Oxley Act, (2002) directed National Bank of Greece to adjust its audit planning process to a risk based one. The Risk Based Audit is superior to traditional audit approaches for two reasons. First, it focuses on risks, the underlying causes of financial surprises, not just the accounting records. Second, the Risk Based Audit shifts the focus from inspecting the quality of the financial information that is recorded in the financial statements to building quality into the financial reporting process and adding value to the organization operations.

2.5 Relationship of RBA and Performance of Internal Audit

RBA is designed to be flexible. It concentrates on the areas of greatest importance, often relying on a "stop and go" sampling technique, allowing the sample to be expanded or curtailed, depending on error rates. Perhaps most importantly, RBA can also help with the "value crisis"

that appears to be affecting the audit profession, since the audits meet the needs of clients (Bou-Raad, 2000).

In an environment of risk, internal audit must be concerned with more than just internal control. To avoid all or some risk, internal audit may advise to diversify and to enter into agreements to share the consequences of risk through contracts, warranties, guarantees, and insurance. Internal audit may even advise managers to accept some risks. In many cases, these strategies may be more cost-effective means of managing the risk in the business process than applying additional controls. Such thinking represents a significant departure from traditional internal auditing. Instead of focusing on the controls in the system after assessing the risk, the new approach maintains its focus on risk throughout the audit process (Kunkel, 2004).

According to the IIA's Statement of Responsibilities of Internal Auditing, the purpose of internal auditing is to examine and evaluate the organization's activities and to furnish analyses, appraisals, recommendations, counsel, and information concerning the activities reviewed. Each audit has an audit objective, and that objective is related to furnishing the results of the examination and evaluation of activities. Several parties advocated the need to assess internal auditing effectiveness, though, at present, there is not a shared framework of reference to this scope (Sawyer, 1995). Recently, (Sarens, 2006) have raised the question "when can we talk about performance of IA function?" in his editorial about future perspectives of internal audit research.

Certain authors related internal audit performance with the quality of internal audit procedures, such as the level of compliance with IIA standards or the ability to plan, execute and communicate audit findings (Stern, 1994). However, this approach suffers from a major limitation as it is based on the hypothesis that internal audit activity is effective if its procedures are carried out properly, without considering the needs of the main stakeholders in each individual audit. This is in contrast with the current trend that stresses the relevance of value-added activities and indicates stakeholders' satisfaction as one of the critical performance categories for internal audit activities (for instance, the Practice Advisory 1311-2).

A second stream of research relates internal audit performance to the output of internal audit activities (Frigo, 2002), looking for instance at the ability of internal audit to respond to auditees' needs (Frigo, 2002). In this context, a recent work by (Ziegenfuss, 2000) has highlighted that the survey results of auditee satisfaction and the percent of recommendations that are implemented are the performance measures, a few authors went further, relating internal audit performance to the outcome of the audit activities (i.e. the impact of a certain output of the audit process). According to Dittenhofer (2001), "when evaluating the performance of the internal auditing operation, a positive response would be given when the internal auditor: audits the achievement of the auditees' objectives and finds no problems, and no problems surface following the audit; or audits and finds problems; and recommends solutions to the problems; and the solutions resolve the problems". From this statement it is clear that outcomes address a wide range of aspects, i.e. all the elements on which audit activities have an impact. These include both efficiency and effectiveness of the audited processes, and corporate performances. At a process level, for example, the impact of IA activities has been related to cost savings generated by the implementation of suggested recommendations. At a corporate level, outcome can address the IA contribution to corporate performance, such as profit, growth, or share price; or its role in the avoidance of corporate failures by ensuring sound corporate governance (Dittenhofer, 2001).

Sarens, (2006), citing Gramling et al, (2004) suggested that internal audit can be considered effective when the quality of internal audit function "has a positive impact on the quality of corporate governance". He also goes on linking internal audit quality to the "capacity to monitor and improve risk management and internal control processes". In fact, to improve risk management and internal control processes, the internal auditors have to convince the auditees about the quality of their work, persuading managers to implement their recommendations. The internal auditors, in most of cases, do not act on the internal control-risk management system "directly". They can identify a criticism or an area of potential improvement and provide managers, responsible of business processes, with an evaluation of the internal control-risk management system. Then, managers and officers have to decide whether and how enacting internal auditors' recommendations. As highlighted by Marks, (2001), audit findings and recommendations would not serve much purpose unless management is committed to implement them. Implementation of audit recommendations is therefore highly relevant to audit

effectiveness (Sawyer, 1995). The effect that internal auditors have on the achievement of corporate objectives (i.e. their effectiveness) is influenced by the extent to which managers consider internal auditors' work valuable and decide to exploit it. In such view, the effectiveness of internal audit depends on the quality perceived by the auditees.

The Institute of Internal Auditors (IIA, 2004b) defined internal auditing as: an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes. This definition signifies that internal audit has undergone a paradigm shift from an emphasis on accountability about the past to improving future outcomes to help auditees operate more effectively and efficiently (Nagy and Cenker, 2002; Goodwin, 2004). Since, the definition equally serves both the private and the public sectors (Goodwin, 2004); it is used in this study as a basis to analyze public sector internal audit performance.

Internal audit is effective if it meets the intended outcome it is supposed to bring about. Sawyer, (1995) states, "...Internal auditor's job is not done until defects are corrected and remain corrected." Chun, (1997) explains that internal audit effectiveness in the public sector should be evaluated by the extent to which it contributes to the demonstration of effective and efficient service delivery, as this drives the demand for improved internal audit services. Based on the results of a consultative forum that focused on improving public sector internal audit, (Chun, 1997) identified perceptions and ownership; organization and governance framework; legislation; improved professionalism; conceptual framework; and also resources as factors influencing internal audit effective performance. Effective internal audit undertakes an independent evaluation of financial and operating information and of systems and procedures, to provide useful recommendations for improvements as necessary.

The effectiveness of internal audit greatly contributes to the effectiveness of each auditee in particular and the organization at large (Dittenhofer, 2001). Dittenhofer, (2001) has also observed that if internal audit quality is maintained, it will contribute to the appropriateness of

procedures and operations of the auditee, and thereby internal audit contributes to effectiveness of the auditee and the organization as a whole.

Internal audit is undergoing a paradigm shift from traditional/compliance audit to value-added internal audit (Stern, 1994; Naggy and Cenker, 2002; Gramling et al., 2004; Bou-Raad, 2000; Stern, 1994) highlights that the value-added audit paradigm is gaining in importance and identified ways to attain a value-adding internal audit department. Similarly, Spira and Page, (2006) developed a profile of a value-adding internal audit function based on a survey of best practices of world-class internal audit departments. Spira and Page, (2006), explains that although every organization is different, all value-adding audit departments tend to share similar characteristics. Likewise, O'Regan, (2002) identified eight factors that help make up a value-adding internal audit function. In sum, from the literature hitherto, one can observe that adding value needs to be the focal point of the very existence of internal audit.

The common thread in the literature that focuses on value-added internal audit is the suggestion that value-adding departments tend to share similar attributes. Maynard, (1999), underscore the contingency of those attributes upon factors specific to each individual organization. Identifying value-adding internal audit profile for each individual organization would enable one to establish the most value-adding internal audit departments – in view of the idiosyncrasies of specific organizations. However, an arguably better approach from the perspective of theory development would be to discern a pattern of value-adding internal audit profiles into which specific organizations would be categorized. This approach possibly enables greater understanding of internal audit's role and a better prediction of the development directions of the value-added internal audit and of the internal audit profession (Maynard, 1999).

Kunkel, (2004), in a review of the American literature, indicate that the external factors leading to changes in organizations resulted in the need for expanded role of internal audit. Generally, Kunkel, (2004) underscored that the internal audit function is moving away from confrontational, detection-focused services to a prevention-focused service through a partnering approach with management, and away from a controls approach to a risk-based approach with a focus on consulting services. Chapman, (2001), documented that traditional audit dominated in Saudi

Arabian companies. Similar results were reported by (Allegrini et al, 2006) in a study of private companies in Belgium. COSO, (2004) case study, pointed out the limited effectiveness of internal audit in a public sector organization. As internal audit effectiveness is a measure of value-added, it is believed that, the lower effectiveness of internal audit might be an indication of low value-added.

2.6 Empirical Studies

Allegrini and D'Onza, (2003) reported that 25 percent of the top 100 companies listed on the Italian Stock Exchange performed traditional compliance activities and generally followed an audit cycle approach in the annual audit planning process. In 67 percent of their responding companies, internal auditors adopted the model proposed by the Committee of Sponsoring Organizations of the Treadway Commission (COSO, 2004) and mainly applied operational auditing and the risk-based approach at the macro level (annual audit planning). In a few large companies (8 percent), auditors applied risk-based approaches both at the macro level and the micro level (individual audit assignments).

In January 2005, a study of the development of internal auditing practices in Ireland by the (IIA –UK and Ireland, 2005) and KPMG Ireland, concluded that 89 percent of heads of internal audit use a risk-based method when preparing annual internal audit plans; 93 percent use a risk-based method in their internal audit assignments; 81 percent liaise with divisional or business heads when compiling their internal auditing plans; 72 percent perform their work in accordance with international standards; and 32 percent are responsible for compliance or risk management. The study concluded that while a large proportion of organizations adopt best practice approaches, there is scope for improvement.

A study of 11 big North-American companies concluded that most internal audit directors use sophisticated risk models to identify potential problem areas (Nagy and Cenker, 2002). In a comparison of internal auditing practices between Belgium and the USA, (Sarens and de Beelde, 2006) found that the role of internal auditors in risk management is time-specific, and changes quickly. In Belgium, internal auditors have pioneered an awareness of a higher level of risk and have developed more formalized risk management systems. In the USA, objective opinions of

internal auditors provide valuable input for the internal control review and disclosure requirements of the Sarbanes-Oxley Act 2002.

In 2005, a IIA Research Foundation study examined the extent to which internal audit functions adhere to the ERM roles recommended in the IIA paper, *The Role of Internal Auditing in Enterprise-wide Risk Management(ERM)* (Gramling and Myers, 2006). Approximately, 90 percent of the 361 responses were from the USA and Canada. The internal audit function was primarily responsible for ERM-related activities in 36 percent of the respondents' organizations. In 27 percent, the primary responsibility belonged to a Chief Risk Officer who was not part of the internal audit function. On average, financial industry audit departments were found to have greater responsibility for core activities than manufacturing industry audit departments.

Specific characteristics associated with the adoption of risk-based auditing by Portuguese entities were identified through a mailed questionnaire survey. The questionnaires were addressed to chief internal auditors in Portugal. All addressees were members of the Institute of Portuguese Internal Audit. They were thought likely to understand the importance of risk-based internal auditing and to have access to updated information on risk-based auditing. Closed questions were used to avoid ambiguous interpretation, to make answer coding easier, and to facilitate statistical analysis. Of the 96 questionnaires mailed, 59 usable responses (61 percent) were received. χ^2 -tests confirmed that the sample was representative of the population in terms of listing status, industry sector (finance or non-finance) and company type (public or private). However, confirmation of representativeness was not possible for size and internationalization because of the lack of reliable data. The study identified likely reasons why internal auditors prefer risk-based approaches over procedures-driven approaches (Colbert and Alderman, 1995) and possible reasons for the involvement of internal auditing in Enterprise Risk Management.

Risk-based internal auditing contributes to effective risk management (McNamee and Selim, 1998). In a study of the voluntary use of internal audit in Australian companies, (Goodwin-Stewart and Kent, 2006) concluded that internal auditing was associated strongly with company size and the effort applied to risk management. Private sector firms seem more likely to be affected by the internationalization of business activity, high levels of competition and the scarcity of resources, than public sector firms. This suggests that risk management will be more

effective in privately-held organizations than in publicly held organizations. (Goodwin, 2004) found a weak significant difference between the public and private sectors with regard to financial risk management. A total of 50 percent of private sector internal audit functions were involved with this type of risk management, compared to 33 percent of public sector internal audit functions ($p=0.068$). Thus, privately-held organizations were assumed to be more likely to apply risk-based approaches in developing internal auditing than publicly held organizations.

McNamee and Selim, (1998) explored contention that firms belonging to international groups have a greater exposure to risk; and that they are more likely to implement methods which contribute to effective risk management (such as risk-based auditing). Listed companies usually have mature risk management as a consequence of close scrutiny by stock exchange regulators. In Portugal, listed companies are subject to stringent regulations issued by the Portuguese Stock Exchange regulator. Therefore, they are more likely to implement risk-based approaches in the development of internal auditing.

2.7 Conceptual Framework

The conceptual framework for this study considers Internal Auditing Function as a critical component of organizational growth and performance. According to this framework, Risk-Based Audit (RBA) constitutes a new approach to internal auditing aimed at achieving better performance in firms and public organizations.

The conceptual framework recognizes the independent variables of the study which are assessed through the various elements of RBA factors namely: business focus, stakeholders' focus, continual risk assessment coverage, process improvement, participation in strategic planning, goal focus, continual process monitoring and continual risk management measures. On the other hand, internal audit performance is considered to be the dependent variables assessed in terms of indicators such as; timeliness, cost effectiveness, and demands of the auditee. In this conceptual framework, the external environment of an organization is given some consideration in determining the attainment of internal audit performance. In this study, the moderating factors include; government financial regulation and professional standards which. The conceptual framework for this study is illustrated in the Figure 1.

Independent Variables (Risk Based Audit Factors)

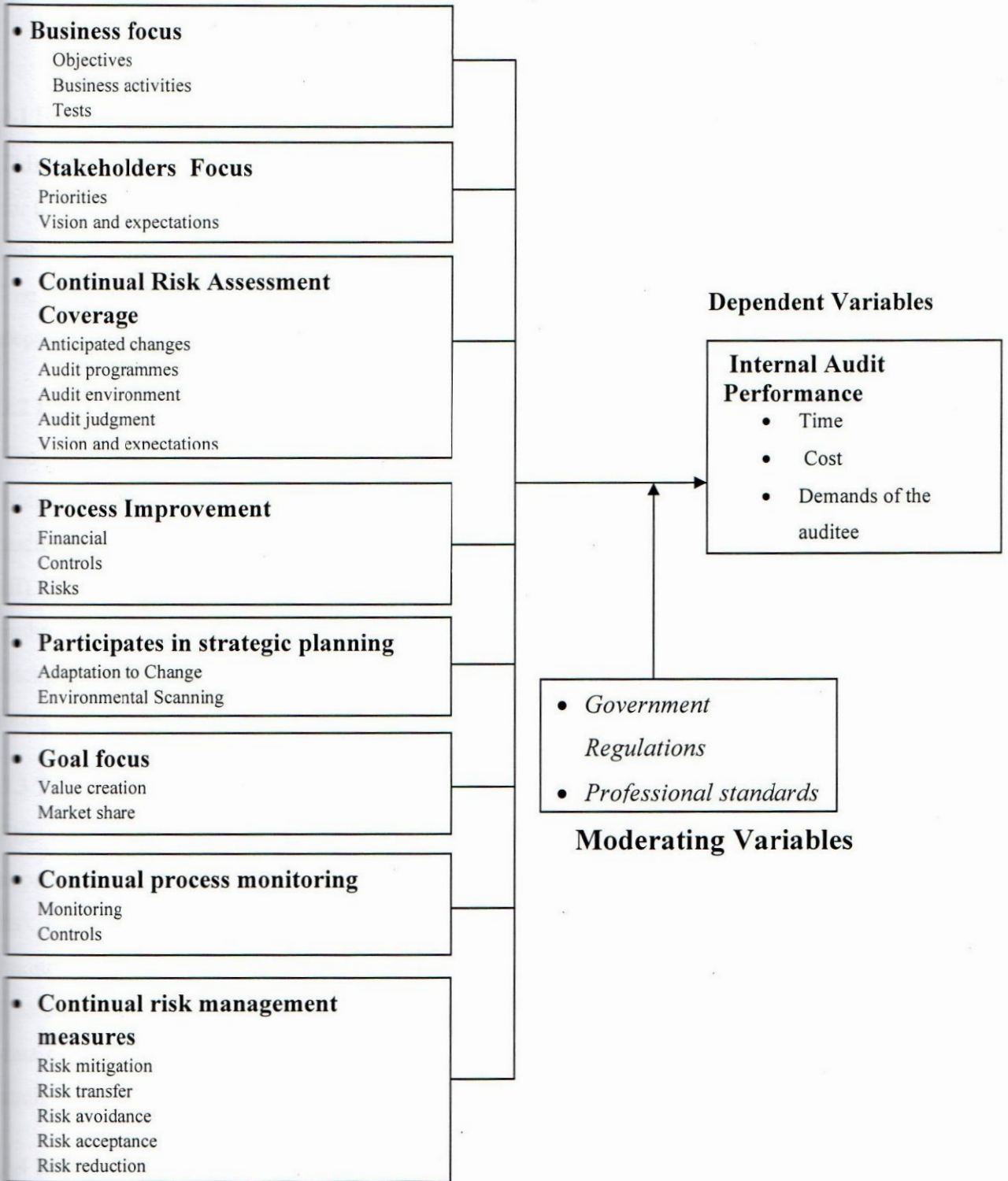


Figure 1: Relationship between Risk-Based Audit Factors and Internal Audit Performance

Source: Adaptation from Reviewed Literature 2012

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Research Design

This study was conducted through a cross-sectional survey. This implies that the data required for the study was gathered just once. This kind of approach helped save on time, effort, and costs that would otherwise be incurred in collecting data over several time periods (Sekaram, 2007). The study evaluated Risk Based Audit factors affecting performance of internal audit departments in public sector within the south rift region of Rift valley province, Kenya.

3.2 Location of the Study

The study was carried out in South Rift, Rift Valley Province Kenya. According to Kenya National Audit Office (KENAO) Records (2009) South Rift region had a total of 36 internal audit units in central government and 20 internal audit units in Local government (see appendix III). The South Rift region was chosen because it was diverse as regards the number of local authorities and districts. All this means that the respondents were not biased in terms of ethnic background, gender or locality. This implied that the population is rich in information that was being sought in this study.

3.3 Target Population

The target population of this study was all internal auditors in charge of internal audit departments in South Rift because they are typically the most knowledgeable people regarding risk based audit and its implementation in public sector. It had a population of 56 internal auditors. The study employed a census survey of all the internal auditors (56) within south rift. The study targeted internal auditors in charge of internal audit departments as respondents for data collection because they are typically the most knowledgeable people regarding risk based audit and its implications in public sector

3.4 Instrumentation

This study was aimed at evaluating risk-based audit factors affecting performance of internal audit in public sector. In order to get these data, the researcher used questionnaires. This instrument was used to collect information about the respondents' perception on the role of RBA

factors on the performance of internal audit in public sector South Rift region measured on a 5 point Likert scale. This type is used to measure perceptions, attitudes, values and behaviour (Mugenda & Mugenda, 1999). The questionnaire had four sections. Each section was developed to address a specific objective. Part A was aimed at collecting data about internal auditors' personal characteristics. Part B was on internal auditors' perception on the level of application of RBA factors and Part C solicited data on their feelings towards internal audit performance. The study used a self-administered questionnaire to gather information from the respondents. A period of one month was used to carry out the survey.

3.5 Validity and Reliability

3.5.1 Validity

In this study, ensuring validity of the data collection instrument involved going through the questionnaire in relation to the set objectives and making sure that they contained all the information that could enable answer these objectives. The tools were developed by the researcher and content and face validity established. The content validity established was to ensure accuracy of the instruments (Leeds, 1993). The face validity was ensured that the instrument appeared to measure what it purported to measure. This was accomplished with the help of experts and examiners in Faculty of commerce at Egerton University.

3.5.2 Reliability

The instruments were piloted in internal audit units from some of local authorities and districts in the regions that were not included in the actual study that is, North Rift, Central Province and Nairobi. This enhanced the reliability and validity of the instruments (Mugenda & Mugenda, 1999). The results of the piloted instruments were used to calculate the reliability coefficient. Reliability was established to ensure accuracy or the consistency of the instrument, that is, the extent to which the results remain similar over different forms of the same instruments (McMillan & Schumacher 1993). This was calculated using the Cronbach formula and reliability of 0.7 and above was acceptable, (Selltiz, Wrightsman & Cook, cited in Githua, 2000). Mcmillan and Schumacher, (1993) viewed Cronbach alpha as the most appropriate type of reliability for survey research. Therefore, the Cronbach alpha test for reliability was used because it is superior to all others and can be used for both dichotomous-type and large-scale data. The reliability coefficient from the piloted instruments was 0.86.

3.6 Data Collection Procedures

The researcher visited or used the internet services to administer the questionnaires. The email addresses of the respondents were obtained from their provincial internal auditor for those in central government. For internal auditors in local authorities the email addresses were obtained through telephone calls to their offices from a list of telephone numbers obtained from Kenya National Audit Office Nakuru branch. The questionnaires were self-administered thus the respondents were asked to complete the questionnaires themselves. The researcher arranged with the respondents to collect the completed questionnaire after two weeks. Internal auditors who were in charge of the departments were in a better position to give in-depth information concerning the effects of RBA factors on IA performance.

3.7 Data Analysis and Presentation

The data was analyzed quantitatively through means, percentages correlation and regression analysis. Data on the respondent's bio data and application of RBA factors was analyzed using descriptive statistics such as statistical mean and percentile values. The effect of RBA factors on the performance was tested statistically using Pearson Moments Correlation. Relationships between RBA factors on performance of internal audit in public sector were determined at alpha level of $p < 0.05$. The relationship between the overall RBA factors index and overall performance index was tested statistically using Pearson moment correlation. Regression analysis was used to test the overall effects of RBA factors on performance of internal audit in public sector. The regression is based on the linear equation model expressed as: $Y = b_0 + b_1x_1 + b_2x_2 + b_3x_3 + \dots + b_nx_n$

Where Y= dependent variable (Internal audit performance)

b_0 = constant ; b_1, b_2, b_3, b_n = correlation coefficient and $x_1, x_2, x_3 \dots x_n$ = independent variables (business focus, stakeholders' focus, continual risk assessment coverage, process improvement, participates in strategic planning, goal focus, continual process monitoring and continual risk management measures). The data was analyzed with the help of the Statistical Package for Social Sciences (SPSS) computer software (version 12.0).

Table 1: Summary of Analysis of Study Objectives

Research Objectives	Independent variables	Dependent variables	Statistical Analysis
To determine the extent to which RBA factors had been applied in internal audit in public sector	RBA	Performance	Means
To determine the level of performance achieved by IA in public sector	RBA	Performance	Means
To determine the effects of RBA factors on the IA performance in public sector	RBA	Performance	Pearson moments Correlation and Regression

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1. Introduction

This study set out to evaluate Risk Based Audit factors affecting performance of internal audit departments in public sector. The data was collected using questionnaires targeting internal auditors in South Rift region of Rift Valley province. Out of 56 questionnaires issued 44 were returned back duly filled representing 78.6% response.

The data was analyzed and discussed under the following research objectives: To determine the extent in which the listed RBA factors have been applied in Internal Audit in public sector, to determine level of performance achieved by Internal Audit in public sector and to determine the extent to which RBA factors (Business focus, Stakeholders Focus, Continual Risk Assessment Coverage, Process Improvement, Participates in strategic planning, Goal focus, continual process monitoring and Continual risk management measures) affects performance (cost, time and demands of the auditee) of Internal Audit in public sector.

4.2 Background Information of the Study Respondents

This section presents a brief description of the demographic characteristics of the sampled respondents involved in this study. Such a description is considered to be very important in providing a better understanding of the respondents included in the study and therefore provide a good foundation for a detailed discussion of the results based on the stipulated objectives of the study. The demographic characteristics included designation, gender, level of education and years of service.

4.2.1 Respondent's Gender

This research sought to find distribution of Internal Auditors by gender in internal audit in public sector. The Study findings indicated the distribution of the respondents by gender. There were 44 respondents in total. The distribution is as shown in the figure below, 73% male and 27% female. This implies that gender parity is yet to be achieved in the study area.

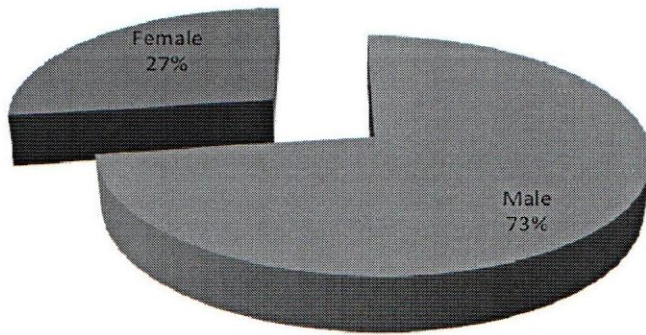


Figure 2: Respondent's Gender

Source: Research Data 2012

4.2.2 Respondents Number of Years in Service

The research was also interested in determining the distribution of Internal Auditors in public sector by experience as measured by number of years in service. Working experience is an important factor with significant influence on understanding of operations of Internal Audit in public sector and how its performance can be influenced. The results are tabulated in table 1 below.

Table 2: Number of Years in Service

Number of Years	Frequency	Percentage
1-5 Years	9	20.5
6-10 Years	13	29.5
11-15 Years	8	18.2
16-20 Years	8	18.2
26-30 Years	6	13.6
Total	44	100.0

Source: Research Data 2012

The Study found out that 20.5% of the respondents had a working experience of 1-5 years. About 29.5% of the respondent had a working experience of 6-10 years whereas 18.2% each had a working experience of 11-15 year and 16-20 years, respectively and 13.6% had a working experience of 26-30 years. None of the respondents was between 21-25 years. These findings indicate that majority of respondents had worked considerably long to understand the effect of

RBA factors on service delivery in the internal audit in public sector. The RBA was introduced in internal audit in public sector in 2005; hence most of the internal auditors had the prerequisite knowledge of RBA since all of them had an experience of at least one year.

4.2.3 Respondent's Highest Level of Education

The Study sought to investigate distribution of Internal Auditors public sector by academic qualification. The results were as indicated in figure 3.

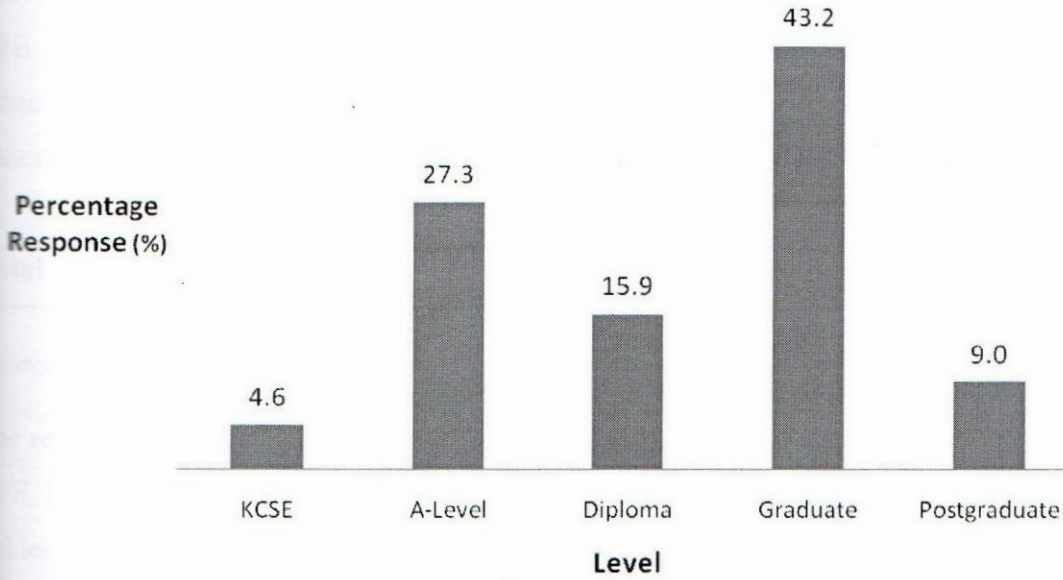


Figure 3: Respondent's Highest Level of Education

Source: Research Data 2012

The respondents were 44 and the categories of their academic were KCSE, A Level, Diploma, Graduate and Post Graduate. The data showed that majority of Internal Auditors in Public Sector were holders of First Degrees, A level, or Diploma. University undergraduate degree holders accounted for 43.2% of the respondents, with those holding A Level certificates accounting for 27.3%, Diploma 15.9%, and Postgraduate Degree 9%. A minority of 4.6% had KCSE as their highest level of education. This data showed that the respondents had prerequisite skills and knowledge to carry out Risk Based Audits.

4.2.4 Respondent's Other Professional Qualifications

The Study sought to investigate distribution of Internal Auditors in public sector by professional qualifications. The results were as indicated in table 3.

Table 3: Respondent's Other Professional Qualifications

Type	Frequency	Percentage
CPA	25	56.8
CISA	4	9.1
CFE	1	2.3
None	5	11.4
Others	9	20.4
Total	44	100.0

Source: Research Data 2012

The respondents were 44 and the categories of their professional qualifications were CPA, CISA, CFE, None and others. The data showed that majority of Internal Auditors in Public Sector were holders of CPA which accounted for 56.8% of the respondents, with those holding CISA were 4 out of 44 accounting for 9.1%. Further one respondent out of forty four was a holder of CFE accounting for 2.3%. 11.4 % of the respondents did not have any qualification while 20.4 % had other professional qualifications which were not considered relevant in understanding RBA. In addition it was observed that none of the respondents had more than one professional qualification. This data showed that the respondents had prerequisite skills and knowledge to carry out Risk Based Audits. However initiative should be taken to enhance professional qualifications in various relevant fields.

4.3 Extent of Application of RBA Factors by Internal Audit in Public Sector

Objective one sought to determine the extent to which RBA factors had been applied in Internal Audit in public sector. To achieve this objective, the respondents were asked to indicate the extent to which RBA factors had been applied in their Internal Audit departments. The factors used are those that differentiate RBA approach from traditional Audit approaches. They include;

Business focus, Stakeholders focus, continual risk Assessment coverage, Process Improvement, participation in strategic planning, goal focus, continual process monitoring and continual risk management.

4.3.1 Extent of Application of Business Focus in Internal Audit

The five point likert scale with very great extent, great extent, some extent, less extent and not at all was used. The results are tabulated in table 4 below.

Table 4: Extent of Application of Business Focus in Internal Audit

Statement	Percentage Response					Mean
	Not at all	Less Extent	Some extent	Greater extent	Very great extent	
Creates focus on the achievement of client's key objectives	0.0	4.5	40.9	43.2	11.4	3.614
Aligns audit objectives to clients' objectives	0.0	6.5	47.7	29.5	15.9	3.546
Creates an insight of the clients business activities	0.0	11.4	43.2	34.1	11.4	3.455

Source: Research Data 2012

The study findings revealed that 95.5% of the respondents agreed that RBA creates focus to the achievement of clients' key objectives. Of these 40.9% was to some extent, 43.2% was to a greater extent, while 11.4% was to a very great extent. Therefore, Internal Audit in public sector has created focus on the achievement of the clients' key objectives. In addition, 93.1% of the respondents agreed that RBA aligns audit objectives to client objectives, (that is 47.7% to some extent, 29.5% to a greater extent while 15.9% to a very greater extent). Therefore, there is need for internal audit in Public Sector to improve their attitude towards business focus so that audit objectives can be aligned with the clients' objectives. Further 88.7% of the respondents agreed that RBA creates an insight of the clients business activities, (that is 43.2% to some extent, 34.1% to a greater extent while 11.4% to a very greater extent). This implies that there is need for internal audit in Public Sector to improve their attitude towards business focus since this would create an insight of the client's business activities.

Comparing statistical mean on the extent to which business focus had been applied in internal audit in public sector in order of magnitude: Creates focus on the achievement of clients key objectives (M=3.614), aligns audit objectives to clients objectives (M=3.546) and that business focus creates an insight of the clients business activities (M=3.455).

On the extent to which the business focus were applied in by internal audit in public sector, survey data (Figure 4) shows that 12% of the respondents reported to a high extent, 86% to a moderate extent while only 2% reported to low extent. It is evident from the findings that a business focus was applied generally to a moderate extent within the internal audit in the study area.

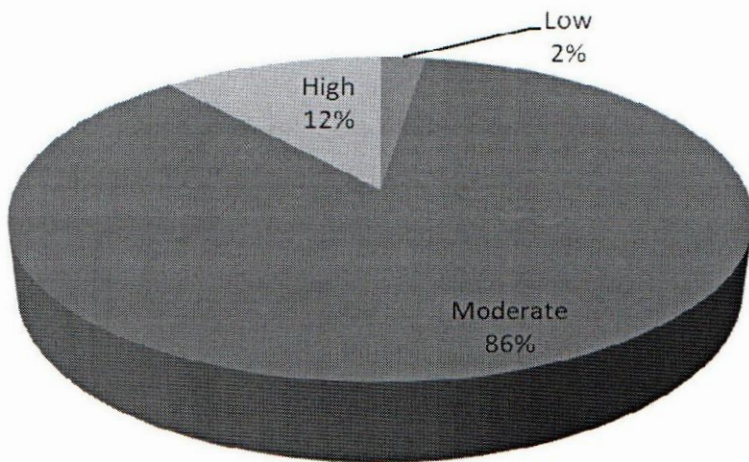


Figure 4: Overall Application of Business Focus

Source: Research Data 2012

4.3.2 Extent of Application of Stakeholders Focus in Internal Audit

The five point likert scale with very great extent, great extent, some extent, less extent and not at all was used. The results are tabulated in the table 5.

Table 5: Extent of Application of Stakeholders Focus in Internal Audit

Statement	Percentage Response					Mean
	Not at all	Less Extent	Some extent	Greater extent	Very great extent	
Ensures that internal audit and key stakeholders shares the same priorities	4.5	13.6	25.0	43.2	13.6	3.750
Vision and expectation of the key stakeholders are of paramount importance	0.0	15.9	27.3	43.2	13.6	3.477

Source: Research Data 2012

This study revealed that 81.8% of the respondents agreed that internal audit in public sector and key stakeholders shares the same priorities, (that is 25.0% to some extent, 43.2% to a greater extent while 13.6% to a very greater extent). Therefore, internal audit in public sector should ensure their priorities align with those of key stakeholders in public sector. This would lead to increased performance of internal audit departments in public sector.

In addition 84.1% of the respondents agreed that RBA ensures vision and expectation of the key stakeholders are of paramount importance, (that is 27.3% to some extent, 43.2% to a greater extent while 13.6% to a very greater extent). Therefore, there is need for IA in Public Sector to improve their attitude towards business focus since this would ensure vision and expectation of the key stakeholders are of paramount importance.

Comparing statistical mean on the extent to which stakeholders focus had been applied in IA in public sector in order of magnitude: Ensures that Internal Audit and key stakeholders shares same priorities (M=3.75) and vision and expectations of the key stakeholders are of paramount importance (M=3.477)

On the extent to which the stakeholders focus were applied in by internal audit in public sector, survey data (Figure 5) shows that 13.6% of the respondents reported to a high extent, 65.9% to a

moderate extent while only 20.5% reported to low extent. It is evident from the findings that stakeholders focus was applied generally to a moderate extent within the IA in the study area.

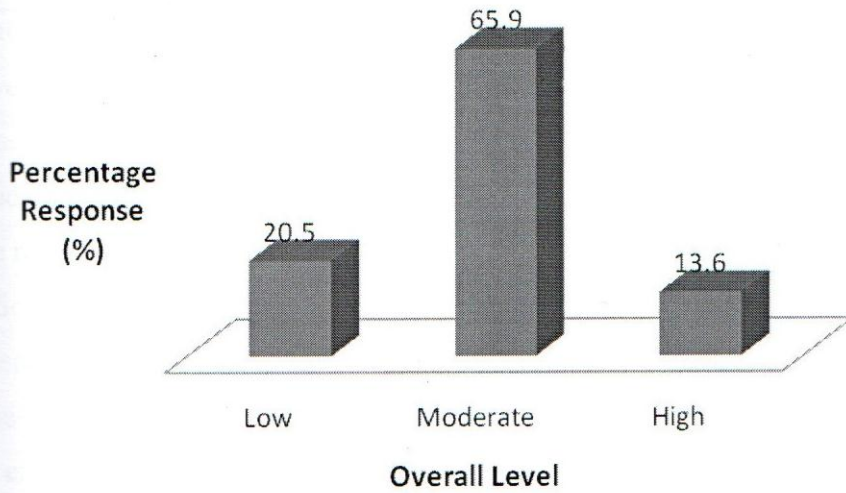


Figure 5: Overall Application of Stakeholders Focus

Source: Research Data 2012

4.3.3 Extent of Application of Continual Risk Assessment Coverage in Internal Audit

The five point likert scale with very great extent, great extent, some extent, less extent and not at all was used. The results are tabulated in the table 6.

Table 6: Extent of Application of Continual Risk Assessment Coverage in Internal Audit

Statement	Percentage Response					Mean
	Not at all	Less Extent	Some extent	Greater extent	Very great extent	
Anticipated changes in risk levels are predictable on time	0.0	6.8	34.1	45.5	13.6	3.546
Audit programmes includes the most effective and efficient tests for each client	2.3	29.5	0.0	47.7	20.5	3.659
The business is viewed in an environment of risk	0.0	11.4	27.3	45.5	15.9	3.841
Audit plans are developed based on risky areas and organizational goals	0.0	15.9	25.0	45.5	13.6	3.659
Audit judgment of inherent risk and control risk have become more accurate and consistent	0.0	18.2	29.5	40.9	11.4	3.568

Source: Research Data 2012

The study findings revealed that 93.2% of the respondents agreed that continual risk assessment coverage ensures anticipated changes are predicted on time. Of these 34.1% was to some extent, 45.5% was to a greater extent, while 13.6% was to a very great extent. This implies that, anticipated changes in risk levels are predicted on time and hence appropriate actions are taken to ensure internal audit achieves its set level of performance. In addition 68.2% of the respondents agreed that continual risk assessment coverage ensures audit programmes includes the most effective and efficient tests for each client. Of this 0% was to some extent, 47.7% was to a greater extent, while 20.5% was to a very great extent. This implies that Internal Audit departments in public sector have put systems in place to ensure that audit programmes contain appropriate tests for each client environment to help organizations achieve success.

Further 88.7% of the respondents agreed that continual risk assessment coverage ensures the business is viewed in an environment of risk. Of these 27.3% was to some extent, 45.5% was to a greater extent, while 15.9% was to a very great extent. This implies, systems should be put in places to ensure that various clients are classified according to their risk factors. The research findings also revealed that 84.1% of the respondents agreed that continual risk assessment coverage ensures audit plans are developed based on risky areas and organizational goals. Of these 25% was to some extent, 45.5% was to a greater extent, while 13.6% was to a very great extent. This implies that there is deliberate positioning of audit plans based on risky areas and organizations goals to optimize performance. Further 81.8% of the respondents agreed that continual risk assessment coverage ensures audit judgment of inherent risk and control risk have become more accurate and consistent. Of these 29.5% was to some extent, 40.9% was to a greater extent, while 11.4% was to a very great extent. Therefore, audit judgment of inherent risk and control risk have become more accurate and consistent, this in turn could result into improved performance.

Comparing statistical mean on the extent to which continual risk assessment coverage had been applied in internal audit in public sector in order of magnitude: the business is viewed in an environment of risk ($M=3.841$), audit programmes includes the most effective and efficient tests for each client ($M=3.659$), audit plans are developed based on risky areas and organizational goals ($M=3.659$), audit judgment of inherent risk and control risk have become more accurate and consistent ($M=3.568$) and anticipated changes are predicted on time ($M=3.546$).

On the extent to which the continual risk assessment coverage were applied in by internal audit in public sector, survey data (Figure 6) shows that 18.2% of the respondents reported to a high extent, 47.7% to a moderate extent while only 34.1% reported to low extent. It is evident from the findings that continual risk assessment coverage was applied generally to a moderate extent within the internal audit in the study area.

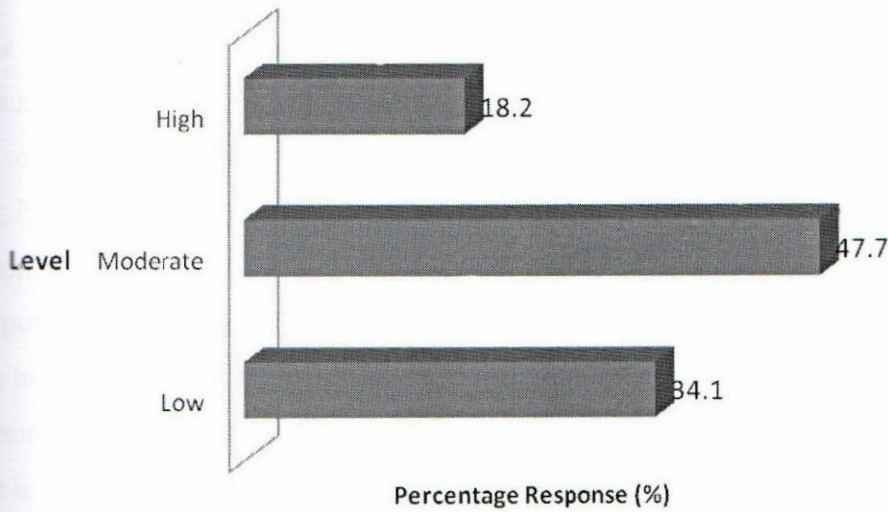


Figure 6: Overall Application of Continual Risk Assessment Coverage

Source: Research Data 2012

4.3.4 Extent of Application of Process Improvement in Internal Audit

The five point likert scale with very great extent, great extent, some extent, less extent and not at all was used. The results are tabulated in the table 7.

Table 7: Extent of Application of Process Improvement in Internal Audit

Statement	Percentage Response					Mean
	Not at all	Less Extent	Some extent	Greater extent	Very great extent	
Improves financial statements assurance and reporting process	0.0	2.3	40.9	38.6	18.2	3.455
The higher the risk area, the more audit time and client controls are required	0.0	6.8	20.5	43.2	29.5	3.727
Assure the organization have focused on emerging risks that may not yet be well managed	0.0	11.4	34.1	43.2	11.4	3.945

Source: Research Data 2012

The study findings revealed that 93.2% of the respondents agreed that process improvement ensures financial statements assurance and reporting process are improved. Of these 40.9% was to some extent, 38.6% was to a greater extent, while 18.2% was to a very great extent. This implies that financial statements assurance and reporting process were improved. Through improved process; this could result to high rating of performance of Internal Audit departments in public sector. In addition 93.2% of the respondents agreed that process improvement ensures the higher the risk area, the more audit time and client controls are required. Of these 20.5% was to some extent, 43.2% was to a greater extent, while 29.5% was to a very great extent. Therefore, the internal audit in public sector has given more priority to the high risky areas in terms of time and controls. This could imply that the risky areas have been considered and there is high chance when more attention is given on risky areas this could lead to improved performance.

Further 88.7% of the respondents agreed that process improvement assures the organization have focused on emerging risks that may not yet be well managed. Of these 34.1% was to some extent, 43.2% was to a greater extent, while 11.4% was to a very great extent. Therefore, this could imply that internal audit in public sector has put in place measures to focus on emerging risks that could have not been well managed to propel internal audit performance forward.

Comparing statistical mean on the extent to which process improvement had been applied in internal audit in public sector in order of magnitude: Assures the organization have focused on emerging risks that may not yet be well managed ($M=3.945$), the higher the risk area, the more audit time and client controls are required ($M=3.727$) and the process improvement improves financial statements assurance and reporting process ($M=3.455$).

On the extent to which the process improvement were applied in by internal audit in public sector, survey data (Figure 7) shows that 25% of the respondents reported to a high extent, 45.5% to a moderate extent while only 29.5% reported to low extent. It is evident from the findings that a process improvement was applied generally to a moderate extent within the internal audit in the study area.

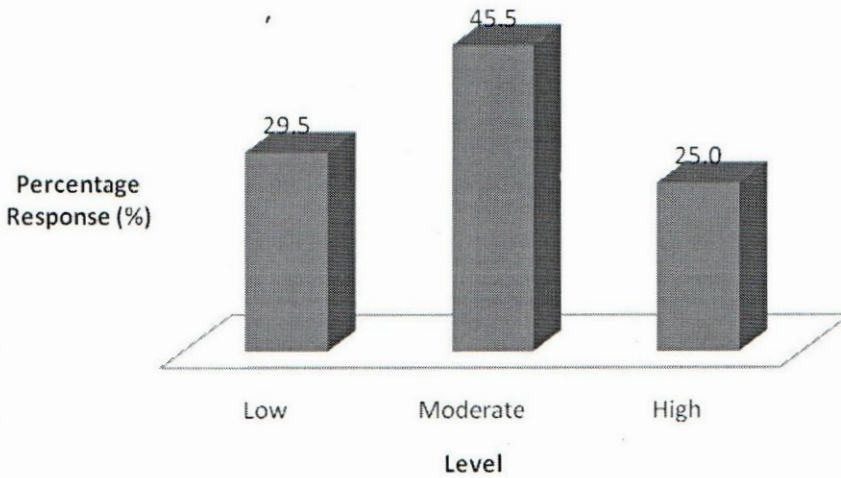


Figure 7: Overall Application of Process Improvement

Source: Research Data 2012

4.3.5 Extent of Application of Participation in Strategic Planning in Internal Audit

The five point likert scale with very great extent, great extent, some extent, less extent and not at all was used. The results are tabulated in the table 8.

Table 8: Extent of Application of Participation in Strategic Planning in Internal Audit

Statement	Percentage Response					Mean
	Not at all	Less Extent	Some extent	Greater extent	Very great extent	
The client entity is viewed as an open system able to adapt to changes	2.3	6.8	34.1	52.3	4.5	3.546
Client Strategic planning process matches environmental threats	0.0	9.1	54.4	27.3	9.1	3.500

Source: Research Data 2012

The study findings revealed that 90.9% of the respondents agreed that participation in strategic planning ensures the client entity is viewed as an open system able to adapt to changes. Of these

34.1% was to some extent, 52.3% was to a greater extent, while 4.5% was to a very great extent. Based on the results, the client is viewed as an open system and is capable to adapt to changes which could be implemented to enhance internal audit performance. This implies that the client has adopted mechanisms for adoption of new technologies to meet new emerging issues. In addition 90.8% of the respondents agreed that participation in strategic planning ensures the client strategic planning process matches environmental threats. Of these 54.4% was to some extent, 27.3% was to a greater extent, while 9.1% was to a very great extent. This Implies that strategic planning process considers environmental threats. By considering environmental threats they are able to capitalize on their strengths to create competitive edge.

Comparing statistical mean on the extent to which strategic planning had been applied in internal audit in public sector in order of magnitude: The client entity is viewed as an open system able to adapt to changes (M=3.546) and clients strategic planning process matches environmental threats (M=3.500).

On the extent to which the participation in strategic planning were applied in by internal audit in public sector, survey data (Figure 8) shows that 4.5% of the respondents reported to a high extent, 79.5% to a moderate extent while only 15.9% reported to low extent. It is evident from the findings that a participation in strategic planning was applied generally to a moderate extent within the internal audit in the study area.

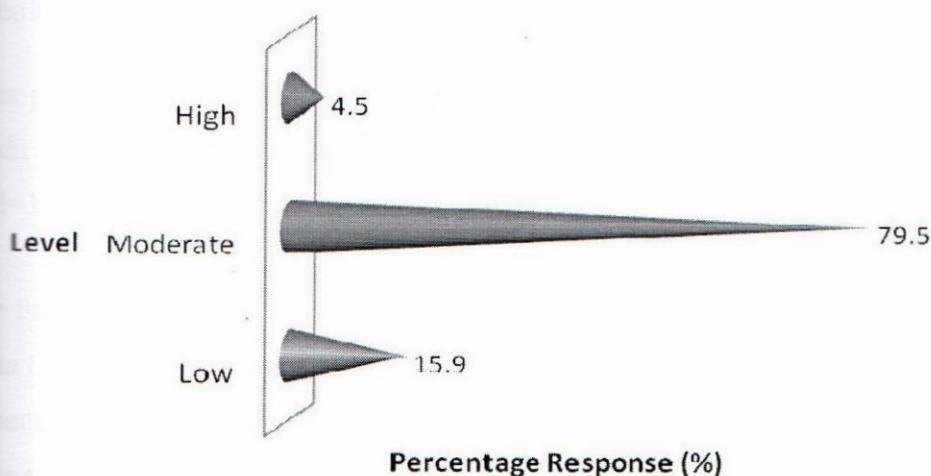


Figure 8: Overall Application of Participation in Strategic Planning

Source: Research Data 2012

4.3.6 Extent of Application of Goal Focus in Internal Audit

The five point likert scale with very great extent, great extent, some extent, less extent and not at all was used. The results are tabulated in the table 9.

Table 9: Extent of Application of Goal Focus in Internal Audit

Statement	Percentage Response					Mean
	Not at all	Less Extent	Some extent	Greater extent	Very great extent	
Creates value to clients entity	0.0	9.1	31.8	50.0	9.1	3.364
Enhances organizational recognition in the market place	4.5	4.5	34.1	47.7	9.1	3.591

Source: Research Data 2012

The study findings revealed that 90.9% of the respondents agreed that goal focus creates value to client's entity. Of these 31.8% was to some extent, 50% was to a greater extent, while 9.1% was to a very great extent. This implies that internal audit by actualizing the clients' goals it added value to the organization hence by achieving clients' goals this improves the performance of the internal audit. In addition 90.9% of the respondents agreed that goal focus enhances good governance in public sector. Of these 34.1% was to some extent, 47.7% was to a greater extent, while 9.1% was to a very great extent. Therefore, Internal Audit departments in public sector should have RBA which promotes good governance.

Comparing statistical mean on the extent to which strategic planning had been applied in internal audit in public sector in order of magnitude: Organizational recognition in the market place (M=3.591) and creates value to clients entity (M=3.364).

On the extent to which the goal focus were applied in by internal audit in public sector, survey data (Figure 9) shows that 16% of the respondents reported to a high extent, 70% to a moderate extent while only 14% reported to low extent. It is evident from the findings that a goal focus was applied generally to a moderate extent within the internal audit in the study area.

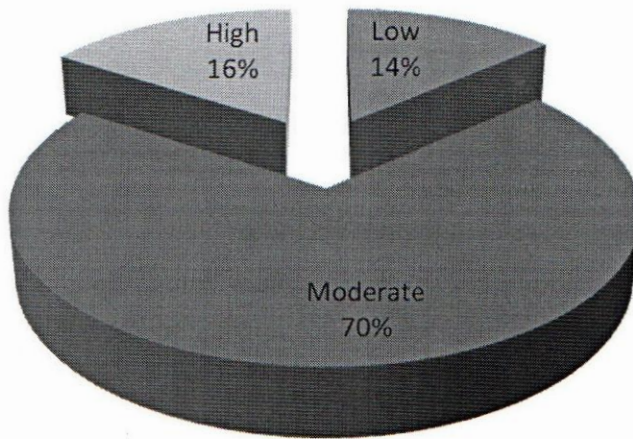


Figure 9: Overall Application of Goal Focus

Source: Research Data 2012

4.3.7 Extent of Application of Continual Process Monitoring in Internal Audit

The five point likert scale with very great extent, great extent, some extent, less extent and not at all was used. The results are tabulated in the Table 10;

Table 10: Extent of Application of Continual Process Monitoring in Internal Audit

Statement	Percentage Response					Mean
	Not at all	Less Extent	Some extent	Greater extent	Very great extent	
Identifies significant internal control weaknesses and designs ways to address them	0.0	0.0	27.3	54.5	18.2	3.523
Monitors progress in closing previously identified risks	4.5	4.5	29.5	45.5	15.8	3.909
Identifies good practices and improvement opportunities	0.0	9.1	22.7	52.3	15.9	3.605

Source: Research Data 2012

The study findings revealed that 99.8% of the respondents agreed that continual process monitoring identifies significant internal control weaknesses and designs ways to address them.

Of these 27.3% was to some extent, 54.5% was to a greater extent, while 18.2% was to a very great extent. This implies that mechanisms have been put in place to continually identify and update significant internal controls weaknesses and designing ways of addressing them. In addition 90.8% of the respondents agreed that continual process monitoring monitors progress in addressing previously identified risks. Of these 29.5% was to some extent, 45.5% was to a greater extent, while 15.8% was to a very great extent. This implies that mechanisms have been put in place to continually monitor the progress of previously identified risks and ensure identified loopholes are sealed. Further 90.9% of the respondents agreed that continual process monitoring identifies good practices and improvement opportunities. Of these 22.7% was to some extent, 52.3% was to a greater extent, while 15.9% was to a very great extent. This implies that RBA promotes learning process which leads to development of best practices which leads to enhanced performance.

Comparing statistical mean on the extent to which continual process monitoring had been applied in IA in public sector in order of magnitude: Monitors progress in closing previously identified risks (M=3.909) identifies good practices and improvement opportunities (M=3.605) and continual process monitoring identifies significant internal control weaknesses and designs ways to address them (M=3.523),

On the extent to which the continual process monitoring were applied in by internal audit in public sector, survey data (Figure 10) shows that 27.3% of the respondents reported to a high extent, 47.7% to a moderate extent while only 25% reported to low extent. It is evident from the findings that a continual process monitoring was applied generally to a moderate extent within the internal audit in the study area.

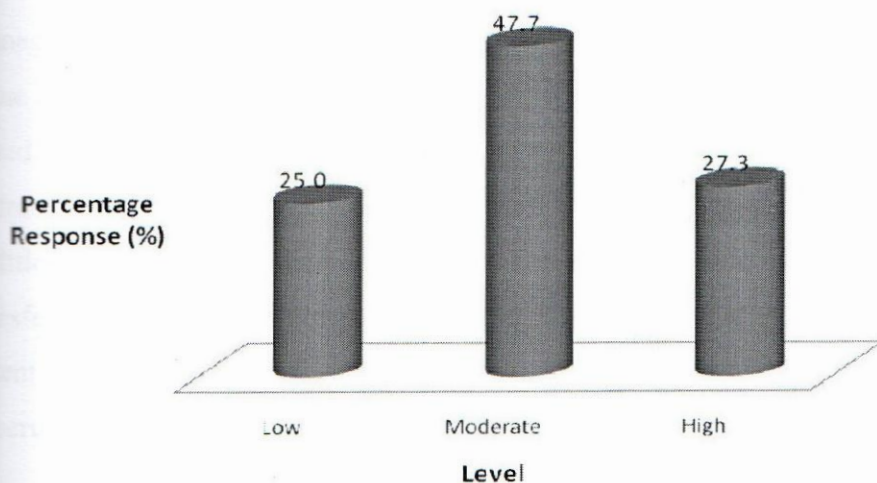


Figure 10: Overall Application of Continual Process Monitoring

Source: Research Data 2012

4.3.8 Extent of Application of Continual Risk Management Measures

The five point likert scale with very great extent, great extent, some extent, less extent and not at all was used. The results are tabulated in the table 11.

Table 11: Extent of Application of Continual Risk Management Measures

Statement	Percentage Response					Mean
	Not at all	Less Extent	Some extent	Greater extent	Very great extent	
Carries out risk mitigation measures	0.0	2.3	38.6	47.7	11.4	3.750
Carries out risk transfer measures	0.0	13.6	38.6	43.2	4.5	3.682
Carries out risk avoidance measures	0.0	15.9	22.7	54.5	6.8	3.386
Carries out risk acceptance measures	0.0	20.5	38.6	38.6	2.3	3.522
Carries out risk reduction measures	4.5	9.1	31.8	43.2	11.4	3.477

Source: Research Data 2012

The study findings revealed that 97.7% of the respondents agreed that continual risk management measures ensure risk mitigation measures are carried out. Of these 38.6% was to some extent, 47.7% was to a greater extent, while 11.4% was to a very great extent. Therefore, based on the study findings risk mitigations measures could prevent occurrence of adverse event or transactions being carried out. This in turn could result to good internal audit performance. In addition 86.3% of the respondents agreed that continual risk management measures ensure risk transfer measures are carried out. Of these 38.6% was to some extent, 43.2% was to a greater extent, while 4.5% was to a very great extent. This implies that the client is able to engage the expertise in dealing with the risky areas hence save on time and cost.

Further 84% of the respondents agreed that continual risk management measures ensure risk avoidance measures are carried out. Of these 22.7% was to some extent, 54.5% was to a greater extent, while 6.8% was to a very great extent. This implies that, there are measures to ensure that risks the client could not be able to handle were avoided. The study findings also revealed that 79.5% of the respondents agreed that continual risk management measures ensure risk acceptance measures are carried out. Of these 38.6% was to some extent, 38.6% was to a greater extent, while 2.3% was to a very great extent. This implies there were measures to ensure that risks the client could be able to manage were being accepted. This implies that the client is able to determine the merits and demerits of a certain level of risk acceptance. Based on the study findings 86.4% of the respondents agreed that continual risk management measures ensure risk reduction measures are carried out. Of these 31.8% was to some extent, 43.2% was to a greater extent, while 11.4% was to a very great extent. This implies that systems have been put in place to minimize the risk levels.

Comparing statistical mean on the extent to which continual risk management measures had been applied in internal audit in public sector in order of magnitude: Carries out risk mitigation measure (M=3.750), Carries out risk transfer measures (M=3.682), Carries out risk acceptance measures (M=3.522), Carries out risk reduction measures (M=3.477) and continual risk management measures carries out risk avoidance measures (M=3.386).

On the extent to which the continual risk management measures were applied in by internal audit in public sector, survey data (Figure 11) shows that 18% of the respondents reported to a high

extent, 55% to a moderate extent while only 27% reported to low extent. It is evident from the findings that a continual risk management measures was applied generally to a moderate extent within the IA in the study area.

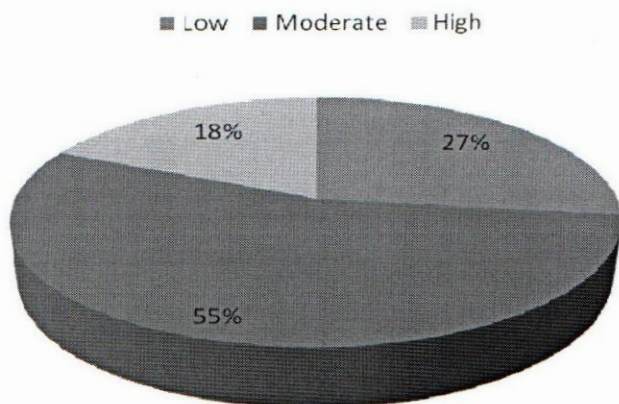


Figure 11: Overall Application of Continual Risk Management Measures

Source: Research Data 2012

4.3.9 Level of Application of RBA Factors

In order to compare the level of application of amongst the RBA factors table 12 summarized their various level of application as shown below.

Table 12: Level of Application of RBA Factors

Factor	Low	Moderate	High
Business focus	2.0%	86.0%	12.0%
Stakeholders focus	20.5%	65.9%	13.6%
Continual Risk Assessment Coverage	34.1%	47.7%	18.2%
Process Improvement	29.5%	45.5%	25.0%
Participation in Strategic Planning	15.9%	79.5%	4.5%
Goal Focus	14.0%	70.0%	16.0%
Continual Process Monitoring	25.0%	47.7%	27.3%
Continual Risk Management measures	27.0%	55.0%	18.0%

Source: Research Data 2012

On the extent on which various RBA factors were applied (figure 12), continual risk assessment coverage was rated lowest at 34.1% while continual process monitoring was the highest with 27.3%. The study findings also indicated that business focus was moderately applied at 86% and other RBA factors in the moderate application were rated below 86%.

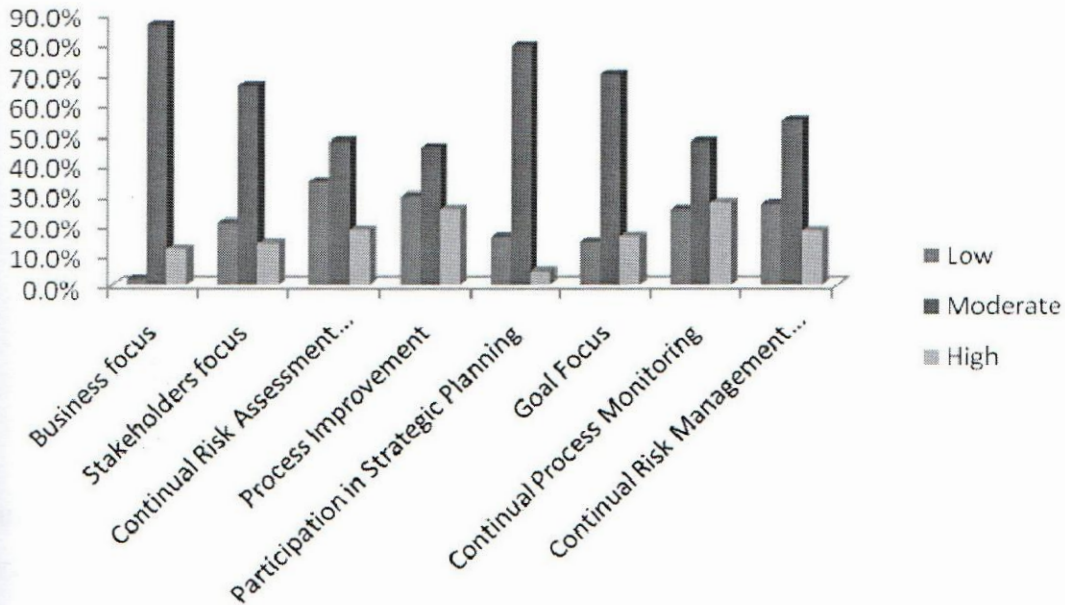


Figure 12: Comparison on the Level of Application of Risk Based Audit Factors

Source: Research Data 2012

4.3.10 Overall Application of RBA Factors

In order to get the overall effect of all the risk based audit factors, the computed index for all the individual respondents were computed and summarized as shown on the table 13 below.

Table 13: Overall application of RBA factors

Level	Frequency	Percent
Low	8	18.2
Moderate	21	47.7
High	15	34.1
Total	44	100.0

Source: Research Data 2012

On the extent to which the overall risk based audit factors were applied in by internal audit in public sector, survey data (Figure 13) shows that 18.2% of the respondents reported to a low application, 47.7% to a moderate application and 34.1% reported to high application. It is evident from the findings that a risk based audit factors were applied generally to a moderate extent within the internal audit in public sector.

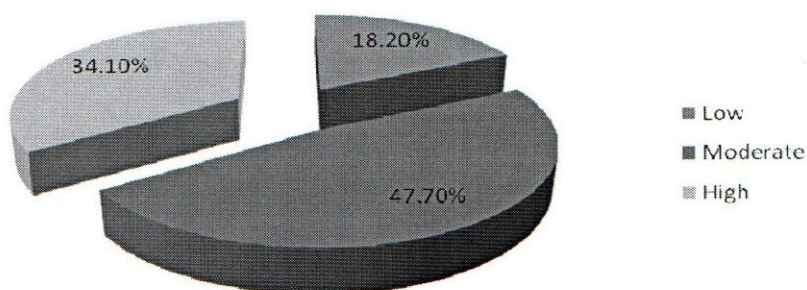


Figure 13: Overall Application of Risk Based Audit Factors

Source: Research Data 2012

4.4 Level of Performance Achieved by Internal Audit in Public Sector

The second objective of this study sought to establish the level of performance achieved in Internal Audit in public sector. In this regard, the respondents were asked to indicate the level of Internal Audit performance in terms of: timeliness, cost and demands of the auditee. The results of data analysis and discussions are as follows:

4.4.1 Timeliness of Internal Audit Performance

Table 14: Timeliness of Internal Audit Performance

Statement	Percentage Response					Mean
	Not at all	Less Extent	Some extent	Greater extent	Very great extent	
Variation of Actual days/time input with planned days/time per audit assignment have reduced	9.1	6.8	25.0	52.3	6.8	3.409
Audit assignment are completed on planned dates	4.5	11.4	31.8	52.3	0.0	3.318
Time of completion of audit plans have reduced	4.5	20.5	18.2	43.2	13.6	3.409
Draft audit reports are issued by the target date	6.8	18.2	22.7	50.0	2.3	3.227

Source: Research Data 2012

The survey data on timeliness of audit engagements (Table 14), 84.1% of respondents agreed that timeliness of audit engagements had improved, that is variation of actual days/time input with planned days/ time per audit assignments have reduced, 25% to some extent, 52.3% to a greater extent and 6.8% to a very greater extent. This showed that the measures that were put in place were translating into reduction of time per audit assignment hence resulting to efficient and effective service delivery. In addition, 84.1% of the respondents agreed that audit assignments are completed on planned dates, 31.8% to some extent, 52.3% to a greater extent and 0% to a very greater extent. This showed that measures adopted by internal audit in public sector ensured that productivity during audit assignment had improved. Further, study findings indicate that 75% of the respondents agreed that time of completion of audit plans have reduced, 18.2% to some extent, 43.2% to a greater extent and 13.6% to a very greater extent. This implies that the measures adopted through RBA of concentrating on risky areas were translating into reduction of time of preparing audit plans. Study findings also revealed that 75% of the respondents agreed

draft audit reports are issued by the target dates, 22.7% to some extent, 50% to a greater extent and 2.3% to a very greater extent. This implies that measures adopted by internal audit in public sector have yielded positive results in ensuring timeliness in the aspect of issuance of reports.

Comparing the statistical means (Table 14), the level timeliness of internal audit performance was ranked in order of magnitude: Variation of Actual days/time input with planned days/time per audit assignment have reduced (M=3.409), Time of completion of audit plans have reduced (M=3.409), Audit assignment are completed on planned dates (M=3.318) and Draft audit reports are issued by the target date (M=3.227).

According to study findings (Figure 14), in 68.2% of the respondents, overall timeliness of internal audit performance was high, 20.5% (moderate) and 11.4% (low). On the basis of these findings, the overall timelines of internal audit performance in public sector was generally high hence an indicator of improved performance due to measures adopted.

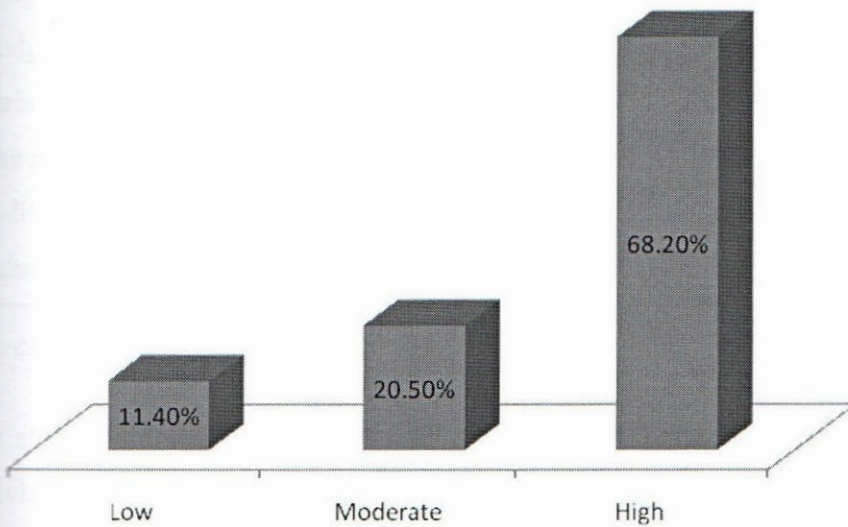


Figure 14: Overall Timeliness of Internal Audit Performance

Source: Research Data 2012

4.4.2 Level of Internal Audit Cost Performance

With regard to cost reduction (Table 15), 65.9% of the respondents agreed that the cost of individual audit assignments have reduced. Further, 63.6% of the respondents agreed that the budgeted and actual cost variances have reduced. Study findings also revealed that 68.2% of the respondents agreed that the number of auditors per audit assignment have reduced.

According to the statistical means (Table 15), the level of cost performance in terms of reduction was ranked in the order of magnitude: cost of individual audit assignments have reduced (M=2.886), the number of auditors per audit assignment has reduced (M=2.864) and reduction of budgeted and actual cost variances (M=2.841).

Table 15: Level of Internal Audit Cost Performance

Statement	Percentage Response					Mean
	Not at all	Less Extent	Some extent	Greater extent	Very great extent	
Cost of individual audit assignment have reduced	15.9	18.2	34.1	25.0	6.8	2.886
Budgeted and actual cost variances have reduced	15.9	20.5	29.5	31.8	2.3	2.841
The number of auditors per audit assignment have reduced	13.6	18.2	38.6	27.3	2.3	2.864

Source: Research Data 2012

The study findings (Table 15), show that in 65.9% of the respondents agreed that the cost of individual audit assignments have reduced, 34.1% to some extent, 25% to a greater extent and 6.8% to a very greater extent. This implies that there was need to come up with new measures or enhance the existing ones to further lower cost in audit assignments to a greater extent. Further 63.6% of the respondents agreed that the budgeted and actual cost variances have reduced, 29.5% to some extent, 31.8% to a greater extent and 2.3% to a very greater extent. This implies that the RBA has resulted to efficient utilization of available funds. Finally 68.2% of the respondents agreed that the number of auditors per audit assignments has reduced, 38.6% to some extent, 27.3% to a greater extent and 2.3% to a very greater extent. This implies that the

available human resource individual productivity has increased hence reduction in wage bill and nominal cost to the auditee.

On the basis of these findings, the overall improvement in cost reduction was generally moderate in internal audit in the study area, especially in terms of reduction in the number of auditors per audit assignment ($M=2.864$) and reduction in the budgeted and actual cost variances ($M=2.841$). Study findings (Figure 13), show that in 52% of the respondents indicated that there was moderate cost reduction in internal audit in public sector, 27% indicated low while 21% indicated high cost reduction levels.

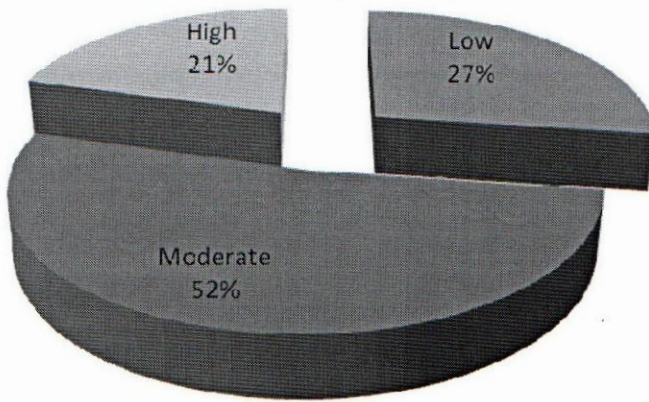


Figure 15: Overall Level of Audit Cost

Source: Research Data 2012

4.4.3 Level of Demands of the Auditee Performance

Table 16 Level of Demands of the Auditee Performance

Statement	Percentage Response					Mean
	Not at all	Less Extent	Some extent	Greater extent	Very great extent	
Level of clients satisfaction have increased	4.5	18.2	38.6	31.8	6.8	3.182
The usefulness of audit reports have improved	4.5	18.2	20.5	43.2	13.6	3.432
Acceptance of audit recommendations have increased	0.0	18.2	34.1	34.1	13.6	3.432

Source: Research Data 2012

The study findings (Table 16), show that in 77.2% of the respondents agreed that the level of clients' satisfaction have increased, 38.6% to some extent, 31.8% to a greater extent and 6.8% to a very greater extent. This implies that RBA measures adopted have bolstered the level of customer satisfaction. Further 77.3% of the respondents agreed that the usefulness of the audit reports have improved, 20.5% to some extent, 43.2% to a greater extent and 13.6% to a very greater extent. This implies that audit recommendations were making positive contributions towards enhancing transparency and accountability. Finally 81.8% of the respondents agreed that the acceptance of audit recommendations have increased, 34.1% to some extent, 34.1% to a greater extent and 13.6% to a very greater extent. Based on the research findings this implies that RBA have improved the credibility and acceptance of audit recommendations. And therefore it can be used as a source reference in reduction of risks facing public sector entities.

On the basis of the statistical means (Table 16), the level of internal audit performance in various aspects of auditee demands was ranked in order of magnitude: improvement of usefulness of audit reports (M=3.432), acceptance of audit recommendations (M=3.432) and increase in the level of clients satisfaction (M=3.182). The study findings (Figure 16), show that in 50% of the

respondents indicated that there was moderate increase in meeting the demands of the auditee in internal audit in public sector, 15.9% indicated low while 34.1% indicated high achievement of auditee demands.

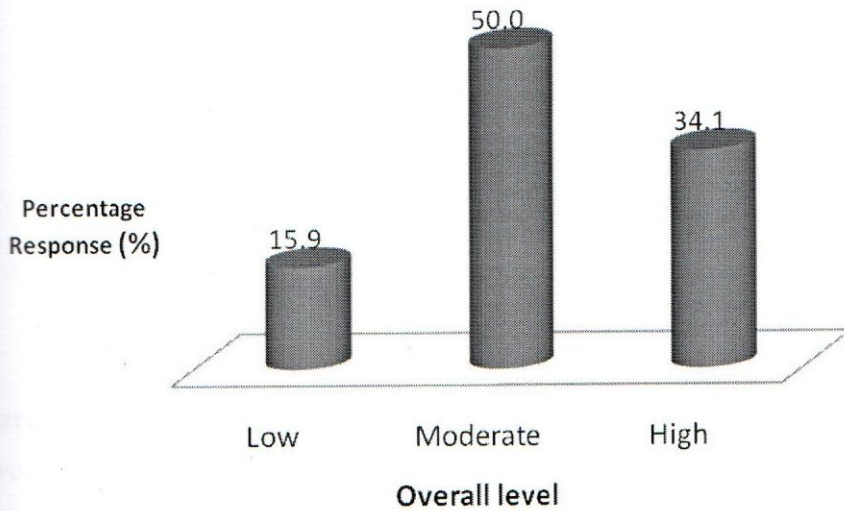


Figure 16: Overall Level of Auditee Demand

Source: Research Data 2012

4.4.4 Overall Performance of Internal Audit in Public Sector

In order to get the overall performance, the computed index for all the individual performance measures were computed and summarized as shown on the table 17 below.

Table 17: Overall Performance of Internal Audit in Public Sector

Level	Frequency	Percent
Low	8	18.2
Moderate	14	31.8
High	22	50.0
Total	44	100.0

Source: Research Data 2012

On the extent to which the overall performance level of internal audit in public sector, survey data (Figure 17) shows that 18.2% of the respondents reported to a low performance level, 31.8%

to a moderate performance level and 50% reported to high performance level. It is evident from the study findings that internal audit performance in public sector was generally to a high level.

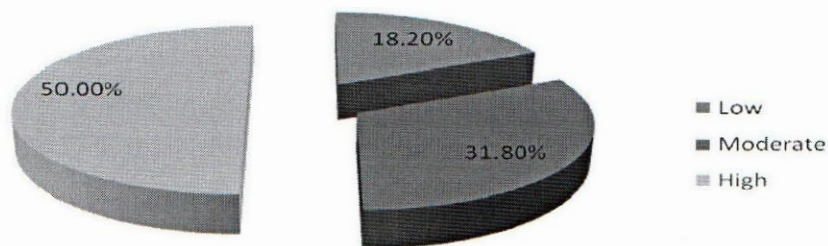


Figure 17: Overall Application of Risk Based Audit Factors

Source: Research Data 2012

4.5 The Influence of Moderating Factors on Internal Audit Performance

The study sought to establish the extent to which moderating factors (government regulations and Professional standards) affect achievement of internal audit performance in public sector. In this regard, the respondents were asked to indicate the extent to which government regulations and Professional standards influenced the level of internal audit performance in terms of: cost, time and demands of the auditee. The results of data analysis and discussions are presented below:

4.5.1 Effect of Government Regulations on Internal Audit Performance

On the basis of the statistical means (Table 18), the influence of government regulations on the level of internal audit performance was ranked in the order of magnitude: reduction of time spent in an audit assignment (M=4.318), achievement of clients demands (M=3.227), and reduction of cost per audit assignment (M=3.046).

Table 18: Effect of Government Regulations on Internal Audit performance

Statement	Percentage Response					Mean
	Not at all	Less Extent	Some extent	Greater extent	Very great extent	
Reduction of time spent in an audit assignment	13.6	20.5	25.0	34.1	6.8	4.318
Reduction of cost per audit assignment	9.1	15.9	36.4	38.6	0.0	3.046
Achievement of clients demand	4.5	15.9	36.4	38.6	4.5	3.227

Source: Research Data 2012

The study findings (Figure 18) show that in 45.5% of the respondents on the overall influence of government regulations on internal audit performance in the public sector was high, 34.1% moderate and 20.5% low. On the basis of these findings, government regulations influence on internal audit performance in public sector was high although the influence on reduction of cost per audit assignment and achievement of client’s demands was found to be low.

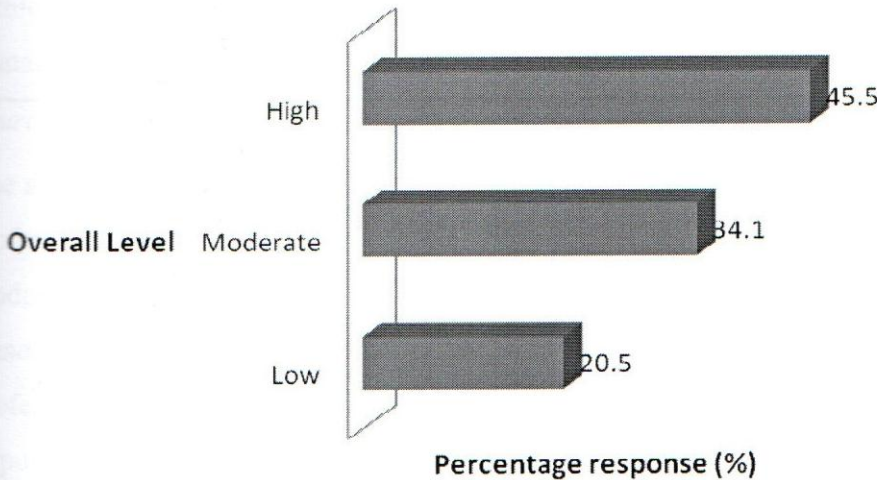


Figure 18: Overall Effect of Government Regulation

Source: Research Data 2012

4.5.2 Effect of Professional Standards on Internal Audit Performance

The influence of professional standards on internal audit performance in public sector was analyzed to bring out the extent to which it influenced performance elements. Comparing the statistical means (Table 19), the influence of professional standards on the level of internal audit performance was ranked in order of magnitude: achievement of clients demands (M=3.591), reduction of time spent in an audit assignment (M=3.341) and reduction of cost per audit assignment (M=3.273). Based on these results, professional standards were found to have the greatest impact on achievement of clients' demands in public sector.

Table 19: Effect of Professional Standards on Internal Audit Performance

Statement	Percentage Response					Mean
	Not at all	Less Extent	Some extent	Greater extent	Very great extent	
Reduction of time spent in an audit assignment	2.3	18.2	34.1	34.1	11.4	3.341
Reduction of cost per audit assignment	2.3	25.0	20.5	47.7	4.5	3.273
Achievement of clients demand	0.0	13.6	25.0	50.0	11.4	3.591

Source: Research Data 2012

The study findings (Figure 19) show that in 50% of the respondents on the overall influence of professional standards on internal audit performance in the public sector was high, 32% moderate and 18% low. On the basis of these findings, the overall influence of professional standards on internal audit performance in public sector was high. In addition, the influence of professional standards on reduction of cost per audit assignment was considered less significant in public sector.

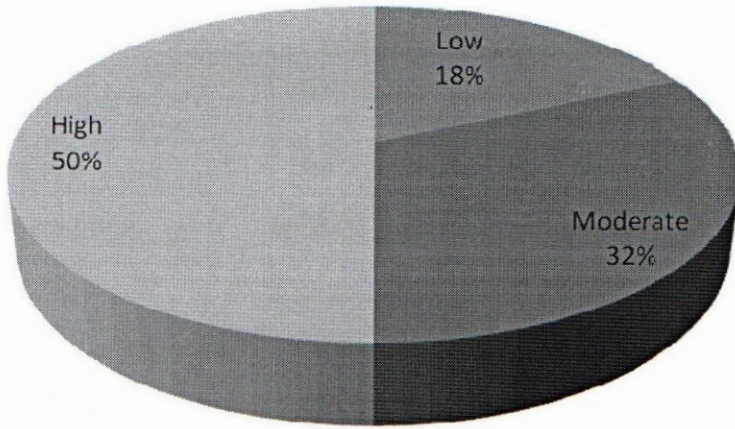


Figure 19: Overall Effects of Professional Standards on Internal Audit Performance

Source: Research Data 2012

4.6 Relationship of RBA Factors and Performance of Internal Audit in Public Sector.

The third objective of this study sought to determine the extent to which RBA factors affects performance of Internal Audit in public sector. In this regard, the respondents were asked to indicate the level of internal audit performance in terms of: cost, time and demands of the auditee. The results of data analysis and discussions are as follows:

To determine the extent to which RBA factors affects performance of Internal Audit in public sector, the overall index score of various aspects of RBA factors (Business focus, Stakeholders Focus, Continual Risk Assessment Coverage, Process Improvement, Participation in strategic planning, Goal focus, continual process monitoring and Continual risk management measures) were correlated with overall index scores of internal audit performance (cost, time and demands of the auditee) as shown in Table 20.

Table 20: Relationship of Risk-based Audit Factors and Internal Audit Performance

Factors	Performance		
	Pearsons Moment Value (r)		
	Timeliness	Cost	Auditee demands
Business Focus	.178	.115	.091
Stakeholders focus	.160	.363*	.070
Continual risk assessment coverage	.326*	.322*	.466
Process improvement	.321*	.392*	.466
Participatory strategic planning	.248	.337*	.211
Goal focus	.028	.304	.026
Continuous process monitoring	.337*	.002	.296
Continual risk management measures	.058	.370*	.163

* Correlation is significant at the 0.05 level

Ns – Not significant $p > 0.05$

Source: Research Data 2012

Table 20 shows the correlation analysis on the relationship between RBA factors and performance in internal audit in public sector at 0.05 significance level. The results show that application of business focus does not significantly influence timeliness of audit engagements ($r = 0.178$ ns), cost reduction ($r = 0.115$ ns) and auditee demands ($r = 0.091$ ns). Study findings indicated that application of stakeholders focus significantly influenced cost reduction ($r = 0.363^*$) and not timeliness of audit engagements ($r = 0.160$ ns) and auditee demands ($r = 0.070$ ns).

Also, correlation analysis indicates that application of continual risk assessment coverage significantly influenced timeliness of audit engagements ($r = 0.326^*$), cost reduction ($r = 0.322^*$) and not demands of the auditee ($r = 0.466$ ns). Further, findings indicate that application of

process improvement significantly influenced timeliness ($r = 0.321^*$), cost reduction ($r = 0.392^*$) and not auditee demands ($r = 0.466$ ns).

Further, participation in strategic planning only significantly influenced cost ($r = 0.337^*$) and not timeliness ($r = 0.248$ ns) and auditee demands ($r = 0.211$ ns). On the basis of the Pearson's moment Coefficient values goal focus did not significantly influence timeliness ($r = 0.028$ ns), cost ($r = 0.304$ ns) and audit demands ($r = 0.026$ ns).

In addition, continual process monitoring only significantly influenced timeliness ($r = 0.337^*$) and not cost ($r = 0.002$ ns) and auditee demands ($r = 0.296$ ns). Finally, correlation analysis shows that continual risk management measures only significantly influenced cost performance ($r = 0.370^*$) and not timeliness ($r = 0.058$ ns) and auditee demands ($r = 0.163$ ns).

These findings show that only some factors of RBA positively and significantly influenced the internal audit performance in the public sector. The results of correlation analysis show that only a few factors of RBA (continual risk assessment coverage and process improvement) influences the aspects of internal audit performance (timeliness and cost) to varying extents. The above study findings show that none of the RBA factors significantly influenced the demands of the auditee. Nevertheless, aspects such as stakeholders focus, participation in strategic planning and continual risk management measures were found to significantly influence cost reduction. In addition, continual process monitoring was also found to significantly influence timeliness of audit assignments.

4.7 Effect of RBA Factors on Performance of Internal Audit in Public Sector.

In order to determine and confirm the effects of RBA factors (Business focus; Stakeholder focus; Continuous risk assessment coverage; process improvement, Goal focus; continual process monitoring and continual Risk management on the dependent variable (Internal Audit performance), regression analysis was done and results summarized in Table 21 below.

Table 21: Regression Analysis Results on Effects of RBA Factors on Performance of Internal Audit in Public Sector

Model	Un-standardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	8.950	8.322		1.075	.290
Business focus	-.957	1.207	-.161	-.793	.433
Stakeholder focus	.435	.704	.111	.618	.541
Continuous risk coverage	.002	1.200	.000	.001	.999
Process Improvement	2.565	.996	.468	2.575	.014
Participatory strategic planning	.673	1.281	.121	.525	.603
Goal focus	-.776	1.006	-.158	-.771	.446
Process monitoring	.889	1.067	.152	.834	.410
Risk management	.361	1.265	.066	.285	.777

a. Dependent Variable: Overall Computed Organizational Performance

Source: Research Data 2012

On the basis of the significance values (Table 21), RBA factors namely; Business focus (P=0.433, $p > 0.05$) Stakeholder focus (P=0.541, $p > 0.05$), Continuous risk coverage (P=0.999, $p > 0.05$), Participation in strategic planning (P=0.603, $p > 0.05$), Goal focus (P=0.446, $p > 0.05$), Process monitoring (P=0.410, $p > 0.05$) and Risk management (P=0.777, $p > 0.05$) were not found to significantly influence Internal audit performance in public sector since ($P > 0.05$). In addition, only process improvement (P=0.014, $p < 0.05$) was found to significantly influence

organizational performance since ($P < 0.05$). This means that process improvement contributed significantly to the internal audit performance in public sector among the RBA factors.

According to the regression summary model (Table 22), the co-efficient of determination (R) indicated a value of 0.559 and $R^2 = 0.313$ or 31.3%. These findings confirm that the observed change in organizational performance attributed to the RBA factors was 31.3% while the remaining percentage could be explained by other intervening factors.

Table 22: Effects of Overall RBA Factors Index on the Overall Performance Index

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.559 ^a	.313	.155	6.55319	.313	1.989	8	35	.077

- a. Predictors: (Constant), Risk management , continuous risk coverage, Stakeholder focus, Process monitoring, Process Improvement, Business focus, Goal focus, Participatory strategic planning

Source: Research Data 2012

4.8 Overall Effect of RBA Factors on the Overall Internal Audit Performance in Public Sector

In order to determine the effect of the overall RBA factors on the overall Internal audit performance, the overall RBA factors Index was correlated with the overall performance index and results summarized in the table 21 below.

Table 23: Effects of Overall RBA Factors Index on the Overall Performance Index

Factors		Overall risk-based auditing index	Overall Performance index
Overall risk-based auditing index	Pearson Correlation	1	.413(**)
	Sig. (2-tailed)	.	.005
	N	44	44
Overall Performance index	Pearson Correlation	.413(**)	1
	Sig. (2-tailed)	.005	.
	N	44	44

* Correlation is significant at the 0.01 level

Ns – Not significant $p > 0.01$

Source: Research Data 2012

The results shows the correlation analysis on the relationship between overall risk based audit factors index and overall performance index of internal audit in public sector at 0.01 significance level. The results shows that overall risk based audit factors significantly influenced internal audit performance ($r = 0.413^{**}$).

4.9 Discussion of Study Findings

4.9.1 Application of RBA in Internal Audit in Public Sector

Objective one sought to determine the extent to which RBA factors had been applied in internal audit in public sector. The study found out that RBA factors have been applied in internal audit in public sector to a varying extent. According to the study findings, RBA factors have been applied moderately by the internal audit in the in the study area. The moderate application of RBA factors in internal audit public sector is inconsistent with Government of Kenya Internal Audit manual (GOK, 2005) which outlines the advantages of embracing RBA to include: Increase in accountability, reduction in risk exposure, improvement in transparency, encouragement of teamwork and management ownership processes, increased efficiency and effectiveness of operations, better strategic use of scarce resources and results in continuous improvement of the system and development of the staff. The listed advantages of RBA in turn

results to improved performance of internal audit departments in regard to timeliness, cost reduction and achievement of clients demands.

4.9.2 Level of Internal Audit Performance in Public Sector

The second objective of this study sought to establish the level of performance achieved by internal audit in public sector. The study findings revealed that the overall internal audit performance in terms of cost reduction and achievement of auditee demands was moderate while timeliness of audit engagements was high.

On the basis of mean scores for various aspects of timeliness performance such as reduction in the variance of actual/time input with planned days days/time per audit assignment was rated high (M=3.409) with reduction in time to complete an audit assignment being rated at the same level (M=3.409) while completion of audit assignment on planned dates and issuance of draft reports by the target dates were rated at (M=3.318) and (M=3.227) respectively.

According to study findings 68.2% of the respondents agreed that overall timeliness of internal audit performance had gone high. This could be attributed to moderate application of RBA factors in internal audit in public sector.

On the basis of mean scores for various aspects of cost performance such as reduction in the cost of individual audit assignments was rated high (M=2.886), reduction of the number of auditors per audit assignment was second (M=2.864) and while reduction of budgeted and actual cost variances (M=2.841) was the lowest. Accordingly, these are very critical aspects of cost reduction and their low mean scores may be attributed to moderate application of RBA factors in internal Audit in public sector.

On the basis of mean scores for various aspects of achievement of auditee demands such as usefulness of audit reports and acceptance of audit recommendations were rated at (M=3.432) while increase in the level of clients satisfaction was rated at (M=3.182) Accordingly, these are very critical aspects of achievement of auditee demands and their low mean scores may be attributed to moderate application of RBA factors in internal Audit in public sector.

4.9.3 Effect of RBA Factors on Internal Audit Performance in Public sector

The third objective of this study sought to determine the extent to which RBA factors affects performance of Internal Audit in public sector. Study findings generally show that RBA factors positively influenced the internal audit performance in the public sector. A closer look at the results of correlation analysis show that various factors of RBA (Business focus, Stakeholders Focus, Continual Risk Assessment Coverage, Process Improvement, Participation in strategic planning, Goal focus, Continual process monitoring and Continual risk management measures) influence the aspects of internal audit performance (cost, time and demands of the auditee) to varying extents.

The above study findings show that stakeholders focus, continual risk assessment coverage, process improvement, participation in strategic planning, continual process improvement and continual risk management measures significantly influenced performance in terms of timeliness and cost reduction but not in achievement of auditee demands. Nevertheless, aspects such as stakeholders focus, participation in strategic planning and continual risk management measures were found not to significantly influence timelines of audit engagements. In addition, continual process monitoring was also found not to significantly influence cost reduction in internal audit in public sector.

GOK, (2005) the internal audit should use RBA in order to focus internal services or resources on areas where they will be of most benefit to the public sector. IIA Performance Standard, (2010) requires establishment of RBA plans to determine the priorities of the internal audit activity consistent with the organization goals.

Based on the research findings on the level of application of risk based audit factors by the internal audit in public sector, they were all found to have been moderately applied. Previous studies found out that private sector firms seem more likely to be affected by the internationalization of business activity, high levels of competition and the scarcity of resources, than public sector firms. This suggests that risk management will be more effective in privately-held organizations than in publicly held organizations (Goodwin, 2004). A total of 50 percent of private sector internal audit functions were involved with this type of risk management,

compared to 33 percent of public sector internal audit functions ($p=0.068$). Thus, we assume privately-held organizations are more likely to apply risk-based approaches in developing internal auditing than publicly held organizations. These results were consistent with the study findings on moderate application of risk based audit factors by the internal audit in public sector. Industry membership seems likely to affect the type of approach used to develop internal auditing. Zárte, 2001) argues that the finance industry is more mature in terms of business risk management, and that firms in this industry have a higher propensity to apply risk-based approaches in developing internal auditing, possibly because they are also required to comply with the Basel II Accord requirements.

The influence of continual risk management measures on internal audit performance was significant as regards cost, but positive and not significant as regards timeliness and meeting auditee demands. This can be attributed to moderate application of continual risk management measures by the internal audit in public sector. Risk-based internal auditing contributes to effective risk management (McNamee and Selim, 1998). In a study of the voluntary use of internal audit in Australian companies, Goodwin-(Stewart and Kent, 2006) concluded that internal auditing was associated strongly with the effort applied to risk management.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Summary of Findings

On the basis of the study objectives and data analysis, the results support the following summary findings:

5.1.1 Application of RBA by Internal Audit in Public Sector

The first objective of this study sought to determine the extent in which the listed RBA factors have been applied in Internal Audit in public sector. The study findings revealed that RBA factors were moderately applied by internal audit in public sector. The overall application of RBA factors was rated moderate at 47.7%, High at 34.1% and low at 18.2%. The RBA factors were all moderately applied; Business focus at 80%, Stakeholders focus at 65.9%, Continual risk assessment at 47.7%, Process improvement at 45.5%, Participation in strategic planning at 79.5%, Goal focus at 70% Continual process monitoring at 47.7% while Continual risk management measures was moderately applied at 55% within the internal audit in public sector.

5.1.2 Level of Performance in Internal Audit in Public Sector

The second objective of this study sought to establish level of performance achieved by internal audit in public sector. The overall performance of internal audit in public sector was rated generally high at 50%, moderately at 31.8% and low at 18.2%

The study findings revealed that the performance in terms of timeliness was high as reported by 68.2% of the respondents in the study area, with aspects of timeliness such as variation of actual days/time input with planned days/time per audit assignment having reduced (M=3.409), reduction of time/duration of completing audit plans (M=3.409), completion of audit assignments on planned dates (M=3.318) and issuance of draft reports being issued on target dates (M=3.227) being rated very low by the respondents.

In addition the cost performance was moderate as reported by 52% of respondents in the study area, with aspects of cost such as reduction of cost of individual audit assignments (M=2.886),

reduction of number of auditors per audit assignment (M=2.864) and reduction in budgeted and actual cost variances (M=2.841) witnessing minimal improvement.

Further the improvement in achievement of the auditee demands was generally moderate as reported by 50% of the respondents, with aspects of improvement in usefulness of audit reports (M=3.432), increase in acceptance of audit recommendations (M=3.432) and increase in the level of client satisfaction being the lowest (M=3.182).

5.1.3 Extent to which RBA Factors Affects Internal Audit Performance

The third objective of this study sought to determine the extent to which RBA factors (Business focus, Stakeholders Focus, Continual Risk Assessment Coverage, Process Improvement, Participates in strategic planning, Goal focus, continual process monitoring and Continual risk management measures) affects performance (cost, time and demands of the auditee) of internal audit in public sector.

The RBA factors positively influenced internal audit performance in terms of timeliness cost reduction per audit assignment and auditee demands in public sector. Stakeholders focus, continual risk assessment coverage, Process improvement, Participation in strategic planning and continual risk management measures had a significant relation on cost. Factors such as continual risk assessment coverage, Process improvement and continual process monitoring had a positive and significant relationship on influencing internal audit timeliness in the study area. The relationship on the overall application of RBA factors and overall performance index was positive and significant.

5.2 Conclusion

This study evaluated RBA factors in the internal audit in public sector in South Rift. Furthermore this study has highlighted the level of performance achieved in internal audit public sector within South Rift. In addition, the study has also evaluated effects of RBA factors on internal audit performance in public sector. The study findings may be useful in providing clear understanding of the subject of RBA and its application by internal audit in public sector. Based on the survey findings, the study concluded that RBA factors have been moderately applied in internal audit in public sector in South Rift.

The study also concluded that the overall internal audit performance in terms of timeliness was high while as regards cost reduction and auditee demands it was moderate. The findings suggest that application of RBA factors has not been applied adequately or highly by the Internal Audit in public sector. The moderate application of RBA factors was consistent with the moderate performance of Internal Audit in public sector.

The study further concluded that RBA is positively correlated to and significantly influences internal audit performance (Timelines and Cost Reduction) in public sector. In addition, factors of RBA such as business focus and goal focus were found not to significantly influence any aspect of internal audit performance public sector. In addition, stakeholders focus, participation in strategic planning and continual risk management measures were found not to significantly influence timeliness of audit assignments. Further continual process monitoring was found not to significantly influence cost reduction as a measure of internal audit performance in public sector.

With regard to the effect of external factors (Government regulations & Professional Standards), the study concludes that Government regulations highly influenced internal audit performance in public sector, although, the influence on reduction of cost per audit assignment was found to be minimal. In addition, the overall influence of Professional standards was found to be high was generally in the study area.

5.3 Recommendations

It is evident from the study findings that RBA factors have only been moderately applied by the internal audit in public sector. This study recommends the need to higher application of RBA factors as well as other elements of RBA in the internal audit in public sector.

The study also concluded that the overall internal audit performance in terms of cost reduction and auditee demands was moderate while for timeliness was high. The findings suggest that application of RBA factors has moderately translated into improved internal audit performance in the internal audit in the study area. Consequently, this study recommends effective application

of RBA factors in order to achieve measurable improvement in the internal audit performance in public sector.

The study noted that moderating factors such as the Government regulations and professional standards had some influence on internal audit performance in public sector. In this regard, this study recommends application of RBA, while recognizing the contribution of the Government regulations and professional standards to internal audit performance.

This study advances the following specific recommendations: Internal audit in public sector should adequately apply RBA factors in their internal audit departments to achieve full results of RBA. The internal audit in public sector should ensure that RBA succeeds on understanding how the risky areas should be identified and given the attention that it requires. RBA should be initiated through effective communication. The core role of communication is to bridge the gap between the auditors and the clients. The internal audit department needs to look for ways to involve staff in identifying ways of implementing RBA factors.

5.4 Suggestions for Further Research

This study provided relevant insight on the evaluation of RBA factors and the effect on internal audit performance in public sector within south rift. It is important that further research is carried out to assess the impact of RBA factors on internal audit performance through assessment of internal operations and process changes rather than from individual internal auditors. The same research should be conducted in the same areas but more focus should be on qualitative measures of performance. Further research should be conducted in a different area like private sector and parastals to establish whether the same results would be obtained. A comparative research should be carried out to compare effectiveness of Risk Based Audit approach with previous audit approaches such as compliance and control based audit. Further research should be carried out to determine other factors influencing performance of internal audit in public sector.

REFERENCES

- Allegrini, M. and D'Onza, G. (2003), "Internal auditing and risk assessment in large Italian companies: an empirical survey", *International Journal of Auditing*, Vol.7, 191-208.
- Allot, A. (1996), "The emerging role of internal audit", *Management Accounting*, January, 60-1.
- Alzuela, J.M.B. (2003), "Risk Management in Financial Institutions", *Double Entry*, December, 62-5.
- Banham, R. (2004), "Enterprising views of risk management", *Journal of Accountancy*, Vol, 197 (6), 65-71.
- Bell, T.B., M.E. Peecher, and I. Solomon. (2002). *The strategic-systems approach to auditing*. In cases in strategic-systems auditing. Bell, T.B., and I. Solomon (Eds.). KPMG LLP
- Best, J. W. and Kahn, J. V. (1989). *Research in Education (6th Ed.)*. New Jersey: Prentice-Hall.
- Bou-Raad, G. (2000), "Internal auditors and a value-added approach: the new business regime", *Managerial Auditing Journal*, Vol, 15 (4), 182-7.
- Busman, E.R. and Zuiden, P.V. (1998), "The challenge ahead: adopting an enterprise-wide approach to risk", *Risk Management*, January, 14-17.
- Campbell, M., Adams, G.W., Campbell, D.R. and Rose, M.P. (2006), "Internal audit can deliver more value", *Financial Executive*, January/February, 44-7.
- Chapman, C. (2001), "The big picture", *The Internal Auditor*, Vol. 580(3), 30-7.

- Choy, A. and R. R. King. (2002). *An experimental investigation of audit decision-making: an evaluation using system-mediated mental model theory*. Working paper. Washington University
- Chun, C. (1997), "On the functions and objectives of internal audit and their underlying conditions", *Managerial Auditing Journal*, Vol. 12 (4/5), 247-50.
- CISA, (2010). *Review Manual for Certified Information Systems Auditor exam*, ISACA, United States of America
- Colbert, J. and Alderman, C. (1995), "A risk-driven approach to the internal audit", *Managerial Auditing Journal*, Vol. 10 (2), 38-44.
- COSO, (2004). *Enterprise Risk Management – Integrated Framework*, Committee of Sponsoring Organizations, New York, NY, September 29.
- Dittenhofer, M. (2001). "Internal auditing effectiveness: an expansion of present methods", *Managerial Auditing Journal*, Vol. 16 (8), 443-50.
- Eilifsen, A., W. R. Knechel, and P. Wallage.(2001). Application of the business risk audit model: A field study. *Accounting Horizons* 15(3), 193-207
- Frijo, M.L. (2002). *A Balanced Scorecard Framework for Internal Auditing Departments*. Altamonte Springs, FL: The Institute of Internal Auditors Research Foundation.
- Fuente, L. and Vega, G. (2003), "risk management in non-financial companies", *Double entry*, December, 54-60.
- Funston, R. (2003), "Creating a risk-intelligent organization", *The Internal Auditor*, Vol. 60 (2), 59-63.

- Government of Kenya (2005). *Internal Audit Manual*, Government printers, Nairobi, Kenya
- Goodwin, J. (2004), "A comparison of internal audit in the private and public sectors", *Managerial Auditing Journal*, Vol. 19 (5), 640-50.
- Gramling, A.A., Maletta, M.J., Schneider, A. and Church, B.K. (2004), "The role of the internal audit function in corporate governance: a synthesis of the extant internal auditing literature and directions for future research", *Journal of Accounting Literature*, Vol.23 194-244.
- Gramling, A. and Myers, P. (2006), "Internal auditing's role in ERM", *The Internal Auditor*, Vol. 62 (2), 52-8.
- Griffiths, D. (2006). *Risk Based Internal Auditing: An Introduction*, available at: www.internalaudit.biz.
- Grobstein M, Loeb S, Neary R, (1985). *Auditing: A Risk Analysis Approach*, Richard D. Irwin, Inc Millichamp A (2002) *Auditing*, 8th Edition,
- Gronli, M.J. and Xystros, C. (1999), "Elevating internal audit", *Traffic World*, August, p. 40.
ICPAK Institute of Certified Public Accountants of Kenya.
<http://www.icpak.com/news.htm>
- IIA – UK and Ireland (2003). *Risk Based Internal Auditing*, Institute of Internal Auditors, Altamonte Springs, FL, available at: www.iaa.org.uk
- IIA – UK and Ireland (2005), *Internal Audit 2005. A Survey of Current Practice in Ireland*, Institute of Internal Auditors, Altamonte Springs, FL, available at: www.iaa.org.uk

- IIA (2001). Practice Advisory 2100-4: *Internal Auditing's Role in Organization without a Risk Management Process*, Institute of Internal Auditors, Altamonte Springs, FL, available at: www.iiia.org.au/2006.pdf
- IIA (2004a). *International Standards for the Professional Practice of Internal Auditing*, Institute of Internal Auditors, Altamonte Springs, FL.
- IIA (2004b), "Definition of internal auditing", available at: www.theiia.org.
- IIA (2009). IIA Position Paper: *The Role of IA in ERM*, Institute of Internal Auditors, Altamonte Springs, FL, available at: www.theiia.org/download.cfm?file%2F462465
- INTOSAI International Organisation of Supreme Audit Institutions. <http://www.intosai.org/>
- Jackson, M. C. (1991). *Systems methodology for the management sciences*. New York, NY: Plenum Press.
- Jackson, R.A. (2005), "Role play", *The Internal Auditor*, Vol. 62 (2) 44-51.
- Jin'e, Y. and Dunjia, L. (1997), "Performance audit in the service of internal audit", *Managerial Auditing Journal*, Vol. 12 (4/5) 192-5.
- Knechel, W. R. (2001). *Auditing: Assurance and Risk*. Cincinnati, OH: South-Western College Publishing
- Koutoupis, A. G. (2005). *Corporate governance and internal audit in Greece*, Panteion University of Social and Political Sciences. In Third European Academic Conference on Internal Audit and Corporate Governance.
- Koutoupis, A. G. (2006). *Corporate governance & business risk management regulations and best practices impact on internal controls & internal audit activities within Greek*

publicly listed enterprises. In Fourth European Academic Conference on Internal Audit and Corporate Governance.

Krogstad, J.L., Ridley, A.J. and Rittenberg, L.E. (1999), "Where we're going", *The Internal Auditor*, October, 26-33.

Kunkel, J. (2004), "The changing role of internal audit", *Chain Store Age*, September, 4-5.

Lemon, W. M., Tatum, K. W., and W. S. Turley. (2000). *Developments in Audit Methodologies of Large Accounting Firms*. UK: ABG Professional Information.

Lindow, P.E. and Race, J.D. (2002), "Beyond traditional audit techniques", *Journal of Accountancy*, July, 28-33.

Lorenzo, M.J.P. (2001), "The internal auditor to process-oriented", *Double-Entry*, J July/August, 78-85.

Marks, N. (2001), "The new age of internal auditing", *The Internal Auditor*, December, 44-9.

Matyjewicz, G. and D'Arcangelo, J.R. (2004), "ERM-based auditing", *Internal Auditing*, November/December, 4-18.

Maynard, G.R. (1999), "Embracing risk", *The Internal Auditor*, February, 24-8.

McMillan, J. J and Schumacher, S., S (1993). *Research in Education: A Conceptual Introduction* 3rd Ed. New York: Harper Collins

McNamee, D. and Selim, G. (1998). *Risk Management: Changing the Internal Auditor's Paradigm*, The Institute of Internal Auditors Research Foundation, Altamonte Springs, FL. Risk-based internal auditing

- Mugenda, C.A., Mugenda A.G. (1999). *Research Methods: Quantitative and Qualitative Approaches*. ACTS Press Ltd., Nairobi, Kenya.
- Nagy, A.L. and Cenker, W.J. (2002), "An assessment of the newly defined internal audit function", *Managerial Auditing Journal*, Vol. 17 (3), 130-7.
- O'Regan, D. (2002), "The CPA's transition to the world of internal auditing", *The CPA Journal*, August, 11-13.
- Risk Based Internal Auditing (RBIA) (2003). Position Paper August 2003. The Institute of Internal Auditors UK and Ireland.
- Rivenbark, W.C. (2000), "Embracing risk-based auditing in local government", *Government Finance Review*, June, 17-20.
- Salterio, S. E, and T. R. Weirich. (2001). *A premier on the strategic systems approach to auditing*. Working paper. University of Waterloo
- Sarbanes-Oxley Act (2002). *Sarbanes-Oxley Act of 2002*, available at: www.sec.gov/about/laws/soa2002.pdf
- Sarens, G. and de Beelde, I. (2006), "Internal auditors' perception about their role in risk management: a comparison between US and Belgian companies", *Managerial Auditing Journal*, Vol. 21 (1), 63-8.
- Sawyer, L.B. (1995), "An internal audit philosophy", *Internal Auditor*, August, 46-55.
- Sawyer, Lawrence B. Sawyer's (1988). *Internal Auditing*. Alamonte Springs, FL: Institute of Internal Auditors, Inc.,

- Selim, G., & McNamee, D. (1999a). The risk management and internal auditing relationship: Developing and validating a model. *International Journal of Auditing*, 3, 159–174.
- Spira, L.F. and Page, M. (2003), “Risk management: the reinvention of internal control and the changing role of internal audit”, *Accounting, Auditing & Accountability Journal*, Vol. 16 (4), 640-61.
- Spira, L. (2006), “Black boxes, red herrings and white powder: UK audit committees in the 21st century”, *Journal of Banking Regulation*, Vol. 7 (1/2,) 180-8.
- Stern, G.M. (1994), “15 ways internal auditing departments are adding value”, *Internal Auditor*, April.
- Szirglas, M. (2006), “Risk management and misunderstandings”, *French Magazine of Management*, February, 67-88.
- Walter G. K and William G. B (1991) 5th ed, *Modern Auditing*, John Willy and Sons Inc, Newyork
- Ziegenfus, D.E. (2000), “Developing an internal auditing department balanced scorecard”, *Managerial Auditing Journal*, Vol. 15 (1/2) 12-19.

APPENDICES

APPENDIX I

QUESTIONNAIRE

**EVALUATION OF RISK-BASED AUDIT FACTORS AFFECTING PERFORMANCE
OF INTERNAL AUDIT IN PUBLIC SECTOR:
A SURVEY OF SOUTH-RIFT REGION, KENYA**

INSTRUCTIONS

Please answer all the questions honestly and exhaustively. All the information given will strictly be used for academic purpose/ research only and will be treated with the utmost confidentiality.

A. ORGANIZATION’S BACKGROUND INFORMATION

- 1. Organization’s/District Name.....
- 2. Title/Designation of Respondent:.....
- 3. Sex of Respondent: Male Female
- 4. Number of years worked at internal Audit Department:
- 5. Highest level of education attained (Please tick in the appropriate box below)

A levels (form 6)	KCPE	KSCE	Diploma	Graduate	Postgraduate

- 6. Other professional qualifications attained (Please tick in the appropriate boxes below)

CPA (Certified Public Accountant)	CISA (Certified Information System Audit)	CFE (Certified Fraud Examiner)	Any other (Please specify)

B. RISK BASED AUDIT (RBA)

RBA focuses upon how an organization responds to the risks it faces in achieving its goals and objectives; it aims to provide assurance on the management of the identified risks within the context of the organization corporate plans and aims. Unlike other forms of audit approach, RBA starts with business objectives and their associated risks rather than the need for controls.

It aims to give independent assurance that risks are being managed to an acceptable level and to facilitate improvements where necessary.

7. Indicate the extent to which you agree with the following statements concerning the Risk Based Audit Factors.

Please Tick the appropriate box

		Not at all	To a low Extent	To some extent	To a greater extent	To a very great extent
		1	2	3	4	5
1	<i>Business Focus (When IA is business focused it)</i>					
	Creates focus on the achievement of client's key objectives					
	Aligns audit objectives to clients' objectives					
	Creates an insight of the clients business activities					
2	<i>Stakeholders focus</i>					
	Ensures that internal audit and key stakeholders shares the same priorities					
	Vision and expectation of the key stakeholders are of paramount importance					
3	<i>Continual Risk assessment coverage</i>					
	Anticipated changes are predictable on time					
	Audit programmes are prepared to test the most important areas					
	The business is viewed in an environment of risk					
	Audit plans are developed based on risky areas and organizational goals					
	Audit judgment of inherent risk and control risk have become more accurate and consistent					

4	<i>Process Improvement</i>					
	Improves financial statements assurance and reporting process					
	The higher the risk area, the more audit time and client controls are required					
	Assure the organization have focused on emerging risks that may not yet be well managed					
5	<i>Participates in Strategic Planning</i>					
	The client entity is viewed as an open system able to adapt to changes					
	Client Strategic planning process matches environmental threats					
6	<i>Goal Focus</i>					
	Creates value to clients entity					
	Enhances good governance in public sector					
7	<i>Continual Process Monitoring</i>					
	Identifies significant internal control weaknesses and designs ways to address them					
	Monitors progress in addressing previously identified risks					
	Identifies good practices and improvement opportunities of Internal controls					
8	<i>Continual Risk Management Measures</i>					
	Carries out risk mitigation measures					
	Carries out risk transfer measures					
	Carries out risk avoidance measures					
	Carries out risk acceptance measures					
	Carries out risk reduction measures					

C. INTERNAL AUDIT DEPARTMENTS PERFORMANCE

8. Indicate the extent to which you agree or disagree with the following statements concerning your Internal Audit department

Please Tick the appropriate box

		Not at all	To a low Extent	To some extent	To a greater extent	To a very great extent
		1	2	3	4	5
	Timeliness					
1	Variation of Actual days/time input with planned days/time per audit assignment have reduced					
2	Audit assignment are completed on planned dates					
3	Time of completion of audit plans have reduced					
4	Draft audit reports are issued by the target date					
	Cost					
1	Cost of individual audit assignment have reduced					
B 2	Budgeted and actual cost variances have reduced					
3	The number of auditors per audit assignment have reduced					
	Demands of the Auditee					
1	Level of clients satisfaction have increased					
2	The usefulness of audit reports have improved					
3	Acceptance of audit recommendations have increased					

D. MODERATING FACTORS

9. During an Audit assignment by your internal audit department to what extent does the use of **Government Regulations** influence the following?

Please Tick the appropriate box

		Not at all	To a low Extent	To some extent	To a greater extent	To a very great extent
		1	2	3	4	5
1	Reduction of time spent in an audit assignment					
2	Reduction of cost per audit assignment					
3	Achievement of clients demand					

10. During an Audit assignment by your internal audit department to what extent does the use of **Professional Standards** influence the following?

Please Tick the appropriate box

		Not at all	To a low Extent	To some extent	To a greater extent	To a very great extent
		1	2	3	4	5
1	Reduction of time spent in an audit assignment					
2	Reduction of cost per audit assignment					
3	Achievement of clients demand					

THE END

APPENDIX III

DISTRICT AND LOCAL AUTHORITIES UNDER SOUTH RIFT AS AT DECEMBER 2009

Appendix III	
List of District in South Rift as at 2009	
1	Nakuru District
2	Njoro District
3	Nakuru North District
4	Rongai District
5	Gilgil District
6	Subukia District
7	Kajiado Central District
8	Kajiado South District
9	Kajiado North District
10	Laikipia East District
11	Nyahururu District
12	Laikipia North District
13	Narok South District
14	Narok North District
15	Bomet District
16	Sotik District
17	Bureti District
18	TransMara East District
19	Kericho District
20	Kipkelion District
21	Konoin District
22	Naivasha District
23	Molo District
24	Kuresoi District
25	Mogotio District
26	Koibatek District
27	Marigat District
28	Laikipia West District
29	Samburu East District
30	Laikipia Central District
31	Transmara West District
32	Samburu West District
33	Chepalungu District
34	East Pokot District
35	Samburu North District
36	Londiani District District

C. P. C.
14.12.2009
KENYA NATIONAL AUDIT OFFICE
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NAKURU

APPENDIX III

LIST OF LOCAL AUTHORITIES – SOUTH RIFT REGION

A. MUNICIPAL COUNCILS

1. Municipal Council of Nakuru
2. Municipal Council of Naivasha
3. Municipal Council of Kericho
4. Municipal Council of Bomet

B. TOWN COUNCILS

1. Town Council of Molo
2. Town Council of Litein
3. Town Council of Londiani
4. Town Council of Kipkelioni
5. Town Council of Narok
6. Town Council of Maralal
7. Town Council of Sotik
8. Town Council of Eldama Ravine

C. COUNTY COUNCILS

1. County Council of Nakuru
2. County Council of Narok
3. County Council of Samburu
4. County Council of Koibatek
5. County Council of Kipsigis
6. County Council of Transmara
7. County Council of Bomet
8. County Council of Bureti

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L.T.C 4/12/2009
Draft