

**EFFECT OF INTERNAL AUDIT PRACTICES ON FRAUD RISK MANAGEMENT
IN DEVOLVED GOVERNMENT SYSTEMS IN KENYA**

BY

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DECLARATION

This research proposal is my original work and has not been submitted for the award of a degree in any university

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This research proposal has been submitted for examination with my approval as the university supervisor

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Thank you all.

DEDICATION

I dedicate this work to the Almighty God and my family. May God bless you

ABSTRACT

Internal audit practices has been documented to be effective in enhancing financial reporting quality and also improving financial performance. Practices such as audit planning, periodic risk assessment, and audit automation have been lauded for being significant in detection, prevention, and reduction in fraud risk. However, most of the studies on internal audit practices and fraud risk management have tended to focus on players in the financial sector and public organizations at the expense of devolved government units such as county governments. This is despite of the counties receiving large amounts of public fund for development and recurrent expenditure. Furthermore, reports indicate that county governments in Kenya loss approximately 730 billion Kenya Shillings annually due to corruption, thereby questioning the effectiveness of internal audit practices in these entities. This study therefore sought to determine the effect of internal audit practices on fraud risk management, taking the case of Kisumu County Government. Specific objectives were to: examine the effect of internal audit planning on fraud risk management, establish the effect of periodic risk assessment on fraud risk management, and to determine the effect of audit automation on fraud risk management. The study was guided by Credibility, Policeman and Technology Acceptance Theories and employed correlational research design. The target population was 112 operational managers who supervise task activities related to finances, including fraud risk management. Through census method, all the 112 operational managers were included as the study sample. Primary data was collected through the use of structured questionnaire. Validity was ensured through adequate conceptualization of study variables. The instrument reliability was ensured through Chrobach's Alpha test of internal consistency, where a coefficient of 0.85 was achieved. Data was analyzed through descriptive statistics like mean and standard deviation and inferential statistics such as regression and correlation. Findings showed that 34.4% changes in fraud risk management is attributed to the internal audit practices investigated by the study ($R^2 = 0.344$). Findings also showed that audit planning ($\beta = 0.936$); periodic risk assessment ($\beta = 1.188$) and audit automation ($\beta = 0.721$) all are significant predictors $\{F = 13.340, P < 0.05\}$ of fraud risk management in Kisumu County Government. It is concluded that audit planning, periodic risk assessment, and audit automation are critical internal audit practices for enhancing fraud risk management. The study recommends that internal audit practices should be enhanced for the purpose of improving fraud risk management. Further research need to be done on effects of audit planning and audit automation on fraud risk management.

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LIST OF ABBREVIATIONS

IFMIS Integrated financial management system

CGK: County Government of Kisumu

FRM: Fraud risk management

IAP: Internal audit practices

ERP: Enterprise Resource Planning

DEFINITION OF KEY TERMS USED IN THE STUDY

Audit automation:	Is the use of information technology such as computer assisted audit in the process of auditing so as to mitigate the auditing risk in an organization
Fraud risk Management	Is the procedure put in place to address the impact and the likelihood of fraud risk happening in the organization
Internal audit planning	The process of laying down procedures by the internal audit department to ensure that internal audit functions follow predetermined plans to conclusion.
Periodic risk assessment	Is the assessment of risk at least once every year especially at the end of the year of whenever there is a radical decision such as job cuts to inoculate the organization from fraud related risks.

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CHAPTER ONE

INTRODUCTION

This section discusses background of the study, statement of the problem and objectives of the study. It addresses also the study hypotheses and the scope of the study. Finally, it looks at justification of the study as well as conceptual framework of the study.

1.1 Background of the Study

Internal audit practices has been ingrained in organizations tenaciously and has been discussed in academia with similar tenacity. According to Jurayevna (2020), internal audit practices come into play as a result of systemic weaknesses and threats to financial fraud and other behaviors that make organizations lose assets in an unfair and dishonest manner. The possibility of having rogue elements whose objective is to defraud companies cannot be overemphasized yet fraud and dishonesty are antithetical not just to the wellbeing of companies but also to development in a wider scheme of things and which is why internal audit department becomes critical in any healthy organization. However, Ghaleb, Kamardin, and Al-Qadasi (2020) points out that the extent to which internal audit practices affect fraud risk management varies significantly and the reason for such variability depends on specific organization singularities. Fraud risk management on the other hand involves the procedures that ensures that fraud risk and impact are mitigated in the organization at the present moment and in the foreseeable future Ghaleb et.al (2020)

1.1.1 Internal Audit Practices

According to the Institute of Internal Auditors IIA (2015), auditing is the prevention, detection and mitigation of financial fraud in particular and misconduct in general in a bid to enhance organization bottom line and corporate governance. Fraud differs from an error in the sense that fraud is intentional action that puts the organization in a disadvantage position in terms of its assets and records while error is an unintentional conduct that also puts an organization at a disadvantage position Obonyo, (2017). According to Yang and Lee (2019), auditing has prevented financial fraud and financial pilferages in many organizations, however it cannot be concluded that such preventions are not necessarily absolute. Such is because fraud financial pilferages happens from a very insignificant proportions to a very large and fully blown proportions. It is only possible to talk about the extent to which audit is beneficial to organizations. Similarly, in some cases, the auditing works well but after sometimes, leakages are found which is why auditing is a continuous vigilance as opposed to absolute measure.

Internal audit practices according to International Professionals Practices Framework IPPF (2016) are the instruments that check the strength of internal control mechanisms in dealing with cases of fraud in an organization. Hazaea et al (2021) assert that internal audit practices as the undertakings by audit department of any organization geared to making sure that internal controls are strong enough to handle both the impact and the probability of financial pilferages and fraud or loss of assets in the organization in any way whatsoever. Internal audit practices according to the Institute of Internal Auditors IIA (2015), are simply the level of compliance with the standard procedures of the auditing profession by internal audit department, not just in improving the profession but also in helping the organization to be inoculated from fraud attacks.

Elements of internal audit practices are numerous. For example, Meliyev (2017) submits that internal audit planning is part of internal audit practices. Internal audit planning articulates the activities required and implementation of the said activities to achieve auditing objectives of the organization. Another element of internal audit practices according to Fortvingler and Szivos (2016) is periodic risk assessment which is checking the exposure from time to time especially towards the end of the year or whenever there is a major event taking place in the organization like job cuts. This helps the organization to identify auditing risks for mitigation. According to Aikins (2020), audit automation is another element of internal audit practice and which involves the use of information technology in mitigating auditing risks in the organization. It was therefore critical to highlight the effectiveness of these internal audit practices including how they affect fraud risk management.

1.1.2 Fraud Risk Management

Fraud according to Husaini & Abu-Bakar (2017), is an act by omission or commission that transfers assets from the organization to another party in a dishonest manner and without the necessary approvals. Fraud risk in an organization is an experience whereby an organization is likely to experience loss of both current and fixed assets in a way that is dishonest and lacks accountability, Hess and Cotrell (2016). Fraud risk management are the procedure put in place to address both the impact and the likelihood of fraud risk happening in an organization, the Association of Certified Fraud Examiners (2016). Fraud risk management embodies effectiveness of systems, driving continual improvement as well as providing information to top management for management reviews and decision making, Madahet al (2020). Effective system is a feasible risk mitigation mechanism while driving continual improvement helps the

organization to maintain quality of the auditing function. Additionally, providing information to top management for decision making ensures that the organization top management is in support of fraud risk management which in turn enhances corporate governance.

1.1.3 Internal Audit Practices and Fraud Risk Management

Internal audit practices have been largely documented to affect diverse elements of financial management including financial reporting and associated with fraud risk management in diverse contexts. Researchers Djanegara & Iriyadi, 2017; Meliyev, 2017; Phornlaphatrachakorn, (2019) have documented that audit planning forms an effective tool in the management of finance including fraud risk management. However, these studies have used financial sector and other public organizations as their context of evaluation, relegating other contexts such as devolved governments. A study done among 34 local audit firms operating in Uzbekistan by Meliyev (2017) look at the effect of audit planning on audit quality found that audit quality was enhanced by audit planning. Another study was done in the Supreme Audit Institution of Indonesia to explore how audit strategy relate with audit quality found that Performance audit findings assisted the auditor in focusing on high potential risks area of material misstatements. Equally, Muchiri and Jagongo (2017) explored how internal audit function relate with financial performance in the Kenya Meat Commission (KMC) and established that there was an insignificant relationship between the existence of internal audit functions and financial performance. The foregoing discussions illustrate that county government as devolved entities have not been given much attention with regards to audit planning as a practice for managing fraud risks. It is also significant to highlight on how dimensions such as audit objective, budget plans for audit, determining alternative causes, forecasting as well as implementing the audit

plan collectively affect fraud risk management. Therefore the effect of the aforementioned components of internal audit planning on fraud risk management in Kisumu County government formed one of the areas focused upon in this study.

Periodic risk assessment forms an important step in fraud risk management. According to Koech (2018), periodic risk assessment is the analysis of significant risks which can impair the financial objective achievement. Hussaini, Abubakar and Yusuf (2018) argue that periodic risk assessment is the practice of periodically evaluating the risk exposures in an organization yearly with the aim of mitigating the said risk to prevent financial fraud and pilferages. Whereas extant literature on periodic risk assessment highlights positive outcomes such as fraud detection, prevention, and reduction, much focus has been in the financial sector as opposed to other contexts such as decentralised government units. In a study which examined how auditors perform fraud risk assessment to different perceived risk level settings in Hungary using a population from audit firms revealed that the assessment influence auditors sensitivity to fraud cues. Another study which investigated the impact of risk assessment practices of some selected firms listed in the stock exchange of Nigeria by Nnam and Eneh (2018) showed that the relationship between risk assessment and fraud was significant. Koech (2018) examined the relationship between risk assessment fraud detection and prevention in a University in Kenya and found that risk assessment influenced fraud detection and prevention positively and significantly. From the discussed studies, it is significant to note that risk assessment, albeit being a significant tool in fraud risk management, has not been documented in the context of county governments. This is despite the fact that the context of county governments handle diverse financial resources which are at risk to fraud. It was therefore critical dimensions such as risk identification, impact

evaluation, planning response, documenting and tracking response, as well as staff function allocation and how they collectively affect fraud risk management is highlighted.

Audit automation is the application of technological information like computers in the process of auditing, Aikins (2020). Automation has aided in risk mitigation by removing human interface, making it highly likely to reduce fraud and pilferages within a given organization, Ghanoum & Alaba (2020). However, existing studies in the field of automation have tended to concentrate on computerized accounting in the banking sector and other public bodies targeting auditors save for decentralised government units. For instance, Aikins (2020) examined the effects of uses of computer assisted audit techniques on implementation of performance measures in the U.S.A using local government auditors and found out that posting audit reports on the website and the existence of dedicated employees affected the performance measures implementation. Another study which looked at the impact of computerized accounting systems on quality financial reports of banks in Ghana showed that automated computerized accounting system positively influence quality of financial reports. Similarly, a study which assessed the effect of computerization on risk based internal audit in Kenya by Otoko (2016) revealed that automation enhance financial procedures. It is critical to note from these studies that the relationship between automation and fraud risk management has not been highlighted. Instead, automation has been related with financial reporting and enhanced financial procedures. Similarly, most of these studies have targeted auditors and accountants instead of operational managers in charge of supervising tasks prone to fraud risks.

The studies reviewed have looked at internal audit planning, periodic risk assessment, as well as audit automation and dimensions thereto individually. What is missing in the studies that are otherwise reasonable is that the variables and the dimensions have not been investigated collectively and how such variables and dimensions thereto affect fraud risk management in Kisumu County government in Kenya.

In the global context, Lamptey and Singh (n.d), points out that organizations lose 5% of revenue to fraud that happens within the organization. According to Sadaf, Olah, Popp, and Mate, (2018), North Africa and Middle East countries are least involved in occupational fraud at 3.7% with United States of America coming on top at 48% in the list. Western Europe has 5.2% while Latin America has 5.3% and Sub-Saharan Africa having 13.4% of occupational fraud. Price Waterhouse Coopers (2020) puts the total cost of occupational fraud at \$42 billion annually. In Kenya, KShs. 730 billion is lost annually due to fraud related cases, Muriuki (2021). In Kisumu county government there is high corruption cases some of which are under investigation. Such corruption cases are rarely mentioned even in academic literature either because they are under investigation or fear of court action by those who mention them. The fact of the matter however is that corruption is live In Kisumu County government that warrants academic inquiry.

According to Fonshell (2018), county government of Kisumu is among the 47 county governments that profited from the 2010 constitution that operationalized devolved systems of government. The County government is responsible for county development and bringing service closer to the people. For instance, county roads and early childhood education as well as medical departments are now under the county government and the county is responsible for making

them work better. However, going by the media reports, the Kisumu County government is faced by numerous allegations of fraud cases some of which are under investigations

1.2 Statement of the Problem

Although devolution was meant to take services closer to the people and spur development, Kisumu County Government has a long way to go in that front due to lack of financial resources, yet high level corruption cases continue to be reported by the media and some are under investigation, despite the existence of internal audit department in the County government. Such corruption cases at Kisumu county government contribute to Kshs 730 billion that is lost every year in Kenya. These corruption cases not only undermine development but are also potential causes of class conflict and instability in the county and in the country despite the availability of internal audit practices. Yet measures can be put in place through fraud risk management to combat both the impact and potential risk of fraud. Kisumu County Government is the County that has received the highest mention in terms of theft of public funds, something that has been collaborated by Office of the Auditor General, who has also raised queries on County's expenditure. Many studies have been done linking internal audit practices and fraud risk management. However, such studies have not focused on these key variables which are: internal audit planning, periodic risk assessment, as well as audit automation. Therefore, the effect of internal audit practices on fraud risk management required deeper scrutiny.

1.3 Objectives of the Study

The general objective of the study was to determine the effect of internal audit practices on fraud risk management in Kisumu County Government. Specific objectives were to:

- I. Examine the effect of internal audit planning on fraud risk management at Kisumu County government
- II. Establish the effect of periodic risk assessment on fraud risk management at Kisumu County Government
- III. Determine the effect of audit automation on fraud risk management at Kisumu County Government

1.4 Hypotheses of the study

The sought to test the following null hypotheses.

- H0₁ Internal audit planning does not have a significant effect on fraud risk management at the County Government of Kisumu
- H0₂ Periodic risk assessment does not have a significant effect on fraud risk management at the County Government of Kisumu
- H0₃ Audit automation does not have a significant effect on fraud risk management at the County Government of Kisumu

1.5 Scope of the Study

The study covered Kisumu county government in relation to geographical scope leaving out other counties in Kenya. The generalizations however was expected to have valid implication in the entire country since the study is scientific in nature. In regard to the phenomenon, the study concentrated on the effect of internal audit practices on fraud risk management. In terms of variables, the study looked at key variables which are internal audit planning, periodic assessment and audit automation.

1.6 Justification of the Study

The study was set to accrue benefits in a number of ways. To the academic fraternity, it could act as a source of secondary data to enable other researcher to conduct other studies in related field because research is cyclical and cumulative. For purposes of practice Kisumu County Government, results of the study could invigorate the internal audit department so as to scale down corruption and spur economic recovery in the County. In terms of legislation and policy, both the County and National Government could use the findings and recommendations of the study to develop policies on internal audit processes, aligning it with the best practices to reduce fraud in public enterprises.

1.7 Limitation of the Study

Several obstacles were encountered during data collection and analysis which were caused by some factors mostly beyond the researchers' control. First and foremost, the study was carried out during the period when restrictions for controlling Covid 19 were still being observed. Such restrictions include travel restrictions, working from home, and social distancing. Therefore,

findings the sampled operational managers in their offices was difficult. To overcome this, the researcher resorted to the use of telephone and email services for data collection. In addition, a number of the respondents were cautious in providing information to the researcher in the study questionnaire for fear of confidentiality breach. To this end, an assurance was given by the researcher not to disclose identities of each respondents anywhere in the analysis as well as the report.

1.8 Conceptual Framework

Figure 1.1 is the conceptual framework which represents the study variables. The left variables are independent variables which stand on their own and do not depend on any other variable while the variables on the right are dependent variables which dependent on the independent ones. Internal audit planning, periodic risk assessment, as well as audit automation are internal audit practices that contribute to fraud risk management depending on the extent to which they are implemented in the organization.

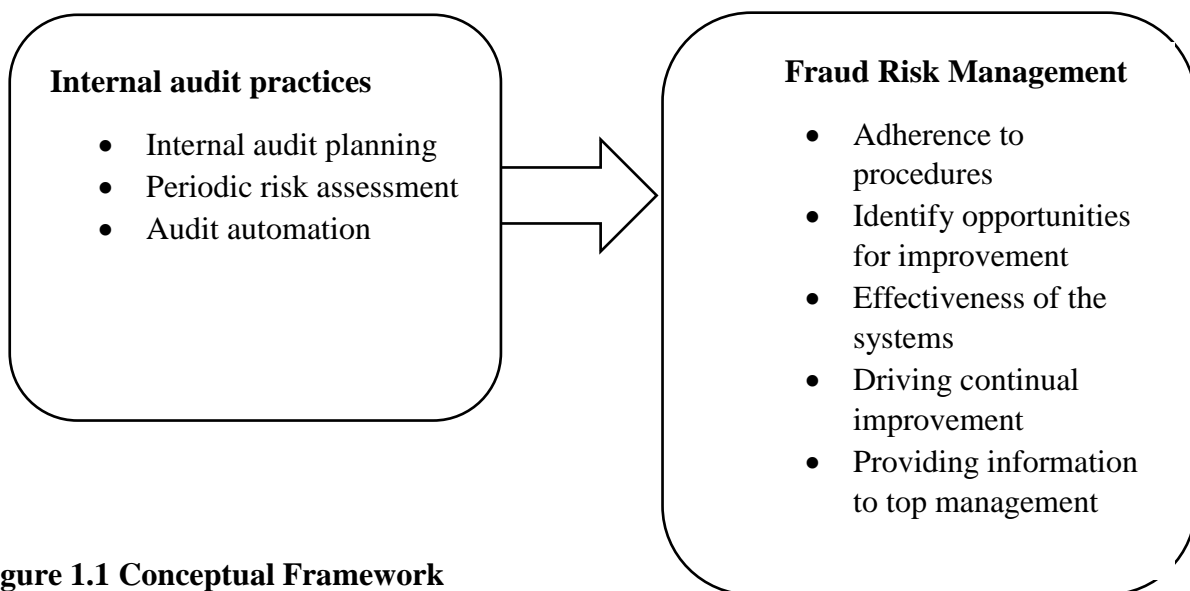


Figure 1.1 Conceptual Framework

Source: Adopted from Kemnitz, 1985 (PT)

CHAPTER TWO

LITERATURE REVIEW

This chapter reviewed the literature related to effect of internal audit practices on fraud risk management. It particularly focused on the theoretical aspects of the study as well as empirical review. The empirical section looked at internal audit planning, periodic risk assessment and audit automation. It ended with the literature summary and knowledge gaps.

2.1 Theoretical Review of the Study

This section focused on three theories of the study namely, Credibility theory, Policeman theory and Technology Acceptance theory. It also focused on the study concepts. The concepts reviewed include: the internal audit planning concepts; the concept of periodic risk assessment and the concept of audit automation. Finally it looked at the concept of Fraud risk management.

2.1.1 Credibility Theory

Credibility theory (CT), according to Amini, Dabbagah and Omrani (2019), was developed by Thomas Bayes in the early 1970s to mitigate information asymmetry in the auditing discipline. Information asymmetry is a situation whereby the investment and the management do not have the same credible information. To mitigate the problem, auditors are required to add credibility to the audited financial statements which then boost confidence in the financial records. This therefore gives the users confidence on the financial records or any aspect of management that is subjected to auditing. Credible audit reports can therefore be used by organization top

management to tweak management decisions so as to make them in line with the objective of the organization and also to mitigate the downside as established by credible audit reports Amini et.al (2019).

According to Assaker (2020), the fundamental assumption of Credibility theory is that credible audit reports improve decision quality. This is the point at which the theory relates to the study. Internal audit planning is a situation in which internal auditors determine the objective of the audit until the plan is implemented. This can only be effective if the internal auditors embrace credibility in their work of audit planning. As such credible audit plans can be used by management to allocate resource for the internal audit planning so as to achieve the objective for which the internal audit planning is set in motion. On the other hand, without credibility, financial pilferage may ensue and work against the very reason internal audit department exists in the organization. Credible audit planning also means that better alternative sources can be made manifest in the planning stage to ensure that there is value for money which puts the entire organization at a better place in achieving the objectives in which the organization was put in place.

Like any other theory, credibility theory also has its shortcomings. According to Assaker (2020), the theory puts a blanket trust on the auditors to provide credibility for the organizations audited financial statement. Unfortunately, auditors are human beings who can be compromised in which case, the salience of credibility postulates is significantly undermined. It is very difficult if not impossible that any human being can be trusted 100% only on the basis of trust and

professionalism. Little wonder that cases of financial misappropriation have continued to be recorded even though internal auditors are available.

2.1.2 Policeman Theory

Policeman theory (PT), as Kemnitz (1985) postulates, was developed by Dutch academician Theodore Limperg in the 1920s to instill more accountability and transparency in the auditing field of the time. According to the theory, there is greater responsibility on the part of the auditors to prevent fraud by all means. In other words, organizational fraud prevention is the responsibility of auditors and in the event that fraudulent activities are rumored or reported, the first person to go to is the auditor, especially the internal auditors of the organization. As such the internal auditors play the role of the police officer in ensuring that any fraudulent activities are detected and thwarted and that in the event that fraud is reported, then the auditor did not do a proper job as expected.

The major assumption of the theory according to Shio (2018), is that the auditor is the organization's policeman whose responsibility is to prevent, search and discover any fraud within the organization. As such, the theory blends well with the current study whose variable is periodic risk assessment. Among other areas, periodic risk assessment department in auditing is responsible for identifying risk and communicating mitigation mechanism for purposes of protecting organization assets. Because policeman theory places the role of police officer at the door step of organization auditors, it is incumbent on the auditors to play their role of mitigating the risks and thwarting them to so as the organization is free from fraud and any risks that can be posed by both external and internal threats.

According to Bobek (2018), policeman theory has a major shortcoming. Auditors' role in any organization is not strictly to act as police officer but to give reasonable assurance and fair view of the organization financial statements. To make auditors to do the role of police in terms of preventing fraud may actually increase fraud because of lack of fairness on the part of management to the auditors. To such extent, Policeman theory stands accused of overgeneralization of the role of auditors in any organization.

2.1.3 Technology Acceptance Model

This model (TAM), according to Hussein (2017), was developed by Fred Davis and Richard Bagozzi in the 1980s to explain the cognitive processes involved in the process of new technology adoption. The theory posits that there are cognitive decisions including attitudes of the user that influences the level of adoption or acceptance of the technology in an organization. Early adopters for example are users that easily adopt technology and are usually young people because of their curiosity. On the other hand, laggards are usually much older individuals who are reluctant to adopt new technologies. The adoption or acceptance of new technologies is therefore a cognitive process on other users yet profoundly affects the level of usage among other organization members.

The major assumption of TAM, according to Assaker (2020), is that the extent of technology acceptance is dependent on perceived usefulness and perceived ease of use. The current study therefore blends much better with the theory in the sense that audit automation relies on technology acceptance by the organization members. Audit automation ensures that there is proper infrastructure built to support technology and that employees are trained on the new

technology to be adopted by the organization and finally technology acceptance. The usefulness and the ease of use must be emphasized to the employees of the organization for the technology to be fully accepted.

As Hussein (2017) points out, even Technology Acceptance Theory has its downside. This is because technology has exposed attack surfaces where hackers can use to penetrate technology. Technology is also very disruptive and some employees may not accept technology because of job cuts. Therefore the challenges brought about by new technology are numerous and may not after all fix internal audit problems in their entirety.

2.1.4 The Concept of Internal Audit Planning

Internal audit planning is an integral function in the wider scheme of corporate governance in organizations of all strata. According to Chowdhury and Shil (2019), internal audit planning envisages a situation where auditing framework is properly planned, that is, articulating activities required in advance to achieve the auditing objective of the organization. The centrality of auditing planning is made manifest in their utility by the top management to make management decisions that anchors the overall organization management. Therefore, the internal audit plans are not only relevant to the corporate management, they are crucial for better governance in any organization in any part of the world regardless of structure or culture.

The salient postulates of internal audit framework are numerous. For instance, Eulerich et.al (2019) postulates that determining the objective of the audit planning as well as making budgets for the audit plans are at the centre of any worthwhile internal audit planning process.

Determining the audit plan objectives enables the audit department to stick to the objectives of the audit and not to branch to other aspects of the audit process that may not be relevant for the internal auditing. On the other hand, putting in place audit budget plans allows the internal audit planning secretariat to ensure that there is sufficient budget allocation for the auditing so that the noble auditing work is not undermined by lack of financial muscle to execute auditing function.

Further, Nornam et.al (2010) postulates that determining alternative causes, forecasting and implementation also underpin proper internal auditing plans. Determining alternative causes in the internal audit planning process helps the auditing department to consider other approaches so that the approach that is finally agreed upon has the most value for the organization. Similarly, forecasting enables the internal audit department to have a preview of what the future might look like and then putting measures to address the future possibilities for the benefit of the organization. Implementation of the plan is the final step of the internal audit planning and which ensures that the plans are actually implemented to address the risks posed in the organization for which planning was construed.

2.1.5 The Concept of Periodic Risk Assessment

Periodic risk assessment, according to Hussaini, Abubakar and Yusuf (2018), has been construed as the process of periodically assessing the risk exposures of an organization with the aim of mitigating the said risk to prevent financial fraud and pilferages. Although periodic risk assessments are conducted yearly especially towards the end of the year, there are certain times that periodic risk assessment can be conducted sooner. For instance, when there is a major event taking place in the organization such as radical budget cuts or employee right-staffing, there is

need for a risk assessment to identify possible exposures and mitigated the identified exposures so as to inoculate the organization from financial related fraud.

According to Nnam and Eneh (2018), identifying the risk and impact evaluation are central to periodic risk assessment in any organization. Risk identification involves the process of marking a risk as a threat to financial wellbeing of an organization. This might include possible areas that financial fraud and pilferages might occur in the organization. Impact evaluation on the other hand is evaluating the kind of impact the risk might have if it were to happen. If the impact is huge enough, then it can be given priority focus to mitigate it. That however does not mean that small risks should not be considered for mitigation.

Further, Lamptey and Singh (n.d) postulates that planning response, documentation and tracking response as well as communicating risks are essential to feasible fraud prevention in the organization. Planning responses encompasses the responses mechanism to deal with the identified risk in order to neutralize the risk completely. Planning responses is therefore articulating step by step strategy of mitigating the risk. Documenting and tracking response involves putting the response down on paper or in a computer to recognize it and then tracking response helps the auditing department to know the extent of the risk mitigation. Finally, communicating the risk ensures that the entire organization is aware of the risk and can identify it whenever it manifest. It also ensures that the top management can make decision about the risk posed in a bid to completely neutralize the risk already identified and related risks even the ones yet to be identified.

2.1.6 The Concept of Audit Automation

Audit automation according to Aikins (2020) is the application of information technology like computer assisted audit in the process of auditing so as to mitigate the auditing risk in an organization. Technology is capable of removing human interface which makes it highly likely to reduce fraud and pilferages of financial resources within a given organization. The process of audit automation is however broad and it is only when the process is implemented and there is acceptability of technology in organization can the full benefits of audit automation be fully realized.

According to Schafer and Schafer (2018), the preeminent feature in audit automation is vision and strategy definition as well as building infrastructure to support automation. The auditing department must define the vision and the strategy to be followed. Strategy involves identifying where the organization is at present, where it wants to go and how it gets there in line with organization automation. Building infrastructure involves laying the technology foundation such as internet cables of mounting computer related infrastructure in the organization so that when the audit automation is finally implemented, there is a smooth integration and continuity of audit work.

Additionally, Mardian and Avianti (2019) postulates that training employees for automation skills, staff function allocation as well as monitoring and evaluation are dimensions inherent in proper audit automation implementation. Training employees for technology is crucial and helps with early adoption of technology for the overall wellbeing of the organization. Staff function allocation especially for the new framework of audit automation helps the organization to know

how the responsibility is allocated for easier structural flow. Monitoring and evaluation helps the organization to monitor the implementation and make adjustment where necessary so as to ensure that the objective of audit automation is attained as earlier planned by the audit department within the organization.

2.1.7 The Concept of Fraud Risk Management

Fraud risk management according to Hess and Cotrell (2016) are the procedure put in place to address both the impact and the likelihood of fraud risk happening in company. Fraud risk in an organization is an experience whereby an organization is likely to experience loss of both current and fixed assets in a way that is dishonest and lacks accountability (Hess and Cotrell, 2016)

According to Power (2013) fraud risk management includes adherence to procedures and identification of opportunities for improvement. Adherence to procedures is a facet of fraud risk management in which the organization procedures whether they are written in the organization manual or not are complied with by all employees in the organization so as to ensure that there are standard procedures of operation that can be verified and are not ambiguous. On the other hand, identification of opportunities for improvement helps the organization to continually improve on the risk mitigation to eliminate fraud and financial pilferages.

According to Madahet. al (2020), fraud risk management embodies effectiveness of systems, driving continual improvement as well as providing information to top management for management reviews and decision making. Effective systems are a credible risk mitigation mechanism while driving continual improvement helps the organization to maintain quality of the auditing function. Additionally, providing information to top management for decision

making ensures that the organization top management is in support of fraud risk management which in turn enhances corporate governance.

2.2 Empirical Review of Literature

Review of empirical literature tackles past studies conducted on the area for which the current study tries to investigate. It focuses on key variables of the study namely, internal audit planning, periodic risk assessment, as well as audit automation. The main reason for empirical review is to bring out the gaps the current study sets to seal.

2.2.1 Effect of Internal Audit Planning on Fraud Risk Management

Several studies have been done in relations to internal audit planning and fraud risk management. However, such studies have not focused on devolved systems of government on one hand, and have been contrasting in methodology and results, on the other hand. For instance, Meliyev (2017) studied the effect of audit planning on audit quality of Uzbekistan audit firms. Data was collected from the entire 34 audit firm working within Uzbekistan through the use of questionnaire. The results analyzed using OLS on all the 16 auditors indicated that there was a positive impact of all the three functions on audit quality. Error prevention function had least positive effect with 0.366849 coefficient, fraud prevention function had a coefficient of 0.433272 hence most effective while risk mitigation function had a coefficient of 0.379647 and was the second most powerful function. The study concluded there was a positive relationship between audit quality and audit planning and that audit planning enhanced audit quality.

Phornlaphatrachakorn (2019) investigated the effects of audit specialization on audit quality, audit planning and audit performance of tax auditors and certified public accountants in Thailand. 217 tax auditors and 243 certified public accountants were sampled. The results indicated that there was a significant effect of audit specialization on audit quality and audit planning. While audit planning has a significant impact on audit quality, audit performance is critically influenced by audit quality. Audit planning is not related to audit performance in the certified public accountants but it's related in the tax auditors. The results further revealed that while audit quality is a mediator of the research relationships, only tax auditors had audit planning as a research mediator.

Djanegara and Iriyadi (2017) sought to describe audit strategy in relation with audit quality as a response of the change of auditees' situation. This study was a case study of the Supreme Audit Institution of Indonesia. Using analytical and descriptive approach centered on secondary data and interview, the results indicated that audit quality was well maintained through performance audits during the transition period in 2013-2015, including enhancement of auditor competence and independence. Performance audit findings was showed to assist auditor in focusing on high potential risks area of material misstatements while the recommendations from the performance audit results was found to assist auditees in improving financial reporting quality.

Bani-Ahmed and Al-Sharairi (2014) analyzed the impact of the audit process planning on the effectiveness of total quality management in Jordan. For the purpose of the study, a questionnaire which were distributed to (110) external auditors was designed with a return rate of 70%. Multiple regression was used to test the hypotheses. The study found that all the independent variables had a significant relationship on

total quality management effectiveness. Preparing audit strategy variable had the highest impacts.

Muchiri and Jagongo (2017) explored how internal audit function relate with financial performance in the Kenya Meat Commission. Primary data was collected using close and open ended questionnaires and was qualitative in nature. The researcher analyzed the data using regression analysis, descriptive statistics and time series. Results illustrated that internal auditing is crucial in the financial performance. However, the research findings showed that there was an insignificant relationship between the existence of internal audit functions and financial performance at the organization. That is, return on investment and profitability is not influenced by the existence of internal auditing.

Momanyi and Ngacho (2018) assessed the influence of auditing strategy on the performance of public universities in Kenya. The study embraced descriptive survey research design with a target population of 1569 top and middle level employees from twenty nine public universities. The research achieved 407 sample size. The findings of the study revealed that the relationship between auditing strategy and organizational performance is significant and moderate in the Kenya public universities. Further, the study showed that with a mean of 1.66, the respondents disagreed that the attributes of auditing strategy in Kenya public universities are not implemented.

From the above mentioned studies, it is evident that audit planning effectiveness in fraud risk management within the context of devolved government systems have been overlooked. Studies Bani-Ahmed and Al-Sharairi, 2014; Meliyev,

2017; Phornlaphatrachakorn, (2019) have focused on auditors in audit firms and not internal auditors in devolved systems of government. Similarly, whereas Meliyev (2017) as well as Djanegara and Iriyadi (2017) found positive and significant relationships between components of audit planning and dimensions of fraud risk management, findings in Phornlaphatrachakorn (2019), however, showed that audit planning is related to audit performance in the tax auditors, but not the certified public accountants. Moreover, other researchers Momanyi & Ngacho (2018); Muchiri & Jagongo (2017), besides focusing on public organizations away from devolved systems, explored on how audit planning influence financial performance and not fraud risk management. It was therefore significant to gather the views of operational managers responsible for task activities related to finances in the County Government of Kisumu to investigate the influence of audit planning on fraud risk management.

2.2.2 Effect of Periodic Risk Assessment on Fraud Risk Management

Studies have been conducted on the area of periodic risk assessment and fraud risk management. In USA, Carcello, Eulerich, Masli and Wood (2020) examined whether internal auditing provides value to organizations by risk reduction. This study compared risk changes among audited business units and matched non-audited units within the same company. Through this design, it enabled for isolation of the significance of an internal audit while holding constant changes in risk brought about by time period and the organization. Based on ratings from the managers of audited and non-audited units, findings indicated that managers of audited units perceive a greater performance increase and a decline in risk compared to heads of non-audited units. Findings further revealed

that higher risk reduction and overall improved performance are associated with organizations that are used as training ground for the management and have had a quality assurance.

In Hungary, Fortvingler and Szivos (2016) examined how auditors perform fraud risk assessment by applying either the decomposition or traditional methods to different setting level of perceived risk. The study similarly investigated how risk assessment outcome influence the audit planning phase. The members were informed about the online survey with the help of The Chamber of Hungarian Auditors assisted. Responses were electronically collected with sample size of 61. The findings proved that auditors' sensitivity to fraud cues between high and low conditions of risk was enhanced significantly using the decomposition method than using the traditional risk audit method. Further, higher propensity to consult with forensic experts was more enhanced by perception of fraud risk. The study finally indicated also that the level of fraud risk assessed has significant impact on internal structure of total hours allocated to the audit along with the internal structure.

Alzeban and Gwilliam (2014) studied factors influencing internal audit effectiveness in Saudi Arabia. Data was collected from 79 public sector organization with a sample size of 239 internal auditors and 203 managers. The relationship between internal audit effectiveness and five principal factors was examined using multiple regression analysis. The study findings revealed that there was effectiveness in the functions of internal audit from both internal auditors' and managements' perspective. By having an independent internal audit department, engaging trained and experienced staff, allocating enough resources, there is a link in management support.

Nnam and Eneh (2018) explored the risk assessment practices to determine the presence and therefore the impact of these practices of some selected firms in Nigeria. The targeted population consisted of firms audited by the big four audit firms (KPMG, E&Y, PWC & AWD) and listed on the Nigeria stock exchange. Four internal control and 2 senior management staff were selected through the use of judgment sampling. Five likert scaled questionnaire was used to collect the data responses while the hypotheses were tested using logistic regression. The findings revealed that risk assessment and fraud has a positive significant relationship.

Chepkoech and Rotich (2017) investigated the effect of risk management process on motor insurance fraud in Kenya. A target population of thirty three motor vehicle insurance companies were selected and used a descriptive research design for the study. The study established that the relationship risk assessment, risk monitoring, risk identification was significant in Kenya Motor Insurance fraud. According to the regression results, it concludes that dependent variables influenced Motor Insurance fraud. Another study by Obonyo (2017) sought to establish the extent to which internal audit practices contributes to success of fraud risk management in all State Corporations in Kenya. The findings of the study revealed that when all the variables of internal audit practices, risk exposure periodic assessment, fraud policy, prevention of fraud and fraud detection when combined, lead to fraud risk management success in Kenya State Corporation. In another study, Koech (2018) sought to determine the relationship between risk assessment fraud detection and prevention at the University of Eldoret. The study used descriptive survey research design with target population 34 internal auditors and accountants. The researcher collected primary data through the use

of structured questionnaires while data was analyzed using inferential and descriptive statistics. Findings concluded that fraud detection and prevention influenced risk assessment ($\beta_1 = 0.133$; $p < 0.05$) positively and significantly.

Based on aforementioned studies, it is worth to note that the correlation between periodic risk assessment and fraud risk management in the context of devolved government units has been overlooked. Studies Alzeban and Gwilliam (2014); Nnam and Eneh (2018) have involved public organizations in their investigations of periodic risk assessment. Other studies by Fortvingler & Szivos (2016); Nnam & Eneh (2018) have laid emphasis on how effective auditors in big audit firms carry out fraud risk assessment. Furthermore, the studies only focused on how single dimensions of periodic risk assessment affect fraud risk management. It follows that the studies left out how dimensions namely, identifying the risk, impact evaluation, planning response, documenting and tracking response, as well as staff function allocation and how they collectively affect fraud risk management. For such reason, the effect of periodic risk assessment on fraud risk management in regard to the named dimensions in Kisumu County government formed the focus of the current study.

2.2.3 Effect of Audit Automation on Fraud Risk Management

Empirical studies have also been done on the area of audit automation and fraud risk assessment. For instance, Aikins (2020) examined the effects of audit automation like the uses of Computer Assisted Audit Techniques on successful implementation and performance measures integration into government internal audit management. The research study focused on auditors in the USA local government. The findings of

the results reveal that successful performance measures integration into ongoing management of audit is influenced by use of Computer Assisted Audit Technique. Also, successful implementation and performance measures integration into management of audit are influenced by posting audit reports on audit websites, dedicated audit information staff and by use of audit time reporting systems.

On their part, Ghanoum and Alaba (2020) explored how artificial intelligence integrated in auditing affect the process of auditing in Sweden. The study was qualitative in nature and obtained data through a semi-structured interview. The target population was auditors from Sweden auditing firms that have implemented in their audit process the use of AI-based tools. The findings of the study agreed that compliance with standards and increased professionalism was effectively enhanced in all audit process stages through the use of AI systems. AI-enabled auditing systems was preferred as per the study unlike the use of traditional auditing tools.

Mbilla, Nyeadi, Akolgo and Abiire (2020) studied computerized accounting systems impact on financial reports quality of Ghana banks. Survey method was used to collect data with a population of all the banks listed on the Stock Exchange of Ghana. The research that was quantitative in nature was analyzed using Statistical Package for Social Sciences (SPSS) programming. The findings of the study established that a unit increment in automated computerized accounting system with a zero autonomous factors lead to financial report quality of the banks increment with about 0.50.

Otoko (2016) assessed the effect of computerization in relation to risk based internal audit at Homabay County Government in Kenya. To best explain the explicit occurrence in its modern measures, contemporary tendencies and connections among dissimilar aspects at the present, the study adopted descriptive survey research. The target population constituted of 60 respondents who were relationship officers/managers, finance officers, the information technology officers, internal auditors and accountants. Structured and unstructured questionnaires to all the respondents was administered. The results of the study indicated that risk based internal audit over risk profiling, risk assessment/valuation, auditing staffing and yearly risk based audit planning should be enhance accountability and transparency in computerized environment, hence financial procedures enhancing.

Much as the foregoing studies have shown extant literature on automation in the accounting system including auditing, audit firms and banking sector form the major context of focus. Similarly, most of the studies have targeted auditors as respondents and not necessarily persons who supervise tasks prone to financial fraud risks. This is as opposed to devolved systems where automation in the financial departments including audit sections and officers who oversee tasks related to financial risks are also vital. Studies by Aikins(2020); Ghanoum and Alaba(2020); Mbilla et al, (2020) targeted auditors and revealed positive outcome on financial performance and quality in financial reporting without mentioning any relationship with fraud risk management. Closer to Kisumu, an earlier study by Otoko (2016) fell short of revealing how audit automation relates with fraud risk management. Moreover, it is equally important to highlight key dimensions of audit automation such as vision and strategy definition, building infrastructure to support automation, training for skills, staff function allocation, as well as

monitoring and evaluation collectively influence fraud risk management. Therefore, the effect of audit automation on fraud risk management in regard to the named dimensions in Kisumu County formed one of the objectives of the current study.

2.3 Summary of literature and Knowledge gaps

This section reviewed three theoretical models which are: Credibility theory, Policeman theory, as well as Technology Acceptance Model and their respective assumptions tied to the variables of the study. The theories therefore mesh well with the variables of the study and that's the reason they have been used in the study.

The study has also reviewed empirical literature and gaps exposed. For example, the studies reviewed have methodological limitations like the use of a sample size that is small hence limit generalization, the use of experimental design that can be affected by artificial environment and hence compromise the credibility of generalization, the use of qualitative approach which has procedural problems. The studies reviewed have also not looked at three key variables which are internal audit planning, periodic assessment, as well as audit automation and how the three variables and dimensions thereto collectively affect fraud risk management in Kisumu County government hence knowledge gap that the current study intended to fill.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This section looked at research methodology that the study relied on. In particular, it addressed research design, target population and area of the study. It also looked at sampling design and data collection and procedure. Further, it addressed data analysis procedures and ethical considerations.

3.2 Research Design

The study used correlational research design. Correlational research design according to Saunders, Thornhill and Lewis (2012), helps in making inferences between two variables and draw generalization hence fulfilling the purpose for which a study was set. The current study used inferential statistics to compare the relationship between internal audit practices and fraud risk management. For such reason, correlational research design was deemed appropriate.

3.3 Area of the Study

The area of the study was Kisumu County Government. It is among the 47 Counties in Kenya lying within longitudes latitudes 0°20' south and 0°50' south and 35° 20'E and 33° 20'E. Kisumu County has seven Sub-counties which are Kisumu Central, Kisumu West, Kisumu East, Nyakach, Nyando, Muhoroni and Seme. The people of Kisumu County are largely small scale traders. Some work in government bodies in the County, County government, and in private enterprises. Others are fishermen in Lake Victoria. Kisumu city is the major city in the entire western Kenya with an international airport and good coverage of road network that links

Kisumu with her neighbors. Kisumu County among the 47 devolved units and is headed by a governor. The senator represents the County at the national senate while the seven members of parliament represent the County in the national assembly (KBBS, 2019). There are alleged cases of funds misappropriation while some have been confirmed by relevant government bodies with media reports putting the County in the spotlight on corruption cases.

3.4 Target Population

The study targeted operational managers in charge of financial operations in the County Government of Kisumu. The operational managers were targeted because they supervise task activities related to finances, including fraud risk management. The researcher therefore considered them to be capable of answering questions related to how internal audit practices affect fraud risk management in the County Government of Kisumu. According to records available in County Board of Kisumu, there are 112 operational managers in charge of divisional operations as shown in Table 3.1.

Table 3.1: Target Population Distribution

Divisions	Target Population
Finance Division	70
Supply Chain Management Division	12
HRM Division	20
ICT Division	10
Total	112

3.4.1 Sample Size and Technique

The study used census method to include all the 112 operational managers as the study sample. Nanjundeswaraswamy and Divakar (2021) explain that when a population size is small, then it is suitable to consider the entire population as the sample. Nanjundeswaraswamy and colleague contend that this method is very suitable because of its accuracy and preciseness. The current study thus used all the target population for a reliable generalization of findings.

3.5 Data Collection Procedure and Instrumentation

3.5.1 Data Collection Procedure

The study obtained the necessary approvals from the university before data collection was started. The researcher proceeded to the county offices for familiarization visit and to identify key individuals that could assist with collecting filled in questionnaires. On the material day, the study distributed questionnaires to the respondents accompanied by approval letter from Maseno University to give the process legitimacy. The study thereafter collected the filled in questionnaires for purposes of analysis.

3.5.2 Instrumentation

The study used questionnaire to collect primary data. Saunders et.al (2012) points out that questionnaires are suitable for a quantitative study because it collects quantitative information that can be reviewed quantitatively. Additionally, questionnaire also saves time. Given that the study was conducted in a given instant and not a long period of time, questionnaire ensured that time scope of the study is respected. This is because questionnaires can easily be dropped and picked when they have been filled in. The questionnaire administered was divided into 5

sections. Section A handled demographic information of study respondents, while section B Focused on internal audit planning, section C handled periodic risk assessment questions, section D looked at audit automation while section E dealt with fraud risk management questions. The questionnaire was scored from 1 to five in a five point Likert scale where 5 was the highest and 1 the lowest.

3.5.3 Pilot Testing

The study conducted pilot testing at the County Government of Homa Bay which also forms one of the 47 counties in Kenya. A total of 11 operational managers were selected from departments which handle finances for the pilot testing. The purpose of the pilot test was to record the time that the questionnaire was answered for purposes of planning. It also tested how best the questions were understood and corrections made before the actual collection of data collection.

3.5.4 Validity of the Study

According to Aila and Ombok (2015), validity is the degree that an instrument actually measures what it is supposed to measure. Content validity is ensured through literature review by predicating the items of the literature review on the study concepts. As such, the study ensured that the study items were based on the study concepts so as to ensure validity of the content.

3.5.5 Reliability of the Study

Reliability of instrument is the degree to which the instrument actually measures what it is intended to measure on repeated trials, Meller (2001).Cronbach's alpha was used to test the

reliability and the internal consistency of the data items. According to Mugenda and Mugenda (2008), a scale of 0.70 or above suggests that there is high degree of reliability. All variables yielded reliability of 0.80 and above: fraud risk management (0.88); audit planning (0.89); periodic risk assessment (0.86), and audit planning (0.84). The overall reliability of the questionnaire instrument with 20 items was 0.87, meaning that the questionnaire instrument was reliable. Reliability test result is presented in Table 3.2.

Table 3.2: Reliability Test Results

Variable	Number of Items	Reliability
Fraud Risk Management	5	0.88
Audit Planning	5	0.89
Periodic Risk Assessment	5	0.86
Audit Automation	5	0.84
Total	20	0.8675

3.6 Data analysis Procedures

The study collected primary data for analysis. The study used both descriptive and inferential data analysis techniques. For descriptive data analysis, the study used mean and standard deviation while for inferential statistics, the study used regression and correlation. The model specification for regression was as follows:

$$Y_i = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_{3i} + \epsilon \dots \dots \dots \text{Eq. 3. 1}$$

Where

β_0 –Is the constant or intercept

β_i (i=1,2,3)-Are the regression coefficients or change induced in Y by each X_i

X_1 - Independent variable internal audit planning

X2- Independent variable periodic risk assessment

X3- Independent variable audit automation

Y- Dependent variable-fraud risk management

ϵ - Is the error component.

3.7 Ethical Consideration

In regard to ethical consideration, the study obtained approvals from the University school of post graduate studies to necessitate data collection. Informed consent is a salient feature in research globally. The researcher thus ensured that the consent of the participants was obtained. To that effect, every questionnaire was accompanied by a letter from the researcher explaining consent and the ability of respondents to withdraw from the study should they want to. However, the researcher emphasized that the study was only for purposes of academics and there were no negative consequences to the study participants regardless of their opinion. The researcher also ensured that all the works used were cited and references to eliminate instances of plagiarism.

CHAPTER FOUR

RESULTS, INTERPRETATIONS AND DISCUSSIONS

This section presents data analysis, results, interpretation and discussions of the study.

The first section provides demographic characteristics of the respondent of the study, while the second section gives out the results and discussions of this research.

4.1 Response Rate

The researcher distributed 112 questionnaires to sampled operational managers in the County and after successive visits to the offices of the managers, 100 fully filled up questionnaires were retrieved. This represented 89.3% questionnaire return rate. This was considered as an appropriate return rate since it surpassed the 50% recommended in Creswell (2014) for analysis. All the divisions targeted had a return rate surpassing 80%. The finance division returned 63 completely filled up questionnaires out of 70 (90%); supply chain management division returned 10 out of 12 questionnaires (83.3%); human resource management division returned 18 out of 20 questionnaires (90%), and ICT division returned 9 out of 10 (90%) fully filled up questionnaires. Table 4.1 presents questionnaire response rate.

Table 4.1: Questionnaire Response Rate

Divisions	Distributed Questionnaires	Returned Questionnaires	Percent
Finance Division	70	63	90
Supply Chain Management	12	10	83.3
HRM	20	18	90
ICT	10	9	90
Total	112	100	

Source: Survey data (2021)

4.2 Demographic Characteristics of the Sample

With regards to the demographic characteristics of the study respondents, the researcher assessed distribution of respondents by gender, age, education level, and period of service in the County Government. Characteristics of respondents by gender is presented in Table 4.2.

Table 4.2: Gender Distribution of Study Respondents

Gender	Frequency	Percent
Male	76	76
Female	24	24
Total	100	100

Source: Survey data (2021)

Table 4.2 illustrates that majority (76%) of the sampled operational managers were males while 24% were females. This tends to suggest that males dominate supervisory positions in the County Government of Kisumu.

Part of the demographic characteristics of the study respondents assessed was age distribution of the operational managers. Table 4.3 presents the distribution of respondents by age.

Table 4.3: Distribution of Respondents by Age

Age (Years)	Frequency	Percent
21 - 30	1	1
31 - 40	13	13
41 - 50	27	27
51 and above	59	59
Total	100	100

Source: Survey data (2021)

It is illustrated in Table 4.3 that majority (59%) of the sampled operational managers were of 51 years and above age group. This implies that the respondents were mature enough to comprehend issues of importance in an organization such as fraud risk management. Table 4.3 further illustrates that 27% of the sampled respondents were of between 41 and 50 years of age while 13% were 31 – 40 years of age, and 1% were of between 21 and 30 years of age. With over 86% of the sampled respondents being above 41 years of age, it was expected that the respondents were persons of mature mindsets to offer honest opinions regarding how internal audit practices affect fraud risk management in the County Government.

Another part of the respondents’ demographic characteristics assessed was education level of sampled operational managers in the County Government of Kisumu. This was categorized as secondary, tertiary, university undergraduate, and university post graduate levels. Table 4.4 presents the distribution of respondents by education levels.

Table 4.4: Distribution of Respondents by Education Level

Level of Education	Frequency	Percent
Secondary	00	00
Tertiary	1	1
University Undergraduate	29	29
University Post Graduate	70	70
Total	100	100

Source: Survey data (2021)

Table 4.4 illustrates that majority (70%) of the sampled respondents held university post graduate degrees including masters and doctorate degrees. This finding suggests that the sampled operational managers in the respective divisions had a fairly high levels of

education hence were expected to have sufficient skills and competencies to manage risks associated with finance through internal audit practices. Table 4.4 additionally illustrates that 29% held undergraduate levels of education while 1% of them had tertiary level of education. None of the respondents held secondary level of education. In overall, the education level of the sampled respondents were considered to be high, with over 99% being of undergraduate and above level of education.

The researcher additionally assessed the number of years that the sampled respondents have worked at the County Government of Kisumu. This was important since it was expected to point at their understanding of issues related to fraud risk management at the county. Table 4.5 presents the distribution of respondents by duration of service at the county.

Table 4.5: Distribution of Respondents by Number of Years of Service in the County

Duration of Service (Years)	Frequency	Percent
0 - 1	2	2
1 - 5	53	53
6 - 10	45	45
Total	100	100

Source: Survey data (2021)

Results presented in Table 4.5 illustrates majority (53%) of the sampled operational managers have served in the county for between one and five years while 45% of them have been in the service of the County Government of Kisumu for between 6 and 10 years. This implies that more than 98% of the respondents have been working

in the county for between 2 years and 10 years. This tends to suggest that the sampled respondents had sufficient experience in the affairs of the county to comprehend issues such as how internal audit practices relate with fraud risk management.

4.3 Internal Audit Practices and Financial Fraud Risk Management

The main objective of the study was to determine the effect of internal audit practices on fraud risk management in Kisumu County Government. Internal audit practices were categorized as internal audit planning, periodic risk assessment and audit automation. The first part of the study questionnaire that was used to collect data focused on internal audit planning and fraud risk management.

4.3.1 Audit Planning and Fraud Risk Management

The first objective sought to determine the effect of audit planning on fraud risk management at the County Government of Kisumu. To this end, the researcher developed and administered an instrument with a 5 point likert scale. The respondents were therefore requested to state the levels of their agreement towards statements presented in the instrument as: **5= Strongly Agree 4=Agree 3 Neutral 2=Disagree 1=Strongly Disagree**, based on their opinion on how audit planning affect fraud risk management. Table 4.6 presents the findings on effect of audit planning on fraud risk management.

Table 4.6: Effect of Audit Planning on Fraud Risk Management

No	Audit planning practices	N	1 (f)	2 (f)	3 (f)	4 (f)	5 (f)	M	SD
1	The audit has set objectives thus leading to improved fraud risk management	100	7 (7)	11 (11)	16 (16)	30 (30)	36 (36)	3.94	.163
2	There exists adequate budget plans for audit thus leading to improved fraud risk management	100	5 (5)	9 (9)	37 (37)	26 (26)	23 (23)	3.17	.138
3	There exists ways of determining alternative causes thus improving fraud risk management	100	11 (11)	30 (30)	24 (24)	23 (23)	12 (12)	2.84	.134
4	There exists proper forecasting in the planning process thus improving fraud risk management	100	8 (8)	8 (8)	12 (12)	47 (47)	25 (25)	4.28	.142
5	We have satisfactorily implemented the audit plan thus improving fraud risk management	100	18 (18)	37 (37)	16 (16)	17 (17)	12 (12)	2.18	.129
Overall Mean and SD								3.282	.1412

Table 4.6 illustrates that the sampled respondents neither agreed nor disagreed that audit planning practices (M=3.28; SD=.141) has been effective in fraud risk management. This tends to imply that audit planning might be effective in fraud risk management to some operational managers and not others. Specifically, the respondents neither agreed nor disagreed that there is adequate budget plans for audit thus leading to improved fraud risk management (M=3.17; SD=.138), and that there exists ways of determining alternative causes thus improving fraud risk management (M=2.84; SD=.134). This tends to suggest that adequacy of budget plans for audit and existence of ways of determining alternative causes have improved fraud risk management heterogeneously.

Table 4.6 also illustrates that the sampled respondents agreed that there exists proper forecasting in the planning process thus improving fraud risk management (M=4.28; SD=.142), and that the audit has set objectives thus leading to improved fraud risk management (M=3.94; SD=.163). This finding suggests that proper forecasting in the planning process and set objectives for audit exercise have been effective in fraud risk management in the county. Findings in Table 4.6 further reveals the sampled respondents disagreed that they have satisfactorily implemented the audit plan thus improving fraud risk management (M=2.18; SD=.129). This finding seems to imply that implementation of audit plans in the county have not been satisfactory and have not contributed effectively to fraud risk management.

Findings in Table 4.6 illustrates that audit planning practices seem to prevent, search and discover fraud within some division and fail to do the same in others. This seems to contradict the articulations in the Policeman Theory developed by Theodore Limperg which suggested it is the responsibility and duty of auditors to search, discover, and possibly prevent fraud occurrences, (Owolabi & Olagunju, 2020). In addition, the fact that audit planning is effective in enhancing fraud risk management in some division and not in others in the county renders financial statements not to be viewed as universally credible. This also seem to counter tenets of Credibility Theory postulated by Thomas Bayes which stipulates those financial statements certified by auditors gain more credibility because it is believed the auditors must have taken 'reasonable care and skills to examine the documentary evidence and the accounting records before ratifying them Omodero & Okafor, (2020). Failure of audit planning in some division to effectively enhance fraud risk management therefore taints credibility of financial statements of the County Government of Kisumu.

The researcher was also able to correlate the mean of components of audit planning and those of fraud risk management. Table 4.7 presents result of Pearson’s correlations between audit planning and fraud risk management.

Table 4.7: Correlations between Audit Planning and Fraud Risk Management

		Fraud Risk Management	Audit Planning
Fraud Risk Management	Pearson Correlation	1	.126 ^{**}
	Sig. (2-tailed)		.001
	N	100	100
Audit Planning	Pearson Correlation	.126 ^{**}	1
	Sig. (2-tailed)	.001	
	N	100	100

****.** Correlation is significant at the 0.01 level (2-tailed).

Source: Research Data (2021)

Table 4.7 illustrates Pearson correlation between audit planning and fraud risk management is .126^{**}, $p < 0.01$ which is positive. It shows that there is a positive relationship between audit planning and fraud risk management. The correlation is significant at 0.01 level (2-tailed) $p < 0.01$. Thus there is a significant relationship between audit planning and fraud risk management. The null hypothesis that audit planning does not have a significant effect on fraud risk management at the County Government of Kisumu was therefore rejected.

Findings in Table 4.7 illustrates the significance of audit planning in fraud risk management. In this practice, auditing framework is properly planned, that is, articulating activities required in advance to achieve the auditing objective of the organization, Chowdhury & Shil(2019). The centrality of auditing planning is made manifest in their utility by the top management to make

management decisions that anchors the overall organization management. These findings tend to agree with Meliyev (2017) in a study done in Uzbekistan to examine the effect of audit planning on audit quality in case of audit firms which also showed that audit planning impacts on error prevention, fraud prevention, and risk mitigation. Another study done in Thailand by Phornlaphatrachakorn (2019) also showed that audit planning has an important impact on audit quality.

For the purposes of highlighting on how audit planning predict fraud risk management, the researcher carried out regression analysis. This was based upon the model defined as:

$$Y = \beta_0 + \beta_1 X + e$$

Where

Y – Fraud risk management (Dependent variable)

β_0 – Constant fraud risk management when audit planning is held constant

β_1 - Change in fraud risk management attributed to audit planning

e_t - error term

X – Coefficient of audit planning (Independent or Predictor Variable)

Table 4.8: Regression model summary

R	R Square	Adjusted R²	Std. Error
.528 ^a	.279	.276	4.942

Table 4.8 illustrates that the calculated R² is 0.279. This implies that audit planning explains 27.9% variations in fraud risk management. To understand how unit changes in audit planning relates with fraud risk management, further analysis to obtain beta coefficients were carried out as presented in Table 4.9

Table 4.9: Coefficients for Audit Planning and Fraud risk management

	Unstandardized Coefficients		Standardized	t	Sig.
	B	Std. Error	Coefficients		
(Constant)	.637	1.111		.573	.567
Audit Planning	.936	.102	.124	9.1765	.000

Table 4.9 shows that a unit change in audit planning leads to .936 change in fraud risk management. This change is significant ($p < 0.05$). If this statistics is substituted in the model,

$$Y = \beta_0 + \beta_1 X_1 + e$$

Then

$$Y = 0.637 + .936 (X): \text{ where } X = \text{audit planning.}$$

4.3.2 Periodic Risk Assessment and Fraud Risk Management

The second objective sought to determine the effect of periodic risk assessment on fraud risk management at the County Government of Kisumu. To this end, the researcher developed and administered an instrument with a 5 point likert scale. The respondents were thus requested to state the levels of their agreement towards statements presented in the instrument as: **5= Strongly Agree 4=Agree 3 Neutral 2=Disagree 1=Strongly Disagree**, based on their opinion on how periodic risk assessment affect fraud risk management. Table 4.10 presents the findings on effect of periodic risk assessment on fraud risk management.

Table 4.10: Effect of Periodic Risk Assessment on Fraud Risk Management

No	Statement	N	1 (f)	2 (f)	3 (f)	4 (f)	5 (f)	M	SD
1	We often appropriately identify risks hence enhance fraud risk management	100	4 (4)	8 (8)	13 (13)	35 (35)	40 (40)	4.49	.147
2	There is sufficient impact evaluation hence improving fraud risk management	100	10 (10)	25 (25)	18 (18)	29 (29)	18 (18)	3.26	.152
3	There is often efficient planning response thus improving fraud risk management	100	4 (4)	6 (6)	13 (13)	47 (47)	30 (30)	4.51	.149
4	There is proper documentation and tracking response thus improving fraud risk management	100	5 (5)	11 (11)	34 (34)	24 (24)	26 (26)	3.42	.145
5	There is proper communication of risk to top management thus improving fraud risk management	100	6 (6)	12 (12)	49 (49)	21 (21)	12 (12)	3.18	.156
Overall mean and SD		100						3.77	.150

Table 4.10 illustrates that the sampled respondents agreed that periodic risk assessment has been effective in enhancing fraud risk management in the county (M=3.77; SD=.150). The respondents specifically agreed that there is often efficient planning response thus improving fraud risk management (M=4.49; SD=.147), and the fact that they often appropriately identify risks has enhance fraud risk management in the county (M=4.49; SD=.149). It is emerging from these findings that efficient planning response and appropriate identification of risks have aided fraud risk management in the county. Table 4.10 further illustrates that the respondents neither agreed nor disagreed that there is sufficient impact evaluation hence improving fraud risk management (M=3.26; SD=.152); there is proper documentation and tracking response thus

improving fraud risk management ($M=3.42$; $SD=.145$), and that there is proper communication of risk to top management thus improving fraud risk management ($M=3.18$; $SD=.156$). These findings tend to imply that impact evaluation, documentation and tracking response, and communication of risk to top management have been effective in fraud risk management in some divisions while in other divisions, they have not been effective.

The overall finding in Table 4.10 that periodic risk assessment is effective in fraud risk management signifies the point that this practice is capable of mitigating fraud risks, thwarting them before they occur. This is in line with articulations in policeman theory which places the auditor in the role of police officer at the door step of organization charged with detection and prevention of fraud Owolabi & Olagunju (2020). Hayes, Dassen, Schilder and Wallage (2005) assert that it is the responsibility and duty of auditors to search, discover, and possibly prevent fraud occurrences in companies. Policeman theory blends well with the current study whose variable is periodic risk assessment. The practice of periodic assessment in auditing is responsible for identifying risk and communicating mitigation mechanism for purposes of protecting organization assets.

The finding that periodic risk assessment is effective in detecting fraud also puts the auditor in the shoe of the company inspector charged with exercising due persistence before communicating a genuine and reasonable view supposition of financial statements Omodero & Okafor(2020). This observation concurs with the tenets of credibility theory which places the primary function of the internal auditor to be the addition of credibility to the financial statements Salifu & Mahama (2015)

The researcher was also able to correlate the mean of components of fraud risk management and those of periodic risk assessment. Table 4.11 presents result of Pearson’s correlations between periodic risk assessment and fraud risk management.

Table 4.11: Correlations between Periodic Risk Assessment and Fraud Risk Management

		Fraud Risk Management	Periodic Risk Assessment
Fraud Risk Management	Pearson Correlation	1	.214**
	Sig. (2-tailed)		.001
	N	100	100
Periodic Risk Assessment	Pearson Correlation	.214**	1
	Sig. (2-tailed)	.001	
	N	100	100

****.** Correlation is significant at the 0.01 level (2-tailed).

Source: Research Data (2021)

Table 4.11 illustrates Pearson correlation between periodic risk assessment and fraud risk management is .214**, $p < 0.01$ which is positive. It shows that there is a positive relationship between periodic risk assessment and fraud risk management. The correlation is significant at 0.01 level (2-tailed) $p < 0.01$. Thus there is a significant relationship between periodic risk assessment and fraud risk management at the county.

For the purposes of highlighting on how periodic risk assessment predicts fraud risk management, the researcher carried out regression analysis. This was based upon the model defined as:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + e$$

Where

Y – Fraud risk management (Dependent variable)

β_0 – Constant fraud risk management when periodic risk assessment is held constant

Δ - Change in fraud risk management attributed to periodic risk assessment

e_t - error term

X – Coefficient of periodic risk assessment (Independent or Predictor Variable)

Table 4.12 presents summary of regression results.

Table 4.12: Regression model summary

R	R Square	Adjusted R²	Std. Error
.869 ^a	.755	.752	2.724

Table 4.12 illustrates that the calculated R² is 0.755. This implies that periodic risk assessment explains 75.5% variations in fraud risk management. To understand how unit changes in periodic risk assessment relates with fraud risk management, further analysis to obtain beta coefficients were carried out as presented in Table 4.13.

Table 4.13: Coefficients for Periodic Risk Assessment and Fraud risk management

	Unstandardized Coefficients		Standardized	t	Sig.
	B	Std. Error	Coefficients		
(Constant)	.482	.219		2.2009	.215
Periodic Risk Assessment	1.188	.198	.214	6.0000	.000

Table 4.13 shows that a unit change in periodic risk assessment to 1.188 change in fraud risk management. This change is significant ($p < 0.05$). If this statistics is substituted in the model,

$$Y = \beta_0 + \beta_2 X_2 + e$$

Then

$$Y = 0.482 + 1.188 (X): \text{ where } X = \text{periodic risk assessment.}$$

With 75.5% of variations in fraud risk management being explained by periodic risk assessment by the internal audit, it can be argued this is a single practice which can significantly help in fraud detection and prevention in an organization. Earlier studies have also observed that risk assessment is a significant predictor of financial performance among different organizations. In agreement with periodic assessments, Carcello et al (2020) revealed in a study done in USA that companies which conduct quality assurance review are associated with greater reductions in risk and improved overall performance. Similar to this, Nnam and Eneh (2018) found a positive and significant relationship between risk assessment and fraud management among Nigerian companies. Likewise to earlier studies, it can be deduced that periodic risk assessment by the internal audit has been effective in managing fraud risk at the County Government of Kisumu.

4.3.3 Audit Automation and Fraud Risk management

The third objective sought to determine the effect audit automation on fraud risk management at the County Government of Kisumu. The respondents were thus requested to state the levels of their agreement towards statements presented in the instrument as: **5= Strongly Agree 4=Agree 3 Neutral 2=Disagree 1=Strongly Disagree**, based on their opinion on how audit automation affect fraud risk management. Table 4.14 presents the findings on effect of audit automation on fraud risk management.

Table 4.14: Effect of Audit Automation on Fraud Risk Management

Audit Automation and fraud risk management	N	1 (f)	2 (f)	3 (f)	4 (f)	5 (f)	M	SD
1 Our vision and strategy definition have improved fraud risk management	100	11 (11)	8 (8)	52 (52)	15 (15)	14 (14)	2.63	.153
2 We have well-built infrastructure supporting automation hence improving fraud risk management	100	16 (16)	52 (52)	15 (15)	8 (8)	9 (9)	2.16	.148
3 We have well trained employees in ICT skills thus improving fraud risk management	100	6 (6)	9 (9)	23 (23)	32 (32)	30 (30)	3.85	.145
4 We have adequate staff function allocation in technology hence improving fraud risk management	100	8 (8)	24 (24)	30 (30)	22 (22)	16 (16)	3.17	.152
5 We often conduct monitoring and evaluation after implementing automation thus improving fraud risk management	100	19 (19)	29 (29)	28 (28)	13 (13)	11 (11)	2.27	.149
Overall Mean and SD							2.82	.149

Table 4.14 illustrates that the sampled respondents neither agreed nor disagreed that audit automation in the County Government of Kisumu has been effective in fraud risk management (M=2.82; SD=.149). This finding implies that audit automation has been effective in fraud risk management in parts of some divisions and ineffective in others. Table 4.14 specifically reveals that the sampled respondents neither agreed nor disagreed that the vision and strategy definition of the county have improved fraud risk management (M=2.63; SD=.153), and that divisions in the County Government of Kisumu have adequate staff function allocation in technology hence improving fraud risk management (M= 3.17; SD=.152). On the other hand, the sampled operational managers disagreed that the divisions have well-built infrastructure supporting automation hence improving fraud risk management (M=2.18; SD=.148), and that the divisions often conduct monitoring and evaluation after implementing automation thus improving fraud risk management (M=2.27; SD=.149). The respondents however agreed that they have well

trained employees in ICT skills capable of improving fraud risk management (M=3.85; SD=.145). These findings suggest that all the initiatives of enhancing fraud risk management through audit automation seem to be ineffective except for ICT skills possessed by the employees. This tends to suggest that automation has been partly accepted and adopted by most of the user departments. These revelations seem to be in line with articulations in the Technology Acceptance Model which argues that acceptance of new technologies is a cognitive process on other users yet profoundly affects the level of usage among other organization members, Assaker (2020).

The researcher was also able to correlate the mean of components of fraud risk management and those of audit automation. Table 4.15 presents result of Pearson’s correlations between audit automation and fraud risk management.

Table 4.15: Correlations between Audit Automation and Fraud Risk Management

		Fraud Risk Management	
		Management	Audit Automation
Fraud Risk Management	Pearson Correlation	1	.134**
	Sig. (2-tailed)		.001
	N	100	100
Audit Automation	Pearson Correlation	.134**	1
	Sig. (2-tailed)	.001	
	N	100	100

****.** Correlation is significant at the 0.01 level (2-tailed).

Source: Research Data (2021)

Table 4.15 illustrates Pearson correlation between audit automation and fraud risk management is .134**, $p < 0.01$ which is positive. It shows that there is a positive relationship between audit

automation and fraud risk management. The correlation is significant at 0.01 level (2-tailed) $p < 0.01$. Thus there is a significant relationship between audit automation and fraud risk management.

For the purposes of highlighting on how audit automation predict fraud risk management, the researcher carried out regression analysis. This was based upon the model defined as:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$$

Where

Y – Fraud risk management (Dependent variable)

β_0 – Constant fraud risk management when audit automation is held constant

β_1 - Change in fraud risk management attributed to audit automation

e_t - error term

X – Coefficient of audit automation (Independent or Predictor Variable)

Table 4.16: Regression model summary

R	R Square	Adjusted R²	Std. Error
.319 ^a	.102	.100	5.317

Table 4.16 illustrates that the calculated R^2 is 0.102. This implies that audit automation explains 10.2% variations in fraud risk management. To understand how unit changes in audit automation relates with fraud risk management, further analysis to obtain beta coefficients were carried out as presented in Table 4.17.

Table 4.17: Coefficients for Audit Automation and Fraud risk management

	Unstandardized Coefficients		Standardized	t	Sig.
			Coefficients		
	B	Std. Error	Beta		
(Constant)	.471	2.117		.223	.037
Audit Automation	.721	.137	.134	5.2628	.000

Table 4.13 shows that a unit change in audit automation to .721 change in fraud risk management. This change is significant ($p < 0.05$). If this statistics is substituted in the model,

$$Y = \beta_0 + \beta_3 X_3 + e$$

Then

$$Y = 0.471 + .721 (X): \text{ where } X = \text{Audit Automation.}$$

The study findings shows that audit automation explains 10.2% variation in fraud risk management. This tends to imply that the county has not put in place sufficient mechanisms to support adoption of computerized system in the internal audit function. This observation is in agreement with earlier study done in the USA by Aikins (2020) which revealed that Computer Assisted Audit Techniques can successful support integration of performance measures into ongoing audit management. However, findings that automation of audit has small effect on fraud risk management contradicts some earlier studies which have indicated that computerized accounting systems significantly influence performance. Ghanoum and Alaba (2020) agreed that the use of artificial intelligence systems enhance effectiveness in all stages of audit process in a study done in Sweden. Equally, Mbilla et al (2020) showed in a study that improvement in automated computerized accounting system significantly improves quality of financial reports of

banks in Ghana. It is therefore emerging that the county seems to be lagging in the acceptance of automation in the internal audit hence it's not benefiting in areas of fraud risk management to the maximum.

4.3.4 Fraud Risk Management

The last part of the study questionnaire assessed the dependent variable: fraud risk management at the County Government of Kisumu. To this end, the researcher developed and administered an instrument with a 5 point likert scale. The respondents were thus requested to state the levels of their agreement towards statements presented in the instrument as: **5= Strongly Agree 4=Agree 3 Neutral 2=Disagree 1=Strongly Disagree**, based on their opinion on the level of fraud risk management. Table 4.18 presents the results.

Table 4.18: The level of Fraud Risk Management

No	Level of fraud risk management at the county	N	1 (f)	2 (f)	3 (f)	4 (f)	5 (f)	M	SD
1	We have continuously observed adherence to procedures as fraud risk management strategy	100	8 (8)	10 (10)	16 (16)	30 (30)	36 (36)	4.16	.159
2	We continuously identify opportunities for improvement as fraud risk management strategy	100	5 (5)	7 (7)	27 (27)	24 (27)	37 (37)	3.82	.142
3	We often ensure effectiveness of the system as a fraud risk management strategy	100	9 (9)	11 (11)	24 (24)	38 (38)	18 (18)	3.59	.147
4	The county has been driving continual improvement as fraud risk management strategy	100	2 (2)	5 (5)	15 (15)	29 (29)	49 (49)	4.49	.158
5	We have been providing information to top management continuously for prudent decision making as a fraud risk management strategy	100	7 (7)	11 (11)	19 (19)	34 (34)	29 (29)	4.18	.149
	Overall Mean and SD							4.05	.151

Table 4.18 illustrates that the sampled respondents agreed that fraud risk management practices in place in the County Government of Kisumu are effective (M=4.05; SD=.151). This tends to suggest that the operational managers who handle finances have adopted procedures aimed at controlling risks associated with fraud. Specifically, the respondents agreed that the County has been driving continual improvement as fraud risk management strategy (M=4.49; SD=.158); the divisions have been providing information to top management continuously for prudent decision making as a fraud risk management strategy (M=4.18; SD=.149); the divisions have continuously observed adherence to procedures as fraud risk management strategy (M=4.16; SD=.159); the divisions continuously identify opportunities for improvement as fraud risk management strategy (M=3.82; SD=.142), and that the divisions often ensure effectiveness of the system as a fraud risk management strategy (M=3.59; SD=.147).

4.3.6 Relationship between Internal Audit Practices and Fraud Risk Management

A descriptive analysis was first done to establish the extent to which the sampled respondents view internal audit practices with regard to their contribution towards fraud risk management in the county. Table 4.19 presents the results of the descriptive analysis.

Table 4.19: Descriptive analyses of internal audit practices and fraud risk management

	N	Minimum	Maximum	Mean	Std. Deviation
Fraud Risk Management	100	1.00	5.00	4.05	.151
Audit Planning	100	1.00	5.00	3.28	.141
Periodic Risk Assessment	100	1.00	5.00	3.77	.159
Audit Automation	100	1.00	5.00	2.82	.149
Valid N (list wise)	100				

Table 4.19 indicates that the sampled respondents agreed that fraud risk management has been achieved by the County Government of Kisumu (M=4.05; SD=.151). Similarly, the respondents agreed that periodic risk assessment has been effective in fraud risk management in the county (M=3.77; SD=0.159). However, the sampled respondents neither agreed nor disagreed that audit planning (M=3.28; SD=.141) and audit automation (M=2.82; SD=.149) have been effective in fraud risk management. These findings tends to imply that whereas audit planning and audit automation are seen as effective in fraud risk management in some divisions, they are not effective in others. These findings also suggest that periodic risk assessments as carried out in the county has been effective in fraud risk management.

4.3.7 Model Summary

To determine the nature and direction of the relationship that exists between internal audit practices (audit planning, periodic risk assessment, audit automation) and fraud risk management at the County Government of Kisumu, the researcher proceeded to conduct stepwise multiple regression analysis. First an analysis was done to check how

well the model ($Y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + e$) could predict the effects of internal audit practices on fraud risk management at the county. This was carried out using analysis of variance (ANOVA). Table 4.20 presents the ANOVA.

Table 4.20: The Analysis of Variance Result

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	29.214	3	9.738	13.340	0.000 ^b
1	Residual	70.809	97	0.730		
	Total	100.023	100			

a. Dependent Variable: Fraud Risk Management

b. Predictor/Constant variables: Audit planning, periodic risk assessment, audit automation

Table 4.20 illustrates that internal audit practices under study are significant predictors of fraud risk management at the County Government of Kisumu {F=13.340, P<0.05}. The significance value of F in this case is 0.000, which is less than 0.05 (P<0.05). Thus, audit planning, periodic risk assessment, and audit automation practices are significant in explaining the variation in fraud risk management at the county. The relative importance of each coefficient of internal audit practices in predicting fraud risk management is presented in Table 4.21.

Table 4.21: Model of prediction using Multiple Regressions

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			
						F Change	df 1	df 2	Sig. F Change
1	.58631	.34375	.3357	.12011	.1009	8.018	3	95	.000

a

a. Predictors: (Constant), Audit Planning, Periodic Risk Assessment, Audit Automation

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.218	.173		12.8201	.000
	Audit Planning	.936	.102	.124	9.1765	.000
	Periodic Risk Assessment	1.188	.198	.214	6.0000	.000
	Audit Automation	.721	.137	.134	5.2628	.000

a. Dependent Variable: Fraud Risk

Management

Findings from the model in Table 4.21 present the actual influence of the coefficients of the independent variable (internal audit practices) on the dependent variable (fraud risk management) at the County Government of Kisumu. The unstandardized beta for audit planning is .936. This implies that audit planning causes .936 unit improvement in fraud risk management. Similarly, the unstandardized beta for periodic risk assessment is 1.188. This implies that improvement in periodic risk assessment can contribute 1.188 unit improvements in fraud risk management at the county. Equally,

the unstandardized beta for audit automation is .721. This implies that improvement in audit automation can contribute .721 unit improvements in fraud risk management at the county.

The regression equation $Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \varepsilon$, with the constant (β_0) being 2.218, the coefficient can be plugged into the formula to predict fraud risk management at the County Government of Kisumu as:

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \varepsilon$$

$$Y = 2.218 + (.936) X_1 + (1.188) X_2 + (.721) X_3$$

With R^2 of .34375, it can be deduced that 34.4% change in fraud risk management at the County Government of Kisumu is attributed to internal audit practices under this study. The remaining 65.60% of change in fraud risk management at the county may be attributable to other factors beyond this study.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

5.1 Summary of Findings

Based on the analysed data, the study presents summary of findings. The summary of study findings are presented in the sequence of study objectives.

5.1.1 Audit Planning and Fraud Risk Management

The study found that the sampled respondents neither agreed nor disagreed that audit planning practices ($M=3.28$; $SD=.141$) has been effective in fraud risk management (Table 4.6). The study also found that the correlation between audit planning and fraud risk management is positive and significant ($r = .126^{**}$, $p<0.01$) hence rejecting the null hypothesis that audit planning does not have significant effect on fraud risk management (Table 4.7). Findings also showed that the unstandardized beta for audit planning is .936 (Table 4.14).

5.1.2 Periodic Risk Assessment and Fraud Risk Management

The study found that the sampled respondents agreed that periodic risk assessment has been effective in enhancing fraud risk management in the county ($M=3.77$; $SD=.150$). It was additionally found that the correlation between periodic risk assessment and fraud risk management is positive and significant ($r = .214^{**}$, $p<0.01$), thus the null hypothesis that periodic risk assessment has no significant effect on fraud risk management is rejected. Similarly, the study found that the unstandardized beta for periodic risk assessment is 1.188.

5.1.3 Audit Automation and Fraud Risk Management

Table 4.10 illustrates that the sampled respondents neither agreed nor disagreed that audit automation in the County Government of Kisumu has been effective in fraud risk management ($M=2.82$; $SD=.149$) (Table 4.10). The study also found that the correlation between audit automation and fraud risk management is positive and significant ($r = .134^{**}$, $p<0.01$) hence null hypothesis that audit automation has no significant effect on fraud risk management is rejected (Table 4.11). In addition, the study findings showed that the unstandardized beta for audit automation is .721 (Table 4.14).

5.2 Conclusions

Based on the study findings, the researchers makes the following conclusions:

- i. Audit planning is effective in fraud risk management to some respondents, but not to others. The researcher also concludes that audit planning has a significant and positive relationship with fraud risk management, and causes .936 unit improvement in fraud risk management.
- ii. Periodic risk assessment has been effective in enhancing fraud risk management in the county. It is also concluded that the relationship between periodic risk assessment and fraud risk management is significant and positive. The study further concludes that improvement in periodic risk assessment can contribute 1.188 unit improvements in fraud risk management at the count.
- iii. Audit automation has been effective in fraud risk management to some respondents and ineffective to others. It is additionally concluded audit automation has a significant effect on fraud risk management. Further, the study

concludes that improvement in audit automation can contribute .721 unit improvements in fraud risk management.

5.3 Recommendations

Based on conclusions derived by the researcher, the researcher draws the following recommendations for improving internal audit practices and for further research.

5.3.1 Recommendations for Improvement

For improvement internal audit practices, the study recommends that:

- i. The study found that audit planning is effective in fraud risk management in some divisions, but not to others. To improve audit planning practice, the study recommends that benchmarking should be encouraged among the divisions with differing audit planning outcomes. This would ensure that best practices with regards to audit planning practices are emulated across all the divisions.
- ii. The study additionally found that periodic risk assessment has been effective in enhancing fraud risk management in the county, with a potential to contribute 1.188 unit improvements in fraud risk management at the county. The study recommends that more efforts should be put to streamline periodic risk assessment in each divisions in the county. This, in turn, stands to ensure the effectiveness of periodic risk assessment on fraud risk management is achieved.
- iii. The study further revealed that audit automation has been effective in fraud risk management in parts of divisions and ineffective in others. The study therefore recommends that all divisions should engage in benchmarking amongst themselves so that best practices derived from audit automation can be emulated across board. This

would ensure that all divisions benefit from effectiveness of audit automation on fraud risk management.

5.3.2 Recommendations for Further Research

In order to provide further literature in the field of internal audit practices and fraud risk management, the study recommends additional research in the following areas:

- i. The effect of audit plan implementation monitoring on fraud risk management in Kisumu County, Kenya
- ii. The effect of periodic risk assessment monitoring on fraud risk management in Kisumu County, Kenya
- iii. The effect of audit automation implementation monitoring on fraud risk management in Kisumu County, Kenya

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APPENDIX 1: LETTER OF INTRODUCTION



MASENO UNIVERSITY **SCHOOL OF GRADUATE STUDIES**

Office of the Dean

Our Ref: MSC/BE/00090/018

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Date: 16th November, 2021

TO WHOM IT MAY CONCERN

**RE: PROPOSAL APPROVAL FOR OUMA WINNIE ANYANGO —
MSC/BE/00090/018**

The above named is registered in the Master of Science in Finance degree programme in the School of Business and Economics, Maseno University. This is to confirm that her research proposal titled “Effect of Internal Audit Practices on Fraud Risk Management in Devolved Government Systems in Kenya” has been approved for conduct of research subject to obtaining all other permissions/clearances that may be required beforehand.


Prof. J.O. Agure
DEAN, SCHOOL OF GRADUATE STUDIES

Maseno University

ISO 9001:2008 Certified



APPENDIX 2: QUESTIONNAIRE

Respondents Profile:

1 Gender

- Male []
- Female []

2 Age

- 21-30 years old []
- 31-40 years old []
- 41-50 years old []
- 51 years old and above []

3 Level of education

- Secondary []
- Tertiary []
- University undergraduate []
- University post graduate []

4 Number of Years of service

- 0- 1 year []
- 2-5 years []
- 6 - 10 years []

SECTION B: INTERNAL AUDIT PLANNING

Give your response by ticking the boxes provided

5= Strongly Agree 4=Agree 3 Neutral 2=Disagree 1=Strongly Disagree

No	Statement	1	2	3	4	5
1	The audit has set objectives thus leading to improved fraud risk management					
2	There exists adequate budget plans for audit thus leading to improved fraud risk management					
3	There exists ways of determining alternative causes thus improving fraud risk management					
4	There exists proper forecasting in the planning process thus improving fraud risk management					
5	We have satisfactorily implemented the audit plan thus improving fraud risk management					

SECTION C: PERIODIC RISK ASSESSMENT

Give your response by ticking the boxes provided

5= Strongly Agree 4=Agree 3 Neutral 2=Disagree 1=Strongly Disagree

No	Statement	1	2	3	4	5
1	We often appropriately identify risks hence enhance fraud risk management					
2	There is sufficient impact evaluation hence improving fraud risk management					
3	There is often efficient planning response thus improving fraud risk management					
4	There is proper documentation and tracking response thus improving fraud risk management					
5	There is proper communication of risk to top management thus improving fraud risk management					

SECTION D: AUDIT AUTOMATION

Give your response by ticking the boxes provided

5= Strongly Agree 4=Agree 3 Neutral 2=Disagree 1=Strongly Disagree

No	Statement	1	2	3	4	5
1	Our vision and strategy definition have improved fraud risk management					
2	We have well-built infrastructure supporting automation hence improving fraud risk management					
3	We have well trained employees in ICT skills thus improving fraud risk management					
4	We have adequate staff function allocation in technology hence improving fraud risk management					
5	We often conduct monitoring and evaluation after implementing automation thus improving fraud risk management					

SECTION E: FRAUD RISK MANAGEMENT

Give your response by ticking the boxes provided

5= Strongly Agree 4=Agree 3 Neutral 2=Disagree 1=Strongly Disagree

No	Statement	1	2	3	4	5
1	We have continuously observed adherence to procedures as fraud risk management strategy					
2	We continuously identify opportunities for improvement as fraud risk management strategy					
3	We often ensure effectiveness of the system as a fraud risk management strategy					
4	The county has been driving continual improvement as fraud risk management strategy					
5	We have been providing information to top management continuously for prudent decision making as a fraud risk management strategy					

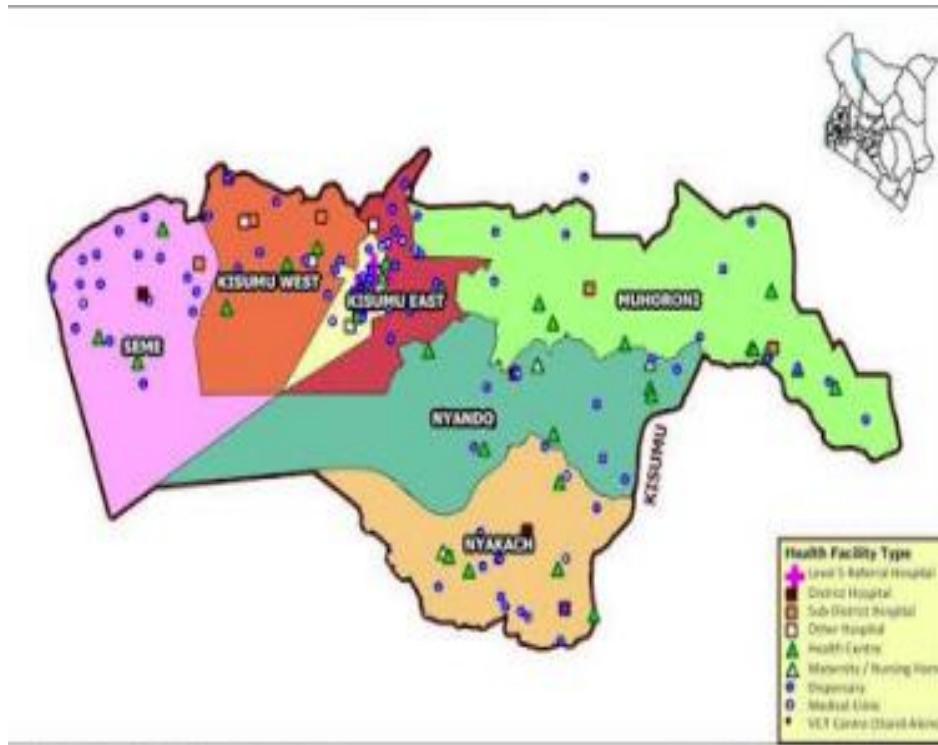
APPENDIX 3: WORK PLAN

Work to be done	WK1	WK2	WK3	WK4	WK5	WK6
Preliminary research to identify topic and objectives						
Literature documentation and writing plans						
Proposal writing and proof reading						
Data management process						
Data analysis using SPSS						
Dissemination of the research to respondents who requested formally and university library						

APPENDIX 4: BUDGET

Item No.	Description	Cost
1	Internet and communication	Ksh. 4,000
2	Cyber services and consumables	Ksh. 3,000
3	Allowance for questionnaire collection	Ksh. 10,000
4	Printing and related services	Ksh. 5,000
5	Binding	Ksh. 2,000
6	Unforeseen expenses	Ksh. 5,000
TOTAL		29,000

APPENDIX 5: MAP OF THE STUDY AREA



Source: Adapted from Fonshell (2018)