

BINDURA UNIVERSITY OF SCIENCE EDUCATION

FACULTY OF COMMERCE



DEPARTMENT OF ACCOUNTANCY

**THE EFFECTIVENESS OF INTERNAL AUDITING IN FRAUD DETECTION
AND PREVENTION IN STATE-OWNED ENTERPRISES (SOEs) IN
ZIMBABWE (2019-2023).**

BY

B202306B

**A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR A BACHELOR OF ACCOUNTANCY
HONOURS DEGREE**

JUNE 2024

APPROVAL FORM

The undersigned certify that they read and recommended to Bindura University of Science Education for acceptance, a research project entitled **THE EFFECTIVENESS OF INTERNAL AUDITING IN FRAUD DETECTION AND PREVENTION IN STATE-OWNED ENTERPRISES (SOEs) IN ZIMBABWE (2019-2023)** in partial fulfilment of the requirements of Bachelors of Accountancy Honours Degree.

To be completed by student

I certify that this dissertation meets the preparation guidelines as presented in the faculty guidelines for dissertations.

Signature of student.....



..... Date 17... /.....10.../2024....

To be completed by the supervisor

This dissertation is suitable for submission to the faculty. This dissertation should be checked for conformity with faculty guidelines.

Signature of supervisor.....



.... Date ...17/10/2024...

To be completed by Chairperson of the Department

I certify to the best of my knowledge that the procedure has been followed and the preparation criteria has been met for the dissertation.

Signature of Chairperson



..... Date 17.../...10....

/...2024.....

RELEASE FORM

NAME OF AUTHOR

REGISTRATION NUMBER B202306B

PROJECT TITLE THE EFFECTIVENESS OF INTERNAL AUDITING IN FRAUD
DETECTION AND PREVENTION IN STATE-OWNED
ENTERPRISES (SOEs) IN ZIMBABWE (2019-2023)

DEGREE TITLE BACHELOR OF ACCOUNTANCY HONOURS DEGREE.

Permission is hereby granted to Bindura University of Science Education to produce single copies of this project for private, scholarly research purposes only. The author does not reserve other publication rights of the project nor extensive extracts from it, be it printed or otherwise reproduced without the author's written permission.

Signed  Date.../../....

Permanent address 05 MUHACHA CLOSE ZENGEZA 5, CHITUNGWIZA

DECLARATION

I **B202306B** hereby declare that this research under the title: THE EFFECTIVENESS OF INTERNAL AUDITING IN FRAUD DETECTION AND PREVENTION IN STATE-OWNED ENTERPRISES (SOEs) IN ZIMBABWE (2019-2023) is my effort except for the authorities acknowledged, that it has never been submitted before to any other university or institution of higher learning for the award of a degree.

DEDICATION

This project is a dedication to my late parents, sisters and friends who moulded and encouraged me tirelessly throughout my educational era.

ACKNOWLEDGEMENTS

Firstly I would like to thank the Most High for guiding me through from the moment I started till now. I am also grateful to my beloved family for their ongoing support and understanding throughout this academic path. Their faith in me, words of support, and sacrifices enabled my journey. Their unflinching support has been an ongoing source of strength and drive.

I would like to express my deepest gratitude to my supervisor for his unwavering guidance, encouragement, and invaluable insights throughout my research journey. His expertise, patience, and constant support have played a pivotal role in shaping and refining my research. I am eternally grateful for his mentorship and the opportunities he has provided me with.

I would like to express my utmost gratitude to my friends for their unwavering support and companionship throughout my journey. Your encouragement, shared experiences, and companionship added meaning to this research experience.

ABSTRACT

The study's premise was to evaluate the effectiveness of internal auditing in fraud detection and prevention in SOE's in Zimbabwe from 2019-2023. The researcher focused on ZESA, ZINWA and GMB head offices situated in Harare. The study intended to establish methods for internal audits in Zimbabwe's parastatal industry. The study also looked into the influence that internal auditing had on detecting and preventing fraud in Zimbabwe's state-owned firms, as well as the effect of internal auditing on organizational internal controls and its compatibility with technology. The study was based on the fraud triangle theory and its modifications (internal control theory). The study followed the pragmatist research philosophy. The study used a mixed method, which used questionnaires to gather quantitative data and interviews as well as examining past published articles of SOE's as a way to gather qualitative data. The target population consisted of three parastatal enterprises with 67 management and internal audit staff at the time of the study. The sample was determined using Yamane's formula, and the study sample size was 41 participants. The collected data was analyzed using SPSS version 20.0 and presented using tables. Multivariate regression analysis was conducted to determine the link between components of internal auditing and fraud detection and prevention. The study discovered that internal auditing had a beneficial influence on detecting and reducing fraud in the parastatal industry, as well as being effective on internal controls of state-owned firms. The report advised that governments enforce the implementation of internal auditing methods since they improve fraud detection and mitigation. The report also recommended that future research focus on establishing theoretical frameworks for understanding fraud in state-owned firms.

Table of Contents

APPROVAL FORM	i
RELEASE FORM	ii
DECLARATION	iii
DEDICATION	iv
ACKNOWLEDGEMENTS	v
ABSTRACT	vi
Table of Contents	vii
LIST OF TABLES	xi
CHAPTER I	1
1.0 Introduction	1
1.1 Background of the Study	1
1.2 Statement of the Problem	2
1.3 Research Objectives	3
1.4 Research Questions	3
1.5 Hypothesis statement	3
1.6 Significance of the Study	3
1.6.1 Significance to the Researcher	4
1.6.2 Significance to Policy	4
1.6.3 Significance to Practice	4
1.7 Assumptions of the Study	4
1.8 Delimitations	5
1.9 Limitations	5
1.10 Definition of terms	5
1.11 Summary	6
CHAPTER II	7
1.0 Introduction	7

2.1 Theoretical framework	7
2.1.1 Fraud Triangle Theory	7
2.1.2 Internal Control Theory	9
2.2 Internal auditing	10
2.3 Fraud detection and prevention	10
2.4 Procedures used in internal auditing in State-Owned Entities (SOEs)	11
2.4.1 Establishment and assessment of internal controls	11
2.4.2 Risk assessment	13
2.4.3 Compliance audits	14
2.4.4 Performance auditing	15
2.5 The impact of internal auditing on mitigation of fraud in SOEs	17
2.6 The effectiveness of internal auditing on internal controls of SOEs	18
2.7 The compatibility of internal auditing with the use of technology and information systems in SOEs	20
2.8 Conceptual framework	21
2.9 Chapter summary	22
CHAPTER III	23
3.0 Introduction	23
3.1 Research philosophy	23
3.2 Research approach	24
3.3 Research design	24
3.4 Research strategy	24
3.5 Target population	25
3.6 Sample size determination	25
3.8 Research data	27
3.9 Research instruments	27

3.10 Data analysis and presentation	28
3.11 Reliability	28
3.12 Validity	29
3.13 Ethical considerations	29
3.14 Chapter summary	29
CHAPTER IV	30
4.0 Introduction	30
4.2 Response rate	30
4.3 Procedures used in internal auditing	31
4.4 Impact of internal auditing in detection and prevention of fraud	32
4.4.1 Regression analysis	33
4.4.2 ANOVA	34
4.5 Effectiveness of internal auditing on internal controls	35
4.5.1 Regression analysis	36
4.5.2 ANOVA	37
4.6 Compatibility of internal auditing on information technology	38
4.7 Chapter Summary	40
CHAPTER V	41
5.0 Introduction	41
5.1 Summary of findings	41
5.1.1 Objective 1	41
5.1.2 Objective 2	41
5.1.3 Objective 3	42
5.1.4 Objective 4	42
5.2 Conclusions	42
5.2.1 Procedures of internal auditing	42

5.2.2 Impact of internal auditing on fraud prevention	43
5.2.3. Effectiveness of internal auditing on internal controls	43
5.2.4 Compatibility with technology	43
5.3 Recommendations	43
5.3.1 Recommendations to practice	43
5.3.2 Recommendation to policy	44
5.4 Areas of further study	44
REFERENCES	46
APPENDICES	51

LIST OF TABLES

Table 1: operationalization of variables	22
Table 2: Target population	25
Table 3: Sampling procedure	26
Table 4: Likert scale	28
Table 5: Questionnaire response rate	30
Table 6: Procedures used in internal auditing	31
Table 7: Impact of internal auditing in detection and prevention of fraud	32
Table 8: Regression analysis model	33
Table 9: ANOVA analysis	34
Table 10: Effectiveness of internal auditing on internal controls	36
Table 11: Regression analysis model	37
Table 12: ANOVA analysis	38
Table 13: Compatibility of internal auditing on information technology	39

LIST OF FIGURES

Figure 1: Conceptual Framework21

CHAPTER I

INTRODUCTION

1.0 Introduction

The ways that society and business are conducted have drastically changed in the twenty-first century. In the twenty-first century, technology has been the most active force behind change (KPMG, 2020). The auditing industry has been impacted in the same way as every other area of business. But even with today's technological advancements, a sizeable portion of organizations continue to operate using antiquated methods (Albrecht et al., 2019). Enterprises that employ conventional auditing methodologies enjoy certain benefits and encounter certain drawbacks from this approach. While some authors (Wells, 2016; Albrecht et al., 2019) contend that traditional auditing still has a high level of effectiveness in reducing fraud and error, other authors (Beasley et al., 2016; Cascarino, 2017; Cohen, 2016) disagree. This chapter seeks to introduce the research topic and establish the context for the study. It sets the scene by providing background information, relevant literature, and theoretical framework that underpins the research.

1.1 Background of the Study

Moyo (2018) reported that SOEs play a crucial role in the economic development of Zimbabwe because they create jobs, stimulate economic growth, and deliver basic services. However, SOEs frequently deal with issues of accountability, transparency, and governance, which can leave them plagued by allegations of fraud and corruption, resulting in financial losses and reputational damage (KPMG, 2020). It is necessary to look at traditional auditing methods in the context of

SOEs in Zimbabwe as they are tasked with providing independent assurance and consulting services to improve risk management, control, and governance processes in order to guarantee efficient fraud mitigation and fortify the governance framework (Mangwengwende, 2021). The majority of the auditing and fraud mitigation literature currently in publication focuses on the private sector, the mentioned research by Madoro and Chimhete (2021) highlights that our knowledge regarding the correlation between internal auditing and the detection and prevention of fraud in the specific context of Zimbabwean state-owned enterprises (SOEs) is insufficient. It is critical to examine the use of conventional auditing techniques and their ability to detect, prevent, and mitigate fraud within the unique operational and governance frameworks of Zimbabwe's State-Owned Enterprises (SOEs). The political and economic landscape of Zimbabwe has changed significantly in recent years, resulting in modifications to the governance structures and environments of State-Owned Enterprises (SOEs) (Mawere, 2019). It is now more important than ever to address the problems with corruption, poor management, and irregular finances within these organizations in order to provide insights that can guide policy, regulatory frameworks, and auditing practices. The purpose of this research is to elucidate the connection between fraud prevention and detection with internal auditing in Zimbabwean SOEs (Zhou & Matambanadzo, 2020). The study looks into the auditing procedures that SOEs currently use in an effort to find any gaps, difficulties, or areas where fraud mitigation efforts could be strengthened

1.2 Statement of the Problem

In the present era, contemporary methods are gradually replacing the conventional auditing practices. The use of technology in many business processes, including auditing, has become commonplace due to the evolution of business and business models. The intricacy of fraudulent activities and other financial crimes has rendered the detection, mitigation, and management of these crimes difficult for conventional auditing methods and instruments. However, some organizations in Zimbabwe still entirely or partially rely on traditional auditing techniques in spite of technological advancements. Examining how well internal auditing works to prevent and combat fraud in Zimbabwe's state-owned enterprises (SOEs) is the study's goal.

1.3 Research Objectives

1. To establish the procedures used in internal auditing in the SOEs in Zimbabwe
2. To explore the impact which internal auditing has on mitigating fraud in SOEs in Zimbabwe
3. To determine the effectiveness of internal auditing on internal controls of SOEs in Zimbabwe
4. To explore the compatibility of internal auditing with the use of technology and information systems in SOEs in Zimbabwe

1.4 Research Questions

1. Which procedures are used in internal auditing in the SOEs in Zimbabwe?
2. What is the impact of internal auditing on mitigating fraud in SOEs in Zimbabwe?
3. How effective is internal auditing on the internal controls of SOEs in Zimbabwe?
4. How compatible is internal auditing with the use of technology and information systems in the SOEs in Zimbabwe?

1.5 Hypothesis statement

H₁: Internal auditing is effective in the prevention and detection of fraud in SOEs in Zimbabwe

H₂: Internal auditing is effective in improving the internal controls of SOEs in Zimbabwe

1.6 Significance of the Study

1.6.1 Significance to the Researcher

The study enhances the researcher's professional experience and academic knowledge, which is beneficial.

1.6.2 Significance to Policy

The study's evaluation of the adequacy of internal auditing techniques makes it important for policymakers in the auditing field. The study serves as a pivotal reference point, capable of either bolstering or challenging the propositions advocating a shift in auditing methodologies from conventional to contemporary approaches.

1.6.3 Significance to Practice

The study is significant for SOEs because it highlights the areas where internal auditing is either lacking or inadequate. Additionally, the study assesses the internal controls of the SOEs to some extent; as a result, the study's conclusions can be applied to improve organizational control.

1.7 Assumptions of the Study

The study makes the assumption that, at the time of the study, some companies under audit depend on internal auditing techniques within SOEs. Additionally, the study makes the assumption that data needed to meet its goals is accessible and not proprietary within SOEs. The study operates under the presumption that focusing on Harare will suffice to gather the information required to address the research problem and its goals.

1.8 Delimitations

The study confined its range to a 5 year interval from 2019-2023. This restriction was imposed to attain a 5 year pattern which is adequate to deduce significance and also to examine the issue in the most recent years feasible. The study also confined the range to Harare-based SOE's as the researcher resides in Harare.

1.9 Limitations

There are inherent limitations in the methodology used in this study. The emphasis on quantitative principles often leads to a lack of attention towards the qualitative dimension of the research, hindering the thorough exploration and revelation of the study's data. By carefully considering the development of the research instrument, this was prevented and in-depth quantitative aspects could be addressed.

The study encountered theoretical limitations. The theories that explained fraud's causes, incentives, and consequences were the only ones that were available. No specific theories directly aimed at internal auditing and State-Owned Enterprises (SOEs) were identified. Consequently, conclusions that were as pertinent to the study as possible were drawn from the theories that already existed.

1.10 Definition of terms

Internal auditing: Internal auditing is a systematic, independent evaluation process conducted within an organization to assess its operations, control systems, and risk management processes. It involves the examination and evaluation of various aspects, including financial records,

internal controls, compliance with laws and regulations, and the overall effectiveness and efficiency of organizational processes (Sawyer, 2003).

State Owned Entities: these are organisations which are established out of the act of a parliament and they are answerable to parliament and the state. They also include municipalities and other such entities which serve at the pleasure of the government (Mazikana, 2023).

Fraud: unlawful or criminal deception with the intent of profiting financially or personally (Driel, 2018).

1.11 Summary

This chapter was devoted to summarizing the study's primary area of interest. The background of the study problem was examined in this chapter. The research problem, which served as the basis for the objectives, was then explained in the chapter. The study aims to determine whether internal auditing is effective in fraud detection and prevention, as the research problem stems from the debate over internal auditing's usefulness in the modern era. The objectives provided clarity regarding the purpose and methodology of the study. The remaining data serves as an introduction, highlighting the study's significance and supporting evidence. The literature review conducted for this study is presented in the upcoming chapter.

CHAPTER II

LITERATURE REVIEW

1.0 Introduction

This chapter concentrated on the study's review of the literature. The chapter explored and analyzed the previously done work in the study area in order to understand the emerging themes and trends in the literature. This chapter served as an important guideline for the study in enlightening the researcher of the methodologies and findings which occurred in the past. The chapter delves into the theoretical framework that underpins the study, as well as the conceptual framework that emerged from the intersection of the theoretical framework and the empirical analysis.

1.1 Theoretical framework

The two primary theories that comprised the study's theoretical framework were the Fraud Triangle Theory and the Internal Control Theory.

2.1.1 Fraud Triangle Theory

According to Cressey's (1953) Fraud Triangle Theory, fraud happens when three factors are met: opportunity, motivation, and rationalization. These conditions interact to create an environment conducive to fraudulent behavior within organizations. Traditional auditing plays a crucial role

in mitigating fraud risks by addressing these conditions (Wells, 2005). Firstly, opportunity refers to the circumstances that allow individuals to commit fraud without detection. Traditional auditing helps identify control weaknesses and vulnerabilities in processes and systems that can be exploited for fraudulent activities (Wells, 2005). Auditors conduct thorough examinations of financial records, perform substantive testing, and assess the adequacy of internal controls to minimize opportunities for fraud (AICPA, 2012).

Secondly, motivation refers to the incentives or pressures that drive individuals to engage in fraudulent acts. Auditors, through their expertise and experience, can detect unusual financial patterns or discrepancies that may indicate fraudulent behavior (AICPA, 2012). By examining financial records, conducting interviews, and analyzing transactions, auditors can uncover potential motives for fraud and provide recommendations to address underlying issues (Wells, 2005).

The cognitive process that individuals employ to justify their fraudulent behavior is referred to as rationalization, which is the final method utilized. Traditional auditing focuses on evaluating the integrity and ethical values of individuals involved in the organization (AICPA, 2012). By evaluating the uppermost tone, ethical codes of conduct, and management's commitment to strong internal controls, auditors can identify potential rationalizations for fraudulent behavior and recommend measures to promote a culture of integrity (Wells, 2005).

By understanding the interplay between opportunity, motivation, and rationalization, auditors can effectively design and execute audit procedures to detect and prevent fraud (Wells, 2005). Through their independent and objective assessments, auditors provide valuable insights into the effectiveness of fraud prevention measures and offer recommendations to enhance controls and reduce fraud risks (AICPA, 2012).

2.1.2 Internal Control Theory

Internal Control Theory emphasizes the importance of establishing effective control systems within organizations to safeguard assets, ensure compliance with laws and regulations, and achieve operational efficiency. Traditional auditing plays a critical role in evaluating and strengthening internal controls to mitigate fraud risks (COSO, 2013). Internal controls include a variety of activities and mechanisms, such as role separation, authorization procedures, physical safeguards, and documentation processes (COSO, 2013). Auditors assess the design and effectiveness of these controls through various procedures, such as walkthroughs, testing of controls, and substantive testing (AICPA, 2012).

By examining and evaluating internal controls, auditors can identify control weaknesses and vulnerabilities that could be exploited for fraudulent activities (AICPA, 2012). They provide recommendations for enhancing internal controls, implementing additional checks and balances, and strengthening control environments to mitigate fraud risks (COSO, 2013). Additionally, by analyzing internal controls, auditors determine whether the company complies with internal policies, laws, and regulations. This lessens the possibility of fraudulent activity by ensuring that the company is functioning within moral and legal bounds (AICPA, 2012).

The evaluation of internal controls also contributes to operational efficiency by identifying areas of inefficiency, duplication of efforts, or inadequate resource allocation. Auditors provide insights and recommendations to streamline processes, enhance productivity, and optimize resource utilization (COSO, 2013). By integrating internal control theory into their audit procedures, auditors play a crucial role in strengthening the control environment and minimizing fraud risks within state-owned enterprises (AICPA, 2012). Their objective evaluations of internal controls provide valuable insights to management and stakeholders, enabling them to take proactive measures to prevent and detect fraudulent activities (COSO, 2013).

The following concepts are mainly used in the study:

2.2 Internal auditing

Internal auditing is an independent, unbiased process that provides valuable insights and recommendations to help organizations enhance their operations. This method employs a systematic and methodical approach to assess and improve the efficiency of risk management, control, and governance procedures (Sawyer, 2003). Internal auditing is the practice of independently and impartially verifying and advising an organization to enhance its performance. It assists an organization in achieving its goals by applying a structured, disciplined method to assess and improve the effectiveness of its risk management, internal control, and governance systems (IIA, 2017, p. 1).

Internal auditing is defined by Sawyer (2016) as a process that aids organizations in accomplishing their goals through the methodical assessment and enhancement of risk management, control, and governance procedures. Arens et al. (2019), on the other hand, define internal auditing as a process that offers unbiased evaluations of an organization's governance structures, risk management procedures, and internal controls. Internal auditing plays a significant role in improving governance practices, risk management effectiveness, and control processes in organizations overall (IIA, 2017; Sawyer, 2016; Arens et al., 2019).

2.3 Fraud detection and prevention

Fraud detection and prevention can be conceived of as the proactive and systematic framework for identifying, investigating, and mitigating fraudulent activities within an organization, aimed at minimizing financial losses, reputational damage, and legal implications (Albrecht et al., 2019; Wells, 2016). Albrecht et al. (2019) describe fraud detection and prevention as the set of activities and controls implemented by organizations to deter, detect, and respond to fraudulent

behavior. It involves the establishment of preventative measures, such as internal controls and fraud risk assessments, as well as the implementation of monitoring and investigative procedures to detect and address potentially fraudulent activities.

Wells (2016) emphasizes the importance of a multi-pronged strategy for fraud detection and prevention, which includes a combination of proactive measures, such as employee training, internal controls, and data analytics, along with reactive measures, such as investigations and legal actions. The technique of identifying and mitigating the risk of fraud through the use of controls, policies, and procedures to prevent fraud from occurring and to detect it when it does occurs is known as fraud detection and prevention (ACFE, 2020, p. 9). They highlight the importance of a robust anti-fraud framework that includes prevention, detection, and response mechanisms.

Overall, fraud detection and prevention involve a multifaceted approach that encompasses both preventive measures and reactive strategies, aiming to safeguard organizations against fraudulent activities (Albrecht et al., 2019; Wells, 2016; ACFE, 2020).

2.4 Procedures used in internal auditing in State-Owned Entities (SOEs)

2.4.1 Establishment and assessment of internal controls

One scholarly argument in the literature highlights the importance of a strong control environment for effective establishment of internal controls. According to Brink's (2018), the control environment includes factors such as management's integrity, organizational structure, and commitment to ethical values. This argument emphasizes that a supportive control environment creates the culture for the entire control system and steers employees' attitudes towards control activities. An additional academic debate centers on the necessity of utilizing a risk-based methodology in the creation and evaluation of internal controls. According to Hoitash

et al. (2018), a risk-based approach allows organizations to leverage resources optimally by zeroing in on high-risk areas. This argument emphasizes the importance of identifying and prioritizing risks to design and implement control activities that mitigate those risks.

Furthermore, some scholars argue for the integration of technology in the establishment and assessment of internal controls. Vafeas and Vlittis (2018) suggest that organizations should leverage technological advancements, such as data analytics and automation, to enhance the effectiveness and efficiency of control activities. This argument highlights the potential of technology to streamline control processes and provide real-time monitoring and reporting capabilities.

On the other hand, there are arguments emphasizing the role of human judgment and the limitations of automated control systems. Kaplan and Mikes (2019) argue that while technology can support control activities, it should not replace human judgment and critical thinking. This argument emphasizes the importance of balancing technological advancements with human expertise to ensure effective control establishment and assessment. Notably, organizational culture, industry-specific laws, and stakeholder expectations all have an impact on the implementation and evaluation of internal controls. Different scholars advocate for tailoring internal control frameworks and methodologies to suit the unique characteristics and challenges of different organizations (Brink's, 2018).

Overall, the literature on the establishment and assessment of internal controls provides various scholarly arguments and perspectives. These arguments highlight the importance of a strong control environment, a risk-based approach, the integration of technology, and the role of human judgment. Tailoring control frameworks and methodologies to the specific context of the organization is also advocated in the literature.

2.4.2 Risk assessment

Risk assessment of internal controls is a widely discussed topic in the literature, and there are several scholarly arguments and perspectives available. The following section summarizes the various perspectives available in the literature on the use of risk assessment as an internal auditing procedure in SOEs.

One scholarly argument in the literature emphasizes the importance of a comprehensive and systematic approach to risk assessment. Alzeban et al. (2019) argue that risk assessment should take into account both internal and external factors, including industry dynamics, regulatory changes, and technological advancements. This argument highlights the importance of internal auditors having panoramic view of the SOE's operating environment to identify and evaluate risks effectively. Another scholarly argument focuses on the integration of risk assessment with strategic planning. According to Jiang et al. (2018), aligning risk assessment with organizational objectives and strategic goals enhances risk management effectiveness. By considering strategic risks and aligning control activities with strategic priorities, internal auditors can enhance the SOE's overall performance. Furthermore, some scholars argue for the use of quantitative risk assessment techniques to enhance objectivity and prioritize risks. Ong et al. (2017), for example, suggest using risk scoring models, which give risks numerical values based on their likelihood and potential impact. This approach allows internal auditors to systematically compare and prioritize risks, ensuring that resources are allocated to regions of highest risk.

However, there are arguments stressing the importance of qualitative risk assessment approaches. Li et al. (2019) argues that qualitative methods, such as expert judgment and scenario analysis, provide valuable insights into complex risks that cannot be easily quantified. Qualitative risk assessment enables a more nuanced understanding of risks, including their interdependence and possible cascading effects. It is crucial to remember that different risk assessment techniques may be used based on the particular circumstances surrounding the SOE and its sector. Different

scholars advocate for tailored risk assessment methodologies that consider the unique characteristics and challenges faced by SOEs in different sectors (Alzeban et al., 2019).

Thus, different academic arguments and perspectives are presented in the literature on risk assessment of internal controls in SOEs. The necessity of a thorough and methodical approach, integration with strategic planning, and application of both quantitative and qualitative methods are emphasized in these arguments.

2.4.3 Compliance audits

The following section shows the literature themes in the use of compliance audits as an internal auditing procedure within SOEs.

The primary argument in the literature emphasizes the importance of a comprehensive and systematic approach to compliance audits. According to Velentzas et al. (2019), compliance audits should cover all relevant laws, regulations, and internal policies applicable to the organization. This argument emphasizes how crucial it is for auditors to have a deep comprehension of the internal control system and the regulatory environment in order to properly assess compliance. Another scholarly argument focuses on the role of risk assessment in compliance audits. A risk-based approach, according to Dang et al. (2020), enables auditors to recognize and rank areas of increased compliance risk, guaranteeing efficient use of audit resources. This argument emphasizes the importance of considering the likelihood and potential impact of compliance breaches when planning and conducting audits. Moreover, some scholars argue for the integration of technology in compliance audits. Chen et al. (2018) suggest that organizations should leverage data analytics and automation tools to enhance the effectiveness and efficiency of compliance audits. This argument emphasizes the ability of technology to examine vast quantities of data, discern trends and uncover possible compliance issues more efficiently.

On the other hand, there are arguments emphasizing the role of human judgment and the limitations of automated compliance auditing systems. Krahnen et al. (2019) argue that while technology can support compliance audits, it should not replace the professional judgment and expertise of auditors. This argument stresses the importance of auditors' critical thinking skills and the capacity to evaluate compliance controls with a professional skepticism. It is noteworthy that compliance audits are subject to the prominence of multiple factors, such as stakeholder expectations, organizational culture, and industry-specific regulations. Different scholars advocate for tailoring compliance audit methodologies and approaches to suit the unique characteristics and challenges of different organizations (Velentzas et al., 2019).

Thus, the literature on compliance audits provides various scholarly arguments and perspectives. These arguments highlight the need for a comprehensive and systematic approach, the importance of risk assessment, the integration of technology, and the role of human judgment.

2.4.4 Performance auditing

Performance auditing is a pivotal facet in evaluating the efficacy and efficiency of public sector organizations. The literature offers diverse scholarly arguments and perspectives on performance auditing, which the following section analyses.

One compelling scholarly argument in the literature underscores the significance of a comprehensive and unbiased approach to performance auditing. Power (2016) asserts that performance audits should not solely focus on financial aspects but should also encompass the attainment of organizational objectives, program effectiveness, and resource utilization. This argument underscores the need for auditors to possess a holistic understanding of the organization to effectively evaluate performance. Another scholarly argument centers around the role of performance measures and indicators in performance auditing. Van Peurse and Guthrie

(2019) contend that auditors should employ relevant and reliable performance measures to assess program outcomes and impacts. This argument emphasizes the importance of establishing clear performance indicators that align with organizational goals and objectives.

Furthermore, some scholars advocate for integrating performance auditing with strategic planning and performance management systems. Funnell and Cooper (2018) propose that performance audits should contribute to the ongoing improvement of organizations by providing recommendations for enhancing performance. This argument highlights the potential of performance auditing to drive organizational learning and development.

Conversely, there are arguments that underscore the challenges and limitations of performance auditing. Bourguignon et al. (2017) argue that performance auditing should consider the intricate and dynamic nature of public sector organizations, including political and contextual factors. This argument emphasizes the necessity for auditors to account for diverse objectives and stakeholders, which can sometimes be conflicting in the public sector. Requirements regarding stakeholder expectations, organizational culture, and legal frameworks are just a few of the variables that impact performance auditing. Different scholars advocate for tailoring performance audit methodologies and approaches to suit the unique characteristics and challenges of different organizations (Power, 2016).

Thus, the literature on performance auditing provides a plethora of scholarly arguments and perspectives. These justifications highlight the necessity of an all-encompassing and objective strategy, the significance of performance metrics and indicators, the coalescence of performance auditing with visioning and performance improvement, as well as the difficulties and constraints associated with performance auditing.

2.5 The impact of internal auditing on mitigation of fraud in SOEs

One argument, proposed by Okaro and Akande (2020), highlights that effective internal auditing plays a crucial role in preventing and detecting fraud in SOEs. They argue that internal auditors, through their regular monitoring and evaluation of internal controls, can identify weaknesses and vulnerabilities that may be exploited by fraudulent activities. Within State-Originated Enterprises (SOEs), internal auditors can prevent and identify fraudulent activity by putting strong internal control mechanisms in place, such as segregation of duties and frequent risk assessments. Another perspective, put forward by Nzekwu and Okwuosa (2019), emphasizes the importance of independence and objectivity in internal auditing to combat fraud in SOEs. It is contended that internal auditors ought to uphold a significant degree of autonomy from management and be permitted to report any questionable actions without worrying about facing reprisals. This independence allows internal auditors the ability to serve as a formidable barrier against fraud., conducting thorough investigations and providing reliable information to management and stakeholders.

Additionally, Nzimande and Mokwena (2018) propose that internal auditors ought to be equipped with the skills and knowledge required to successfully prevent and identify fraud in SOEs. They argue that continuous professional development and training programs are essential for internal auditors to stay updated with the latest fraud schemes and techniques. Internal auditors can more effectively spot patterns and red flags suggestive of fraudulent activity by honing their skills in fields like data analytics and forensic auditing. Additionally, Mahlangu and Dube (2017) argue for the. The proposal suggests that internal auditors ought to foster an environment of openness and responsibility, enabling staff members to report any instances of fraudulent activity they come across. By acting as a conduit for whistle-blowing, internal auditors can provide valuable information that aids in the prevention and detection of fraud.

Chivambo and Muzividzi (2021) argue that internal auditing in Zimbabwean SOEs can effectively prevent and detect fraud by implementing robust internal control systems. They

emphasize the criticality of task allocation, regular risk assessments, and the establishment of strong control frameworks to mitigate the risk of fraud. By ensuring that proper controls are in place, internal auditors can significantly reduce the opportunities for fraudulent activities within SOEs. Additionally, Musonza and Magadzire (2019) emphasize the need of internal auditors' impartiality and independence in successfully preventing fraud in Zimbabwean SOEs. They argue that internal auditors should be free from undue influence and have the autonomy to report suspicions of fraud without fear of reprisal. Internal auditors can prevent and detect fraud by conducting in-depth investigations and offering management objective insights while upholding a high degree of independence.

Simultaneously, Moyo and Ncube (2018) stress in their research how crucial it is for internal auditors in Zimbabwean SOEs to pursue ongoing professional development in order to hone their expertise in fraud detection and prevention. They argue that ongoing training programs and certifications in areas such as forensic auditing and data analytics equip internal auditors with the necessary tools to identify fraudulent activities effectively. By staying updated with evolving fraud schemes, internal auditors can proactively detect and prevent fraud within SOEs. Also, Chitambara and Sibanda (2017) emphasize the role of internal auditors in promoting a culture of accountability and transparency within Zimbabwean SOEs. They argue that internal auditors should actively encourage employees to report any fraudulent activities they observe by implementing effective whistle-blowing mechanisms. This fosters a culture where individuals feel safe and empowered to speak up, leading to the early detection and prevention of fraud.

2.6 The effectiveness of internal auditing on internal controls of SOEs

Firstly, internal auditing contributes significantly to improving the efficacy of internal controls in SOEs. Research indicates that through routine assessments and audits, internal auditors can detect deficiencies and openings in the current control frameworks (Chivambo & Muzividzi, 2021). Through thorough assessments, internal auditors can provide valuable insights and

recommendations to management for improving control frameworks, thereby enhancing the overall performance of internal controls.

Furthermore, a major factor in the efficacy of internal controls in SOEs is the aloofness and non-involvement of internal auditors. Research highlights that when internal auditors maintain a high level of independence from management and operate objectively, they can provide unbiased assessments of the control systems (Musonza & Magadzire, 2019). This objectivity ensures that potential control deficiencies are identified without any undue influence, leading to more accurate and reliable evaluations of internal controls. Continuous professional development and training programs for internal auditors also contribute to the effectiveness of internal controls in SOEs. By staying updated with evolving risk landscapes and emerging control techniques, internal auditors can apply the latest methodologies to assess and improve internal controls (Moyo & Ncube, 2018). Stronger internal control systems are the outcome of this continuous development, which gives internal auditors the knowledge and abilities they need to address control deficiencies.

Furthermore, the presence of effective internal auditing promotes a culture of accountability and transparency within SOEs, which strengthens internal controls. Research suggests that internal auditors can encourage employees to adhere to control procedures and policies by fostering an environment where individuals feel comfortable reporting any control lapses or fraudulent activities (Chitambara & Sibanda, 2017). Internal control failures and fraud are less common as a result of this accountability culture, which makes sure internal controls are appropriately implemented and monitored. Consequently, new research emphasizes how internal auditing helps SOEs' internal controls to be stronger. The arguments presented emphasize the role of internal auditors in identifying control deficiencies, maintaining independence and objectivity, continuous professional development, and fostering a culture of accountability. By incorporating these elements, internal auditing can significantly enhance the effectiveness of internal controls in SOEs, leading to improved governance, risk management, and prevention of fraud.

2.7 The compatibility of internal auditing with the use of technology and information systems in SOEs

To begin with, new research indicates that internal auditing and the use of IT and information systems in State-Owned Enterprises (SOEs) are highly compatible and can improve the efficacy and efficiency of internal audit procedures. Automation monitoring systems and data analytics are two examples of technology-enabled auditing tools that enable internal auditors to swiftly evaluate vast amounts of data and spot possible irregularities or control weaknesses (Knechel, 2016). These tools enable auditors to perform more comprehensive and in-depth audits, leading to improved risk assessment and control evaluation in SOEs. Furthermore, the incorporation of technology in internal auditing processes can increase the timeliness and accuracy of information. Real-time monitoring and continuous auditing techniques supported by technology enable internal auditors to monitor transactions and control activities on a more frequent basis (Alles et al., 2018). This timely access to information allows auditors to identify control breakdowns or fraudulent activities promptly, enabling management to take corrective actions swiftly.

Additionally, technology-driven internal auditing can enhance the reliability and integrity of audit evidence. Digitalization of audit documentation and the use of electronic work papers reduce the risk of errors, loss, or manipulation of audit evidence (Alles et al., 2018). This digital approach improves the quality and traceability of audit documentation, facilitating better collaboration among audit teams and ensuring greater consistency in audit processes. Moreover, the use of technology in internal auditing can enhance the monitoring and evaluation of control systems in SOEs. Continuous monitoring tools and control self-assessment applications enable auditors to assess control effectiveness in real-time and provide timely feedback to management (Groomer & Murthy, 2019). This proactive and continuous monitoring approach ensures that control weaknesses are promptly identified and addressed, leading to improved control systems within SOEs.

Thus, recent literature suggests that internal auditing and the use of technology and information systems in SOEs are highly compatible and mutually beneficial. The arguments presented highlight how technology-enabled auditing tools enhance the effectiveness, efficiency, timeliness, and reliability of internal audit processes. By leveraging technology, internal auditors can perform more comprehensive audits, monitor control activities in real-time, improve the quality of audit evidence, and facilitate better control evaluation. Incorporating technology in internal auditing can significantly contribute to strengthening control systems and enhancing governance in SOEs.

2.8 Conceptual framework

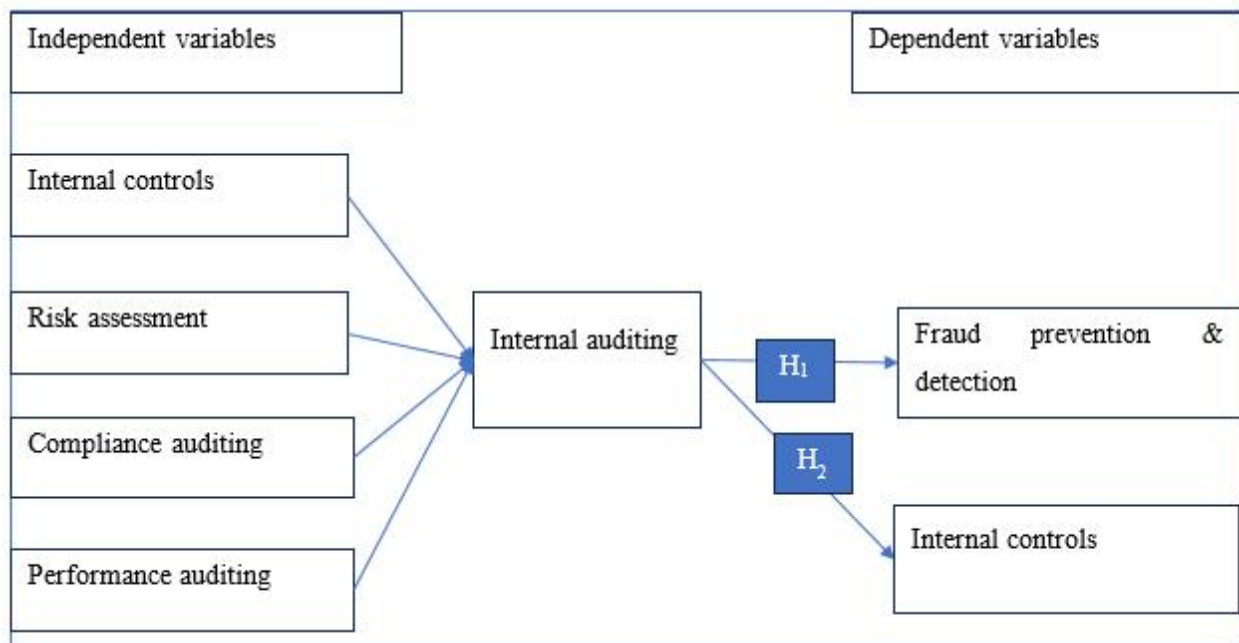


Figure 1: Conceptual Framework

Source: Researcher's Illustration (2024)

Operationalization of variables

Table 1: operationalization of variables

Independent variables	Measurements
Internal controls	Control self-assessment
Risk assessment	Scenario analysis
Compliance auditing	Compliance testing
Performance auditing	Value for money
Dependent variables	
Fraud detection and prevention	External fraud auditing
Internal controls	Key control indicators

Source: Primary data (2024)

An overall view of the topic under study is shown through conceptual framework (Kivunja, 2018). It is clear from the conceptual framework above that the goal of the study is to comprehend how internal auditing procedures in SOEs relate to the prevention and detection of fraud. The goal of the study is to determine how the independent variables that are internal controls, risk assessment, compliance auditing, and performance auditing under internal auditing affect the dependent variables that are the SOEs' attempts to stop and identify fraud.

2.9 Chapter summary

Understanding the theoretical framework guiding the investigation was the main goal of this chapter. The internal controls hypothesis and the fraud triangle idea are the study's two key theories. The study's conceptions were established based on an examination of the empirical

evidence in the subject area, which was covered in this chapter. The study's variables served as the basis for the conceptual framework.

CHAPTER III

RESEARCH METHODOLOGY

3.0 Introduction

The chapter presents the methodological framework of the study, including the research philosophy, research approach, research design, and research strategy. The chapter also outlines the target population and sampling strategy employed in the study. Furthermore, the chapter describes the research instruments used, the data analysis procedures followed, and the ethical considerations taken into account during the research process.

3.1 Research philosophy

The study followed the pragmatism research philosophy. The main drive was because the study wanted to address the research problem with whatever means necessary to address it and thus, pragmatism was the philosophy recommended by Creswell (2020) for such a mentality. The pragmatism research philosophy combines the understanding that the world is abstract and can be explained in opinions as well as the understanding that the world is absolute and can be understood scientifically.

3.2 Research approach

The study used the mixed methods approach. The main choice of the mixed methods approach was because of the selection of the pragmatism research philosophy. The mixed methods approach incorporates both the quantitative approach and the qualitative approach in research (Saunders et al., 2020). The study aligned its focus to a more quantitative approach and thus the quant-qual approach was used. This was primarily focused on the need to understand the quantitative relationship between internal auditing practices and the prevention and detection of fraud in SOEs.

3.3 Research design

The study used a survey research design. The survey targeted SOEs operating within Harare. The survey was narrowed towards multiple cases and not spread over the entire SOEs operating in Harare. The choice of the research design was to allow the study to understand the situation within different entities under the same type of management and understand how the internal auditing function assists in fraud detection and prevention. The selection of the research design was also influenced by previous research in the same field that utilized a similar design (Mangwengwende, 2021; Madoro & Chimhete, 2021). Consequently, the research design was also informed by empirical evidence.

3.4 Research strategy

The research strategy used in the study was a multiple case study strategy. The survey technique comprises picking diverse players or individuals within a set restriction, whether geographical, social, or industrial (Bell, 2021). The study conducted a survey on a specific number of SOEs

operating in Harare. The choice of SOEs was narrowed to 3 cases, which were ZESA head office, ZINWA head office and GMB head office in Harare. These three were chosen primarily because the research problem was being experienced in the 3 entities at the time of the study, thus, addressing this research problem would benefit these entities greatly.

3.5 Target population

A target population is a population of interest with similar attributes taken from an entire population (Lohr, 2010). The study narrowed the target population to the management personnel and the internal audit personnel within these branches. With the aim of assessing the effectiveness of internal auditing of fraud detection and prevention in SOEs in Zimbabwe from 2019 to 2023 the following was the target population.

Table 2: Target population

Target population (management and internal audit personnel)	Number of respondents
ZESA	21
ZINWA	18
GMB	28
Total	67

Source: Primary data (2024)

3.6 Sample size determination

The study used sampling to determine the number of respondents to target as a sample. The Yamane's formula was used to derive the sample size and the degree of error was chosen to 5%

after taking into consideration factors such as sampling techniques and the variability of the target population. The formula for determining the sample size is given below

$$X = \frac{N}{1 + N(e)^2}$$

Where;

X is the sample

N is the target population

e is the tolerated error which in this case was decided to be 5%

Determining the workable sample size

Table 3: Sampling procedure

ENTITY	POPULATION	SAMPLE
ZESA	$\frac{21}{21 + 1(0.05)^2}$	18
ZINWA	$\frac{18}{18 + 1(0.05)^2}$	15
GMB	$\frac{28}{28 + 1(0.05)^2}$	24
TOTAL	67	57

Source: Primary data (2024)

3.8 Research data

The research data used in the study was primary data in order to contribute to the body of knowledge on the research questions. The choice of using primary data was made mainly because the research problem was contemporary and thus, there was need to explore the current state of affairs within the entities using the most relevant data for such a problem (Creswell, 2010). The nature of the study was such that the constructs in the study have no prior records in the organization which can directly address the study and as such, new information was required to address the research problem and the research questions.

The study also relied on the use of secondary data in the form of a literature review to understand the current position of academics and other relevant specialists on the link between the variables of the study (Creswell, 2010). This secondary data was mainly used to form the conceptual understanding and to sharpen the objectives of the study as well as gain insights on methodologies used in the previous studies.

3.9 Research instruments

Questionnaire was the main instrument for data collection in this study because the main aim was to collect standardized responses for quantitative analysis. The researcher designed the questionnaire which consisted of both closed-end and open-ended questions in order to gather reliable and relevant information. Open-ended questions gives the participants the independence to share their own opinions (Creswell, 2014). Close-ended questions were designed using the Likert Scale. Likert scale is a type of a scale which is used in a research survey when measuring the participants' responses concerning a certain area of the study (Bowling, 1997). The scaling ranges from 1 to 5 each giving a differentiated opinion and this is illustrated below

Table 4: Likert scale

1	2	3	4	5
Strongly disagree	disagree	Neutral	agree	Strongly agree

Source: Bowling (1997)

3.10 Data analysis and presentation

The meaning of data that has been collected can only be derived after the collected data has gone through thorough analysis (Saunders, 2007). The data was analyzed with Microsoft Excel 2016 and SPSS version 29. The quantitative aspects of the study were made through regression analysis, correlation analysis, and hypothesis testing through analysis of variance. The qualitative analysis of data was done through thematic analysis. Data was presented in the form of clear text, tables and figures. To determine the direct link between internal auditing and fraud detection and prevention, multivariate regression analysis was employed.

3.11 Reliability

The reliability of the research instrument was determined through the tests performed on the internal consistency of the research instrument. Tavakol (2011) posited that in order to test for reliability of any data set, Cronbach alpha is used and any outcomes that is more than 0.7 is considered to be an indication of data reliability. The study used the Cronbach's Alpha test to test the internal consistency on 10 selected participants.

3.12 Validity

Validity in the study was ascertained through face validity. An iterative process of giving the instrument to the supervisor of the study and having him, as an expert correct the instrument until he was convinced that the research instrument was valid for the study was used.

3.13 Ethical considerations

The study ensured that the participants of the study consented to their participation. When carrying out a research study, all the information pertaining any participant must not be disclosed (Bandari, 2022). This was done through seeking permission before administering the research instrument. The research instrument also had a section on ethical considerations which made it abundantly clear that the respondents had their freedom to stop participating in the study. Also, the instrument informed the respondents that their responses were for academic use only and that their responses would be treated with confidence.

3.14 Chapter summary

This chapter gave an overview of the methods utilized in this research on the effectiveness of internal auditing on fraud detection and prevention in SOEs in Zimbabwe from 2019 to 2023. The following chapter is to give an analysis as well as a presentation on the data collected using the methods mentioned in this chapter.

CHAPTER IV

DATA PRESENTATION, ANALYSIS AND DISCUSSION

4.0 Introduction

The chapter discusses the study's outcomes. The chapter demonstrates the presentation and analysis of the data acquired for the investigation. The analysis is carried out in an attempt to answer the research questions and solve the problem. Following the data analysis, there is an immediate debate. This debate compares the study's conclusions to past findings reported in similar research. The chapter aims to present conclusive findings about the study problems using figures, tables, and text.

4.2 Response rate

Table 5: Questionnaire response rate

Instrument	Issued	Returned	Percentage
Questionnaire	57	41	72%

Source: Primary data (2024)

The above table shows how the study managed to distribute the sample to the different entities proportionally.

4.3 Procedures used in internal auditing

In order to understand the techniques utilized in the internal auditing of the organization, the study discovered the following:

Table 6: Procedures used in internal auditing

Descriptive Statistics			
	N	Mean	Std. Deviation
The internal auditing procedures in our organization are well defined and documented	41	3.90	.768
The internal auditing procedures are consistently implemented across all departments	41	3.98	.879
The internal auditing procedures are regularly reviewed and updated to meet evolving organizational needs	41	3.95	.669
The internal auditing team has the necessary skills and expertise to effectively carry out procedures	41	4.12	.872
Valid N (listwise)	41		

Source: Primary data (2024)

The table above displays the replies of the study's 41 participants. The questionnaire responses were evaluated, with the mean and standard deviation calculated for each question. The data suggest that respondents agree (mean = 3.9, standard deviation = 0.77) that the organization's internal auditing procedures are well-defined and documented. The standard deviation is minimal, indicating that the mean is a good indication of respondents' overall view. Furthermore, the study found that the respondents agreed that internal auditing procedures are consistently implemented across all departments (mean=4; standard deviation=0.9), internal auditing procedures are

regularly reviewed and updated (mean=4; standard deviation=0.67) and the internal auditing team has the necessary skills and expertise to effectively carry out the procedures (mean=4.1; standard deviation=0.87). These findings show that the internal auditing procedures in the organization are well defined and functional. The findings agree with the previous studies who also found that State-Owned Entities (SOEs) have well-established internal auditing procedures (Alzeban et al., 2019; Arens et al., 2019). These results reassure the study of the existence of robust and thorough internal auditing procedures within the organisation.

4.4 Impact of internal auditing in detection and prevention of fraud

The study discovered the following about the impact of internal auditing on the discovery and prevention of fraud.

Table 7: Impact of internal auditing in detection and prevention of fraud

Descriptive Statistics			
	N	Mean	Std. Deviation
The internal auditing function plays a crucial role in detecting and preventing fraud in our organization	41	3.10	1.375
The internal auditing process has helped uncover and address specific instances of fraud in the past	41	2.98	1.387
The organization has implemented effective strategies to leverage internal auditing for fraud mitigation	41	3.32	1.274
The impact of internal auditing on reducing fraud in the organization is measureable and significant	41	2.88	1.470
Valid N (listwise)	41		

Source: Primary data (2024)

The respondents had a reasonably low variability in their responses, with the standard deviations being around 1. This indicates that the mean can be used to estimate respondents' overall opinions. The study discovered that the internal auditing function has a critical role in detecting and preventing fraud within the firm (mean=3.1; standard deviation=1.4). The study also found that internal auditing process helped to uncover and address specific instances of fraud in the past (mean=3; standard deviation=1.4), the organization has implemented effective strategies to leverage internal auditing for fraud mitigation (mean=3.3; standard deviation=1.3) and the effect of internal auditing on reducing fraud in the organization is measurable and significant (mean=2.9; standard deviation = 1.5). These findings mean that the internal auditing procedures are found to be significant and meaningful in the organization. In order to test the relationship further, the following regression analysis and ANOVA were done.

4.4.1 Regression analysis

To further test the influence of internal auditing on the detection and prevention of fraud.

Table 8: Regression analysis model

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.438 ^a	.192	.102	.592

a. Predictors: (Constant), the internal auditing team has the necessary skills and expertise to effectively carry out the procedures. The internal auditing procedures are consistently implemented across all department. The internal auditing procedures in our organization are well defined and documented.

Source: Primary data (2024)

The regression analysis was conducted under the assumption that the relationship between the variables was linear. The second assumption was that the regressive relationship could be

defined by the regressive equation $Y = ax + b$, where Y was the independent variable (internal auditing), a was the regression coefficient, x was the dependent variable (fraud mitigation), and b was the constant.

The regression analysis yielded a result of $Y = 0.19x + 0.59$, signifying a positive correlation between internal auditing efforts and the prevention and detection of fraud within the organization. Specifically, for each unit increase in internal auditing efforts, there is a 19% increase in the prevention and detection of fraud. This relationship aligns with prior studies (Jiang et al., 2018; Kneckel, 2016; Groomer & Murthy, 2019), which also found a positive relationship between internal auditing and fraud prevention and detection.

4.4.2 ANOVA

The study conducted an investigation on the association between internal auditing and fraud prevention and detection.

Table 9: ANOVA analysis

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.002	4	.750	2.139	.096 ^b
	Residual	12.626	36	.352		
	Total	15.628	40			

a. Dependent Variable: average mitigation

b. Predictors: (Constant), the internal auditing team has the necessary skills and expertise to effectively carry out the procedures. The internal auditing procedures are consistently implemented across all department. The internal auditing procedures in our organization are well defined and documented.

Source: Primary data (2024)

The assumptions of the ANOVA test were that the difference between the means had to be less than 1 in order to show no relationship. Thus, the rejection criterion was set to 1. If the ANOVA f-value was found to be greater than 1, this would imply that the null hypothesis would be rejected.

The ANOVA's f-value was 2.139, which was considerably higher than one, suggesting that there was sufficient evidence in the study to reject the null hypothesis. Thus, the study rejected the null hypothesis at the 10% level of significance, indicating that internal auditing methods in Zimbabwean state-owned enterprises have a favorable impact on fraud prevention and detection. Therefore, the regressive link defined by $Y=0.19X+0.509$ is statistically significant. These results align with Musonza and Magadzire (2019), who found a strong association between internal auditing and fraud prevention.

4.5 Effectiveness of internal auditing on internal controls

To answer the research question, which sought to investigate the effectiveness of internal auditing on internal controls of SOEs, the study discovered the following

Table 10: Effectiveness of internal auditing on internal controls

Descriptive Statistics			
	N	Mean	Std. Deviation
The internal auditing function is highly effective in evaluating the adequacy	41	3.00	1.360
The internal auditing process has led to the identification and remediation of weakness in the internal control system	41	3.59	1.203
The organization has taken proactive measures to measures to enhance the effectiveness of internal auditing in strengthening internal controls	41	3.17	1.394
The overall impact of internal auditing on the robustness of the organization's internal control system is substantial	41	2.78	1.314
Valid N (listwise)	41		

Source: Primary data (2024)

The vast majority of research participants felt that internal auditing has a significant impact on the organization's internal controls. The study's standard deviation was quite low, indicating that the mean is a valid measure of the relationship between internal auditing and internal controls in SOEs. To quantify the link, the following regression and ANOVA analysis were performed on the results.

4.5.1 Regression analysis

The table illustrates the regression model for the effectiveness of internal auditing on the internal controls of Zimbabwe's state-owned enterprises.

Table 11: Regression analysis model

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.337 ^a	.114	.015	.620

a. Predictors: (Constant), the internal auditing has a significant impact on the robustness of an organization's internal control system. The organization has taken aggressive initiative to improve efficacy of internal auditing and tighten internal controls. The internal auditing procedure resulted in the discovery and rectification of deficiencies in the internal control system. The internal auditing is quite successful at assessing the adequacy and efficacy of internal controls.

Source: Primary data (2024)

The regression relationship between internal auditing and internal controls of the organizations was defined in the manner $A = Bx + C$ where A was the independent variable (internal auditing), b was the regression coefficient, x was the dependent variable (internal controls) and C was the constant. The study found the relationship to be $A = 0.114x + 0.62$. This indicates that there is a positive relationship between internal auditing and internal controls, such that a unit increase in the efforts to improve internal auditing in SOEs leads to an 11% increase in the internal controls of the organization. These findings agree with previous studies (Chitambara & Sibanda, 2017) who also found that internal auditing improves internal controls.

4.5.2 ANOVA

The study conducted the following ANOVA analysis to further understand the association between these variables.

Table 12: ANOVA analysis

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.775	4	.444	1.153	.347 ^b
	Residual	13.853	36	.385		
	Total	15.628	40			

a. Dependent Variable: average mitigation

b. Predictors: (Constant), the internal auditing has a significant impact on the robustness of an organization's internal control system. The organization has taken aggressive initiative to improve efficacy of internal auditing and tighten internal controls. The internal auditing procedure resulted in the discovery and rectification of deficiencies in the internal control system. The internal auditing is quite successful at assessing the adequacy and efficacy of internal controls.

Source: Primary data (2024)

The outcome of the analysis revealed an f-value of 1.153, which surpassed the threshold of one. Consequently, the null hypothesis was disregarded, confirming a statistically significant connection between internal controls and internal auditing. This result aligns with prior research that exhibited a favourable, statistically significant association between internal auditing and internal controls in state-owned enterprises (SOEs).

4.6 Compatibility of internal auditing on information technology

The following results show the responses to the enquiry into whether the internal auditing is compatible with technology in SOEs.

Table 13: Compatibility of internal auditing on information technology

Descriptive Statistics			
	N	Mean	Std. Deviation
The internal auditing process in our organization is well intergrated with the use of technology and information systems	41	3.73	.742
The organization has successfully leveraged technological solutions to enhance efficiency and effectiveness of internal auditing	41	3.76	.799
The internal auditing team has the necessary skills and knowledge to effectively utilize technology and information systems	41	3.88	.812
The use of technology and information systems has significantly improved the compatibility and performance of internal auditing in the organization.	41	3.98	.821
Valid N (listwise)	41		

Source: Primary data (2024)

The foregoing results demonstrate that internal auditing methods are very compatible with technology within SOEs. The results suggest that internal auditing methods are compatible with the technologies being adopted in SOEs. The findings demonstrate that the companies use information systems that are efficient and effective, and this has led to a significant improvement in the compatibility and performance of internal audits in the SOEs.

4.7 Chapter Summary

The chapter presented the research findings and their implications. The chapter revealed a statistically significant relationship between internal auditing and the prevention and detection of fraud. The chapter also showed that internal auditing enhances the internal controls of SOEs. Furthermore, the chapter demonstrated that internal auditing is adaptable to technology. The subsequent chapter provides a summary of the study's findings, conclusions, and recommendations.

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

The chapter provides an oversight of the research study including a synopsis of the findings that were presented and analyzed on the previous chapter. The primary objective of this study was to evaluate the effectiveness of internal auditing on fraud detection and prevention in State Owned Enterprises and the research findings are concluded in this chapter as well as recommendations and suggestions for future research.

5.1 Summary of findings

.

5.1.1 Objective 1

It can be concluded that the internal auditing procedures are being observed, practiced and maintained in SOEs in Zimbabwe. Every SOE which was studied showed that there are internal auditing procedures being observed within the entity.

5.1.2 Objective 2

The regression equation $Y = 0.19X + 0.59$ was used in the study to calculate the impact of internal auditing on fraud mitigation in Zimbabwean state-owned enterprises. This suggests that the study discovered a statistically significant positive correlation between internal auditing and fraud mitigation. The study discovered that the results are significant under extreme statistical scrutiny using the ANOVA test at the 10% level of significance.

5.1.3 Objective 3

The study discovered that the firms' internal auditing methods are effective on their internal controls. Literature revealed that internal auditing is mainly concerned with internal controls and as such, the study found that in SOEs in Zimbabwe, Internal auditing methods have a substantial impact on the internal controls within the SOE.

5.1.4 Objective 4

The investigation discovered that the internal auditing techniques in use are compatible with technology. The majority of respondents agreed that the internal auditing procedures being implemented in Zimbabwe's state-owned enterprises are compatible with technology such as accounting information systems and enterprise resource planning. The study also discovered that the use of technology has substantially enhanced the compatibility and performance of internal audits in firms.

5.2 Conclusions

5.2.1 Procedures of internal auditing

The study concluded that all of the organizations in the study use internal auditing methods. The study concluded that Zimbabwe's state-owned enterprises have developed and effective internal auditing systems in place.

5.2.2 Impact of internal auditing on fraud prevention

The study concluded that the internal auditing has a statistically significant impact on fraud prevention. The study concluded that a unit increase in the internal auditing efforts leads to a subsequent 19% increase in the prevention and detection of fraud in SOEs in Zimbabwe.

5.2.3. Effectiveness of internal auditing on internal controls

The study indicated that the internal auditing methods seen in the SOEs have a favorable effect on the development, upgrading, and operation of internal controls in the SOEs.

5.2.4 Compatibility with technology

The study also indicated that the internal auditing processes of state-owned enterprises are technologically compatible. The study indicated that the use of technology has increased and improved the internal auditing methods observed in SOEs. Thus, the study indicated that using technology in internal auditing has resulted in more effective and accurate auditing.

5.3 Recommendations

5.3.1 Recommendations to practice

The study recommends the SOEs, especially the ones which were selected in the study to increase their efforts in implementing and maintaining the current practices of internal auditing. The study found that the practices in the SOEs regarding implementation of internal auditing procedures was high and consistent across the various SOEs which were taken in the study. Thus, the recommendation is that the organizations should seek to increase their implementation or maintain the preexisting internal auditing procedures.

The study also suggested the maintenance of internal auditing practice because the study indicated a good association between internal auditing and the mitigation of fraud, which includes both prevention and detection of fraud.

The study also advises that the SOEs should aim to improve their indulgence with technology in internal auditing procedures. The inclusion of technology ensures the benefits which were found in the literature review of the study which include more efficiency, greater speed and cost saving.

5.3.2 Recommendation to policy

According to the study, internal auditing practices that are either superior to or comparable to those now in use at the SOEs that were the subject of the study should be emphasized by the government and the parliament. The study showed that internal auditing and fraud prevention and detection in state-owned enterprises (SOEs) have a statistically significant positive correlation. Additionally, the study suggests that legislators concentrate on enhancing SOE internal controls.

5.4 Areas of further study

According to the report, further research should concentrate on expanding the study to other SOEs in order to understand the research problem in a variety of organizations and determine

whether the findings hold true in different settings. The report suggests that future research concentrate on developing a theory that clarifies the type and scope of the connection between internal auditing and the identification and prevention of fraud in public businesses. The results of the literature review indicated that there was no prior theory that addressed the focus of internal auditing and the prevention of fraud in state-owned enterprises (SOEs). Future research will benefit from the development of this theory as it will help identify the precise factors influencing the subject area.

REFERENCES

- AICPA. (2012). Professional skepticism in an audit of financial statements. New York: American Institute of Certified Public Accountants.
- Albrecht, W. S., Albrecht, C. O., Albrecht, C. C., & Zimbelman, M. F. (2019). Fraud examination. Cengage Learning.
- Alles, M., Brennan, N., Kogan, A., & Vasarhelyi, M. (2018). Continuous Auditing and Continuous Monitoring: The Current State of Practice, Knowledge, and Development. *Journal of Information Systems*, 32(3), 1-14.
- Alzeban, A., Gwilliam, D., & Al-Rasheed, A. (2019). Risk management and internal audit in Saudi Arabian state-owned enterprises (SOEs): A study of senior managers' perceptions. *Journal of International Accounting, Auditing and Taxation*, 34, 100-112.
- Arens, A. A., Elder, R. J., Beasley, M. S., & Hogan, C. E. (2019). Auditing and assurance services. Pearson.
- Association of Certified Fraud Examiners (ACFE). (2020). Fraud Examiners Manual. John Wiley & Sons.
- Bourguignon, A., Huysentruyt, M., & Renard, R. (2017). Performance auditing in the public sector: The interplay between politics and auditing in Belgium. *Financial Accountability & Management*, 33(2), 159-177.
- Bowling, A. (1997). Measuring Health: A review of quality measurement scales. Available at <https://www.amazon.com/Measuring-Health-Review-Quality-Measurement/dp/033519754x>
- Brink's, A. (2018). The role of internal control in the management of public organizations. *Journal of Public Administration Research and Theory*, 28(2), 296-312.
- Chen, L., Deng, M., & Cao, M. (2018). The compliance audit of big data. *Journal of Audit and Economics*, 5, 44-49.
- Chitambara, P., & Sibanda, F. (2017). Internal Auditing and Fraud Detection: A Case Study of Zimbabwean State-Owned Enterprises. *Journal of Governance and Regulation*, 6(3), 33-41.

Chivambo, E., & Muzividzi, P. (2021). The Role of Internal Auditing in Fraud Prevention and Detection: A Case Study of Zimbabwean State-Owned Enterprises. *Journal of Accounting and Financial Management*, 7(1), 1-14.

Committee of Sponsoring Organizations of the Treadway Commission (COSO). (2013). Internal Control-Integrated Framework. Retrieved from https://www.coso.org/Documents/990025P_FINAL.PDF

Cohen, S. (2016). *Fraud Analytics: Strategies and Methods for Detection and Prevention*. John Wiley & Sons

COSO. (2013). Internal Control - Integrated Framework. Committee of Sponsoring Organizations of the Treadway Commission.

Cressey, D. R. (1953). *Other people's money; a study in the social psychology of embezzlement*. Free Press.

Dang, R., Hsieh, S. L., & Ziegenfuss, D. E. (2020). Compliance audit: A systematic review and future research directions. *Journal of Business Ethics*, 163(1), 13-33.

Funnell, W., & Cooper, K. (2018). Performance auditing and accountability. In *The Routledge Companion to Performance Management and Control* (pp. 485-501). Routledge.

Gendron, Y., Cooper, D. J., & Townley, B. (2019). The construction of auditing professionalism: The case of the French Ordre des Comptables Agréés. *Accounting, Organizations and Society*, 75, 30-47.

Groomer, S. M., & Murthy, U. S. (2019). Continuous Monitoring and Auditing: An Integrative Literature Review. *Journal of Information Systems*, 33(2), 31-56.

Hoitash, R., Hoitash, U., & Bedard, J. C. (2018). Risk-based internal control assessment and financial reporting quality. *Accounting Review*, 93(4), 99-129.

Hugo, V. D. (2018). Financial fraud, scandals and regulation: A conceptual framework and literature review. Available at <https://doi.org/10.1080/00076791.2018/1519026>

Jiang, J., Tang, L., & Chen, Y. (2018). Risk management, strategic planning and firm performance: Evidence from Chinese state-owned enterprises. *International Journal of Production Economics*, 198, 104-114.

Kaplan, R. S., & Mikes, A. (2019). Managing risks: A new framework. *Harvard Business Review*, 97(6), 48-57.

Knechel, W. R. (2016). Use of Big Data by Auditors and Its Implications for the Audit Profession. *Accounting Horizons*, 30(2), 293-305.

KPMG. (2020). Global Insurance Fraud Survey 2020.

Krahnert, J. P., Sandner, P. G., & Schmitt, T. A. (2019). Compliance in financial institutions: An integrated framework. *Journal of Business Ethics*, 158(2), 457-486.

Li, X., Xiong, B., & Wang, Y. (2019). An integrated risk assessment model for state-owned enterprise reform. *Journal of Risk Research*, 22(7), 823-847.

Madoro, I., & Chimhete, H. (2021). The Role of Auditors in Fraud Detection and Prevention in Zimbabwe: A Review. *International Journal of Accounting and Financial Management Research*, 8(2), 1-10.

Mahlangu, T., & Dube, T. (2017). The role of internal audit in fraud prevention and detection in the public sector. *Mediterranean Journal of Social Sciences*, 8(6), 61-70.

Mangwengwende, A. (2021). Enhancing Corporate Governance in Zimbabwe: A Case of the Insurance Sector. *Journal of Governance and Regulation*, 10(4), 77-87.

Moyo, M., & Ncube, M. (2018). Enhancing Internal Audit Effectiveness in Fraud Prevention and Detection in Zimbabwean State-Owned Enterprises. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 8(2), 86-97.

Musonza, T., & Magadzire, M. (2019). The Role of Internal Auditing in Fraud Detection and Prevention: Evidence from Zimbabwean State-Owned Enterprises. *International Journal of Business and Management*, 14(2), 273-285.

- Nzekwu, C. O., & Okwuosa, C. N. (2019). Internal audit, fraud detection and prevention in the Nigerian public sector. *Journal of Accounting and Financial Management*, 5(2), 17-25.
- Nzimande, N., & Mokwena, S. (2018). The role of internal audit in fraud prevention and detection: A case study of a South African government department. *The Journal of Applied Business Research*, 34(6), 1097-1108.
- Okaro, I. S., & Akande, M. (2020). Internal audit effectiveness and fraud prevention in Nigerian state-owned enterprises. *Journal of Accounting, Finance and Auditing Studies*, 6(1), 1-16.
- Ong, T. S., Tan, P. S., & Soh, K. L. (2017). Risk assessment of state-owned enterprises: a framework based on fuzzy AHP and TOPSIS. *Risk Management*, 19(2), 111-135.
- Power, M. (2016). Performance audit and the rationalization of public organizations. In *Performance Audit and Public Management in Government* (pp. 1-15). Emerald Publishing Limited.
- Chitambara, P., & Sibanda, F. (2017). Internal Auditing and Fraud Detection: A Case Study of Zimbabwean State-Owned Enterprises. *Journal of Governance and Regulation*, 6(3), 33-41.
- Chivambo, E., & Muzividzi, P. (2021). The Role of Internal Auditing in Fraud Prevention and Detection: A Case Study of Zimbabwean State-Owned Enterprises. *Journal of Accounting and Financial Management*, 7(1), 1-14.
- Moyo, M., & Ncube, M. (2018). Enhancing Internal Audit Effectiveness in Fraud Prevention and Detection in Zimbabwean State-Owned Enterprises. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 8(2), 86-97.
- Musonza, T., & Magadzire, M. (2019). The Role of Internal Auditing in Fraud Detection and Prevention: Evidence from Zimbabwean State-Owned Enterprises. *International Journal of Business and Management*, 14(2), 273-285.
- Sawyer, L. B. (2016). *Sawyer's Internal Auditing: Enhancing and Protecting Organizational Value*. The Institute of Internal Auditors Research Foundation.
- Tavakol, M (2011). Making Sense of Cronbach's Alpha – *International Journal of Medical Education*, pp 53-55 available at <http://dx.doi.org/10.5116/ijme.4df.8dfd>

The Institute of Internal Auditors (IIA). (2017). International Standards for the Professional Practice of Internal Auditing. Retrieved from <https://na.theiia.org/standards-guidance/Public%20Documents/IPPF%20English%202013%20Translation.pdf>

Vafeas, N., & Vlittis, A. (2018). The role of technology in the internal control reporting process. *International Journal of Accounting Information Systems*, 31, 19-32.

Van Peursem, K., & Guthrie, J. (2019). Performance auditing: Measuring and reporting the performance of public sector agencies. In *Routledge Handbook of Accounting in Asia* (pp. 401-418). Routledge.

Velentzas, J., Broni, G., & Sotiropoulos, H. (2019). Compliance audits in the public sector: A systematic review and future research agenda. *International Journal of Public Administration*, 42(12), 1071-1087.

Wells, J. T. (2016). *Principles of fraud examination*. John Wiley & Sons.

APPENDICIES

**Bindura University
of Science Education**



FACULTY OF COMMERCE

DEPARTMENT OF ACCOUNTING

APPENDIX 1: QUESTIONNAIRE

RESEARCH TOPIC

**THE EFFECTIVENESS OF INTERNAL AUDITING IN FRAUD DETECTION AND
PREVENTION IN STATE OWNED ENTERPRISES IN ZIMBABWE (SOE's) 2019-2023**

Dear Respondent

I am an undergraduate student at Bindura University of Science Education majoring in Accounting. In partial fulfillment of the degree requirements, I am entrusted with completing a dissertation study. My research focuses on understanding the relationship between internal auditing and fraud detection and prevention in state-owned enterprises. The primary goals are to establish internal auditing procedures, investigate the impact of internal auditing on fraud mitigation, determine the effectiveness of internal auditing on internal controls, and investigate the compatibility of internal auditing with technology and information systems in Zimbabwean state-owned enterprises. You have been selected to take part in the study. You are reminded that anonymity is important; do not reveal your identity on the research instrument. You are also told that participation is voluntary; you may choose not to participate in this study or withdraw at any moment without explanation. The information you provide is for academic purposes solely.

For any queries/questions, or for any clarity issues that may deem necessary, please do not hesitate to contact **on +263 712 911 423 / +263 782 816 302**

Please tick the box below to show your consent.

Consent:

☐

INSTRUCTIONS:

Please answer all the questions to the best of your ability. Kindly indicate your answers by ticking where appropriate in the boxes provided. Your name or identity is not required.

SECTION A: DEMOGRAPHIC INFORMATION

Gender	Response
Male	
Female	
Age	
18-30	
31-40	
41-50	
50 and above	
Academic Qualifications	Response
Certificate	
Diploma	
Bachelor's Degree	
Masters/Post graduate	
Doctorate	

A4. For how long have you been employed by the firm you are currently working for?

Period of service	Response
Less than 5yrs	
5-10yrs	
11-19yrs	

20-25yrs	
26 yrs. and above	

A5. What is your level of occupation? Please indicate by putting a tick.

Level of Management	Response
Top management	
Middle management	
Lower management	

SECTION B

In your opinion, please indicate the level of your agreement or disagreement using a tick on the following statements

1=strongly disagree 2=Disagree 3= Neutral 4= Agree 5= Strongly Agree							
CONSTRUCT	ITEM CODE	ITEM DESCRIPTION	1	2	3	4	5
Internal Auditing Procedures	IAP 1	The internal auditing procedures in our organization are well-defined and documented.					
	IAP 2	The internal auditing procedures are consistently implemented across all departments.					
	IAP 3	The internal auditing procedures are regularly reviewed and updated to meet evolving organizational needs.					

	IAP 4	The internal auditing team has the necessary skills and expertise to effectively carry out the procedures					
--	--------------	---	--	--	--	--	--

SECTION C

In your opinion, please indicate the level of your agreement or disagreement using a tick on the following statements.

1=strongly disagree 2=Disagree 3= Neutral 4= Agree 5= Strongly Agree							
CONSTRUCT	ITEM CODE	ITEM DESCRIPTION	1	2	3	4	5
Impact of Internal Auditing on Fraud Mitigation	IFM 1	The internal auditing function plays a crucial role in detecting and preventing fraud in our organization.					
	IFM 2	The internal auditing process has helped uncover and address specific instances of fraud in the past.					
	IFM 3	The organization has implemented effective strategies to leverage internal auditing for fraud mitigation.					
	IFM4	The impact of internal auditing on reducing fraud in the organization is measurable and significant.					

SECTION D

In your opinion, please indicate the level of your agreement or disagreement using a tick on the following statements

1=strongly disagree 2=Disagree 3= Neutral 4= Agree 5= Strongly Agree							
CONSTRUCT	ITEM CODE	ITEM DESCRIPTION	1	2	3	4	5
Effectiveness of Internal Auditing on Internal Controls.	AIC 1	The internal auditing function is highly effective in evaluating the adequacy and effectiveness of internal controls.					
	AIC 2	The internal auditing process has led to the identification and remediation of weaknesses in the internal control system.					
	AIC 3	The organization has taken proactive measures to enhance the effectiveness of internal auditing in strengthening internal controls					
	AIC 4	The overall impact of internal auditing on the robustness of the organization's internal control system is substantial					

SECTION E

In your opinion, please indicate the level of your agreement or disagreement using a tick on the following statements

1=strongly disagree 2=Disagree 3= Neutral 4= Agree 5= Strongly Agree							
CONSTRUCT	ITEM CODE	ITEM DESCRIPTION	1	2	3	4	5
Compatibility of Internal Auditing with Technology and Information Systems	ITI 1	The internal auditing process in our organization is well-integrated with the use of technology and information systems.					
	ITI 2	The organization has successfully leveraged technological solutions to enhance the efficiency and effectiveness of internal auditing.					
	ITI 3	The internal auditing team has the necessary skills and knowledge to effectively utilize technology and information systems.					
	ITI 4	The use of technology and information systems has significantly improved the compatibility and performance of internal auditing in the organization.					

Thank you for your cooperation