The role of the Special Investigating Unit in combating corrupt and fraudulent activities in the public sector of South Africa

by

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submitted in accordance with the requirement for the degree of

MASTER OF PHILOSOPHY IN ACCOUNTING SCIENCES

at the

UNIVERSITY OF SOUTH AFRICA

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September 2025

DECLARATION

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I, Cornelius Mapitsa, declare that this dissertation titled **The role of the Special Investigating Unit in combating corrupt and fraudulent activities in the public sector of South Africa** is solely compiled by myself and it is my work, and all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

I further declare that I have not previously submitted this work, or part of it, for examination at Unisa for another qualification or at any other higher education institution.

Cornelius Mapitsa

Signed at Pretoria, South Africa on 25 September 2025

ACKNOWLEDGEMENTS

I would like to express my gratitude to everyone who assisted me in completing this dissertation:

- The Almighty and my ancestors for giving me the courage to complete my dissertation studies.
- My Supervisor, Dr Harold Patrick for support, guidance and constructive feedback.
- Mr Anton Mzwakhe Lemdede: your words of wisdom have been a shining light to me.
- I would like to thank Mr Sagren Reddy, the provincial head of the SIU Gauteng office for granting me permission to conduct this study at the office. I am thankful to all the research participants for providing insightful data and taking time from tight schedules to complete the questionnaire.
- To my partner, Miss Mmemme Mamly Moatshe: thank you for your undying support during my studies.
- To my family for your understanding and encouraging words.
- My children for always complaining when I am studying but still giving me space to study.
- Lastly to my friends and colleagues for the pressure you put on me and forcing me to persevere with the studies.

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EDITOR'S DECLARATION

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ABSTRACT

The Special Investigating Unit (SIU) is an anti-corruption agency in South Africa, mandated to investigate corrupt and fraudulent activities, serious maladministration, improper conduct, etc. within state institutions or organs of state and recover misappropriated funds through litigation. While its investigative role is well established, the SIU's capacity for fraud prevention and detection remains underexplored. For the purpose of the study, the mandate was to focus on the investigation of corrupt and fraudulent activities. This study aimed to determine how the SIU can enhance its role in combating corrupt and fraudulent activities by using forensic audit tools and anti-fraud controls.

Using an interpretivist philosophy and a qualitative methodology, the study gathered insights from 22 purposively sampled forensic investigators and lawyers within the office of the SIU in Pretoria, Gauteng Province. Data were collected through open-ended questionnaires and analysed thematically using NVivo software.

Findings revealed that when conducting investigations, the crime busting organisation (the SIU) does not employ forensic audit tools or structured anti-fraud controls. Participants emphasised that integrating tools such as background investigations, lifestyle audits, and forensic data analytics, alongside robust fraud prevention and detection strategies would significantly strengthen the SIU's efforts to combat corruption and fraud. The study recommends that the SIU institutionalise these mechanisms within its investigative processes to improve effectiveness and reduce the recurrence of corrupt and fraudulent activities within state institutions.

Keywords: SIU, forensic audit tools, anti-fraud controls, fraud prevention, fraud detection, corruption, public sector, South Africa

TSHOBOKANYO

Lekala le le Kgethegileng la Dipatlisiso (SIU) ke setheo se se kgatlhanong le bonweenwee mo Aforikaborwa, se se neilweng maikarabelo a go batlisisa ditiro tsa bonweenwee le tsa tsietso, tsamaiso e e sa siamang e e masisi, maitsholomabe, jj. Le fa seabe sa yona sa patlisiso se tlhomilwe sentle, bokgoni jwa SIU jwa go thibela le go lemoga tsietso bo sa ntse bo sa tlhotlhomiswe sentle. Mabapi le maitlhomo a patlisiso, thomo e ne e le go tsepamisa mogopolo mo dipatlisisong tsa ditiro tsa bonweenwee le tsa tsietso. Patlisiso eno e ne e ikaeletse go bona gore SIU e ka tokafatsa jang seabe sa yona mo go lwantsheng ditiro tsa bonweenwee le tsa tsietso ka go dirisa didiriswa tsa boruni jwa forensiki le ditaolo tse di kgatlhanong le tsietso.

Ka go dirisa filosofi ya tlhaloso le mokgwa wa khwalitatifi, patlisiso e kokoantse dintlha go tswa mo babatlisising ba forensiki ba le 22 ba ba tsereng disampole ka maitlhomo le mo babueleding mo teng ga ofisi ya SIU kwa Pretoria, Porofense ya Gauteng. Datha e ne ya kokoanngwa ka lenaane la dipotso tse di tlhokang go arabiwa ka botlalo e bile e ne ya sekasekwa ka thitokgang go diriswa serweboleta sa NVivo.

Diphitlhelelo di senotse gore fa o dira dipatlisiso, mokgatlho wa twantsho ya bosenyi (SIU) ga o dirise didirisiwa tsa boruni jwa forensiki kgotsa ditaolo tse di rulagantsweng tse di kgatlhanong le tsietso. Batsayakarolo ba gateletse gore go kopanya didiriswa tse di jaaka dipatlisiso tsa lemorago, boruni jwa mokgwa wa botshelo, le ditshekatsheko tsa datha ya forensiki, mmogo le maano a a nonofileng a thibelo le temogo ya tsietso go tlaa maatlafatsa thata maiteko a SIU a go lwantsha bonweenwee le tsietso. Patlisiso e tshitshinya gore SIU e dire gore mekgwa eno e nne karolo ya setheo mo teng ga dithulaganyo tsa yona tsa dipatlisiso go tokafatsa katlego le go fokotsa go boelela ga ditiro tsa bonweenwee le tsa tsietso mo teng ga ditheo tsa puso.

Mafoko a botlhokwa: SIU, didirisiwa tsa boruni jwa forensiki, ditaolo tse di kgatlhanong le tsietso, thibelo ya tsietso, go lemoga tsietso, bonweenwee, lephata la puso, Aforikaborwa.

ISIFINYEZO

I-Unit Ekhethekile Yokuphenya isikhungo sokulwa nenkohlakalo eNingizimu Afrika, okugunyazwe ukuthi iphenye ngezenzo zenkohlakalo nokukhwabanisa, okubandakanya ukuziphatha kabi, ukuziphatha ngokungafanele, njll. Ngaphakathi kwezikhungo zikahulumeni noma izinhlaka zikahulumeni futhi kutholakale imali esetshenzisiwe kabi ngokugagamela. Nakuba indima yayo yophenyo isungulwe kahle, amandla e -Unit Ekhethekile Yokuphenya okuvimbela nokuthola inkohlakalo asengakahlolisiswa ngokwanele. Ngenhloso yocwaningo, umsebenzi oyinhloko kwakuwukugxila ophenyweni lwezenzo zenkohlakalo kanye nokukhwabisana. Lolu cwaningo beluhlose ukucacisa ukuthi I-Unit Ekhethekile Yokuphenya ingayithuthukisa kanjani indima yayo ekulweni nenkohlakalo kanye nemisebenzi yokukhwabanisa ngokusebenzisa amathuluzi okuhlola asemthethweni kanye nokulawula ukukhwabanisa.

Ukusebenzisa I-Philosophy yokuhumusha kanye nendlela yocwaningo esekelwe kwikhwalithi, lolucwaningo luqoqe imininingwane kubaphenyi bezobugebengu obuyinkimbinkimbi (forensic invistigators) kanye nabameli abangu-22 abakhethwe ngamabomu ehhovisini lophenyo e-Pitoli, esifundazweni sase-Gauteng. Idatha iqoqwe ngemibuzo evulekile futhi yahlaziywa ngokwezihloko kusetshenziswa I-software ye-NVivo.

Imiphumela iveze ukuthi ngesikhathi kwenziwa uphenyo, inhlangano elwa nobugebengu ayisebenzisi amathuluzi okuhlola izimali ngokujulile (forensic audit) noma izindlela ezihleliwe zokuvimbela inkohlakalo. Abahlanganyeli bagcizelele ukuthi ukuhlanganisa amathuluzi anjengokuphenya kwangemuva, ukuhlolwa kwendlela yokuphila, kanye nokuhlaziywa kwe-data le-foensic, ukuba nezindlela eziqinile zokuvimbela nokuthola inkohliso kungaqinisa kakhulu imazamo ye-Unit lophenyo lokuhlolwa nenkohliso kanye nokukhwabanisa. Ucwaningo luphakamisa ukuthi I-Unit Yophenyo ifake lezi zindlela ohlelweni lwayo lokuphenya ukuze ithuthukise ukusebenza ngempumelelo kuphinde kuncishiswe ukuphindeka kwezenzo zenkohlakalo nokukhwabanisa ezikhungweni zikahulumeni.

Amagama angukhiye: I-Unit Ekhethekile Yophenyo, amathuluzi okucwaninga nge-forensic, izindlela zokuvimbela ukukhwabanisa, ukuvinjelwa kokukhwabanisa, ukutholwa kokukhwabanisa, inkohlakalo, umkhakha kahulumeni, I-Ningizimu Afrika

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LIST OF ABBREVIATIONS

ACFE: Association of Certified Fraud Examiners

ACTT: Anti-Corruption Task Team

CFI: Chief Forensic Investigator

CPA: Criminal Procedure Act

CPI: Corruption Perception Index

CSIR: Council of Scientific and Industrial Research

CW: Corruption Watch

DARLLD: Department of Agriculture Land Reform and Rural Development

DPCI: Directorate for Priority Crime Investigation

EFCC: Economic and Financial Crime Commission

FA: Forensic Accountant

FI: Forensic Investigator

FIS: Forensic Investigation Specialist

ICPC: Independent Corrupt Practices Commission

IPSFF: International Public Sector Fraud Forum

JFI: Junior Forensic Investigator

MDA: Market Data Analytics

NACS: National Anti-Corruption Strategy

NPA: National Prosecuting Authority

OLS: Ordinary Least Square

NLC: National Lotteries Commission

PDA: Protected Disclosures Act

POCA: Prevention of Organized Crime Act

PRECCA: Prevention and Combating of Corrupt Activities Act

PRASA: Passenger Rail Agency of South Africa

PFI: Principal Forensic Investigator

PFL: Principal Forensic Lawyer

PH: Provincial Head

RTA: Reflective Thematic Analysis

SABC: South African Broadcasting Corporation

SMME Small, Medium, and Micro Enterprises

SFO: Serious Fraud Office

SIU: Special Investigating Unit

TI: Transparency International

UKZN: University of KwaZulu Natal

UNISA: University of South Africa

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Chapter One: Background of the study

1.1 Introduction

Occupational fraud refers to a situation in which employees use their positions in an organisation by misusing the resources and misappropriating assets of such organisation to benefit personally (Association of Certified Fraud Examiners ACFE, 2024). This is a type of fraud that is committed by perpetrators while performing their duties. Hlongwane (2018) asserts that corruption is an intentional and illegitimate act by public officials in performing their duties to receive personal gain or gains for others.

According to Transparency International (TI) (2022), South Africa scored 43% on the public sector corruption index compared to other developing countries. Given such high percentage, there is no doubt of the need for the country to improve existing mechanisms to combat corruption in the sector. In fact, South Africa is ranked very low in the public sector corruption index, compared to Denmark which scored (90%) South Africa, however, scored better than Somalia which scored (12%) and is considered the most corrupt country in the index. Corruption is the most prevalent type of occupational fraud in Sub-Saharan Africa, accounting for 62% of cases (ACFE, 2022).

Corruption has negative impacts on governance, including deterring timely delivery of good quality services to the public as funds allocated for services get diverted for corrupt activities (Hlongwane, 2018). Budhram and Geldenhuys (2018) point out that corruption is used by some employees in government to influence decision-making. Thus, corruption affects the development of countries as money meant for use to improve services gets misplaced by some public officials. The researcher views the concept of corruption as an abuse of power by some public officials through diverting funds meant for development to benefit themselves and/or for the benefit of their associates.

While governments established structures, policies, and legal frameworks to mitigate

public sector corruption, the threat remains (International Public Sector Fraud Forum IPSFF, 2019). The IPSFF was established in 2017 by international anti-corruption bodies with the aim to discuss best and leading practices in combating fraudulent activities. The forum uses information gathered across the world to combat fraudulent activities in government institutions (IPSFF, 2019). According to the IPSFF (2019), fraud, especially theft of money meant for services, leads to the loss of trust by the public, businesses, stakeholders and civil society organisations in their respective governments. The Serious Fraud Office (SFO) is an anti-corruption agency intended to prevent, investigate, and prosecute serious financial crime in New Zealand and has assisted government in identifying and addressing emerging fraud and corruption risks within government departments (SFO, 2022).

Fraud is committed across the world and involves misrepresentation with the intention to benefit unlawfully (TI, 2019). The SIU (2021) describes fraud as criminal deception with the intention to gain. When committed in the public sector, fraud deprives victims of essential services they need to survive or improve their lives such as reliable water supply, proper roads, electricity and health care. For the purpose of this research, fraud is defined as unlawful and intentional misrepresentation which causes harm/potential harm to victims and financial gain to perpetrators. According to Mokhomole (2023), proactive investigation conducted by forensic investigation units within the departments in the public sector is the most effective way of combating fraudulent activities. Thus, forensic investigations, especially those conducted in the public sector, can prevent fraud.

A multi-agency approach coupled with a multi-disciplinary approach plays a vital role in combating fraudulent activities within the public sector. The South African government established a multi-agency approach involving the Anti-Corruption Task Team (ACTT), comprising of the Special Investigating Unit (SIU), the Directorate for Priority Crime Investigation (DPCI), and National Prosecuting Authority (NPA), to fast-track investigations pertaining to corruption, as well as prosecutions (National Anti-Corruption Strategy, 2020).

The SIU aims to assist state entities, government, and municipalities to minimise and mitigate corruption and fraud (SIU, 2022). If the intervention has been successful recommendations by the SIU assists state entities, government departments, and municipalities to improve their internal control process, which in turn, may prevent corruption and fraud. Knowledge that the SIU is permitted to probe corrupt and fraudulent financial activities creates awareness among employees in state entities, government departments, and municipalities that corrupt and fraudulent activities involving public funds are likely to be exposed to and as such plays a role in reducing corrupt and fraudulent activities in South Africa

Forensic auditing tools such as business intelligence and forensic data analytics play an important role in combating corruption in the public sector around the globe (Tayo & Ayool, 2021). Suleiman and Othman (2021) assert that creating awareness programmes with citizens can involve citizens in preventing corruption in the public sector. Oyerogba (2021) is of the view that forensic audit tools such as the evaluation of financial statements are key and helpful in detecting fraud within the public sector. Udukeke (2019) indicates that forensic audit tools such as forensic data analytics, whistleblowing, background investigation, analytical procedures, interviews, and substantive tests assist in combating fraudulent activities in public organisations. Clearly, the use of forensic auditing is beneficial as it assists in combating corrupt and fraudulent activities.

1.2 Research focus

The researcher discovered that most of the state institutions (state entities, government departments, and municipalities) lack adequate policies to address corruption and fraud. In some instances where state institutions have such policies, gaps and weaknesses are identified when the SIU is called upon and/ or proclaimed to investigate corrupt and fraudulent activities within those institutions. Moreover, the SIU detected weak internal controls which compromise governance of these institutions. The standard practice for state institutions is that policies are required to be reviewed within 2-3 years to adapt to the emerging trends of corruption and fraud internally, externally and across the globe. However, the study established that in most

instances, the investigations carried out by the SIU in these state institutions established that it is not the case, thus urging the SIU to make systemic recommendations on corruption and fraud policy improvement.

The SIU wants to establish competency capabilities that would assist state entities, government departments and municipalities to improve their processes and advisory services that would assist in developing anti-corruption strategies to reduce the reoccurrence of fraudulent activities. Investigations conducted by the SIU. under Proclamation R27 of 2017 and R19 of 2018 revealed that loopholes in internal controls and policies led to fraudulent activities at the South African Broadcasting Corporation (SABC), the Department of Agriculture Land Reform and Rural Development (DARLLD) under Proclamation R24 of 2017, and the Moretele Local Municipality under ProclamationR7 of 2019 (SIU, 2021).

Reports on these incidents are indicators that involving the SIU can assist, state entities, government departments, and municipalities especially, to combat activities related to financial fraud, as well as and from recurrence of such (SIU, 2021). In fact, the timely involvement of the SIU regarding these incidents helped curb fraudulent activities. According to the SIU (2023), establishing an advisory service and public education services could serve as tools to prevent corruption. The advisory service would assist state entities, government departments, and municipalities to prevent fraudulent activities by reviewing policies and processes, strengthening internal control, and monitoring activities that promote corruption. The researcher is of the view that the proposed advisory services alone would not mitigate corrupt and fraudulent activities as the rate of corruption and fraud occurs in [state the country(s) or continent(s] is vast, and that the new approach is that includes the use of forensic audit tools and anti-fraud controls to mitigate them is necessary.

The SIU assistance through systemic recommendations comprises that state entities, government departments, and municipalities identify and examine policies and procedures that are vulnerable to corruption and fraud, including weaknesses in internal control systems and then develop programmes aimed at preventing corruption

(SIU, 2022). State institutions should not rely on consultations they have with the SIU as advice by the latter that can be ignored. Therefore, the approach involving examination of the policies and procedures during investigation is better, as it forces state institutions to enforce advice they receive from the SIU.

The SIU records allegations of corruption and fraud received from a centralised location where their assessment committee assesses such allegations and determines whether they should be refuted or approved for investigation that could lead to the motivation of a proclamation (SIU, 2021). The SIU is an anti-corruption agency that conducts investigations, mainly focusing on state entities, government departments and municipalities, whereby the organisation provides evidence and recommendations that can be used to prevent corruption and fraud through systemic recommendations to reduce the likelihood of recurrence of corruption and fraud. The efforts of the SIU in combating corruption have not rendered the desired results, given the continued losses caused by acts of corruption and fraud in state entities, government departments, and municipalities. Therefore, there is a need for an innovative approach that can address causes of corruption and fraud in the public sector. The study intended to ascertain the use of forensic audit tools and anti-fraud controls in preventing and detecting corruption and fraud at state institutions.

1.3 Research aim

The study seeks to ascertain how forensic audit tools and anti-fraud controls can assist the SIU in combating corrupt and fraudulent activities within state entities, government departments, and municipalities.

1.3.1 Objectives

- To identify the use of forensic audit tools by the SIU in combating corrupt and fraudulent activities.
- To identify the use of anti-fraud controls by the SIU in combating corrupt and fraudulent activities.
- To present strategies that the SIU can use to combat corrupt and fraudulent activities.

1.4. Methodology

1.4. 1 Research design and approach

The study used a qualitative research method which enabled the researcher to obtain perceptions, views, and opinions of participants (forensic investigators and forensic lawyers) regarding the use of forensic audit tools and anti-fraud controls. The researcher used interpretive research methodology to understand forensic audit tools and anti-fraud controls used and that which can be adopted to combat corruption and fraudulent activities within state entities, as well as government departments and municipalities. Interpretivism was chosen by the researcher to get different insights about forensic audit tools and anti-fraud controls. The paradigm assisted the researcher to source views about mechanisms that can be used to detect and mitigate corruption and fraud.

The researcher undertook qualitative research to determine opinions, experiences, and views of the participants regarding the use of forensic audit tools and anti-fraud controls. The researcher used an exploratory questionnaire design to conduct the study and employed purposive sampling to select the participants. Purposive sampling was adopted as it allowed the researcher to select participants that can answer the research questions. Purposive sampling assisted the researcher to interview participants who are not working with the researcher on the same projects. Therefore, purposive sampling supported the researcher to avoid bias when selecting the participants of the study.

1.4.2 Data collection and data analysis

The researcher collected data by means of an open-ended questionnaire from forensic investigators and lawyers as they have experience in the field study, including that, they have worked together in writing recommendations for state institutions after completion of investigations. The open-ended questionnaire aided the researcher to collect rich data, from the participants as they gave different perceptions. Targeted participants displayed valuable knowledge, interest, and understanding of the use of

forensic audit tools and anti-fraud controls and the questionnaire was identical for all the participants. The researcher used NVivo software to conduct a thematic analysis to assist in identifying and analysing patterns or themes in each data set (Braun & Clarke, 2021). The data were thematically analysed by means of the six phases outlined by Braun and Clarke, (2021) from the codes that were created from responses of the participants. The data were thematically analysed using six phases for thematic analysis outlined by (Braun and Clarke, 2021).

1.5 Significance of the study

The researcher intended to minimise corruption and fraud through better fraud prevention; as well as contribute new knowledge to anti-corruption agencies to boost the fight against corruption and fraud. Moreover, the study was intended to strengthen efforts of combating corrupt and fraudulent activities. State institutions can benefit from findings of the research given that it may provide new insights that would assist them to combat corruption and fraud. Furthermore, the research could explore the use of forensic auditing in the public sector and, the academic community may benefit from findings of the study while identifying possible knowledge gaps in forensic auditing.

1.6 Chapter Overview

A summary of the chapters is given below:

1.6.1 Chapter 2 Literature review

The chapter focuses on corruption and fraud concepts and outlines the theoretical, legal, and conceptual frameworks of the study. It discusses fraud prevention and fraud detection. Additionally, it cites literature studies conducted on the SIU as well as fraud prevention and detection. Lastly, the chapter identifies gaps in the study.

1.6.2 Chapter 3 Research Methodology

The chapter focuses on the research paradigm, methodology, and design that were used to conduct the study. The study followed an interpretive paradigm, qualitative methodology and survey designed to collect data using an open-ended questionnaire,

while data were thematically analysed from the codes that were created using NVivo software.

1.6.3 Chapter 4 Data Presentation, Analysis and Interpretation

The chapter presents findings of the study from the participants, through thematical analysis by using NVivo software. Tables are used to elaborate on the findings of the study. The chapter analyses the results and interprets the findings compared with those found in existing literature The tables are used to interpret the data of the study of the study

1.6.4 Chapter 5 Summary, Conclusions, and Recommendations

The chapter summarises the findings of the study, concludes and makes recommendations based on the findings of the study; including suggesting that gaps identified on the topic be explored in future research.

Chapter Two: Literature review

2.1 Introduction

The aim of the study was to ascertain the use of forensic audit tools and anti-fraud controls by the SIU in combating corrupt and fraudulent activities. This chapter reviewed related and relevant literature on concepts of corruption and fraud in international and local contexts. The literature review elaborated on the theoretical framework that is used in forensic audit and the legal frameworks that used by the SIU when conducting investigations. The conceptual frameworks that are relevant to the study were explained. The role of the SIU in combating corrupt and fraudulent activities with regard to fraud prevention and fraud detection is discussed.

Published literature on how forensic audit tools and anti-fraud controls used to combat corrupt and fraudulent activities was scrutinised. The discussed studies assessed the use of forensic audit tools and anti-fraud controls in the private and public sector. The study further discussed fraud prevention and fraud detection mechanisms in the private and public sector. Lastly, existing gaps in published and cited literatures were noted.

2.2 Corruption

According to the ACFE (2024), occupational fraud is the use of positions within the organisation for personal benefit by misusing and misappropriating the resources and assets of the organisation. Thus, a perpetrator ought to be within an organisation and have a significant position to commit corruption. Hlongwane (2018) asserts that corruption is the intentional and illegitimate conduct by public officials in performing their duties by obtaining personal gain or gains for others. In general, it involves an official acting unlawfully at a workplace or during the execution of official duties. Corruption involves conduct by public officials and private persons aimed at benefiting unlawfully by self-enrichment or people close to them through the misuse of power they hold (Budhram & Geldenhuys, 2018). For instance, corruption occurs when an official employed in a public institution collaborates with private persons or companies

to act in a particular way (inducement) for personal gain, to commit bribery as part of corruption. The private person could have offered favours to public officials, and in return public officials use their positions to divert resources to the private person.

A general offence of corruption means that any individual who expressly or tacitly consents to receive any form of gift or gratification from another individual, whether for his or her personal gain or for the benefit of another individual or behaves in such a manner as to influence another person to misuse a position of authority commits fraud (PRECCA, 2004). Section 34A of PRECCA states any member of the private sector or incorporated state-owned entity will be guilty of an offence if a person associated with that member gives or agrees or offers to give any gratification to another person (PRECCA, 2004). Smit (2019) indicates that corruption is gratification obtained illegally by public officials. The gratification may be in the form of gifts, assets, expensive vacations, favours, and money. Corruption is a form of behaviour that deviates from ethics, morality, tradition, and law (Lekubu, 2019). Thus, the concept involves public officials who act in unethical ways to misuse resources and assets to personally benefit or benefit those close to them. Wright (2021) implies that grand corruption involves accounting officers that are in elevated positions within state entities and government departments and municipalities.

Corruption refers to unlawful conduct committed by those in power (SIU, 2021). Normally, leaders in state institutions commit corrupt activities by using their positions of influence. In the context of this research, corruption is defined as abuse of power by a public official who is a position of authority to personally gain or gain by those close to the public official. Normally, the public official accepts benefits for doing something that is unlawful, thereby misusing a position they hold. The public official is likely an individual who occupies a position of authority within a state entity, government department or a municipality. The abuse of power refers to using a position by a public official to benefit or benefit those close to them by diverting from his/her original duties to influence unlawful outcomes.

Public sector corruption

Public Sector Corruption undermines the ability of governments to guarantee human rights of their citizens as it affects service delivery. Additionally, corruption committed by public officials in higher positions causes gross human right violations (Transparency International, (TI) 2021). Albanese and Artello (2018), argue that when public corruption is committed, everyone is negatively affected due to the misuse of public funds by public officials. Public sector corruption involves public officials using government resources and assets to act unlawfully to benefit themselves or people close to them. In addition, when a company that has contracts with government and is involved in corrupt activities, it becomes guilty of public corruption. Public corruption such as procurement fraud, unethical behaviour by public officials, receiving kickbacks from privately owned companies and private individuals often occurs at state institutions. As a result, funds get channelled to benefit the public officials and those close to them.

Parties in corruption

The researcher is of the view that understanding people who engage in corruption mitigates the impact of corruption. Houqe, Van Zijl, Waresul Karim, and Mahoney (2019) indicate that corruption involves a corruptor who gives an economic benefit as well as a corrupted who provides favours to the former. Corruption requires the participation of at least two parties, one being a member of an organisation or institution and holding a specific position of authority and having influence (Wright, 2021). Section 3 of PRECCA (2004), describes general offences of corruption as any person who directly or indirectly accepts or offers to accept or gives or agrees or offers to give any gratification to act in a manner that amounts to the abuse of a position of authority, or which is designed to achieve an unjustified result. Such a person is guilty of the offence of corruption (PRECCA, 2004).

Parties that get involved in corrupt activities are persons who offer a gratification (corruptor) and one who accepts the gratification (corrupted). The corrupter is the person who voluntarily presents a benefit to another person illegally while the

corrupted is the receiver of the unlawful gain. Corruption is committed when a corruptor offers a gain to a corrupted, and both parties commit an offence of corruption. The relationship is discussed below.

Corruptor

A corruptor agrees to give gratification to the corrupted to act unlawfully while performing his/her duties. The corrupter offers the reward and needs a favour which the corrupted can perform or provide (Smit, 2019). Corruptors maximise their gains through any means. Additionally, they tend to possess economic resources that they can provide for unlawful benefit. Active corruption is committed by the corruptor and concerns the offering or giving of gratification to influence a person in power to act unlawfully (Wright, 2021). According to PRECCA (2004), giving includes lending, granting, conferring, promising, and procuring gratification.

Corrupted

The corrupted accepts or agrees to accept gratification. A corrupted person who usually has power and resources at his/her disposal accepts any form of gratification from the corruptor (Budhram & Geldenhuys, 2018). Any person accepting gratification commits a corruption offence. By accepting gratification, the corrupted does not show moral standards that are acceptable in society and harms the interests of the public (Smit, 2019). Passive corruption is committed by the corrupted who accepts a promise of an advantage in return for acting unlawfully when performing their official duties (Wright, 2021). According to PRECCA (2004), accepting includes demanding, soliciting, promising, offering, asking for, seeking, requesting, and receiving gratification.

2.3 Fraud

Fraud is an intentional act that involves the use of deception to obtain unlawful benefit (TI, 2019). It is the use of deception such as creating fake invoices for non-purchase of goods or services rendered to gain from the payment. Fraud can involve an act of unlawful deeds which portrays the violation or concealment of trust (Abdulrahman,

2019). Thus, fraud involves misrepresentation to benefit from the act. Fraud is a criminal deception with the intention to gain (SIU, 2021). It includes acts of omission, falsifying statements, and misrepresenting information (Lekubu, 2019). For the purpose of this research, fraud is defined as an unlawful and intentional misrepresentation which causes harm/potential harm to the victim and financial gain to the perpetrator. Such misrepresentation involves a victim being unaware that it could cause harm, and that the perpetrator stands to benefit from the act. The misrepresentation is an act that is carried out intentionally and unlawfully by the perpetrator to deceive the victim.

Elements of fraud

Tsegba and Duenya (2018), as well as Snyman (2020) outline the following four elements of fraud:

1. Misrepresentation by the perpetrator
2. Unlawfulness
3. Intentional
4. Harm (actual or potential harm to the victim)

Misrepresentation

Misrepresentation can be in the form of omission of the information, false statements, and deception by the perpetrator. Tsegba and Duenya (2018) describe misrepresentation as a false representation of material nature through misstatement or omission of material facts.

Unlawfulness

The misrepresentation must be unlawful, meaning it must be against the law of a particular country where such offence is committed. The perpetrator knows that the misrepresentation is unlawful and would benefit from it (Snyman, 2020).

Intentional

The misrepresentation must be done intentionally by the perpetrator. The perpetrator tends to know that the information supplied to the victim is false and that if used by the victim, he/ she may suffer harm, while the perpetrator stands to gain.

Harm (actual or potential)

The misrepresentation must cause harm or potential harm to the victim. By using false information, the victim likely suffers harm or potential harm. The victim uses the misrepresentation and incurs actual or prejudiced economic damage (Tsegba and Duenya, 2018).

Public sector fraud

Fraud is a serious problem that affects the economy of a country and the benefits of individuals in the economic system (Abdulrahman, 2019). Fraud in the public sector causes harm to victims who tend to be citizens, as it deprives them of essential services that they need to survive or improve their lives. Fraud committed by public officials in South Africa causes the loss of billions of Rand to the government every year (Mokhomole, 2023). Fraud in the public sector affects all levels of government as the funds aimed for development are used for personal gains by those in power across different structures of government. Funds that are budgeted for developments to improve the livelihood of ordinary citizens get to be siphoned out of the state coffers, delaying the developmental progress of the country.

2.4 Fraudulent Activities

Fraud and corruption are considered similar (Erbuğa, 2022). Fraudulent activities in the public sector diminish government performance (Saifullah & Abbas, 2020). Fraudulent activities are common when there is collusion between government and business (Singh, 2020). Fraudulent activities involve fraud and corruption committed in the public sector which, as expected, hinder the delivery of services to the public. In fact, such activities are perpetrated by public officials who are entrusted to offer services to the public.

According to results by the Corruption Perceptions Index (CPI) 2019, fraudulent activities are more prevalent in countries where government is influenced by wealthy private individuals and entities. In South Africa, fraudulent activities pose a real risk within the public sector (CPI, 2019). Singh (2020) indicates that fraudulent and corrupt activities in the public sector are caused by poor administration of procurement which

results in lack of confidence in the supply chain. Thus, corrupt and fraudulent activities in the public sector affect the growth of a country as citizens lack trust in government, resulting in the loss of investment opportunities.

Corrupt and fraudulent activities in the public sector are caused by lack of good governance and anti-corruption laws that are compromised by unethical public officials. Moreover, public officials involved in corrupt and fraudulent activities through using resources and assets of the government to enrich themselves and those close to them, compromise development and provision of essential services. Ndlovu (2021) lists that financial mismanagement, procurement irregularities, bribery, abuse of power, conflict of interest, favouritism, nepotism, as well as unethical behaviour rank among the corrupt and fraudulent activities that are common in the public sector in South Africa. Such corrupt and fraudulent acts are rife in the public sector; however, non-government employees or public officials that partake in them rarely get punished for performing such acts. Therefore, the use of forensic audit tools and anti-fraud controls has the possibility to assist in mitigating these acts.

2.5. Theoretical framework

The section below discusses the theories used for the study, as well as the reasons why the theories are used.

2.5.1. White Collar Crime

The theory was introduced by Sutherland (1949) in an address to the American Sociological Society to study two fields namely, crime and high society. Ahmed (2019) asserts that the theory involves two fields: crime and high society, and that more than 2% of people in prison that committed crime are of high status. The theory refers to crime committed by people categorised as upper class and the chances of being prosecuted for the crimes they commit are low. Almost all white-collar offenders are distinguished by lives of privilege, much thereof with origins in class inequality. Alhassan (2021) indicates that white collar criminals are intellectual and wealthy people who can get jobs that allow them to have unsupervised access to financial systems and able to accumulate financial gain for themselves. These wealthy people

are often trusted public officials that can manipulate the systems without getting caught.

Olaoye (2020) argues that white-collar crimes are more related to violation of trust and deceit rather than violence. The white- collar crimes that are committed by public officials in high positions are not easy to detect as the perpetrators use complex methods to commit their crimes and can easily hide their acts. Moreover, white-collar crimes are usually done by public officials who hold high occupational status and are respected within society because of the position they hold at institutions. In addition, they tend to have access to systems of state institutions and therefore able to change the systems for their financial gain without being noticed. This theory assists the SIU to identify public officials that are in elevated positions in public organisations and helps to understand the criminal behaviour of such public officials in elevated positions; hence its relevance to the study.

2.5.2 Fraud triangle

A seminal study in criminology led to the development of the fraud triangle theory which has been used extensively in the auditing and fraud prevention professions (Peltier-Rivest, 2018). The theory refers to common characteristics of a person who commits fraud. According to Eze and Okoye (2019), forensic auditors use fraud triangle theory to identify fraud in weak internal control systems. The theory assists to understand fraudster behaviour when committing fraud. Saifullah and Abbas (2020) point out that the fraud triangle focuses on the factors that lead people to engage in fraudulent activities. Three elements were identified by Cressey, namely pressure or motivation, seeing opportunity, and rationalisation by an individual.

Normally, when public officials entrusted with positions of authority are under financial pressure, they tend to use such situations as an opportunity to loot because internal controls are weakened. In that way, they rationalize their actions by justifying the reasons to commit fraud. The theory explains that individuals who are trusted tend to violate the trust once they believe that some financial problems can be solved by violation of a position of financial trust, and they then use their position to change their

perception of their actions (Appiah & Inini, 2021). This theory is relevant in the study because it focuses on character traits that public officials usually have to be able to commit fraud. The theory is widely used to determine fraud detection and fraud prevention mechanisms. The SIU uses the theory to identify public officials that are committing fraud. Also, it helps members of the SIU when investigating at state institutions as they are able to detect public officials who commit fraud.

2.5.3 Fraud diamond

The theory was developed by Wolfe and Hermanson (2004) as an extension of the fraud triangle and includes capability as another element to commit fraud. They believe that by doing the same duties all the time, people tend to commit fraud. The fraud diamond enhanced the fraud triangle to improve both fraud prevention and detection by considering a fourth element (Ahmed, 2019). Oyerogba (2021) posits that capability means that a person must have adequate abilities to commit a crime as he/she would have access to systems and has authority to effect changes in the systems.

According to Ukoma (2019), the theorists thought that fraud would not be committed without a public official having the skills to commit it. If a public official has pressure, opportunity and rationalisation, but lacks the capabilities; the fraud would not be committed. The fraud diamond theory indicates that the fraud triangle could be enhanced to improve both fraud prevention and detection by including the fourth element of capability. This theory is relevant as it aids understanding why fraud is committed and takes measures to mitigate fraud. The theory further assists the SIU when conducting investigations as it gives the SIU the edge to detect the fraudsters at state entities, government departments and municipalities. Furthermore, the theory is widely used for forensic audits because it helps to look at the abilities of public officials who are committing fraud.

2.6. Legal framework

The following are the legal frameworks that the SIU adheres to when conducting investigations at state institutions. These frameworks form the cornerstone for the SIU in pursuing its mandate.

Constitutional Framework

2.6.1 Constitution of the Republic of South Africa, 1996

Section 32 Access to information

(1) Everyone has the right of access to:

a) Any information held by the state; and
b) Any information that is held by another person and that is required for the exercise or protection of any rights.

(2) National legislation must be enacted to give effect to this right and may provide for reasonable measures to alleviate the administrative and financial burden on the state.

The section used by the SIU when gathering evidence during the investigation and gives the SIU the right to access the information to conduct investigation properly.

The SIU uses this section when collecting information during investigations. The section assists the SIU to accumulate information to strengthen the investigation and be able to complete the investigation.

Section 34 Access to courts

Everyone has the right to have any dispute that can be managed and adjudicated by the application of law decided in a fair public hearing before a court; or where appropriate, another independent and impartial tribunal or forum.

The sections are used by the SIU for criminal and civil proceedings if an investigation gets referred to the National Prosecuting Authority (NPA) for criminal proceedings and at a special tribunal for civil proceedings. The section assists the SIU to collaborate with the NPA and the police when the investigation goes to court.

2.6.2 Legislative Mandate

The legislative mandate consists of the guidelines the SIU follows when conducting investigations and litigation services to state institutions. The legislative mandate assists the SIU in performing the work to achieve its vision of being the state- preferred anti-corruption agency. The following are legislative mandates that the SIU uses in

conducting forensic investigations at state entities, government departments and municipalities.

2.6.2.1 Prevention and Combating of Corruption Activities Act 2004 (PRECCA)

According to Dassah (2018), the PRECCA is a central law used to combat and prevent corruption and corrupt activities in South Africa. The Act is the most important anti-corruption legislation that describes corruption as a universal crime as well as specific corrupt activities that public officials commit (Mkhize, 2022). The Act clarifies that preventing and combating corruption and related corrupt activities requires a multi-disciplinary and multi-agency approach, with the support and participation of people and from other sectors than the public sector (Smit, 2019). The act assists in understanding corruption and corrupt activities that public officials commit. It serves as assurance that public officials are prosecuted if they are in breach of the act. The SIU uses the act when conducting investigations to identify public officials that are in contravention of the act when performing their duties.

The primary purposes of the PRECCA are to prevent and combat corruption, make provision for the investigation of corruption, ensure the establishment of a register of people convicted of corruption, and compel people in positions of power to report corruption. According to the PRECCA (2004), a general offence of corruption means that any individual who expressly or tacitly consents to receive any form of gift or gratification from another individual, whether for his or her personal gain or for the benefit of another individual, or behaves in such a manner as to influence another person to misuse a position of authority; violates or neglects their legal obligations, or cause actions that ensue in breach of trust and leading to an unjustified result, will be guilty of the offence of corruption. Thus, the Act criminalises actions by public officials which are unlawful and in the breach of the act, and it also specifies the corrupt activities that public officials are performing which are unlawful. The act is a benchmark in combating corruption and corrupt activities committed in the country.

2.6.2.2 Prevention of Organised Crime Act 121 of 1998 (POCA)

The Prevention of Organised Crime Act 121 of 1998 (POCA) is one central legislation that anti-corruption agencies use to combat money laundering and racketeering, as corruption in South Africa has become complex. Money laundering occurs when corrupt benefits are laundered by using various channels (Lekubu, 2019). It is legislation that criminalises organised crime, money laundering and racketeering, and illegal practices by businesses (Smit, 2019). The POCA is aimed at combating organized crime; money laundering; criminal gang and racketeering activities. These offences are often intricately linked to corrupt activities that are committed by public officials working together with private persons or companies. The act assists the SIU to investigate organised crime and money laundering. Like the PRECCA, the act assures that public officials that commit offences under the act would be prosecuted.

According to Smit (2019), the POCA is used alongside the PRECCA because corrupt activities are occasionally carried out by public officials in positions of authority who receive or offer indirect or direct gratification to private enterprises that are doing business with the state. Baloyi (2020) asserts that proceeds obtained through money laundering and racketeering can be recovered by means of civil and criminal forfeiture. This assists the SIU to obtain orders of attachment to seize assets that are gained from money laundering and racketeering. Botha (2018) points out that the POCA criminalises any conduct that conceals or disguises the proceeds of crime. Thus, the POCA assists in the investigation and prosecution of money laundering and racketeering, and it is used together with the PRECCA as money laundering and racketeering form part of corrupt activities that public officials commit. It also used to investigate companies that are doing illegal business in which public officials are benefiting from the business.

2.6.2.3 Criminal Procedure Act 1977(CPA)

It makes provision for procedures and related matters in criminal proceedings (SIU, 2021). The Criminal Procedure Act (CPA) concerns the conduct of police officials when managing criminal cases and procedures that are followed in courtrooms (Smit,

2019). Section 205 of the CPA South Africa 1977 permits a judge or a magistrate to summons a person who is going to provide substantial or significant information regarding an alleged crime. This is usually used to obtain information from financial institutions, government departments, private enterprises, and unwilling witnesses. Lekubu (2019) indicates that the CPA establishes the procedural legislation for anti-corruption measures. The CPA assists in the investigation and prosecution of corruption as it guides police officers how to conduct investigations and obtain of evidence. The SIU uses CPA when assisting the police to get information from the suspect. The SIU does not have power to arrest or prosecute any suspects; the CPA ensures that the evidence collected during investigation assists the police and NPA in arresting and prosecuting the suspect. With regards to the SIU assisting with prosecution, the act helps the SIU to open criminal charges against the perpetrators who are in breach of the act.

2.6.3. Special Investigating Unit and Special Tribunals Act 1996

The SIU Act is the legislative mandate that governs the work done by the SIU. It provides for the establishment of a Special Investigating Unit for the purpose of investigating corruption and fraud in connection with the administration of state entities, government departments, municipalities, state resources and public money, and to conduct litigation in any court of law (SIU, 2021). This is the main act that directs the SIU in performing investigations and pursuing litigations. The Act sets out the following relevant sections in relation to the SIU which are used for this study.

Section 4: Functions of SIU

According to Chetty (2017), the SIU has the following functions: To

- Investigate all allegations regarding the matters concerned.
- Collect any evidence connected with its investigation.
- Institute civil proceedings in a Special Tribunal or any court of law for any relief relevant to its investigations, itself or to a state institution.
- Refer incidents of criminality to the relevant prosecuting authority
- Not perform functions that conflict with its founding Act.

- Upon conclusion of its investigation, submit a final report to the President; and
- Submit a report on its investigations, activities, composition, and expenditure at least twice a year to the Parliament.

Section 5: Powers of the SIU

Mkhize (2022) implies that the SIU has powers to investigate corruption and fraud in any state institution and lodge any litigation to recover any loss suffered by state institutions. He further mentions that other powers of the SIU include the ability to summon and examine persons, as well as to conduct search and seizure (Section 5(2) (c) of SIU Act of 1996) (Mkhize, 2022).

According to Bruce (2019), the SIU has the following powers:

- To order the production of specified books, documents, or objects Section 5(2) (b).
- To order a person to appear before it and to question the person 5(2) (c)

When executing its functions in terms of section 5 of the SIU Act, the SIU may:

- determine the procedure to be followed in an investigation.
- charge and recover fees associated with its services from a state entity, government department and municipality.
- request any information as may be necessary in its investigations.
- subpoena any person by a notice in writing issued by the Head of the SIU or a duly delegated member to appear before it and produce any book, document, or object under the control of such person.
- administer an oath or affirmation on a person required to appear before it and question him or her.
- refer any matter which could best be dealt with by the Public Protector, to the Public Protector (Chetty, 2017).

The SIU uses section 5 (2) (a) to request any information from state institutions that would assist with an investigation.

The legislative framework is used by the SIU to conduct investigations at state entities, government departments and municipalities.

2.7 Conceptual framework

The conceptual framework in this research focuses on forensic auditing, forensic accounting, forensic audit tools, anti-fraud controls, fraud prevention, and fraud detection.

2.7.1 Forensic Auditing

Forensic auditing is a process involving moving from fraud prevention to fraud detection (Tonye & Ebimobowei, 2018). Forensic auditing assists in resolving fraudulent activities that have legal implications for organisations. Ukoma (2019) indicates that forensic auditing is the process of gathering and analysing data to obtain evidence that would help to solve fraud cases. Udukeke (2019) points out that a forensic audit is performed when there is suspicion that fraud may have been committed, is committed, or would be committed in future Enofe, Ekpulu and Ajala (2019) & Agbeyi and Osugba (2019) agree that forensic auditing is an important and vital tool in strengthening corporate governance in organizations and the reduction of corporate failures. It assists in determining the reasons why a fraudster commits fraud and to mitigate the risks of the recurrence of fraud within organisations.

Forensic auditing helps to eradicate fraudulent activities in organisations where it has become rife (Okoye, Nwoye, Akuchi, & Onyema, 2020). For the purpose of this research, forensic auditing is the activity of identifying, minimizing, and mitigating fraud within an organisation. Forensic audit is internal auditing that focuses on fraudulent activities within the organisation and encompasses the integration of fraud examination, fraud risk assessment, fraud prevention and fraud detection.

Forensic auditing can be proactive or reactive (Inyanda, Olopade & Ugbede, 2019). Appah and Inini (2021) indicate that proactive forensic auditing assists in identifying errors in financial transactions before they become fraudulent. Proactive forensic auditing is aimed at preventing fraud by promoting an overall fraud awareness culture in the public sector through workshops (Gbegi, Gberindyer & Duenya, 2018). Proactive

forensic auditing involves managing of any transactions that may cause fraud to occur. All transactions are scrutinised to see if they do not constitute fraud.

Reactive forensic auditing investigates fraudulent activities, identify the preparator and gather evidence for legal proceedings (Inyada, et al., 2019). Furthermore, it focuses on the investigation of allegations of fraudulent activities. The submitted allegation is then confirmed or refuted by collecting and submitting substantive evidence (Gbegi, et al; 2018). Reactive forensic auditing involves the examination of the causes of fraud, identifying a perpetrator, the reason behind the fraud, and steps to be taken to stop its recurrence.

Safiyanu, Saifullahi, and Armaya (2019) assert that forensic auditors assist in reducing fraud in the public sector by providing the means to hold public officials accountable and making it harder for public officials to commit fraud when performing their duties. Moreover, forensic audits would assist the public sector to mitigate corruption by the deterrence of potential corruption by means of forensic audit tools According to Mvunabandi (2023), the role of forensic auditors has not been well articulated within non-government organisations. Forensic audit is gaining prominence in the prevention and detection of fraudulent activities within the public sector (Masanja & Mitti ,2020). Hence, adopting the use forensic auditing in the public sector would assist to prevent and detect fraudulent acts which has become a menace in our country.

2.7.2 Forensic Accounting

Forensic accounting involves the gathering, analysis, and interpretation of accounting evidence for use in a court of law (Tsegba & Duenya, 2018). Eze and Oke (2019) state that forensic accounting is a discipline that uses special procedures to investigate and produce legal evidence. Forensic accounting is financial investigation, conducted to determine the nature of fraudulent activities with the aim of generating sufficient and reliable evidence to be used in the court (Suleiman, 2018). The researcher views forensic accounting as the application of accounting skills in the investigation of financial matters that have legal consequences.

Forensic accounting refers to the application of analytical and investigative skills to resolve financial issues in a manner that meets the standards required by a court of law. Accounting, auditing, and investigation skills are used in forensic accounting to give expert support in legal cases (Kolawole, Salman, Durodola, Babatunde & Igbekoyi, 2018). Forensic accounting is the application of accounting, investigative and criminology techniques for collecting, analysing, and reporting about the evidence (Agbeyi & Osugba, 2019) and involves the application of skills to analyse, interpret, and present complex financial transactions evidence to be used for prosecution.

Therefore, a forensic accountant plays a key role in finding, investigating, and prosecuting persons involved in fraudulent activities (Honigsberg, 2020). Forensic accounting includes litigation services that recognizes the role of the forensic accountant in quantifying the losses and damages incurred by fraudulent activities, and investigative services to investigate matters that may require possible criminal or civil prosecution.

2.7.3 Difference between forensic auditing and forensic accounting

Forensic Accounting, also known as forensic auditing, is an investigative method of accounting used in determining if fraud is taking place in organisations (Agbata, Okafor, Igweze & Okonewa, 2021). Forensic auditing is a specialized area of accounting that employs forensic auditing techniques, investigation, and legal skills to provide evidence for legal issues (Tayo & Ayoola, 2021). Appah and Inini (2021) as well as Inyanda *et al.,* (2019) point out that forensic auditing uses accounting processes and procedures for legal issues.

Both forensic auditing and forensic accounting are used for investigating fraudulent activities; however, their mandates differ. Forensic audit involves investigating fraudulent activities inside an organisation such as embezzlement, while forensic accounting concerns investigating fraudulent activities that occur outside an organisation, but still harms the organisation and these include bribery by public officials who collaborate with private persons doing business with the organisation.

Forensic auditing investigates fraudulent activities within the organisation to prevent, deter and detect fraudulent activities. As a result, it assists in fraud risk assessment, improving internal control systems, enhancing corporate governance, monitoring of red flags, performing fraud awareness programmes, and performing surprise audits regularly to minimise fraud. Forensic accounting includes litigation services that recognize the role of forensic accountants in assisting civil cases, and investigative services to investigate financial matters that may require possible court intervention.

2.7.4 Forensic Audit tools

Udukeke (2019) defines forensic audit tools as methods used to identify fraud and to gather evidence that can be used in court. The use of forensic audit tools enhances the prosecution of fraudulent activity allegations across the globe (Tayo & Ayoola, 2021). Udukeke and Ezenwafor (2019) opine that forensic audit tools include different inquiry methods used for the purpose of providing evidence of fraud against an individual in a court of law. In the context of this study, forensic audit tools are processes that are used to identify, minimize, and mitigate fraud within an organization. Seini, Aliu, and Micah (2022) assert that forensic audit tools are a scientific method of conducting auditing assignments into fraudulent activities in an organization to uncover the perpetrators of fraudulent activities. Thus, forensic audit tools assist in identifying fraudulent activities as well as the people who committed such acts within the organization.

Forensic audit tools such as business intelligence and forensic data analyses play a significant role in combating fraudulent activities in the public sector (Tayo and Ayool, 2021). Oyerogba (2021) views financial statement valuation as a forensic tool that assists in fraud detection within the public sector. Udekeke (2019), and Udukeke and Ezenwafor (2019) agree that large businesses that use forensic data analytics, whistleblowing, background investigations, analytical procedures, interviews, and substantive tests can successfully combat corrupt and fraudulent activities. Ogiriki and Appah (2018) argue that forensic audit tools such as forensic data analytics, interviews, continuous auditing, computer assisted tools, financial data analysis and Bedford law analysis are applied to combat corrupt and fraudulent activities.

Ogiriki and Appah (2018), analysed the effect of different forensic accounting and auditing techniques in fraud prevention, detection, and investigation in the Nigerian public sector. They suggest that whistleblowing as forensic audit tool assists state institutions to prevent and detect corrupt and fraudulent activities. The authors view whistleblowing as a very effective forensic audit tool to combat corruption and fraud in the public sector. According to Okoye, Nwoye, Akuchi and Onyema (2020), there are no universally accepted forensic auditing techniques for the detection of public sector fraud. They are of the view that anti-corruption agencies do not use forensic data analytics in their investigations. They suggest that anti-corruption agencies in Nigeria should adopt using forensic data analytics as forensic audit tool in all their investigations to be able to produce evidence that will be supportive in prosecution of corruption and fraud cases in courts. The researcher believes that the use of forensic audit tools will enhance the investigation of anti- corruption agencies such as the SIU. Forensic data analytics can assist the SIU in the investigation of complex data sets.

As mentioned by Bangura (2020), forensic auditing techniques have a positive significant effect on corporate governance, internal control, and on whistle blowing. The review study examined the relationship between forensic audit tools and corporate governance, internal controls and whistleblowing in preventing fraud. Bangura (2020) explains that forensic audit tolls assist in the prevention of fraud, coupled with corporate governance, internal control and whistleblowing which are all anti-fraud controls. By combining forensic audit tools and anti-fraud controls, the SIU can assist state institutions in combating corrupt and fraudulent activities. Ukoma (2019) suggests that forensic auditing techniques have a significant positive effect on internal control systems and cash management systems of DEPOSIT BANKS, but not such a profound effect on loan processing and repayment systems. The study opines that forensic audit tools and anti-fraud controls assist in reducing fraud in the deposit banking system.

Forensic data analytics assisted in preventing leakage in revenue at Nigerian Federal Universities (Taiya, Jugu, & Ojaide, 2021). The study examined the extent to which forensic data analytics as forensic auditing techniques serve as a solution for

preventing revenue leakages in federal universities in Nigeria. Data were collected using questionnaires from a sample of 238 respondents by investigators from the Economic and Monetary Crime Commission (EFCC) and internal audit staff of selected Nigerian Federal Universities. The use of forensic data analytics as forensic audit tools can assist the SIU in its effort to prevent and detect corruption and fraud in state institutions. Thus, the SIU should always use forensic data analytics in its investigation.

According to Tayo and Ayoola (2021), the use of forensic audit tools is viable in combating financial crime. They examined the viability of forensic data analytics and background investigation as forensic tools in combating financial crime in Nigeria. They suggest that government agencies use forensic data analytics and background investigations to strengthen internal controls and ensure detailed investigations to prevent, deter and detect white collar crimes. Both studies maintain that applying forensic audit tools during investigations would strengthen the investigation and enable investigators to get evidence that can be used for prosecution. The SIU can use forensic data analytics and background investigations in its investigations to enhance the investigation. Forensic data analytics can assist in identifying suspicious patterns in a complex data set, while background investigations can assist in understanding public officials that have committed corruption and fraud. Hence, the use of forensic data analytics and background investigations can be beneficial for the SIU.

Suleiman and Ahmi (2018) examined the extent to which the EFCC and the Independent Corrupt Practices Commission (ICPC) use forensic auditing tools to combat fraudulent activities in Nigeria's public sector. They suggest that anti-corruption agencies, like the SIU should use the latest forensic digital technology tools and that forensic personnel must be trained in using such tools. With the latest forensic data analytics available, the SIU will be able to analyse complex data easily and quickly. The researcher believes that using the latest available technology for forensic investigations will enhance investigations with e quick turnaround times.

Udukeke (2019) reports that forensic audit tools are not extensively used to detect fraud at large scales businesses. He studied the utilisation of forensic auditing tools in fraud detection in large scale business organisations. Findings showed that forensic auditing tools such as forensic data analytics, whistleblowing and background investigations were hardly used for fraud detection, while analytical techniques and investigative interviews were moderately used for fraud detection by accounting staff in the above-mentioned organisations. He believes that forensic audit tools are used in detecting corruption and fraud; however, forensic audit tools were only minimally used, and it did not detect corruption and fraud effectively. The SIU should use forensic audit tools from the beginning of the investigation so that they can assist in combating corruption and fraud at state institutions. The use of forensic audit tools in the investigation can assist the SIU to minimise and mitigate corrupt and fraudulent activities. By using forensic data analytics, lifestyle audits, surprise audits and background investigations across all the investigations, the SIU will be able to combat corruption and fraud at state institutions more effectively.

There was no significant association between forensic audit tools and occupational fraud in the Nigerian public sector (Appah & Inini, 2021). The study investigated the effects of forensic auditing tools in mitigating occupational fraud in the Nigerian public sector. They suggest that the adoption of forensic audit techniques in the Nigerian public sector would improve the level of accountability and transparency in public sector financial management due to the reduction in the level of corrupt practices. The SIU should use forensic tools in investigations as they will assist in reducing corruption and fraud at state institutions. Masanja and Mitti (2020) examined the usefulness of implementing forensic audits among state -owned entities in the Arusha region. Their findings indicate that forensic audits are useful in fraud prevention, fraud detection, fraud investigation, improving fraud management, and fraud mitigation in such entities. The SIU may have the edge in combating corrupt and fraudulent activities if it adapts to using forensic auditing tools in its investigation.

Business intelligence, forensic analytics, lifestyle audit, database collection, whistleblowing, background investigation, and ratio analyses are forensic audit tools

that are used in combating corruption and fraud. These tools can deter the extent of corrupt and fraudulent activities that are taking place in organizations and assist in mitigating the recurrence of such acts.

Types of forensic audit tools

The literature displays different types of forensic audit tools to be used to combat corrupt and fraudulent activities; however, the study focuses on lifestyle audits, forensic data analytics, whistleblowing, and background investigation. The researcher believes that these forensic audit tools can assist the SIU in the fight against corruption and fraud at state institutions. Forensic audit tools can enhance the investigations that the SIU conducts at state institutions.

- **Lifestyle audits**

The Guide to Implement Lifestyle Audit in the Public Service is "a an amalgamation of reports from a variety of databases such as e-Natis, CIPC, Deeds, etc. in order to understand the financial profile of a person, regarding legitimate declared income against known and observed assets; (b) where that person's expenditures exceed his or her income, an investigation should be instituted through legally sound methods, an independent corroboration of information and the collection of evidence so as to assist in identifying (i) undeclared sources of income; (ii) whether a person is living beyond his or her means; (iii) debt, assets, income, criminal records, trusts, hidden assets and undeclared income; and (c) where required, an objective evaluation of a person's standard of living to express an opinion derived by applying audit sampling methods as governed by legislation and complying with audit standards on whether that person ─ (i) is living above his or her means; or (ii) is abusing power or influence for personal gain at that time or a later stage" (Department of Public Service and Administration (DPSA) , 2021: 6).

A lifestyle audit was conducted on 11 Western Cape (WC) Members of Cabinet (MECs) and their spouses to determine if they lived beyond their means. The report revealed that all the MECs appeared to be living within their means, and that no suspicious transactions were identified (Parliamentary Monitoring Group, 2020a).

Lifestyle audits conducted on 400 senior ESKOM employees to determine if they abused their power to benefit themselves and those close to them revealed that 135 had been conducting business with ESCOM and had benefited R 6 billion Rand, as well as the fact that 5452 employees had conflicts of interest with ESKOM (Parliamentary Monitoring Group, 2020b).

Lifestyle audits are assessments of an individual's income and expenses related to their living standards (McIntyre, Aslett & Buitendag, 2021). Lifestyle audits are tools that are used in preventing and detecting fraudulent activities (France, 2021). Lifestyle audits that show unusually large expenditures should signal that money is coming from some unidentified place. According to Mkhize (2022), lifestyles that reveal a significant difference between an employee's salary and his/her lifestyle warrant further investigation into the sources of revenue sustaining that lifestyle. Lifestyle audits help to identify public officials that live beyond their means by doing assets verification, bank statement analysis and income and expense verifications.

France (2021) suggests that lifestyle audits are most effective when combined with other anti-corruption measures such as a compilation of an asset registration by employees on a yearly basis and declaring any income earned during a specific financial year by employees. Niven (2021) states that lifestyle audits help identify and seize assets, improving the chances of recovering stolen property while monitoring changes in income and assets within the same position or organization. Government can use lifestyle audits as an accountability tool and anti-corruption measure (McIntyre, et al., 2021). Lifestyle audits are forensic tools that assist in combating corrupt and fraudulent activities that are committed by public officials as it would be able to identify the changes in the lifestyle of a public official. Lifestyle audits should address corruption and fraud in the public sector and restore ethics in the public service (Corruption Watch, 2022).

McIntrye and De Villiers (2020) mention two types of life lifestyle audit, namely a general lifestyle audit in which a person's known income is compared to the public available information the person has declared on annual declaration forms (to their

employer), and a complex lifestyle audit in which bank statements, tax returns, assets and liabilities of the person are analysed in detail. According to France (2021), two methodologies are used in lifestyle audit namely, a desk review which involves verifying of public financial information for the person and observation of the person, as well as the associate's lifestyle to ascertain that the person does not live beyond the declared income.

Animashaun and Chitimira (2022) indicate that administration lifestyle questionnaires which ask public officials about assets, liabilities, income, and expenses is a form of conducting a lifestyle audit. Lifestyle audits assist in ascertaining the living standards of public officials who live beyond their means. Their known income. and expenses are compared to the actual income and expenses that the public official may have incurred. Furthermore, registered and known assets of public officials are verified against all the assets that the public officials possess, and all. directorships of such a person are looked at to determine whether there are no unusual activities.

The net worth method assists in doing lifestyle audits of public officials as the assets, liabilities, income, and expenses are calculated to determine if undisclosed or illegal income has been received by the public official. The difference between the disclosed assets, liabilities, income, and expenses is the undisclosed income. The net worth method is calculated based on previous years where assets were purchased by public officials to the year under investigation.

Net worth calculation

Table 2.1 below shows how net worth is applied when doing lifestyle audits on public officials.

Table 2.1

Starting year	**Year under review**
Assets	Assets

Minus: Liabilities	Minus: Liabilities
Equals: Net worth of starting year	Equals: Net worth year under review
	Minus: Net worth starting year
	Equals: Net worth increase
	Add: expenses
	Equals: Income
	Less: income declared by public official
	Equals: Undisclosed/illegal income

(AUE4866, 2017)

The net worth method is suitable for use when public officials spend more on acquiring assets. Assets are calculated using the amount that public officials paid to acquire assets while, market values are ignored.

Expenditure method

Table 2.2 indicates the method used when expenses and the income are calculated for every year that forms part of the lifestyle audits. The expenditure method is used when public officials tend to spend money rather than buying assets. An analysis of official's bank statements will assist in using the expenditure method.

Table 2.2

Year under review
Total expenses in the year
Less: reported income

Equals: undisclosed/ illegal income

(AUE4866, 2017)

According to the researcher, performing these methods when conducting lifestyle audits on public officials would identify unusual income received by public officials. A comparison of the assets declaration form with the assets that were declared against the database of the official, performing background checks and bank statements verification by using these methods; will determine whether that public official is living beyond his/her means. An analysis of bank statements would help determine suspicious activities on the bank accounts of public officials. In addition, the methods would be able to determine when the public officials spend more than the income, they officially receive.

- **Forensic data analytics**

Forensic data analytics is tools used to identify suspicious patterns in complex data. Erbuğa (2022) points out that forensic data analytics combines human activity and technology in detecting corrupt and fraudulent activities by looking for inconsistent patterns in the data. Forensic data analytics can enhance efficiency of fraud detection as it helps to identify red flags of fraudulent activities (Hossain, 2023). Forensic data analytics assists in detecting fraud in large data sets as it can identify irregularities in the data. Forensic data analytics decreases the opportunity for fraud as transactions containing fraud will interfere with reliability, accuracy, and efficiency in the data (Kılıç, 2020). Forensic data analytics assist in analysing large amounts of data efficiently and spot fraud indicators, therefore it can deter fraudulent activities in complex transactions as it identifies different sets of actions in the data.

Novita and Anissa (2022) assert that forensic data analytics augments the search for information that can be used to detect fraud. Forensic data analytics assists in analysing data to determine the effectiveness of internal controls and to identify fraud risks. Proactive forensic data analytics assists forensic auditors to detect fraudulent activities (Newmana, Tshumab & Sitshac, 2023). Columbus (2019) and Gencer (2022)

agree that forensic data analytics is the perfect match for complex fraudulent activities in the digital world as it can identify unusual or suspicious patterns in the data. Thus, the use of forensic data analytics would enhance efforts by the SIU to combat corrupt and fraudulent activities as it would quickly detect suspicious transactions.

Ogunode and Dada (2022) indicate that forensic data analytics is concerned with the treatment and examination of fraudulent activities; moreover, the relevance of its use is to develop an adequate technique for speedy detection of fraudulent activities. Forensic data analytics can discover suspicious complex transactions effectively and quickly before they may harm the organisation. In addition, it assists in performing reviews relating to fraudulent activities to detect unusual transactions.

- **Whistleblowing/hotline**

Whistleblowing is the service that helps internal and external persons to report fraudulent activities that are taking place within organisations. Cheng, Bai, and Yang (2019) point out that whistleblowing can assist internal disclosure within organisations, external disclosure to anti-corruption agencies and public disclosure through the media. Whistle-blowers assist in combating fraudulent activities by reporting the fraudulent activities using channels that are available in the organisation. According to a report conducted by ACFE (2024), organisations that employ whistleblowing can deter fraudulent activities quickly and it is less expensive. Whistleblowing is effective in preventing fraudulent activities (Suh & Shim, 2020) and (Mauilda & Bayunitri, 2021). In most cases, there is a relationship between the institution and the whistleblower (Feinstein & Devine, 2021), in other words a whistle blower is usually involved in the organisation, either as internal or external person. When there is a legal forum to report fraudulent activities, the whistle-blower would be able to report any fraudulent activities. The effectiveness of the whistleblowing depends on the channels and anonymous systems in place to protect the person. reporting the anomaly.

Syahputra and Irawati (2022) believe that government agencies that use whistleblowing can prevent and detect fraudulent activities. Whistleblowing encourages organisations to conduct forensic audits (Vierina & Imam, 2022). The SIU

relies on a tip-off hotline reporting mechanism to get information about corruption and fraud that occurs at state institutions. The channel records all the allegations, report and analyse them to be able to disapprove or approve them. Fuller and Shawver (2020) define whistleblowing as an act of reporting illegal activities conducted by employees within the organization and report them to the authorities that can manage the matter. Thus, whistleblowing assists in strengthening the prevention and detection mechanism of organisations. Efficient and effective channels would mitigate fraudulent activities in state entities, government departments and municipalities. Reporting channels can constitute an anonymous email in which the whistleblower reports fraudulent activities anonymously or a tip- off through a hotline.

The Protected Disclosures Act 26 of 2000 (PDA) defines whistleblowing as the reporting of conduct that has a criminal element committed by an employee who works within the organisation and involves a high degree of risk for the reporting employee.is. The act protects the employee who reported the conduct from being mistreated by the organization after reporting the fraud. According to a study conducted by CW (2021), most respondents understood whistleblowing as the reporting of information about any type of abuse of power or misconduct in all sectors to the public, media, persons of authority, or investigative agencies. It also found that whistleblowing assists s in reducing corruption in South Africa.

Background investigation

Background investigation involves a process of confirming the personality identity claim (Suponcic, 2017). Background investigation is executed to seek direct evidence of fraud by digging deeply into related transactions. It can help to identify investigative leads, locate interviewees, and perform asset searches (Udukeke, 2019). He further states that conducting background investigations assists in gathering information of the suspects without their knowledge (Udukeke, 2019). Background investigation is a crucial activity in a bid to detect and prevent fraud in an organisation and could facilitate fraud detection and act as a deterrent to criminally minded individuals who

may want to engage in fraudulent activities in the future; moreover, it is done to profile a suspect.

Adu (2018) asserts that background investigation confirms past activities of a person to determine their validity. It provides a comprehensive understanding of the individual and the entities with which the individual has interactions. Performing a background investigation can assist the SIU when doing intelligence gathering, using social media and publicly available information through internet searches for a suspect to determine the criminal history of the suspect. The information necessary for background investigations can be found from publicly available sources such as the Department of Home Affairs of South Africa where an Identity number can be used to verify and confirm if the person is alive, and from private available sources such as Lexis Windeed where different searches can be done. Internet searches and media can supply valuable information of a suspect, for instance about a suspect's associates and business interests, as well as historic activities that he/she may have been involved in. Collected data and information about a suspect must be analysed to aid the investigation (Adu, 2018).

2.8. Anti-fraud Controls

Anti-fraud controls are detection and prevention tools used for fraud awareness and management plans to combat corrupt and fraudulent activities (Erbuğa, 2022). These anti-fraud controls assist in minimising and mitigating corruption and fraud when doing fraud risk assessments. Anti-fraud controls comprise enhanced audit committees, internal audit departments, staff rotation, fraud reporting policies, proper due diligence on customers, reference checks on employees, and codes of conduct (Wanjiru & Ndegwa, 2022). An effective anti-fraud control model consists of the implementation of a fraud risk management programme that includes regular fraud risk assessments, regular anti-fraud training for employees and implementation of internal controls that would strengthen the mitigation of fraudulent activities (Peltier-Rivest, 2018).

Anti-fraud training assists in reducing fraudulent activities (Hauser, 2019). Fraud risk assessment is a process of identifying weaknesses within state entities, government

departments, and municipalities that could cause fraudulent activities. The assessment of fraud risks within an organisation assists in mitigating and minimising fraudulent activities. Peltier-Rivest (2018) investigated the extent of corruption and fraud around the globe and introduced an anti-fraud control model that would assist organisations combat corrupt and fraudulent activities. His findings suggest that an effective anti-fraud control model ought to include psychological employee assistance programmes, fair compensation and realistic individual performance goals, and fraud risk management programmes. These anti-fraud controls assist to mitigate corruption and fraud in organisations.

Other means include the fraud risk assessments, internal audit, internal controls, employee programmes, anti-fraud training and strong codes of conduct are anti-fraud controls that can assist in combating corruption and fraud. When the SIU is conducting investigations at state institutions, it can review the programmes to detect any weaknesses and then. include the weakness as part of the systematic recommendations and advice to the state institutions to improve the programmes.

Erbuğa (2022) indicates that fraud risk assessments, red flags, data analytics and whistleblowing are used as anti-fraud control tools to combat corrupt and fraudulent activities in the public sector. The objective of his study was to provide methods that can assist in detecting fraudulent activities within the public sector. Current and review studies have similar detecting methods; however, the current study treats forensic data analytics and whistleblowing as forensic tools audits rather than anti-fraud controls. The review study includes red flags as anti-fraud control while the current study excludes it.

Preventive controls and corrective controls are effective in combating fraudulent activities, while detective controls do not reduce the occurrence of fraudulent activities (Wanjiru & Ndegwa, 2020). The study finds that effective implementation of anti-fraud control lies with management of the listed companies. The SIU can liaise with management of state institutions to address the anti-fraud controls that are used

by state institutions to discuss how the controls can be improved. The SIU can liaise with management while conducting investigations.

According to Singal, Nagi, and Goyal (2019), internal controls of the public sector must be strengthened to prevent and detect fraudulent activities so that public officials do not become involved in corrupt and fraudulent activities. Their study analysed fraud prevention and detection strategies in the Indian public sector. The review study and current study accede that strengthening internal controls in business processes would assist in preventing and detecting corruption and fraud in the public sector. When the internal controls are strong, the chances of committing corruption and fraud are minimised. The SIU should review the internal controls of the state institutions to advise how they can be strengthened to minimise fraud risks in state institutions.

Jalil (2018) asserts that internal control does not affect fraud prevention, while antifraud awareness on the other hand, has a positive effect on fraud prevention. The review study is different from the current study as the review study used internal control as fraud prevention tool, while this study uses internal control as anti-fraud control tool. Kamaliah, Marjuni, Mohamed, Mohd-Sanusi, and Anugerah (2018) found that internal controls reduce fraudulent corrupt and activities in government agencies, while good governance and fraud prevention programmes did not diminish fraudulent activities in government agencies. The current study used good governance as a fraud prevention mechanism while the review study used good governance as anti-fraud control measures.

Internal controls, cash reviews, inventory observation and inspection and bank reconciliation are effective methods of anti-fraud control that are used in the public sector (Malle, Mwonge & Naho, 2021). These anti-fraud controls are mitigating corruption and fraud. The current and review studies view internal control as good measures for anti-fraud control that state institutions can use to mitigate fraudulent activities. However, the current study does not use cash reviews, inventory observation and bank reconciliation as anti- fraud control measures.

Petersen (2018) suggests that internal controls implemented at SMMEs are not enough in combating fraudulent activities. The study examined effectiveness of internal control activities in combating fraudulent activities in Small, Medium, and Micro enterprises (SMMEs) in the Cape Metropole. The use of anti-fraud controls in combating corrupt and fraudulent activities must be redesigned to make it effective and efficient. The researcher alludes that the anti-fraud control methods used currently can be changed to assist state entities, government department and municipalities to mitigate corrupt and fraudulent activities.

2.9. Fraud prevention

Fraud prevention uses measures that would stop fraud from occurring in the first place (Eze & Okoye, 2019). This implies that applying prevention methods such as fraud awareness, ethical culture, and corporate governance assist in reducing fraudulent activities. It is a forward-thinking process that is used to predict the occurrence of fraud (Oladipo & Olurotimi, 2021). Fraud prevention comprises procedures, systems, and verification processes that stop fraudulent activities from occurring (Mvunabandi, 2023). According to the researcher, fraud prevention involves strategies that help mitigate fraudulent activities within an organisation.

According to Alhassan (2021), fraud prevention includes approaches that will assist in creating gravity and loyalty within the organisation to minimise the recurrence of fraud. Fraud prevention is a proactive process which uses methodologies, measures and strategies that can anticipate the occurrence of fraud (Ogunode & Dada, 2022). Moral, ethical leadership, good governance, and regular fraud awareness programmes assist in preventing fraud.

As indicated by Vyas-Doorgapersad (2022), ethical organisational culture, ethics training, and ethics strategy are used to address corrupt and fraudulent activities in the South African public sector. She investigated organisational ethics management to combat corruption in the South African Public Sector. The studies see ethics as a tool to prevent corruption in state institutions. The objective of the review study was to develop organisational ethics and encourage an ethical culture in the South African

public sector. The objective of this study was to employ ethics as a prevention tool in combating corruption. Therefore, the studies have different objectives regarding the use of ethics in the public sector.

Feliti (2018) assessed how corrupt and fraudulent activities could be combated through ethical leadership decision-making in the public sector. Findings indicate that unethical decision-making is rampant within the public sector of South Africa. Feliti (2018) suggests that government must develop and implement a decision-making model that would proactively prevent the occurrence of unethical decision-making in the public sector. Feliti's study developed an ethical framework model that can assist in combating fraudulent activities. His study views ethics as tool that must be used in preventing corrupt and fraudulent activities. The studies agree that corruption and fraud can be reduced through ethical frameworks that the leadership at public sector organisation must implement. The SIU can review the ethical frameworks of state institutions that address moral obligations of the leadership with regards to running state institutions.

As established by Ndlovu (2021), ethical leadership contributes more to the fight against corruption than promoting good governance. The study investigated the effect of ethical leadership on corruption and good governance in selected municipalities in South Africa. The study further showed that the fight against corruption can be won through strengthening anti-corruption agencies, effective legal frameworks, and allocation of resources for anti-corruption agencies. The study's objectives were to determine if ethical leadership and good governance can assist in combating corruption at state institution. Similarly, the current study wants to ascertain if ethics and good governance can assist in combating corruption. The SIU can review governance and ethical frameworks of state institutions to see if they comply with legislations and address the measures to combat corruption and fraud. This can be done during investigations when the SIU is meeting with the leadership of the state institutions and any loopholes detected should be included in the recommendations.

Phahlane (2021) indicates that there is no political will, including ethical leadership to implement mechanisms that could combat corrupt and fraudulent activities. He studied the fight against corruption using ethical political leadership. He further states that lack of consequence management and accountability by public officials affects the will to combat corrupt and fraudulent activities in the public sector (Phahlane, 2021). The review study highlighted that public officials did not act ethically as they knew that nothing would happen to them if they acted unethically. The current study wants to emphasise the importance of appointment of ethical leaders in the public sector. This can be done by doing an intense screening process of public officials and not using political appointments. When conducting investigations, the SIU can assist state institutions by doing lifestyle audit and background investigations of suspect political figures.

According to Singh (2020), fraudulent activities occurred in the administration department of the University of KwaZulu Natal (UKZN) as fraud awareness was not regularly communicated amongst employees within the department. She studied the role of fraud awareness in promoting an anti-fraud culture to prevent corrupt and fraudulent activities within the university. The findings also confirmed the value of increased fraud awareness in promoting an anti-fraud culture. This study agrees with the above study that promoting anti-fraud awareness regularly assists in preventing fraud, as employees are kept informed and educated about the dangers of committing fraud. The SIU should present fraud awareness campaigns in state institutions that they are investigating to prevent its re- occurrence,

As outlined by Kanyane (2021), anti-corruption structures such as punishment for committing fraudulent activities are essential in combating fraudulent activities. The study focuses on punishment versus prevention of fraudulent activities in government institutions. Also, it suggests that an ethical approach assists in achieving effective and better governance in preventing fraudulent activities within the public sector. Latif, Hasnan, Hussain, and Ali (2021) found that fraud prevention mechanisms such as ethical leadership and internal control are the most effective methods that influence awareness in combating corrupt and fraudulent activities. This study has different

objectives to that cited, as it intends to ascertain the use of internal control as measure for anti-fraud control while the review study used internal control as fraud prevention programme. Both studies regard an ethical approach as an effective fraud prevention programme that can assist the public sector to reduce fraudulent activities.

2.9.1. Fraud prevention measures in the public sector

The following are fraud prevention measures that are widely used in state institutions by those in leadership positions to combat corruption and fraud. The measures are discussed below.

- **Ethics**

Ethics is the first step in fraud prevention strategy (Ogunode & Dada, 2022). It comprises behavioural standards that control the daily actions of employees in an organisation while doing their duties (Vyas-Doorgapersad, 2022). It is about moral obligations to society that determine the individual's actions. Ethical culture in the organisation yields positive results in fraud prevention (Ogwiji & Lasisi, 2022). Ethical public officials strengthen efforts by state institutions in fraud prevention as they tend to act in a morally sound behaviour.

Ethical leadership is the application of integrity, responsibility, accountability, and transparency in the public sector to prevent and avoid negative consequences and corrupt activities (Lekubu, 2019). Ethical decisions are affected by the law and other government regulations, industry and organisational ethical codes, social pressures and tension between personal standards and organisational needs. Thus, public sector organisations must develop an ethical culture that would become the guidelines for public officials working in the organisation and deliver services to the public.

The public sector experiences a lack of moral norms or adversely, unethical conduct in the appointment of public officials (Ndlovu, 2021). According to Lekubu and Sibanda (2021), ethics may offer the solution to eradicate corruption in the public sector. It can be achieved by forming a strong ethical culture of placing people with high morals in strategic decision-making positions. Ethical leadership in the public sector plays a key

role in always ensuring ethical conduct (Mkhize & Nel, 2018). According to Vyas-Doorgapersad (2022), a strong ethical culture assists in combating fraudulent activities in South Africa. Ethical leadership in organisations assists in influencing subordinates to act in the right manner to work effectively and efficiency ((Ndlovu, 2021). Leaders in the public sector can influence the ethical tone at the top which will influence the employees act ethically when performing their duties.

Ethical thinking in the workplace promotes anti-fraud training and ethical governance which would encourage potential fraudsters to think twice about their moral values (Pilter-Rivest, 2018.). Ethics is important for people and organisations that are striving for moral awareness (Budhram, 2018). Public officials must have high morals to offer services to the public with integrity and competency.

- **Governance**

Governance comprises the rules that are set in directing an organisation (Nwoke, 2019). Budhram (2018) indicates that organisations would not be able to function without effective governance. Good governance in the public sector includes active cooperation of government and citizens that participate in all challenges facing the state (Ndlovu, 2021). It assists state institutions to appoint competent public officials in strategic positions. Good governance helps shape the attitude of the employees as it promotes good organisational culture and ethical values (Ndevu & Muller, 2018). Good governance can reduce fraudulent activities in state entities, government departments and municipalities by means of internal audits and tight internal controls. The effective and efficient use of government resources strengthen the governance systems (Bergsten, Jiren, Leventon, Dorresteijn, Schultner & Fischer, 2019). Motubatse and Ngwakwe (2020) point out that the role of South African governance is to ensure the optimal utilisation of resources by means of appropriate internal control systems.

Section 195 of the Constitution of South Africa identifies values and principles of good governance, namely accountability, impartiality, development orientation, representation and participation, fairness, public accountability, effectiveness and

efficiency and professional ethics. Public sector leaders are key players in implementing good governance that would strengthen the prevention of fraudulent activities. They are responsible for the prevention and detection of fraudulent activities.

- **Fraud awareness**

Fraud awareness raises awareness on the importance of fraud prevention by all related stakeholders in organizations through good leadership that would assist in minimising the occurrence of fraud in the organisation. Pilter-Rivest (2018) states that fraud awareness is central in preventing fraudulent activities. Mykhalchenko and Wiegratz (2019) believe that fraud awareness is key in combating fraudulent activities in Botswana, Malawi, South Africa, and Zambia. Suleiman and Othman (2021) assert that creating fraud awareness programmes with citizens assist in preventing fraudulent activities in the public sector. Singh (2020) views fraud awareness as promoting an anti-fraud culture and preventing fraudulent activities from occurring at university. Fraud awareness encourages the public to be aware and cautious about fraudulent activities taking places within their surroundings. It assists in combating fraudulent activities as the programmes that are done promotes a fraud- free environment. Fraud awareness at state institutions helps to prevent fraud as public officials are trained to know what fraud is and how to avoid committing such acts.

2.10. Fraud detection

Fraud detection is a process of identifying hidden fraudulent activities and catching perpetrators (Oladipo & Olutorimi, 2021). Also, it involves a systematic process of uncovering fraudulent activities in an organisation (Udukeke, 2019). Fraud detection is a vital step in fraud investigation as it helps to guide how the investigation would commence; it also assists in fraud prevention as it would show steps to improve to minimise fraud within the organization (ACFE, 2024). This implies that fraud detection assists in the investigation of the fraud that occurred and helps in forming processes that can prevent fraud from occurring again in the future. The researcher defines fraud detection as the process that is used to identify any wrongdoing within an organisation.

Oyerogba (2021) indicates that fraud detection requires sophisticated skills, techniques and experience which are conducted continuously in an organisation as incidences of fraud regularly occur. The activity includes ways that fraud is discovered by surprise audits and regular monitoring of organisation transactions. According to Peltier-Rivest (2018), surprise audits or random verifications are effective in detecting fraudulent activities, when performing unannounced verifications, as it does not give public officials enough time to cover up and hide their fraudulent activates. Peltier-Rivest (2018) further states that surprise audits increase fraudsters' fear of getting caught. Knowing where to look and understanding the motives to commit fraud assists in detecting fraudulent activities before, as they harm the organisation. Fraud detection is a tool used after fraud prevention has failed in stopping fraud.

Table 2.3 shows detection methods to be used to combine corruption and fraud ACFE (2024), shows the detection methods that are used to detect occupational fraud across the globe. The table shows the methods from the highest percentage to the lowest percentage. The table also shows who detected the occupational fraud.

Table 2.3

Detection method	Percentage of detection methods	Person who reports fraud	Percentage of person who report fraud
Tip-off	43	Employee	52
Internal audit	14	Customer	21
Management review	13	Anonymous	15
Document examination	6	Vendor	11
By accident	5	Other	7
Account Reconciliation	5	Shareholder/owner	1
Data Monitoring	3	Competitor	1

External audit	3		
Surveillance	3		
Notification by law enforcement	2		
Confession	1		

(ACFE, 2024)

The table indicates that fraud can be detected by different methods and that different people can report fraud. Fraud detection is a tool used after fraud prevention has failed in stopping fraud.

2.11. Role of SIU in combating corrupt and fraudulent activities

This section reviews activities that the SIU performed in combating corrupt and fraudulent activities within state entities, government department and municipalities. It focusses on fraud prevention and fraud detection services that the SIU performed and plan to do to improve its performance. It critically analyses the activities used by the SIU in its efforts against in the fight corruption and fraud.

2.11.1 Fraud Prevention

According to the SIU (2022) annual plan, the SIU wants to establish competency capabilities that would assist state entities, government departments and municipalities to improve their processes and advisory services that would assist in developing anti-corruption strategies to reduce the reoccurrence of corrupt and fraudulent activities. This would assist state institutions to strengthen their internal controls by giving advice that will reduce corrupt and fraudulent activities. The SIU wants to form public education services where it would educate the public about fraudulent activities within the public sector and measures used to mitigate them (SIU, 2022). This would encourage citizens to participate in the efforts of mitigating corruption and fraud. The prevention role has not been tested fully as the SIU envisages.

Investigations performed by the SIU consist of elements of prevention as mentioned by (Chetty, 2017). While the SIU conducts investigations, it can assist state entities, government departments and municipalities to prevent fraudulent activities by way of recommendations. based on the findings from the investigation. Nevertheless, such recommendations are not an enforcement for state entities, government departments and municipalities, as they may choose to ignore them.

The SIU uses the Market Data Analytics (MDA) and Prevention Programme to measure the performance in combating fraudulent activities. Its purpose is to implement proactive prevention measures that would assist in reducing the recurrence of fraudulent activities caused by deficiencies in state intuitions systems and to have a positive impact on the public (SIU, 2022). It also employs the MDA to review its performance in mitigating corruption and fraud. However, the SIU efforts rarely mitigate the corruption and fraud, as state institutions are not forced to apply suggested recommendations. The aim of the MDA is to combat corrupt and fraudulent activities through proactive preventative mechanisms and effective enforcement of consequence management measures (SIU, 2023). To achieve this aim, the SIU has the following objectives:

1. Record allegations received electronically in a central location to facilitate ease of tracking.
2. Access for the Assessment Committee to duly assess all centrally registered allegations.
3. Multisectoral stakeholder engagements on anti-corruption initiative.
4. Conduct lifestyle audits.
5. Develop and deploy plans to leverage data analytics to create globally competitive data-driven high-performance organisation.

The first two objectives have been used before by the SIU to combat corrupt and fraudulent activities. The SIU records all allegations received and analyses them for further investigation and approval. Once the allegations are approved, the motivation for proclamation is compiled. Additionally, the SIU as an anti-corruption agency,

focuses more on investigating corrupt and fraudulent activities that get reported through a hotline, whistle blowing and reported by state institutions. The whistleblowing mechanism is effective as all the allegations received are recorded.

Objective number three concerns the SIU performing anti-corruption forums in vulnerable sectors. The SIU mentioned the following as vulnerable sectors:

1. The Health sector
2. The Infrastructure sector
3. The Local government sector

The researcher opines that the SIU should conduct anti-corruption forums with state-owned entities, as they are most vulnerable, especially the procurement section. They form the core of government, as they bring services to the public, and the money earned from the services help build the nation. For example, procurement fraud s at ESKOM affects the distribution of electricity to homes and businesses. The SIU must include state-owned entities as part of the sectors in which they want to establish anti-corruption forums.

With regard to objective number four, the SIU started conducting lifestyle audits in the 2023 financial year. It was tasked to conduct lifestyle audits at the Passenger Rail Agency of South Africa (PRASA), the Northern Cape office of the Premier, the Gauteng office of the Premier, and the Free State Department of Community Safety Roads and Transport (SIU, 2024). The researcher is of the view that conducting lifestyle audits at state institutions put the SIU on the right track. Part of this study concerns the employment of lifestyle audits as forensic auditing tools in combating corruption and fraud by the SIU. The SIU created a lifestyle audit department which focuses on conducting lifestyle audits; however, being relatively new, its impact has not been assessed, as it has only been used for one financial year. The researcher is of the view that lifestyle audits should be conducted regularly during investigations at state institutions, not only when there has been a request from government institutions. By conducting lifestyle audits during investigations, members would be able to detect

public officials that live beyond their means, thereby strengthening the case against public officials suspected of corrupt and fraudulent activities. A lifestyle audit is vital tool in the fight against corruption and fraud at state institutions.

The SIU wants to improve its data analytics capabilities (objective number five) and has partnered with the Council of Scientific and Industrial Research (CSIR) to assist in implementing data analytics (SIU, 2024) as it does not have capabilities to perform data analytics to assist with investigations. The CSIR can assist the SIU implement the use of data analytics but can -not enhance the investigation. Some of the cases that the SIU investigates are too complex to use the current data analytics software. Thus, the SIU should purchase updated software packages and train employees to use it effectively. The researcher is of the opinion that the SIU lags in the use of forensic data analytics, and it should speedily adapt to the new technology regarding forensic data analytics.

The Market Data Analytics and Prevention Programme is divided into three categories:

2.11.1.1 Data Analytics

The purpose of the MDA section is to supply data, knowledge, and information internally and to state institutions which help to mitigate fraudulent activities (SIU, 2024). The SIU collects and analyses relevant data that can assist in conducting research in trend analyses that combat fraudulent activities in the public sector. A data analytics platform for market data analysis allows varying levels of data analysts to easily analyse, aggregate, model, present and explore various sources of data which the SIU has obtained through research. The data analytics tool that the SIU currently uses cannot assist in the efforts of combating corrupt and fraudulent activities and should improve its effectiveness by using updated data analytics software.

2.11.1.2 Case Advisory

The SIU performs the following functions as advisory services to state institutions:

- Advise the relevant public official in an executive position on systemic recommendations to reduce corrupt and fraudulent activities. The

recommendations are not always enforced at state institutions and therefore the SIU must ensure that public officials always apply the systematic recommendations by advising state institutions to implement changes that curb corrupt and fraudulent activities. This would assist in avoiding the recurrence of the same corrupt and fraudulent practices.

- Asses the practices and procedures used at state institutions to secure a revision of any that may be conducive to corrupt and fraudulent activities. This would assist in strengthening internal controls of state institutions to detect any irregularities.
- Advise, upon the request of private organisations or individuals, on measures to combat corrupt and fraudulent activities through fraud risk assessments and fraud awareness programmes. The SIU would assist in assessing any potential fraud indicators at state institutions and advise on mitigating controls. The SIU will also provide training how to reduce fraud indicators identified.

2.11.1.3 Prevention and Awareness

The SIU performs the following functions as prevention and awareness programmes:

- Foster public support for combating fraudulent activities and promote education. The SIU would perform regular fraud awareness training to the public informing and advising them about trends in fraud to mitigate such fraud.
- Improve the rate at which allegations are reported. The SIU would increase its efforts in addressing the allegations that are received. This will ensure that all allegations are reported and acted upon.
- Share data analytics information to the public. The SIU would inform the public about the efforts already done in combating corruption. This would help the SIU to restore the public's confidence in them.

2.11.2 Fraud detection

The SIU, as an anti-corruption organisation, focuses on investigating corruption and fraud within state institutions. The detection has not been assessed yet. The SIU receives tips through its fraud hotline about fraudulent activities in institutions. It would

record the allegations and assess the allegations to prove or refute them. Once the allegations are proved, it would motivate for proclamation which will be approved by the president. Corrupt and fraudulent activities are detected during investigation by reviewing the policies of state institutions.

2.12 Gap in Literature

The survey of selected published literature shows that anti-corruption agencies do not use forensic audit and anti-fraud controls to combat corrupt and fraudulent acts. The cited literature reveals that forensic audit tools are rarely used in curtailing the fight against corruption and fraud. This study examines the adoption of forensic audit tools in combating corrupt and fraudulent activities. In fact, as shown by the cited literature, the implementation of forensic audit tools and anti-fraud controls are vital in combating corrupt fraudulent activities. Further, the study of the literature indicated that private and public sectors can curb corruption and fraud when fraud prevention and fraud detection mechanisms are in place.

The study ascertains that the use of forensic audit tools and anti-fraud controls during investigation would assist the SIU to contend corruption and fraud at state institutions. Currently there is no literature about the SIU using forensic audit tools and anti-fraud controls to combat corruption, as its main mandate is to investigate corrupt and fraudulent activities that are taking place at state institutions. Therefore, there is a gap in existing knowledge regarding the use of forensic audit tools and anti-fraud controls in the effort of the SIU to fight against corruption practices.

The reviewed literature does not show any efforts by the SIU in preventing and detecting fraudulent activities. The SIU is doing roadshows aimed at educating the public about its mandates and how they can participate in the fight against corruption and fraud. Additionally, the SIU has performed fraud awareness programmes in which the public and public officials are educated about the dangers of committing fraud. However, the new strategies that the SIU has embarked on, including the prevention of fraudulent activities, have not been used before by the SIU. The strategy is in a development phase as the objectives have only recently been planned and has not

been implemented. This gap is an operational gap as it is not currently part of SIU's mandate and has not been researched yet. The study determined that applying fraud prevention and fraud detection mechanisms across the investigation at state institutions will assist the SIU to curb corrupt and fraudulent practices.

2.13 Conclusion

The chapter provided a review of published literature which focused on the title of the study. Section one described corruption and fraud as separated concepts. Section two focused on theorical frameworks used in corruption and fraud studies; legal frameworks that are used by the SIU in combating fraudulent activities; and conceptual frameworks regarding forensic auditing, forensic accounting, forensic tools, anti-fraud controls, fraud prevention and fraud detection.

The role of the SIU in combating fraudulent activities, published information on forensic audit tools, anti-fraud controls, fraud prevention, and fraud detection were discussed in this chapter. Finally, the gap in published studies regarding anti-corruption agencies was discussed. The chapter that follows describes the methodology that the study used to achieve the set objectives of the study.

Chapter Three: Research Approach and Methodology

3.1 Introduction

The aim of the study was to ascertain the role of the SIU in combating corrupt and fraudulent activities in state institutions by means of forensic audit tools and anti-fraud controls. This chapter discusses the paradigm, methodology, and design of the study. The study used an interpretivism paradigm, a qualitative approach, and an open-ended questionnaire to collect data from the participants and thematic analysis as data analysis method. The chapter includes the positions of research participants (the population), sampling method used, data collection and data analysis. Lastly, the ethical clearance, as well as the limitations of the study are discussed.

3.2 Paradigm

A research paradigm a system of beliefs and assumptions about the development of knowledge (Saunders, Lewis, & Thornhill, 2019). Creswell and Creswell (2018) assert that interpretivism relies on views of the participants about the issues that have been studied. The study used an interpretivist paradigm to seek to understand the research problem from the views of the participants. The researcher endeavoured to gather substantial information from the participants to determine the participants' experience regarding forensic audit tools and anti-fraud controls in combating corrupt and fraudulent activities in the public sector. An interpretivist paradigm assisted the researcher to get opinions from the participants about fraud prevention and fraud detections mechanisms that can assist to mitigate fraudulent acts in state institutions. Additionally, interpretivism aided the researcher to understand the perceptions, and insights from the participants about combating corrupt and fraudulent activities.

3.3 Methodology

According to Creswell (2014), a research method is a systematic, methodical, and accurate execution of the design whereby various methods and tools are used to collect data. The study used qualitative methodology as the researcher aimed to explore and understand the meaning that participants attribute to the use of forensic

audit tools and anti-fraud controls. A qualitative study is also an effective way to examine complex issues like using forensic audit tools in combating corrupt and fraudulent activities. The researcher used qualitative methodology to understand the phenomena that the participants have about the use of forensic audit tools and anti-fraud controls in combating fraudulent activities. from. The researcher opted to use qualitative methodology to get different opinions about the issue from participants' own words.

3.4 Research design

Research design is the collection and analysis of data in a manner that aims to generalize the findings of the sample on the population (Kothari, 2004). Research design is the direction the study takes from methodology to presenting the results of the study. The researcher used an emergent design where the initial plan for research changed as more information became available during the research and collecting of data (Creswell, 2014; Cropley, 2021). The researcher used an exploratory questionnaire to explore the use of explore audit tools and anti-fraud control in combating corrupt and fraudulent activities by the SIU. The questionnaire assisted the researcher to formulate innovative ideas from participants' responses about fraud prevention and fraud detection mechanisms that can assist the SIU in combating fraudulent activities.

3.5 Research Method

3.5.1 Population

Sekaran and Bougie (2016) indicate that population refers to the group of people, events, or things of interest that are used in a study. The population in this study comprised Forensic Investigators and Forensic Lawyers that are work in the SIU's Pretoria Office in Gauteng. The Gauteng office has 115 personnel working within the operation business unit: one Head of investigations, nine Principal Forensic Investigators ("PFIs"), twenty-two Chief Forensic Investigators ("CFIs"), sixty-five forensic investigators ("FIs"), fifteen junior forensic investigators ("JFIs") and four Principal forensic Lawyers ("PFLs"). The above population participated in the investigation, from the planning phase to the execution phase. The PFIs and PFLs

work together to draft reports that are presented to the president. The population included contract and permanent employees as well as employees who had recently joined the SIU.

3.5.2 Sampling

A sample is a subset of the population that assists the researcher to draw conclusions that are generalizable to the population of interest (Sekaran & Bougie, 2016). It selects a portion from a population to represent the entire population. A total number of 30 participants, consisting of investigators and forensic lawyers were sampled. The researcher purposefully selected the participants of the study as he wanted to discern their views on using forensic audit tools and anti-fraud controls in combating corrupt and fraudulent activities in state institutions. The topic of the study had not been explored before and therefore, purposive sampling was used as the researcher wanted to explore new insights and ideas from the participants. Additionally, the researcher sampled participants who had three of more years of experience as they have worked on different projects within state institutions and exposed to different weaknesses within state institutions.

From the 30 participants that were sampled, 22 responded to the questionnaire which is a 73.33 percent response rate. The sample also reached saturation when the responses became repetitive, and no new insights were generated. To avoid bias, the researcher distributed the questionnaire to participants who worked on national and provincial projects that he was not involved in, which allowed him to get different views from participants with whom he did not work closely.

3.5.3 Data collection

According to Kothari (2004), once a research problem is defined and the research design is identified, collection of data can commence. The researcher collected data using an open-ended questionnaire distributed to forensic investigators and forensic lawyers. The open-ended questionnaire allowed the participants to provide in-depth descriptions and explanations of their knowledge, understanding and experience in the use of forensic audit tools and anti-fraud controls. The questionnaire was

developed through exploring literature on forensic audit tools, anti-fraud control, fraud prevention, and fraud detection.

The open-ended questionnaire gave the participants an opportunity to express their views about the research topic without limitations and their responses would not be that expected by the researcher. The questionnaire was distributed via e-mail to forensic investigators and forensic lawyers who are based in the Gauteng office of the SIU at the same time. The participants were given one month to complete the questionnaire, considering their responsibilities within the SIU. One month was considered enough time to give the participants time to complete the questionnaire at their own pace and to express their opinions freely.

The researcher designed the questionnaire to avoid bias in collecting data from participants. The returned questionnaire was saved and labelled using pseudonyms. It allowed the researcher to know the participants in terms of their positions they held, but hiding their identity. The researcher is a forensic investigator and collaborates with teams in projects when conducting investigations, therefore by using the questionnaire, the researcher was able to receive responses from different participants that are not working in the same projects with the researcher.

Maxwell (2013) states that pilot studies are small-scale preliminary studies that are used to evaluate and refine the research strategy. A pilot study was conducted to strengthen the questionnaire and to align them with the objectives of the study and to ensure its validity and reliability with the Provincial Head (PH) of the SIU Gauteng office to ensure that questions were clear and the feedback assisted to clear issues that might have risen during fieldwork. The questions were piloted to the PH to get his opinion on the questions and to make changes on the structure of the questions before distributing them to participants.

3.5.4 Data Analysis

Qualitative data analysis concern making sense of text and image data (Creswell & Creswell, 2018). The data were coded and then categorised according to themes, according to Braun and Clarke (2006), thematic analysis involves identifying,

analysing, and reporting patterns within data. It allows the researcher to get different information from participants to explore complex phenomena under study. The responses were reviewed to form codes and identify themes and subthemes. Sekaran and Bougie (2016) allude that coding is the analytic process in which qualitative data are reduced, rearranged, and integrated to be interpreted. The researcher used NVIVO software to conduct a thematic analysis to help identify and analyse patterns or themes in each data set (Braun & Clarke, 2021).

3.6. Verification of trustworthiness

Validity

Creswell and Creswell (2018) and Sekaran and Bougie (2016) agree that qualitative validity is used to determine that collected data are accurate. The questions asked to participants were derived from the research objectives of the study. The researcher maintained the participants' anonymity so that the participants could feel free to respond to the questions. The data were accurately collected from the participants who possess knowledge, interest, and understanding of the use of forensic audit tools and anti-fraud controls.

Reliability

Qualitative reliability indicates that an instrument is consistently administered in different settings (Creswell & Creswell, 2018). The researcher asked questions that were relevant to the study and the questionnaire was the same for all the participants. and all responses were used to form codes and themes.

3.7 Limitations

The Gauteng SIU office was used to conduct the study as this office has more investigators and lawyers than other offices, and the researcher was also based at that office. The study employed the operation department as they engage in investigations from the beginning to completion. Forensic Investigation Specialists (FIS) were not part of the study, as they are based at the national office, and the population is not enough to use them for the study. Forensic Accountants (FA), cyber

forensics, and forensic data analysts were not used for the study as they fulfil a supporting role in investigations, employed only when required.

3.8. Ethical Considerations

Sekaran and Bougie (2016) assert that ethics in research involves codes of conduct or expected societal norms of behaviour while conducting research. The researcher acted ethically by familiarising himself with the guidelines in the UNISA code of conduct for researchers and obtained permission from the Special Investigating Unit to conduct the research. College of Accounting Sciences Research Ethics Review Committee from UNISA provided ethical clearance to send the questionnaire to the participants.

The participants were provided with clear information about the research. Participants were informed of their right to withdraw at any stage and that their privacy and anonymity will be protected during the study as pseudonyms were used throughout and no data were manipulated in any way. The researcher avoided plagiarism by acknowledging all the sources used in the study. Data collected and analysed derived from the responses of participants. The pseudonyms assisted the researcher to maintain anonymity of the participants.

3.9 Conclusion

The research paradigm, methodology, and design were covered in this chapter. The chapter defined the population and the purposive sampling that was used for the study. Furthermore, the data collection and data analysis methods are discussed as well as the imitations, trustworthiness, and ethical considerations for the study. The study used an interpretive paradigm, qualitative methodology and exploratory design. Questionnaires were used to collect data and thematic analysis by means of NVivo software to generate codes and themes. The next chapter present the analyses and interpretations of the findings of the study.

Chapter four: Data Presentation, Analysis and Interpretation

4.1 Introduction

The SIU, as an anti-corruption agency, focuses on investigating corrupt and fraudulent activities in state entities, government departments and municipalities. The aim of the study was to ascertain whether the SIU uses forensic audit tools and anti-fraud controls in combating corrupt and fraudulent activities in the public sector.

The current research intended at addressing the following objectives:

- To identify the use of forensic audit tools by the SIU in combating corrupt and fraudulent activities.
- To identify the use of anti-fraud controls by the SIU in combating corrupt and fraudulent activities.
- To present strategies that the SIU can use to combat corrupt and fraudulent activities.

The chapter examines five key sections. First, a brief overview of participants involved in the study is given. Second, it describes how data were analysed before presenting findings related to forensic audit tools, highlighting the methods and techniques SIU employs to detect and investigate fraud. The third section examines the SIU's anti-fraud controls and presents the findings related to the measures implemented to safeguard state institutions from corrupt and fraudulent activities. The fourth section presents various fraud prevention strategies, focusing specifically on the proactive steps the SIU should take to alleviate the fraud. The fifth the section present the findings of the study compared to information found in the literature.

4.2 A brief overview of participants

Twenty-two (22) respondents completed an open-ended questionnaire, each lasting approximately 45 - 60 minutes. The questionnaire distributed via email to thirty participants, however, only twenty-two responded, constituting 73.33 % of the respondents. The sample was considered sufficient, as it included participants from

the positions that the researcher wanted to involve. In terms of positions, the sample consisted of chief forensic investigators (coded as CFI_1-CFI_4) (18%); forensic investigators (coded as FI_1- FI_{12}) and accounting for 54% of the sample; junior investigators (coded as JF_1 -JF_2) (9%); principal forensic investigators (coded as PFI_1-PFI_2) (9%) and principal forensic lawyers (coded as PFL_1- PFL_2) (9%). Regarding their gender, twelve out of twenty-two respondents were female, representing about 54% of the total sample and ten were male, representing 46% (see Table 4.1). Participants were questioned about their views or perceptions regarding forensic audit tools, anti-fraud controls, and SIU's strategies to combat fraudulent activities in the public sector.

Table 4.1 Brief description of participants

Positions	**Participant Codes**	**Demographic Variables (Gender)**		**Frequency**	
		Male	Female	Male	Female
Chief Forensic Investigators	CFI_1		1		
	CFI_2		1		
	CFI_3		1		
	CFI_4	1			
		1	3	4.5%	13.5%
Forensic Investigators	FI_1		1		
	FI_2		1		
	FI_3	1			
	FI_4		1		

Positions	Participant Codes	Demographic Variables (Gender)		Frequency	
	FI_5		1		
	FI_6		1		
	FI_7	1			
	FI_8	1			
	FI_9	1			
	FI_{10}		1		
	FI_{11}	1			
	FI_{12}	1			
		6	6	27%	27%
Junior Investigators	JF_1		1		
	JF_2		1		
			2		9%
Principal Forensic Investigators	PFI_1	1			
	PFI_2	1			
		2		9%	

Positions	Participant Codes	Demographic Variables (Gender)	Frequency		
Principal Forensic Lawyers	PFL_1		1		
	PLF_2	1			
		1	1	4.5%	4.5%
	Total (N=22)	**10**	**12**	**45.5%**	**54.5%**

Source: Researcher's compilation

The data shown in Table 4.1 reveal that of the participants, 54,5 % were female and 45.5 % were male. The participants were from all the positions within the operation department. The researcher used participants that had knowledge and understanding of how the SIU could assist state institutions in the fight against fraud.

4.3 Data Presentation and Analysis

4.3.1 Description of Data Analysis Process using NVivo

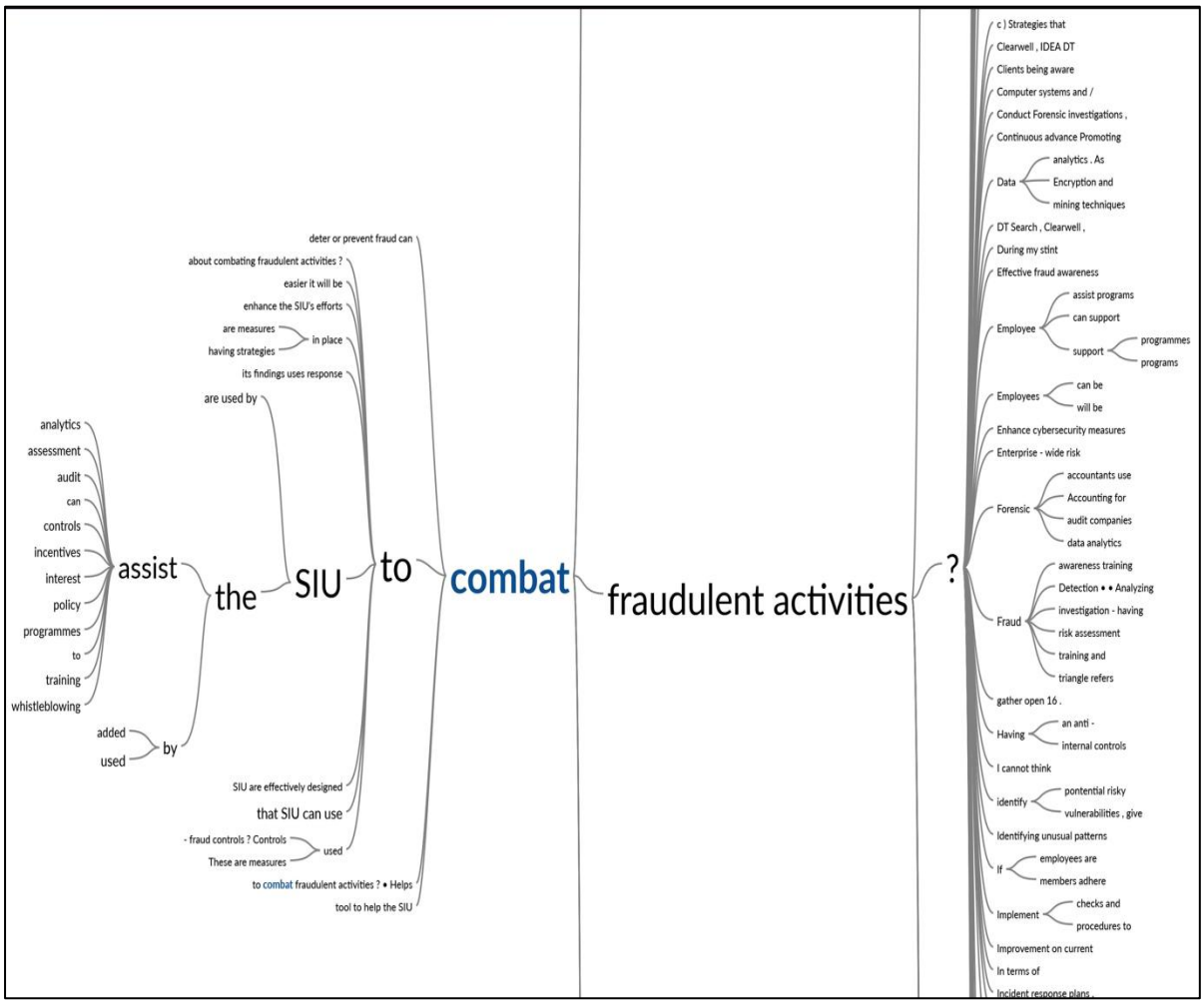
To ensure transparency and credibility in examining the SIU's role in fighting fraudulent activities in the public sector, NVivo software was used to conduct a Reflexive Thematic Analyses (RTA) to help identify and analyse patterns or themes in each data set (Braun & Clarke, 2021).

- **Preliminary data analysis using NVivo**

The NVivo software was crucial in analysing data on the role of the SIU in Combating Fraudulent Activities in the Public Sector, as it helped the researcher organise, code, and interrogate the data to ensure systematic engagement with participant responses.

Specific functions such as word frequency queries were used to identify recurring terms and concepts, such as combating fraudulent activities and anti-fraud control, as depicted in the figures below:

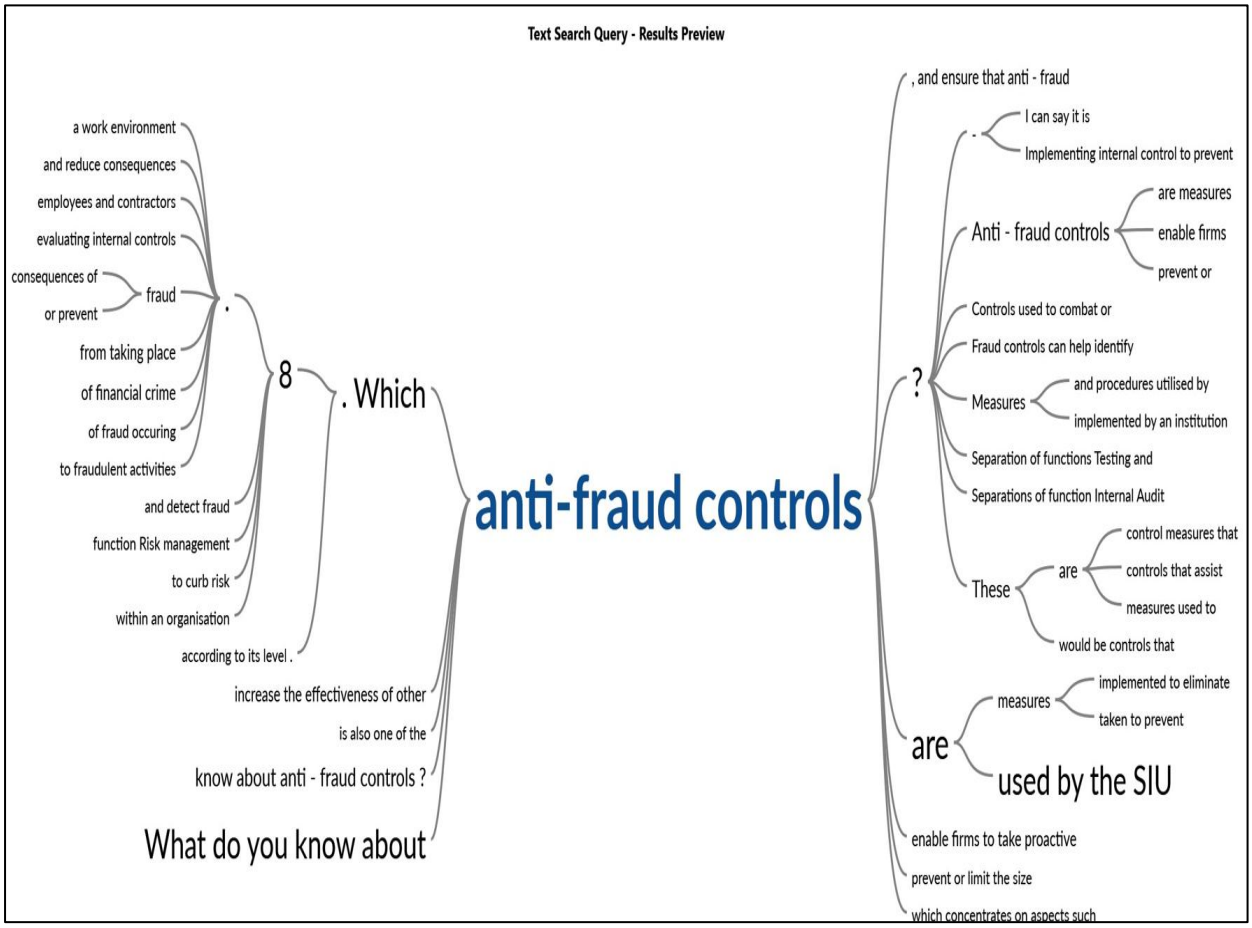
Fig 4.1 Some word tree evidence for combating fraudulent activities



Source: Researcher's own compilation from the NVivo analysis

Figure 4. 1 shows the word frequency queries used to identify recurring terms and concepts, such as combating fraudulent activities.

Fig 4.2 Some word tree evidence for Anti-fraud controls



Source: Researcher's own compilation from the NVivo analysis

Figure 4.2 shows the word frequency queries that were used to identify recurring terms and concepts, such as anti-fraud controls.

These search queries in NVivo helped the researcher identify commonly used phrases to provide a foundation for initial coding so that the analysis could better capture the crucial ideas and ensure that the coding process aligned closely with the data.

Additionally, the researcher used NVivo to generate a word cloud to depict the most frequently appearing terms in the data visually. The word cloud offered a quick and intuitive overview of relevant concepts in the study. Though the word cloud constitutes a powerful tool to visualise the frequency of words in written content and assist when analysing certain content, it does not serve any purpose in this study other than visually representing the most referenced words in participants' narrative. Thus, prominent words such as 'combat', 'fraudulent' 'fraud', 'activities', and 'forensics' occurred on a large front, suggesting their frequent usage and central relevance to the study.

Fig 4.3 Word cloud including all data



Source: Researcher's own compilation from the NVivo analysis

Figure 4.3 illustrates the most referenced words in respondents' narratives. 'Fraudulent activities' is a phrase that was utilised widely by the respondents in answering research questions.

4.3.2 Thematic analyses phases.

RTA was appropriate for an in-depth examination of complex data. This type of qualitative analysis is suitable for the study as it examines participants' perspectives, perceptions, experiences, and viewpoints regarding forensic audit tools, anti-fraud controls, fraud prevention and fraud detection strategies. Additionally, RTA can capture the opinions of participants about the effectiveness of the SIU interventions in the fight against corruption and fraud. By identifying patterns and themes, RTA enables a researcher to capture both explicit and implicit meanings in the data, making it ideal for qualitative studies that intend to understand processes, such as anti-fraud strategies. Braun and Clark (2014; 2020) suggest a six-phase analytical process consisting of familiarising oneself with the data, generating initial codes, generating themes, reviewing potential themes, defining and naming themes, and producing the report. These phases were adopted and followed through in the present study.

- **Phase one: familiarisation with the data**

It entailed reading and re-reading the entire dataset to become familiar with it. The initial process was necessary to identify relevant information which addressed the research objectives. The researcher read each transcript numerous times and was able to make notes of initial trends and potentially interesting excerpts identified in the transcripts. Moreover, the familiarisation processes aided reflection on the generated data. Table 4.2 provides sample passages of preliminary notes taken during phase one.

Table 4.2: Preliminary notes during phase one

Participants' excerpts	Researcher's preliminary notes
FI_{11}: "They [fraudulent activities] involve intentional deception to gain unlawful financial gain."	This excerpt suggests the need to explore the numerous forms of fraudulent behaviour, the underlying motivations, and its impact on financial systems.

CFI_3: "I understand fraud to be the unlawful and intentional making of a misrepresentation that causes actual or potential prejudice to another. …can be any activity that is done intentionally which is contrary to legislation and causes prejudice to another…"	Fraud can involve deliberate misrepresentation or actions that violate legal provisions, harming or disadvantaging another party.
JFI_2: "A lifestyle audit can reveal inconsistencies between an individual's standard of living and their reported income."	The lifestyle audit can uncover discrepancies between a person's living expenses and declared earnings, indicating potential fraud or financial misconduct.

Source: Researcher's own compilation

Table 4.2 shows quotes from participants' responses. The quotes assisted the researcher to familiarize himself with the raw data from respondents and were used to form codes.

- **Phase two: generating initial codes**

Codes represent the fundamental building block of what later became a theme. According to Braun et al. (2016) the process of coding focuses on producing concise, shorthand descriptive or interpretative labels of pieces of information which may be necessary to address the research objectives. More specifically, a description-focused coding strategy was adopted, in which initial codes were generated by thoroughly reading and describing the data. C_i (which ranges from 1 to 22) represents the researcher's preliminary responses from participants 1 to 22.

Table 4.3 presents examples of selected initial codes generated from the participants' quotes. The quotes were used to form preliminary codes and assisted to understand the participants meanings when they were responding to the questionnaire. After reading the responses from questionnaire, the researcher began the coding and

labelling process. NVivo software was used to generate codes for the sections of the questionnaire.

Table 4.3: Extract of preliminary coding

Participants' excerpts	Researcher's preliminary codes [C_i]
	The next one is a repetition, but more complete.
PL_1: "It [forensic data analysis] is a crucial anti-fraud control because it identifies unusual patterns and may prevent fraudulent activities before, they take place."	Forensic data analysis is a potential tool necessary to alleviate fraud, as it helps detect irregular patterns early, potentially stopping fraudulent activities before they occur.
FI_7: "Internal controls can assist in the early detection of prevention of fraudulent activities and the reduction of opportunities to commit the fraudulent activity."	Internal controls for early detection and fraud prevention.
CF_1: "Anti-fraud controls prevent or limit the size of the fraud risk by reducing the likelihood and consequences of fraud."	Anti-fraud controls to alleviate fraud risk and impact.

Source: Researcher's own compilation

Table 4.3 illustrates the codes that were formed from the participants' views. The codes generated were used to form themes and subthemes. The grouping of codes assisted in forming themes.

- **Phase three: generating themes**

Coding analysis revealed a variety of themes in the data and allowed the researcher to form subthemes, allowing the study to perform logical analyses across the data. The data were then sorted and classified into meaningful themes based on the

research questions. This phase was initiated when all relevant data items had been coded and enabled the researcher to switch from analysing individual data items to interpreting the aggregated meanings within the dataset. Hence, preliminary coded data in phase two were reviewed to identify how different codes may be combined based on shared meanings, allowing for themes and sub-themes. Additionally, themes or sub-themes must be unique and connected to produce a coherent picture of the data set.

Table 4.4 below shows an initial thematic map presenting three main themes. The following are themes generated, namely forensic *audit tools, anti-fraud controls and fraud prevention and fraud detection strategies*. The themes were generated from the research questions.

Table 4.4: Initial thematic analyses

Forensic Audit Insights and Overview	**Anti-fraud Controls**	**Fraud prevention and fraud detection strategies**
Forensic audit insights	SIU anti-fraud measures	Fraud risk assessment for enhanced prevention
Forensic audit tools	Importance of Internal/External Controls	Incentivizing integrity in fraud prevention
		Good governance in fraud prevention
		Anti-fraud policy in fraud prevention

	Training and awareness programmes in fraud prevention
	Strong ethical guidelines in preventing fraud
	Background investigation for fraud detection
	Lifestyle audit in detecting fraud
	Surprise audits and random verifications for detecting fraud
	Whistle-Blower Programmes and Tools for detecting fraud
	Forensic data analytics on detection of fraud

Source: Researcher's own compilation

Three themes were generated based on the responses from the participants and each theme had subthemes. The themes are sufficient as they assist in answering the research questions.

- **Phase four: reviewing potential themes (sub-themes)**

The researcher reviewed and refined the identified themes during this phase. The themes represented broad frameworks into which various aspects of the data were included to finalise themes. In this phase, the researcher critically reviewed the

respondent themes and sub-themes generated. For instance, two sub-themes under forensic audit tools (theme one) were closely related and were merged. Similarly, theme one was revisited and re-named as 'forensic audit overview and tools. After reviewing all themes and sub-themes, they reflected the recurring concepts and insights regarding the SIU's effectiveness in addressing fraud activities in the public sector.

Table 4.5 presents the reviewed thematic analyses generated in this study. The researcher used initial themes and subthemes that were generated, after a critical review of them.

Table 4.5: Reviewed thematic analyses

Forensic Audit Insights and Overview	Anti-fraud Controls	Fraud prevention and fraud detection strategies
Forensic audit insights	SIU anti-fraud measures	Fraud risk assessment for enhanced prevention
Forensic audit tools	Importance of Internal/External Controls	Incentivizing integrity in fraud prevention
		Good governance in fraud prevention
		Anti-fraud policy in fraud prevention
		Training and awareness programmes for fraud prevention
		Strong ethical guidelines in preventing fraud

	Background investigation for fraud detection
	Lifestyle audit in detecting fraud.
	Surprise audits and random verifications for detecting fraud
	Whistle-Blower Programmes and Tools for detecting fraud
	Forensic data analytics on detection of fraud

Source: Researcher's own compilation

After reviewing, the three themes and subthemes were finalised without any changes.

- **Phase five: defining and naming themes and subthemes.**

In this phase the researcher named the three themes and sub-themes which emerged from the collected data to answer the research questions. Theme one is 'forensic audit insight and overview', theme two 'anti-fraud controls', and theme three is 'fraud prevention and fraud detection strategies.

- **Phase 6: producing the report**

The reports contained richly detailed narratives based on data from the research participants' own words.

The first theme has the following subthemes, namely 'forensic audit insights' and 'forensic audit tools and techniques', which emerged after an analysis of the

participants' views on forensic auditing and forensic audit tools. Subtheme 'forensic auditing insight' has a subsequent theme 'deception for gain', which was generated when participants were asked what fraudulent activities entail.

Table 4.6 illustrates theme one and the subthemes generated from the participants' answers indicating the respondents' views about forensic auditing and forensic audit tools.

Table 4.6 Theme One: Forensic Audit Overview and Tools

Sub-themes	Subsequent Themes	Cases (Nº of participants)	Counts (Nº of evidence)	Description (What it represents)	Empirical indicators (Some evidence)
Forensic Auditing Insights		17	74	It involves a detailed investigation to detect and prevent fraudulent activities in public institutions, helps trace irregularities, recover funds, and supports prosecutions.	*"This is a process whereby a plan is put in place in order to prevent fraud or corruption in an organisation." [CFI1].* *"I am aware that forensic auditing is a form of accounting. It is when the auditors examine the financial records of a firm or an individual to identify areas where fraud has occurred." [CFI3* *"Forensic auditing*

Sub-themes	Subsequent Themes	Cases (Nº of participants)	Counts (Nº of evidence)	Description (What it represents)	Empirical indicators (Some evidence)
					involves being aware of the different types of fraud, so you are able to identify them when they happen…" [FI10].
	Deception for gain	18	88	It is about understanding fraudulent activities from the respondents' viewpoints.	*"Any activity that relies on deception in order to achieve a gain." [FI2]* *Misrepresentation, dishonesty are one of the fraudulent activities." [FI9].* "*These are any activities that are deceptive in nature. These are done to achieve gain by misrepresentation of the truth or concealment of important facts." [CF1].*

Sub-themes	Subsequent Themes	Cases (Nº of participants)	Counts (Nº of evidence)	Description (What it represents)	Empirical indicators (Some evidence)
Forensic Audit Tools and Techniques		15	68	It describes tools and techniques that assess and verify financial records and compliance, forensic using data analytics, and risk assessments to detect fraud fraudulent activities.	*"These are tools that are used to detect fraud. These are hardware and software tools that are utilised to help in the recovery and prevention of fraud. These include doing reconciliations, review documents." [JFI2]* *"Forensic audit tools are used to analyse financial data and identity irregularities, discrepancies, and anomalies that may indicate fraudulent activity." [JFI2]*

Source: Researcher's own compilation

The table above demonstrates participants' understanding on forensic auditing and forensic audit tools. The table illustrates themes one and two as well as subthemes that were generated from the findings.

Theme two, which was on anti-fraud controls, had the following subthemes: 'SIU anti-fraud measures' and 'importance of internal/external controls. The subthemes were generated from the data when the participants were asked what anti-fraud controls are and how the SIU used the anti-fraud controls to combat corrupt and fraudulent activities at state entities, government departments, and municipalities.

Table 4.7 points out the participants' perceptions of using anti-fraud controls.

Table 4. 7 Theme Two: Anti-fraud Controls

Sub-themes	Cases (Nº of participants)	Counts (Nº of evidence)	Description (What it represents)	Empirical indicators (Some evidence)
SIU anti-fraud measures	15	33	SIU anti-fraud measures involve detecting, preventing, and investigating fraudulent activities through legal actions, and asset recovery to ensure accountability and transparency.	*"These are controls that assist in detecting or preventing fraud/ corruption from taking place." [FI6]* *"Measures implemented by an institution to prevent, detect and respond to fraudulent activities." [FI7]* *"Anti-fraud controls enable firms to take proactive measures*

Sub-themes	Cases (Nº of participants)	Counts (Nº of evidence)	Description (What it represents)	Empirical indicators (Some evidence)
				against fraud and, if necessary, deliver evidence to regulatory authorities." [JFI2]
Importance of Internal/External Controls	10	27	The idea is to evaluate internal/ external controls to prevent and detect fraud.	*"Internal controls are a pivotal assistant to the SIU as they Establish a Strong Control Environment." [CFI4]* *"Anti-fraud controls [internal and external] can help identify when fraud has occurred, disrupts additional fraud and reduce consequences." [FI12]* *"These [control activities] are actions taken to mitigate risks, such as approvals, authorisations, verifications,*

Sub-themes	Cases (Nº of participants)	Counts (Nº of evidence)	Description (What it represents)	Empirical indicators (Some evidence)
				reconciliations, and segregation of duties." [CFI4]

Source: Researcher's own compilation

The table displays views of the respondents about the use of anti-fraud controls in combating corruption. Also, it shows measures that the SIU used in the fight against corruption and fraud.

Theme three is based on strategies that the SIU could use to assist state institutions in combating corruption and fraudulent activities. The theme 'fraud prevention and detection strategies' and first explicates fraud prevention strategies, followed by fraud detection strategies. Additionally, forensic audit tools and anti-fraud controls have been combined.

Table 4.8 demonstrates the opinions of participants about strategies that the SIU can use in the fight against corruption and fraudulent activities at various state institutions.

Table 4.8 Theme Three: Fraud Prevention and fraud Detection Strategies

Sub-themes	Cases (Nº of participants)	Counts (Nº of evidence)	Description (What it represents)	Empirical indicators (Some evidence)
Fraud Risk assessment for	7	10	It seeks to systematically identify and analyse potential fraud risks to develop targeted strategies to	*"Fraud risk assessment can significantly assist*

Sub-themes	Cases (Nº of participants)	Counts (Nº of evidence)	Description (What it represents)	Empirical indicators (Some evidence)
enhanced prevention			reinforce controls and reduce vulnerabilities.	*the SIU in combating fraudulent activities by providing a systematic approach to identifying, evaluating, and mitigating potential fraud risks." [CFI4]* *"The assessment process allows the SIU to prioritise fraud risks based on their potential impact and likelihood." [CFI4]*
Incentivising Integrity in Fraud Prevention	11	22	The idea aligns fraud prevention strategies with organisational goals and encourages reporting unethical behaviour. Also, it minimises conflicts of interest and rewards ethical conduct to foster a culture of accountability.	*"Incentives can be offered for identifying and reporting fraudulent activities, which motivates vigilance." [CFI4]*

Sub-themes	Cases (Nº of participants)	Counts (Nº of evidence)	Description (What it represents)	Empirical indicators (Some evidence)
				"It will motivate the employees to work hard for their more income rather than defrauding the organisation for money." [FI3] *"If employees are well -remunerated and are incentivised, that can help to ensure stability in their financial well-being…" [FI10]*
Good Governance in Fraud Prevention	13	26	This idea encourages leaders or managers to take responsibility for their actions and decisions and foster a culture of accountability.	*"Assist the SIU to prevent fraud from occurring as it outlines roles to be carried, implementing fraud awareness for employees." [FI2]*

Sub-themes	Cases (Nº of participants)	Counts (Nº of evidence)	Description (What it represents)	Empirical indicators (Some evidence)
				"Assists with accountability; transparency; better decision making; risk management; improved reporting; trust; clarity; and minimizes potential fraud/corruption." [FI3]
Strong ethical guidelines	16	24	These ethical guidelines at SIU ensure integrity, objectivity, and confidentiality, and the organisation makes fair and trustworthy assessments.	*"Ethical guidelines provide a framework for making decisions that are in the best interest of the organisation and its stakeholders." [CFI4]* *"People will apply the principles of*

Sub-themes	Cases (Nº of participants)	Counts (Nº of evidence)	Description (What it represents)	Empirical indicators (Some evidence)
				right and wrong and be ethical in the work environment." [FI9] *"It aids in there being an ethical and good governance framework within an organisation. Where that exists, there will be limited fraud and/or more ethical persons that will stand for the truth no matter what." [CFI3]*
Anti-fraud policy	12	33	It is about outlining the commitment of the SIU to prevent and address fraud and establish guidelines and procedures to prevent and detect fraud.	*"An anti-fraud policy often includes provisions for regular training and awareness*

Sub-themes	Cases (Nº of participants)	Counts (Nº of evidence)	Description (What it represents)	Empirical indicators (Some evidence)
				programmes." [JFI2]] *"Anti-fraud policy provides guidelines employees, it assists with outlining how to prevent fraud, the role regarding combating fraud and how to detect fraudulent activities." [FI2]*
Training and awareness programmes	15	33	Employees are educated about fraud prevention, detection, and reporting mechanisms, which foster a culture of vigilance and integrity,	*"Fraud awareness Training programmes educate employees about the different types of fraud, common schemes, and red flags to watch for." [FI5]* *"It can help*

Sub-themes	Cases (Nº of participants)	Counts (Nº of evidence)	Description (What it represents)	Empirical indicators (Some evidence)
				employees in making them aware of the consequences of committing fraudulent activities." [CFI1] *"*It equips employees with the knowledge and skills necessary to detect, deter, and report fraud effectively, contributing to a robust fraud prevention framework within the organization." [JFI1]
	3	3	This idea is about providing comprehensive training on fraud types, detection skills, and	*"Fraud awareness training provides*

Sub-themes	Cases (Nº of participants)	Counts (Nº of evidence)	Description (What it represents)	Empirical indicators (Some evidence)
			awareness of red flags, which equips employees to recognise and prevent fraud.	*employees with the skills to detect fraudulent activities." [CFI4]* *"By keeping employees informed about the latest fraud activity and how, when, where there are committed." [PFL1]*
Background investigation for fraud detection	13	26	It assesses individuals' histories and credentials to identify risks of fraud. For instance, they evaluate financial conduct, verify employment and educational claims, and check for previous criminal activity.	*"It can help to identify their lifestyle and how they conduct himself in social media." [FI5]* *This assists SIU in compiling a profile for role players and identifying the red flags in terms of unexplained*

Sub-themes	Cases (Nº of participants)	Counts (Nº of evidence)	Description (What it represents)	Empirical indicators (Some evidence)
				income and assets." [CFI3 *"A background investigation can reveal if the person conducting the inquiry has ever engaged in fraudulent activity." [FI1]* *"This involves analysing financial records, such as bank statements and tax returns, to uncover discrepancies and suspicious activities." [FI7]*
Lifestyle audit in detecting fraud	14	26	It is about assessing financial behaviours and expenditures to identify discrepancies between	*"Lifestyle audits help to identify individuals who are*

Sub-themes	Cases (Nº of participants)	Counts (Nº of evidence)	Description (What it represents)	Empirical indicators (Some evidence)
			reported income and lifestyle, which helps to detect potential fraud.	*living beyond their known income. It helps identify gaps and indicates if someone is living above their means." [CFI1]* *"Assist by examining an individual's financial situation to identify discrepancies* *in finances to point to any activity," [FI11]*
Surprise audits and random verifications in fraud detection.	20	88	This idea is about implementing preventive measures, detection techniques, and response plans to mitigate fraud risk and promote accountability.	*"Assist companies in meeting industry standards regulating the prevention of money laundering*

Sub-themes	Cases (Nº of participants)	Counts (Nº of evidence)	Description (What it represents)	Empirical indicators (Some evidence)
				and other forms of financial crime." [CFI4] *"They [anti-fraud strategies] can help in combating fraud, encouraging people to speak up and expose wrongdoing and unethical behaviour." [CFI1]*
Whistle-Blower Programmes and Tools	14	25	It allows employees to report suspicious activities confidentially, encouraging accountability and transparency.	*"Whistleblowers can report suspicious activities if they witness them. The SIU has opened a whistleblowing*

Sub-themes	Cases (Nº of participants)	Counts (Nº of evidence)	Description (What it represents)	Empirical indicators (Some evidence)
				hotline to allow whistleblowers to report suspicious activities anonymously." [FI10] *"Whistleblowers are an important part of exposing corruption, mismanagement and fraud'FI6]* *"The SIU encourages individuals to report suspicious activities through anonymous whistle-blower programmes." [JFI2]*
Forensic data analytics	4	5	It focuses on identifying financial record discrepancies or	*"Forensic data analytics can*

Sub-themes	Cases (Nº of participants)	Counts (Nº of evidence)	Description (What it represents)	Empirical indicators (Some evidence)
			behaviours that may indicate fraudulent activities.	*significantly enhance the SIU's efforts to combat fraudulent activities by applying specialised analytical techniques to identify, investigate, and prevent fraud." [CFI4]* *"It can analyse large volumes of data to detect anomalies and irregular patterns that may indicate fraudulent behaviour. This includes unusual transactions, discrepancies in financial records, and deviations from*

Sub-themes	Cases (Nº of participants)	Counts (Nº of evidence)	Description (What it represents)	Empirical indicators (Some evidence)
				normal behaviour." [JFI2] *"Forensic data analytics maintains track of individuals who are involved in fraudulent activities and helps analysts determine the motivations behind workers' involvement in such actions." [FI1]*

Source: Researcher's own compilation

Table 4.8 outlines the participants' views on the strategies that will help the SIU in combating fraud. These strategies can assist the SIU in preventing and detecting fraud during investigations at state institutions. The researcher believes that if the SIU adopted those strategies, they would have more impact in the fight against corruption and fraud. The strategies combine the anti-fraud controls to form fraud prevention strategies and forensic audit tools to form fraud detection strategies.

4.4 Data Interpretation/ Discussion

4.4.1 Interpretation of the findings

The data collected generated three themes based on the objectives of the study. The themes and subthemes of the study are discussed below.

4.4.1.1 Theme one: Forensic audit overview and tools

The theme emerged from the research objective identifying which forensic audit tools the SIU used to combat fraudulent activities. The participants were asked about forensic auditing to ascertain their understanding of what forensic auditing was and how it was used in combating corrupt and fraudulent activities. Furthermore, they had to indicate how it could help the SIU in fighting against corrupt and fraudulent activities in the public sector. The participants were asked to define 'fraudulent activities'; the aim was to get their views on what fraudulent activities were. Participants also had to define the concept 'forensic audit tools to determine which forensic audit tools were used at the SIU in combating fraudulent activities and which could be used in combating fraudulent activities, and how they could assist the SIU in combating corrupt and fraudulent activities.

- **Forensic audit insight**

Table 4.9 shows the findings, comparing them with literature, and then critically interpreting the responses and literature.

Table 4.9 Forensic Audit Insight

Findings	literature	Interpretations
The findings denote that forensic auditing assists in preventing and detecting fraud in an organisation.	This is aligned with findings in studies by Safiyanu, Saifullahi, and Armaya (2019) showing that forensic auditing assists in reducing corrupt	The results showed that some participants recognized the function of forensic audit. The participants were of the view that forensic auditing can assist the SIU to

	and fraudulent activities in any public sector.	combat corrupt and fraudulent activities. Thus, forensic auditing is essential in addressing corruption and fraud in the public sector as it can uncover hidden corruption practices that are conducted by public officials. State institutions must adopt the use of forensic auditing to fight against the menace of fraudulent activities taking place.
	This is in contrast with Mvunabandi (2023) who opines that the role of forensic auditing has not been well articulated.	The use of forensic audit is in a developing phase as it is not widely used in preventing and detecting corruption and fraud. The SIU must use forensic audit when conducting investigations. This can be done by using proactive forensic auditing to prevent corruption and fraud from escalating and reactive forensic auditing when corruption and fraud have been discovered. In

		this way, the SIU would assist state institutions mitigate corrupt and fraudulent activities.
The findings indicate that forensic audit is auditing that is used by auditing firms.	This is in agreement with (Inyada, et.,al, 2019). who state that forensic auditing is the application of auditing and accounting skills by auditing firms to situations that have legal consequences.	Forensic auditing is used when there is suspicion of corrupt and fraudulent activities. State institutions use external auditing firms to conduct forensic audit investigations. In this way, state institutions use reactive forensic auditing to uncover corrupt and fraudulent activities that have taken place. The SIU can assist state institutions with reactive forensic auditing during an investigation instead of using external auditing firms, State institutions can require the SIU to help identify the perpetrators of fraud to determine how the fraud occurred as the SIU is familiar with the fraud triangle and how

		public officials commit fraud.
The findings suggest that fraudulent activities are committed for gain (personal or financial). The participants believed that public officials commit fraud by misrepresentation of facts, and dishonesty when performing their duties.	The views agreed with Ukoma (2019) who notes that fraud is acquiring gain by using deception.	Public officials may commit fraud by changing information on invoices and purchases orders to benefit themselves while state institutions would experience actual or potential financial or reputational losses. Thus, fraud affects organizations.
The findings reveal that fraudulent activities were committed by misrepresentation (intentional and omission).	This is aligned with Lekubu (2019) who indicates that fraudulent activities include acts of omission, falsifying statements, and misrepresenting information.	For a public official to commit fraud, the act must be intentional with false information, unlawful, and the public official gain from the act.

Source: Researcher's own compilation

Table 4.9 describes findings about forensic auditing and fraudulent activities. The responses were compared to existing literature and interpreted. The findings suggest that forensic auditing can assist in combating fraud which public officials commit by deception to benefit themselves. The findings further suggest that forensic auditing is not widely used as its roles have not been articulated clearly. Therefore, forensic audit is still a developing profession that must be explored, particularly in the public sector.

The SIU can use forensic auditing to explore and give it exposure to the public sector. In this way, the SIU would lead in formulating forensic auditing in the public sector.

By adopting the use of forensic auditing, the SIU can combat white collar crime which is committed by public officials who have high social status as mentioned by Sutherland 1949). For fraud to happen, public officials must have the ability and skills to manipulate the system. Therefore, the fraud diamond as alluded by Wolfe and Hermanson (2004) shows that a public official has the capabilities to commit fraud. The fraud triangle has occurred if a public official who has a motive sees an opportunity to misrepresent information and justifies and benefits from such act.

- **Forensic Audit Tools**

Table 4.10 shows the findings regarding the SIU use of forensic audit tools and techniques. The findings are compared with literature and interpreted.

Table 4.10 Forensic Audit Tools

Findings	Literature	Interpretation
The findings are that the forensic audit tools are forensic software tools and artificial intelligence technology which can assist the SIU to advance in terms of technology.	As stated by Suleiman and Ahmi (2018), the procurement of more modern digital tools would enhance forensic personnel skills with regards to investigation.	The SIU must advance itself in terms of technology to enhance inquiries of complex investigations. Therefore, members must be trained to be acquainted with developments of the new software used for investigation.

The findings indicate that forensic tools are methods used during investigations to detect and prevent fraudulent activities. This implies that the tools assist the investigation process; the methods are processes that are applied during the investigations.	According to Udekeke and Ezenwafor (2019), forensic auditing tools are used to identify and gather evidence to prove how long the fraud has been committed or how it was perpetrated and hidden by the perpetrators.	Forensic audit tools enhance investigation in preventing and detecting fraudulent activities. The SIU must use the forensic audit tools when conducting investigations to elevate itself in investigating complex investigations.

Source: Researcher's own compilation

Table 4.10 outlines the findings about the SIU in using forensic audit tools in the investigation. The findings suggest that the SIU should enhance its application of forensic audit tools and techniques as it lags in terms of technology. The findings further suggest that the SIU should use forensic audit tools during the investigation to improve the investigation of complex investigations. Thus, the use of forensic audit tools must be applied from the beginning to the end of the investigation. The employment of background investigations during preliminary investigations assists in gathering sufficient information about the suspect and it would give the investigation the leads to pursue. Further, the use of forensic audit tools would enhance the investigation as members would be able to identify public officials who commit fraud based on the fraud diamond model as indicated by (Ahmed, 2019).

4.4.1.2 Theme Two: Anti-fraud Controls

The participants were asked to define anti-fraud controls, to ascertain their understanding of anti-fraud controls. Participants were asked which anti-fraud controls are used at the SIU with the aim to get their views on SIU anti-fraud control measures, and how they are used in combating fraudulent activities; and how it can help the SIU in fighting against corrupt and fraudulent activities in the public sector. The following subthemes were generated from the data

- **SIU anti-fraud measures**

Table 4.11 illustrates the findings regarding the SIU anti- fraud measures used to combat corruption and fraud**.**

Table 4.11 SIU Anti-fraud Measures

Findings	**Literature**	**Interpretations**
The findings are that anti-fraud measures used by the SIU can prevent, detect and investigate fraudulent activities at state institutions.	In support of Chetty (2017), the investigations that are performed by the SIU have elements of prevention.	Through system recommendations that are given to state institutions, the SIU assists in combating fraudulent activities. Thus, after completions of every investigation, the report is sent to the President, and the state institutions receive the report; the state institution must implement the recommendations provided in the report. The recommendations that the SIU gives to state institutions are not enforceable as they can be ignored with no action to stop the recurrence of fraud at state institutions. Thus, the SIU

		recommendations do not produce the desired results.
The findings point out that through legal action actions (disciplinary, criminal, and civil action), the SIU can combat fraudulent activities.	Mkhize (2022) implies that the SIU investigates corruption and fraud in any state institution and lodges any litigation to recover any loss suffered by state institutions.	The SIU investigations have three potential outcomes (disciplinary, criminal and civil actions) against perpetrators that committed offences against state institutions. Additionally, the SIU ensures that every investigation conducted has at least one of the outcomes. The researcher views that the SIU must use anti-fraud control measures during investigations. By doing fraud risk assessment during investigations, the SIU would be able to determine the vulnerability of the state institution and advise it to mitigate the fraud risk.
	Peltier-Rivest (2018) created the anti-fraud control model that can	The SIU must review the anti-fraud control measures of state

	assist in combating corruption.	institutions to be able to mitigate the fraud risks that face state institutions. In this way, the SIU would be assisting state entities, government departments and municipalities in combating corruption and fraud.

Source Researcher's own compilation

Table 4.11 illustrates the findings about anti-fraud measures used by the SIU. The findings suggest that the SIU relies on the recommendations to combat fraud made after investigations. The recommendations are not enforceable as state institutions can choose to ignore them, but then fraud would flourish. The findings also suggest that the legal actions assist the SIU to fight against corruption and fraud at state institutions. The legal actions assist the SIU, but the final decision lies with state institutions and other anti-corruption authorities such as the NPA which can decide not to prosecute the matter. The researcher opines that the SIU must perform regular monitoring of anti-fraud control measures at state institutions.

- **Importance of Internal/External Controls**

Table 4.12 illustrates the importance of anti-fraud controls in combating fraudulent activities. The table shows internal and external controls that are effective in the fight against corruption and fraud.

4.12 Importance of Internal/External Controls

Findings	**Literature**	**Interpretation**

Anti-fraud controls are assisted in detecting, preventing, and responding to corrupt and fraudulent activities.	The participants were of the view that anti-fraud controls were effective in combating corrupt and fraudulent activities. This is in line with Erbuğa (2022) who points out that anti-fraud controls are detection and prevention tools used to combat fraudulent activities.	When the SIU reviews control measures of state institutions, it can deter any weaknesses within the control measures that have been used. The controls of state institutions can be improved by regular monitoring, as it would help to detect any suspicious event that is taking place.
	The above views are in contrast to the study by Petersen (2018) which suggests that internal controls implemented at SMMEs are not sufficient in combating corrupt and fraudulent activities.	Internal controls are not preventing and detecting corrupt and fraudulent activities. This could be because public officials are cognizant of the weaknesses of the systems and are able to take advantage of those to commit corruption and fraud. By regular monitoring the systems, state institutions will be able to prevent fraud as it will pick up unusual or suspect transactions

Source: Researcher's own compilation

The findings suggest that anti-fraud controls assist in combating fraudulent activities while some published literature indicates that anti-fraud controls are not effective in fighting corruption. According to the researcher, the current anti-fraud controls must be redesigned. State institutions should apply anti-fraud controls consisting of fraud risk assessments, employee and remuneration benefits, and fraud policies. This would assist state institutions to strengthen their control environment to minimise the occurrence of fraud.

The SIU should perform anti-fraud control monitoring during the investigations at state institutions as it would be able to pick up any shortfalls and address them. Therefore, the SIU should assist state institutions in formulating proper control measures with the full awareness that those who assist state institutions in formulating control measures may be the ones who are responsible for committing white collar crimes.

4.4.1.3 Theme Three: Fraud Prevention and fraud detection Strategies

The participants were asked about strategies that can be implemented to combat fraudulent activities. The aim was to ascertain which strategies can assist the SIU in combating corrupt and fraudulent activities. The subthemes which emerged from the data are categorized as fraud prevention and fraud detection strategies. The following subthemes are for fraud prevention.

4.4.1.3.1 Fraud prevention strategies

- **Fraud Risk Assessment for enhanced fraud prevention**

Table 4.13 shows the findings regarding the use of fraud risk assessments as fraud prevention strategy. The table displays the findings, literature and interpretations of how fraud risk assessments may assist the SIU in combating fraudulent activities.

Findings	Literature	Interpretations
The findings reveal that fraud risk assessment can	The findings are in agreement with Peltier-	When the SIU conducts investigations in state

assist the SIU to combat fraudulent activities as it would be able to identify, assess and mitigate fraud risks at the state institutions.	Rivest (2018) who says that the implementation of a fraud risk management programme that includes regular fraud risk assessments strengthens mitigating of corrupt and fraudulent activities.	institutions, it must review fraud risk assessment of such institution to determine that all fraud risk indicators are assessed and acted upon to prevent them from escalation. Fraud risk assessment can be performed during the preliminary stage of investigation when the SIU does site visits at state institutions.

Source Researchers own compilations

The findings shown in the table attest that fraud risk assessment is a vital anti-fraud control measure that can help the SIU fight against fraudulent activities. In addition, the findings suggest that the SIU should conduct fraud risk assessment at state institutions as part of preliminary investigations. Fraud risk assessment can ensure that state institutions are able to prevent fraud from escalating as it can detect any fraud indicators early. The SIU may then be able to identify fraud risks early in the investigation and advise the state institution how to prevent them from affecting the organisations. In doing so, the SIU would consider the fraud triangle theory to identify any public officials who are committing fraud.

- **Incentivising Integrity in Fraud Prevention**

Table 4.14 illustrates the employee programmes assisting in preventing fraud from taking place. The table shows how employee incentives can ensure that public officials do not commit fraud at state institutions. It provides the findings, compared to literature and interpretations**.**

Findings	Literature	Interpretation
The findings display that employee, and remuneration incentives assist in combating fraudulent activities. The participants are of the view that if public officials are incentivised well, they would not get involved in fraudulent activities.	According to Peltier-Rivest (2018), revising bonus plans, performance benchmarks and fair compensation levels reduce potential fraud risks.	The SIU should check the remuneration policy of state institutions to benchmark it with national treasury policy. This would assist in identifying public officials that are committing fraud because of financial pressure as they may not be remunerated according to national treasury requirements. The remuneration policy will assist to determine if public officials receive fair bonuses. The SIU can review the policy during the preliminary phase of the investigation so that it may be able to identify any discrepancies that could lead to public officials committing fraud.

Source: Researcher's own compilation

The findings indicate that employee and remuneration programmes that are fair for employees may assist in minimising fraud, bearing in mind that 80% might commit fraud, 10% will commit fraud and 10% will not commit fraud. The findings further indicate that the SIU can assist state institutions in preventing fraud by reviewing the

remuneration policy to ensure it aligns with regulations and does not have a negative impact on public officials. The researcher opines that by reviewing the policy at the preliminary stage of the investigation the SIU would help in minimizing corrupt and fraudulent activities. Therefore, it is suggested that the SIU review the policy to determine any corruption, fraud or unfairness in the policy.

- **Good governance in fraud prevention**

Table 4.14 denotes that good governance can assist in preventing fraud from occurring. The table shows the findings of using good governance, compared with literature and the researcher's interpretations of the findings**.**

Findings	**Literature**	**Interpretation**
Good governance assists in combating fraudulent activities as it promotes accountability at state institutions.	Ndevu and Muller (2018) suggests that good governance helps shape the attitude of the public officials as it promotes good organisational culture, which agrees with the findings in this study.	Good governance ensures that state institutions are managed effectively and that the accounting officers are held accountable for any fraud committed. The SIU can assist state institutions in preventing fraud by checking that the state institutions have good leaders. The SIU must review the governance framework of state institutions to determine whether leaders of organisations perform their duties with

		diligence and minimize the occurrence of fraud. Through reviewing the governance framework, the SIU would be able to prevent fraud from escalating as it would detect leaders who do not perform their duties diligently. The review of the governance framework can be done at the initial stage of investigation so that the SIU are able to advise according to the findings at that stage on what must be done about leaders who are not performing accordingly
	This finding opposes Ndlovu's view (2021) who says promoting good governance does not help to combat fraudulent activities.	Good governance is not a cornerstone in preventing fraud from taking place at state institutions. The governance framework can address fraudulent acts effectively but does not guarantee that fraud would not take place. When the SIU is faced

		with such, it must look at other policies within the state institutions such as the remuneration policy and fraud policy to determine if public officials that commit fraud is not pressured by different factors such as financial issues. In this way, the SIU would be able to assist in preventing fraud from escalating.

Source: Researcher's own compilation

The findings suggest that good governance assists to prevent corrupt and fraudulent activities; however, it does not guarantee that corruption and fraud can stop when good governance is applied. Good governance can be used as start-up in preventing corrupt and fraudulent acts as executives ought to lead by example in the fight against corruption and fraud. The SIU must review the policy to determine whether it addresses actions that can prevent corruption and fraud and how to manage fraud. The researcher believes that if the SIU were to review the policy, such could strengthen the efforts of fraud prevention as it would be able to advise on actions that must be taken to minimise the recurrence of fraud. Additionally, the SIU must consider white collar crime theory as it will help to identify the leaders that are compromised.

- **Ethical guidelines for fraud prevention**

Table 4.15 shows how ethics guidelines can assist to prevent fraud. The table outlines the findings, comparisons to literature and interpretations of the findings.

Findings	Literature	Interpretation
The findings indicate that ethical guidelines can assist the SIU to combat fraudulent activities; they opine that ethical guidelines would set frameworks that would guide the public officials when performing their duties.	According to Vyas-Doorgapersad (2022), ethical organisational culture, ethics training, and ethics strategy, are used to reduce fraudulent activities in the South African public sector. This aligned with Ndlovu (2021) that ethical leadership contribute more to fighting fraudulent activities at state institution	Applying ethics assists to prevent corrupt and fraudulent acts. The SIU must check ethical frameworks of state institutions to determine whether there is a resolve by leaders of state institutions to fight against corruption and fraud. The reviewing of ethical framework would assist state institutions in preventing fraud as the SIU would pick up any shortcomings and present them to the executives of the state institution.
	On the other hand, Feliti (2018) points out that unethical decision making is rampant in the public sector, and Phahlane (2021) states that there is	The public sector is known for its unethical behaviour committed by leaders. For example, the chairperson of the National Lotteries Commission (NLC) gave

	no will from public officials to be ethical as there are no consequence management for their actions.	funds to an undeserving No Profit Organisation (NPO). The NPO used the money received to fund the lifestyle of its owner. Such decisions affect the efforts to prevent corruption and fraud. The chairperson of the NLC was an educated person, a professor and entrusted to guide the commission and expected to make ethical decisions that would grow the commission. The SIU was able to identify payments made to different non-deserving NPOs and how the Professor was involved. The SIU managed to seize assets of the chairperson and the NPOs (SIU, 2023). The SIU is trying its best to combat unethical decision making by executives of state institutions. Many public leaders do not care about acting ethically as in

		most cases nothing happens to them as some appointments are politically linked appointments. Therefore, the SIU should investigate cases that involve political appointments as unethical decisions are often taken which influence public officials to commit corruption and fraud.

Source: Researcher's own compilation

Table 4.15 shows findings that ethical behaviour can assist in preventing fraudulent activities. Literature shows that ethical conduct by leadership at state institutions may be able to prevent fraud. Some literature sources have a different view that unethical decisions at state institutions occur too often and that the leaders persist in such illegal practices as they will not suffer any consequences. The SIU can identify officials who make unethical decisions when it conducts investigations at state institutions. The researcher believes that the SIU should continue in identifying such perpetrators and especially focus on political appointments as they are those who often take unethical decisions and face no consequences. The white-collar theory can assist the SIU to identify leaders who are unethical.

- **Anti-fraud policy in fraud prevention**

Table 4.16 shows the findings of using fraud policy theory to prevent fraud. The table indicates how fraud policy can be used to prevent fraud, comparing it with literature and lastly the interpretation of the findings.

Findings	**Literature**	**Interpretation**

The findings that anti-fraud policy assists the SIU in combating fraudulent activities as it provides guidelines that would help public officials take measures against fraud.	This is in support of Hauser (2019) who indicates that anti-fraud policy assists in reducing fraudulent activities,	A review of the anti-fraud policy that state institutions have developed would help to combat and fraudulent activities as they can effect changes that would improve its effectiveness. Thus, the SIU should look at the anti-fraud policy during the investigation of state institutions as it would be able to assist in combating fraudulent activities.

Source: Researcher's own compilation

The table illustrates the conclusions that fraud policy assists in preventing the commission of fraud. The policy assists state institutions to manage any corrupt and fraudulent activities that would have taken place. The SIU must review the policy when conducting investigations at state institutions to determine any loopholes that public officials may use to commit undetected fraud. A review of the policy must be done in the initial phase of the investigation so that the SIU is be able to advise state institutions on the way forward when there is a gap in the policy. Therefore, any investigation conducted by the SIU should review the fraud policies of state institutions.

- **Fraud training and awareness in fraud prevention**

Table 4.17 below demonstrates the findings about using fraud awareness and training to prevent fraud. The table shows how the SIU uses fraud awareness to train public officials and the public about corruption.

Findings	Literature	Interpretation
Fraud awareness and training assist public officials in preventing and detecting fraudulent activities at state institutions.	It agrees with Singh (2020) who states that fraud awareness promotes an anti-fraud culture and prevents corruption and fraudulent activities from taking place,	Fraud awareness and training at state institutions is essential in preventing fraud as it educates public officials about the risks of committing fraud. It also promotes good behaviour amongst public officials and commitment to fight against corruption. The SIU conducts anti-corruption forums in the health sector, infrastructure sector, and local government sector. The SIU should expand its anti-corruption forums to other sectors, particularly state-owned entities where corruption seems to continue unabated. The SIU should also educate personnel employed in state institutions regarding their investigations, particularly about corrupt and fraudulent activities that it discovers during

		investigations. This would minimise the recurrence of the same activities.
	Suleiman and Othman (2021) state that developing fraud awareness programmes with citizens assists in preventing fraudulent activities in the public sector.	The fraud awareness programmes should be presented to the public to educate them about how corruption affects their lives and development of the country. Educating the public about corruption and fraud helps in preventing fraud as they would be aware of the risks associated with committing such acts. The SIU must expand its anti-fraud awareness programmes to reach the majority of society. The SIU should do regular roadshows to all provinces to educate the public about fraudulent activities. This would also assist the SIU to have a significant impact and be accessible to more people.

Source: Researcher's own compilation

Table 4.17 reveals findings that promoting fraud awareness is crucial in preventing fraud as it would educate public officials and the public about the risks of committing fraud. The findings indicate that fraud awareness minimise incidents of fraud in state institutions when the public officials are educated about risks of fraud. The findings further indicate that when the public is informed about fraud, incidents of fraud could reduce. The SIU must do fraud awareness programmes to all sectors to educate public officials.

The SIU must also educate public officials at state institutions that are under investigation about the corruption activities that they discover. When conducting investigations and found any corruption practices, the SIU must conduct anti-corruption awareness within state institutions. This would alert state institutions about corruption and minimise the likelihood of reoccurrence. The SIU must conduct anti-corruption road shows nationwide to reach the public. The roadshows must teach public about fraud and corruption, how to participate in the fight against such acts, how to report any wrongdoing they see or know, and how to avoid in doing corruption. The researcher opines that the SIU must improve its fraud awareness programmes to reach to different sectors and public at large.

4.4.1.3.2 Fraud detection strategies

- **Background Investigation for fraud detection**

Table 4.18 show the findings on how background investigations can assist in combating fraudulent activities. The table show the impact of using background investigations to boost investigations.

Findings	Literature	Interpretation
The findings that performing background investigation on person interest assist in combating fraudulent	It aligns with Adu (2018) who stated that background investigation confirms past activities of	Background investigation on the suspect assists the investigation as it would help to know any history of the person involve in

activities as it helps to uncover previous behaviour where they involve in committing fraud.	person to determine the validity of the person.	wrongdoing. This help to understand their behaviour, patterns and modus operandi in committing fraud. When the SIU is conducting investigation and have identify the person of interest, it must do background investigation of that person before it goes deep in the investigation. This would assist to get intelligence about the person and understand why fraud is committed. The SIU would be able to know what steps to take in the investigation.
	A study by Udekeke (2019) found out that background investigation is hardly used for fraud detection.	Background investigation is ignored as no history of the person is check. The person is employed without knowing their past activities and behaviours. State institutions must do proper screening of any person who is interest to serve as public officials.

		This eliminates hiring individuals who have bad past that can harm the state institution.

Source Researcher's own compilation

Table 4.18 shows that background investigation is important as it helps reveal the history of a person of interest. The findings suggest that background investigation must done to boost investigation. Knowing and understanding a person under investigation assist an investigation partly by revealing leads to follow. The SIU must conduct background investigations of the person of interest when it has identified that person. This helps shape the investigation and give direction where to look for evidence against the person. The researcher view background investigation vital tool in enhancing investigations.

The literature reviewed shows that background investigation is not widely used by organisations for fraud detection. This shows that fraud can be committed easily because organisations do not thoroughly screen newly appointed personnel to establish their background history. Conducting screening (background investigations) about the person can assist in minimising fraud as organisations would then employ persons they can trust. By considering fraud triangle during background investigation, the SIU would be able to identify public officials that are committing corruption and fraud.

- **Lifestyle audit in fraud detection**

Table 4.19 shows the findings of using lifestyle audit in detecting corruption and fraud.

Findings	**Literature**	**Interpretation**
The findings are that lifestyle audit would assist the SIU in combating	This is because McIntyre *et al*. (2021) defines lifestyle audits as an	Lifestyle audits assist compares public officials declare income and

fraudulent activities as it would help to identify the public officials that live beyond their means	assessment of an individual's income and expenses related to his/her living standard.	assets. Any differences between the two means of income or assets would likely be coming from an illegal or undeclared income. Lifestyle audit assist to determine public officials who live lifestyles that are above the income they earn. Public officials that have business interest must be declared in annual declaration forms, failure to so is an offence. The SIU must intensify on its lifestyle audits investigations of flagged individuals or any person of interest during their investigation. This help to identity any public officials who hide assets or income.
	The SIU has recently received request to conduct lifestyle audits of senior management and supply chain at state institutions (SIU 2024-2025).	In the 2023/2024 financial year, the SIU receive request to perform lifestyle audit at PRASA, Northern Cape office of the Premier, Gauteng office of the Premier, and Free State

		Department of Community Safety Roads and Transport. The SIU was still busy with the lifestyle audits of state institutions that made request at the time this dissertation was completed; thus, SIU's impact is not yet known. The SIU introduced lifestyle audit department to conduct requested lifestyle audit investigations. Conducting lifestyle audit must be compulsory across all the investigations, not upon the request of state institutions.

Source Researcher's own compilation

Table 4.19 show that a lifestyle audit assist to minimise corrupt and fraudulent activities at state institutions. The findings suggest that conducting a lifestyle audit at a state institution would combat corruption and fraud. The SIU establish lifestyle audit business unit as it has received request to conduct lifestyle audits at state institutions. The researcher believes that conducting lifestyle audits must be done at every investigation that the SIU investigates. This would help to boost investigations as it would identify public officials that live above the income they declare. It would also assist to seize assets of public officials quickly as it would be done during the investigation instead of towards the end of investigation.

Whenever there is a public official who is linked to the investigation, the SIU must conduct lifestyle audit of the official. The SIU can conduct desktop lifestyle audit where it compares the income and assets declare against the current income and assets of the public official. It does not have to be full scale lifestyle audit of the official. Moreover, the SIU must use the fraud diamond theory when doing lifestyle audit as it would assist to identify the capabilities of the public official who confide in corruption and fraud.

- **Surprise audit and random verification for fraud detection**

Table 4.20 shows how a surprise audit and random verification assist to detect fraud. The table shows the findings of using surprise audit and random verification in detecting fraudulent activities.

Findings	**Literature**	**Interpretation**
The findings are that surprise audits, and random verifications can assist the SIU combat fraudulent activities. They are an opinion as anti-fraud strategies surprise audits and random verifications can detect fraudulent activities	As mentioned by Peltier-Rivest (2018), surprise audits and random verifications are effective in detecting fraudulent activities	Surprise audit and random verification are effective in detecting fraud as the perpetrators would not have a chance to hide the act. Surprise audits are conducted without informing anyone and the public official can be caught on the act of committing fraud. Random verifications assist to detect as the public officials is caught doing fraudulent act without getting time to hide the act.

		The SIU must do site visits to state institutions that they are under investigating without prior announcements so that public officials will not be able to hide any information that will assist the investigation. The recent Department of Home Affairs (DHA) search and seizure was done without informing DHA and SIU was able to seize all the evidence. The public officials did not have time or chance to hide information. Therefore, the SIU must conduct surprise audits and random verification in every investigation at state institutions.

Source Researcher own compilation

Table 4.20 show findings that surprise audits and random verifications detect corrupt and fraudulent activities. The findings indicate doing surprise audits and random verifications at state institutions, the SIU would detect corruption and fraud that happening. The SIU must conduct surprise audits and random verifications on all state institutions that are under investigation. The SIU must conduct site visits without telling the state institution about the visit. The researcher is of the view that doing surprise

audits and random verifications as part of preliminary investigation would assist state institutions detect fraudulent activities. Additionally, a surprise audit must accompany with white collar crime theory where it would assist detect corruption and fraud done by public officials in higher positions in the state institutions.

- **Whistle-Blower Programs and Tools for fraud detection**

Table 4.21 illustrate how whistleblowing assists to detect fraudulent activities. The table shows the findings, the literature and interpretation of the findings.

Findings	**Literature**	**Interpretation**
The findings are that whistleblowing assist the SIU to detect fraudulent activities as public officials and the public are encouraged to report any suspicious activity anonymously.	This is aligned with Syahputra & Irawati (2022) who suggest that government agencies that use whistleblowing can combat fraudulent activities	Whistleblowing is integral in detecting fraud as people who sees any wrongdoing can report the act. When the whistleblowing is anonymously, it encourages people to report fraud in numbers. For whistleblowing to be effective it must ensure that the person reporting fraudulent activities would not be mistreated. The SIU whistleblowing is effective as most of the cases were reported through it. The SIU record the allegation reported, conduct preliminary

		investigation to refute or approved the allegation. When the allegations have been approved, the SIU would motivate for proclamation which would authorise for full investigation. Whistleblowing assists the SIU to detect fraud at state institution.
	However, Udekeke (2019) argues that whistleblowing is not used to detect fraudulent activities.	Some organisations or state institutions do not have whistleblowing programmes that can assist to detect fraud. When there is any wrongdoing in an organisation, it is not reported as there is no channel to report it. Fraud would likely flourish as there is no one who can report it and not be victimized. Public officials would see that something is not right but not say anything as they may be scared that reporting the matter would jeopardise

		their jobs. The SIU encourages public and public officials to report fraud on the fraud line which it is anonymous. When using the line, the public or public officials will not be identified or asked personal information. Therefore, The SIU fraud line is a safe way to report any allegations of corruption and fraud.

Source Researcher's own compilation

Table 4.21 shows findings of whistleblowing assistance in detecting fraud. The findings indicate that effective whistleblowing programmes encourage public and public officials to report any wrongdoing they notice. Effective whistleblowing programme protects whistleblowers and their identities. The SIU whistleblowing programmes assist state institutions to detect fraud as when the allegations are received and acts on them to refute or approve the allegations. When allegations are approved, the SIU uses them to motivate for proclamation which allows the SIU to conduct investigations at state institutions. Most of the investigations that the SIU conducts at state institutions are because of allegations reported on the SIU fraud line. Thus, the SIU should not make any changes on the mechanism as it works well and brings desired results

- **Forensic data analytics for fraud detection**

Table 4.22 shows how forensic data analytics assists to detect fraudulent activities. The table discusses the findings, literature and interpretation of using forensic data analytics as fraud detection tool.

Findings	**Literature**	**Interpretation**
The findings are that forensic data analytics can assist the SIU to combat fraudulent activities as it is able to identify patterns and anomalies in data	This was confirmed by Okoye *et al.* (2020) and Tayo and Ayool (2021) who state that forensic data analytics plays an important role in detecting fraud in the public sector.	Forensic data analytics can identify and analyse complex data to determine unusual and suspicious transactions. Effective use of forensic data analytics enables detection of fraud that has taken places as it would pick up unusual patterns on the data. Forensic data analytics would help the SIU to enhance complex investigations as it would analyse large data quickly and with ease. Currently, the forensic data analytics that the SIU uses are not effective in enhancing the investigations. Current forensic data analytics takes time to analyse data, and it does not analyse some of the information that is crucial for

		investigation. The SIU must improve on t forensic data analytics by using latest technology in forensic data analytics. It must also train its staff to adapt to new technological. developments.
	On the other hand, Udekeke (2019) argues that forensic data analytics is rarely used to detect fraudulent activities.	Fraud flourishes in the absence of forensic data analytics as the analysis of complex data takes times or are not analysed fully. Fraud is often not detected early as public officials familiar with financial systems of state institutions would manipulate the system and would not easily be caught. The use of forensic data analytics minimises such incidents as it would be able to detect changes in the systems. Thus, using forensic data analytics eliminates corrupt and fraudulent activities and

		improves the effectiveness of the financial system.

Source Researcher's own compilation

The findings in the table 4.22 suggest that the employment of forensic data analytics is essential in detecting corrupt and fraudulent activities. Forensic data analytics should use the latest technology to detect corruption and fraud easily and quickly. The SIU should improve on the use of forensic data analytics to boost the investigation and be on par with technological developments. Current analytics used by the SIU delay investigations given its slow response and ineffective analyses. The researcher believes that if the SIU adopted and used the latest technology in forensic data analytics, it would enhance complex investigation and enable it to complete such investigations in a shorter time. Furthermore, the use of forensic data analytics and fraud diamond theory would enhance complex investigations as it would detect complicated data sets and the skills of the public officials involved in corruption and fraud would be enhanced.

4.4.1.4 Combination of the strategies

The findings indicate that some of the strategies can be combined to improve the effectiveness of preventing and detecting fraudulent activities at state institutions.

The combination of the strategies emerged from themes and subthemes of the study. The combination is categorized into fraud prevention strategies and fraud detection strategies. The following are the fraud prevention strategies.

4.4.1.4.1 Prevention strategies

- **Good governance and ethical frameworks**

Table 4.23 shows findings of combining good governance and ethical frameworks. Table reveals how good governance and ethical frameworks could assist state institutions prevent fraud.

Findings	**Interpretation**

Applying good governance and ethical frameworks would assist the SIU combat fraudulent activities at state institutions.	Combining a good governance and ethical framework assist in preventing fraud. The implementation of good governance and ethical framework lies with the leaders at state institutions. The leaders at state institutions must be ethical and be held responsible in running institutions. The SIU should review the governance and ethics policy of the state institutions to determine that they address the roles and responsibilities of the leaders in ensuring that the state institutions are fraud-free. By reviewing the policies, the SIU would be able to pick up any loopholes that would make fraud prevail and address them with the leaders that run state institutions. Therefore, the SIU would assist to prevent fraudulent activities at state institutions.

Source Researcher's own compilation

Table 4.23 illustrate that combining good governance and ethics is essential in preventing corruption and fraud. The findings suggest that applying good governance and ethics can assist to prevent corrupt and fraudulent activities. Ensuring that good governance and ethics lies with the management of the organisation, therefore the management must be ethical and take responsibility for always running the organisation. The role of the SIU may be to review the policies and procedures of state institutions to determine that they address fraud risks and how to manage them. The SIU should be to collaborate with leaders to ensure that governance and ethical

frameworks are within the regulations and assist state institutions in their mandates to render services to the public. White collar crime theory supports the prevention of fraudulent activities as the SIU may be assisting in reviewing governance and ethical frameworks of the state institutions

- **Anti-fraud policy and fraud awareness training**

Table 4.24 below addresses the combination of anti-fraud policy and fraud awareness training. The table shows how the strategies assist to prevent fraud when they are combined.

Findings	**Interpretation**
The findings are that anti-fraud policy, and fraud awareness can be combined to assist in preventing fraud.	Anti-fraud policy which details how fraud is dealt with works well if it is combined with fraud awareness to public officials. When the policy has been written and approved by leaders of the state institutions, it must be followed by training with public officials on how the policy addresses fraud and how public officials must be vigilant about fraud risks within the state institutions. The SIU must check the approved policies to see if all stipulations would prevent fraud. When reviewing the policy, the SIU should also provide fraud awareness to state institutions to educate public officials about fraud and its implications in the public sector.

Source Researcher's own compilation

Table 4.24 addresses the combination of anti-fraud policies and fraud awareness in assisting to prevent corruption and fraud. The combination of the strategies strengthen prevention as public officials would know the policy and understand how fraud is treated and mitigated in the workplace. The SIU must review the policy and provide training to public officials about corruption and fraud. When reviewing the policy, the SIU should be able to detect its shortfalls and address them through fraud awareness. This would strengthen fight against corrupt and fraudulent activities, and the SIU would be assisting in preventing them from escalating.

4.4.1.4.2 Detection strategies

- **Background investigation and lifestyle audit**

Table 4.25 illustrates findings of combining background investigation and lifestyle audits in fraud detection. The table shows how combining the strategies assists in detecting fraudulent activities.

Findings	**Interpretation**
Combining background investigation and lifestyle audit assists to combine fraudulent activities.	Applying background investigations and lifestyle audits assists in detecting fraud. Background investigation and lifestyle audits enhance the investigation as they can detect public officials who live beyond their means. The strategies should be used in the preliminary phases of investigation after identifying persons of interest. The SIU must p adopt strategies at every investigation as it would assist to get information about a person of interest, and it would determine the direction which the

	investigation would take. The strategies are vital in the investigation as they assist to shape the investigation. The SIU must profile any person of interest and perform reviewed lifestyle audits on the person's past, public available information and compare the public information with declared income and assets of the person. The strategies must be used concurrently to boost their effectiveness.

Source: Researcher's own compilation

Table 4.25 illustrates findings of combining background investigation and lifestyle audit in detecting corrupt and fraudulent activities. The findings suggest that using the strategies would assist to combat corrupt and fraudulent activities as they may enhance the investigation. The SIU must use these strategies when it has identified the person of interest and in all the investigations that it conducts. When investigating public officials, the SIU should start by doing background investigation and lifestyle audit desk reviews which include verifying past activities and public available financial information of the public officials. The researcher believes that these strategies are essential in combating corrupt and fraudulent activities as they increase the effectiveness of investigations. Furthermore, applying the fraud triangle theory and fraud diamond theory coupled with the strategies can boost the investigation as they would be able to identity public officials that are able to commit complex fraudulent practices.

4.5 Contributions

The findings of the study suggest that the use of forensic audit tools can enhance investigations by the SIU, particularly those conducted in state institutions. The forensic audit tools must be applied across the investigations to achieve good results on investigations conducted. The use of anti-fraud controls can improve efforts of the

SIU in combating corrupt and fraudulent activities. Moreover, anti-fraud controls must be used at the beginning of the investigation as they help to identify shortcomings at state institutions. Fraud prevention and fraud detection mechanisms can assist the SIU to fight against corruption and fraud at state institutions. The SIU must use the fraud prevention and fraud detection strategies in all investigations that are conducting at state institutions.

4.6 Limitations

The study used a qualitative methodology, and the findings cannot be generalised as the results may be different in alternative settings. However, the choice of the methodology was suitable as it was able to answer the research questions. The findings are based on the insights of the participants who had knowledge and understanding of conducting investigations at state institutions working on provincial and national projects. Therefore, the findings are based on the participants who had minimum background on the concepts of forensic auditing but were familiar with the forensic audit process which they used when performing their duties. The study was based on anti-corruption agency that investigates high profile cases with sensitive information which is not publicly available for access. Therefore, the information about the SIU was limited as some the information is private and sensitive and not easily accessible.

4.7 Conclusion

The study seeks to determine the role of the SIU in combating corrupt and fraudulent activities through forensic audit tools and anti-fraud controls. An open-ended questionnaire was distributed to the participants that were based in the Gauteng office of the SIU. The chapter presented the responses from the participants which outlined the forensic audit tools and anti-fraud controls that were used and could assist the SIU in the fight against corrupt and fraudulent activities in the public sector. Additionally, the participants suggested strategies that could assist the SIU in fraud prevention and detection of corrupt and fraudulent activities in the public sector.

The chapter focused on the interpretation of the findings about the forensic audit tools, anti-fraud controls, and strategies to combat corrupt and fraudulent activities at state institutions. The findings are the importance on this study as they answered the research questions. The findings were compared with literature review. The research objectives have been achieved as the participants have responded to all questions. The next chapter summarises findings, chapters one to four, recommendation for further research based on the findings from the study and conclude the study.

Chapter Five: Summary, Conclusion and Recommendations

5.1 Introduction

The aim of the study was to determine efforts of the SIU in combating corruption and fraud by means of forensic audit tools and anti-fraud controls. The study examined fraud prevention and fraud detection strategies that would assist the SIU combat corrupt and fraudulent activities. This chapter provides a summary of previous chapters, as well as the findings and insights derived during the study and concludes by suggesting recommendations including possible topics for further research.

5.2 Summary of the findings

The summary of the findings is based on the data collected from the participants. The findings determined that forensic auditing may assist to combat corrupt and fraudulent activities. The use of forensic auditing can help the SIU fight against corruption and fraud at state institutions and the SIU should use forensic auditing in its investigations at state institutions. The use of forensic auditing tools can enhance investigations as the SIU would be able to prevent and detect corrupt and fraudulent activities at state institutions. Public officials commit fraud by deception and misrepresentation of facts or information. Those acts cause potential or actual prejudicial harm to state institutions and public officials enrich themselves or those close to them. Therefore, forensic audit tools should assist to minimise and mitigate such acts.

The findings further suggest that the anti-fraud measures that the SIU employs to combat corruption and fraud at state institutions are not effective to combat corrupt and fraudulent activities. The SIU uses system recommendations in combating corruption and fraud which are sent to state institutions in the form of reports to implement them. The challenge with such recommendations is that state institutions are not obliged to apply those recommendations. Therefore, the practice of system recommendations to combat corruption and fraud does not have the desired results because of the restriction that the SIU cannot force state institutions to apply them.

The findings indicate that legal actions (disciplinary, criminal and civil action) assist the SIU to combat fraudulent activities. The outcomes of investigation that the SIU

conducts can have either of the legal actions. The SIU investigates the matters and informs institutions about the legal actions it should take against the perpetrators. The SIU only recommends actions that should be taken but does not have the power to enforce such actions. State institutions decide about disciplinary action, the NPA decides on prosecutions, and the courts decide about civil action. Thus, the SIU measures only partly combat fraudulent activities as some of the functions are above its mandate.

The findings suggest that anti-fraud controls can assist in combating corrupt and fraudulent activities. The SIU must review anti-fraud controls of state institutions during investigations to determine their effectiveness in mitigating corruption and fraud. The SIU must review fraud risk assessments, internal controls, employee and remuneration programmes and fraud policies of state institutions to indicate any shortcomings and include them in the recommendations.

The findings reveal that if it were to apply fraud prevention and fraud detection strategies, the SIU may be able to improve it fight s against corruption and fraud. The strategies may improve the effectiveness of state institutions and minimise occurrences of corruption and fraud. The strategies used to combat corruption and fraud are fraud prevention and fraud detection. Fraud prevention entails the SIU reviewing anti-fraud controls and policies of state institutions which assists to identify any shortcomings of the controls and policies that allow corruption and fraud to occur. The SIU can advise and train state institutions how to avoid the recurrence of corruption and fraud. When the SIU conducts investigations and identifies any corruption and fraud during an investigation it is referred to as detection. In cases where the SIU detects corrupt and fraudulent activities as part of its investigations, it should inform state institutions about corruption and fraud.

The findings further specify that strategies may be combined for effectiveness in preventing and detecting corruption and fraud. When This can assist the SIU to review anti-fraud controls together separately from policies and review polices together separately from anti-fraud controls. The combination of detection strategies helps the SIU to assist state institutions in detecting corrupt and fraudulent activities. Hence, it

is vital for the SIU to combine strategies and use them all the time during an investigation.

5.3 Summary of chapters

A summary of each chapter is presented in this section. It deals with an overview of the entire research study from chapter one to chapter four.

In chapter one, the researcher introduced the study; identified its research focus defined the frameworks that are relevant to the study; discussed the aims and objectives of the research, outlined the research methodology of the research, and pointed out the significance of the study.

In chapter two, corruption, fraud and the theoretical, legal, and conceptual frameworks of the study were explicated the role of the SIU in preventing and detecting corruption and fraud was also described in this chapter. The chapter subsequently highlighted previous studies regarding forensic audits, anti-fraud controls, fraud prevention and fraud detections. The gap regarding anti-corruption agencies in the use of forensic audit and anti-fraud control was explained.

In chapter three, the rationale for the methodology applied was delineated. The researcher used interpretivism to employ a qualitative methodology. An exploratory questionnaire and purposive sampling were used to collect data by means of open-ended questions. The researcher analysed and thematically grouped the data into themes and subthemes by means of NVivo. The trustworthiness of the study was established through adherence to the principles of validity and reliability. The chapter concluded with an explanation of the ethical considerations of the study.

Chapter four presented, analysed and interpreted the responses to the questionnaire. which reflected the views of the participants about the role of the SIU regarding the use of forensic audit tools and anti-fraud controls in combating corrupt and fraudulent activities. The participants also gave their opinions on the strategies that can assist the SIU in the fight against corruption and fraud at state institutions. All views were coded and thematically analysed to identify themes and subthemes that answered the

research objectives. The chapter concluded by presenting the contribution and the limitations of the study.

5.4 Conclusion

The research focussed on the SIU's role in the use of forensic audit tools and anti-fraud controls in combating corrupt and fraudulent activities at state institutions. The research explored the strategies that can assist the SIU in the fight against corruption and fraud but concluded that the SIU does not use forensic audit tools and anti-fraud controls to combat corruption and fraud. The study therefore recommended that the SIU should use forensic audit tools during investigations to enhance its efforts in combating corruption and fraud. Combined forensic auditing tools can assist the SIU to be more effective and efficient in its investigations at state institutions.

The study concluded that the SIU should use anti-fraud controls that include monitoring and reviewing of anti-fraud control measures and policies. Monitoring and reviewing anti-fraud measures would help the SIU to identify the inadequacies of the controls and policies and advise the relevant state institutions about the way forward. The study suggested that forensic audit tools and anti-fraud controls are essential in the fight against corruption and fraud. Furthermore, the study concluded that fraud prevention and fraud detection strategies be applied while conducting investigations. The research objectives of the study were achieved as the participants were able to answer the research questions.

5.5 Recommendations

Based on the findings and conclusion of the study, the researcher makes the following recommendations:

5.5.1 System recommendation to mandatory.

The SIU anti-fraud measures recommendations should be mandatory. The SIU can make recommendations that are provided in the report to be compulsory by enforcing state institutions to act on them. The SIU could do follow- ups to state institutions after issuing a report to see if the recommendations made have been implemented and advising the state institutions to implement them.

5.5.2 Use of forensic audit tools in the investigation.

The SIU should employ forensic audit tools in its investigations to effect a quick turnaround time on complex investigations. The SIU should use background investigations, lifestyle audits, whistleblowing, forensic data analytics and surprise audits in its investigation to enhance its investigations.

5.5.3 Use of anti-fraud controls in the investigation

The SIU should use anti-fraud controls. This can be done during investigations of the state institutions by looking at fraud policy, fraud risk assessment programmes, internal control measures, and employee programmes. The SIU should apply the fraud diamond theory when reviewing anti-controls and policies of state institutions as it would assist in identifying public officials with the inclination to commit fraud.

5.5.4 Applying fraud prevention mechanism

The SIU should apply fraud prevention mechanisms across its investigations as it would be able to see corrupt and fraudulent acts that are harming state institutions and be able to advise on the actions that must be taken to prevent the re-occurrence of corruption and fraud. The SIU should engage with the leaders of the state institutions by reviewing the governance and ethical frameworks and fraud awareness of the institutions. This will enable the SIU to assist state institutions in preventing corruption and fraud by addressing the shortcomings that lead to occurrence of corruption and fraud and provide advice and offer training to state institutions.

5.5.5 Applying fraud detection mechanism

Furthermore, the SIU should apply fraud detection mechanisms while conducting investigations as it would be able to catch fraudsters committing the act. The SIU must perform background investigations, lifestyle and surprise audits in all the investigations it conducts. Such mechanisms may be able to detect corruption and fraud during investigations as they enhance the SIU efforts in combating corrupt and fraudulent activities in state institutions.

5.6 Future research

Since the study was limited to the Gauteng SIU office and adopted a qualitative research approach, future studies could focus on other provinces, perhaps using quantitative validation. Future studies should also be conducted on other anti-fraud and corruption units to establish their methodology adopted to combat and/ or prevent and detect fraud and corruption.

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