The study aims to clearly articulate the role of forensic accounting in the supporting of criminal investigation in the banking sector in South Africa. The research analysed the available theories, where it made an analysis of the theory of forensic accounting and the theory of crime. These theories were found to be of impressive significance to the research study since the study was looking at the role of forensic accounting and hence the study wanted to have a view of these theories relative to the situation on the ground. It was noted that these theories are of great importance to the research results. The research study made use of the quantitative research methodological approach, where it made use of the employees within the banking sector in South Africa; a sample of 120 respondents was initially looked at, who were supposed to respond to the surveys. The questionnaire for the

19. Online methodical approaches were also made use for the purposes of preventing the spread of COVID-19. The target response from the survey was very impressive for the researcher to further make an analysis of the research data. The results of the research indicated that forensic accounting has started to gain some momentum in the banking sector in its quest to bring to clarity the issues of white-collar crime in South Africa. Forensic accounting was not a feature that was very important as banks, and other institutions made use of the general crime dictation methodologies. However, with the changes that are taking place in the business environment, forensic accounting is increasingly being used to support criminal investigation in the South

surveys was distributed in various ways taking into consideration the presence of COVID-



African banking sector.

Dr. Tichaona GotoraPost-graduate Diploma in Forensic Accounting
Roll No. – SIFS/OC/2020/012

XOURNALS
International E - Publication



International Association of Scientists and Researchers

The Role of Forensic Accounting in Support of Criminal Investigation

Forensic Science



Manuscript References No. TFSc-0623-001-Gotora

Tichaona Gotora

XOURNALS

International E - Publication

International Association of Scientists and Researchers

Tichaona Gotora

XOURNALS

Forensic

Science

"The Role of Forensic Accounting in Support of Criminal Investigation"

Submitted By:

TICHAONA GOTORA

Post-graduate Diploma in Forensic Accounting Roll No. – SIFS/OC/2020/012

2023

International E - Publication
International Association of Scientists and Researchers (IASR)

© Copyright Reserved

June-2023

Manuscript References No. TFSc-0623-001-Gotora

All rights reserved. No part of this publication may be reproduced, stored, in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, reordering or otherwise, without the prior permission of the publisher.

International E - Publication

International Association of Scientists and Researchers (IASR)

2443, Hudson Lines, Kingsway Camp, Delhi-110009, INDIA



Cite This MLA

Gotora, Tichaona *The Role of Forensic Accounting in Support of Criminal Investigation*: International Association of Scientists and Researchers, www.xournals.com. June. 2023. Web

XOURNALS

DECLARATION

I, Tichaona Gotora.do hereby declare that this research is the result of my investigation and research and that this has not been submitted in part or full for any degree or for any other degree to any other University.

XOURNALS

ACKNOWLEDGEMENTS

My distinguishing gratitude goes to the Lord God who made all things possible in His own time with the guidance and acumen that He gave to me throughout the period of working on this research.

A special mention goes to my colleagues, for their firm support in terms of inspiration and enthusiasm. My genuine and sincere acknowledgement goes to my supervisor, who devoted her endurance and mentorship; I could not have accomplished this research project.

XOURNALS >

ABSTRACT

The study aims to clearly articulate the role of forensic accounting in the supporting of criminal investigation in the banking sector in South Africa. The research analysed the available theories, where it made an analysis of the theory of forensic accounting and the theory of crime. These theories were found to be of impressive significance to the research study since the study was looking at the role of forensic accounting and hence the study wanted to have a view of these theories relative to the situation on the ground. It was noted that these theories are of great importance to the research results. The research study made use of the quantitative research methodological approach, where it made use of the employees within the banking sector in South Africa; a sample of 120 respondents was initially looked at, who were supposed to respond to the surveys. The questionnaire for the surveys was distributed in various ways taking into consideration the presence of COVID-19. Online methodical approaches were also made use for the purposes of preventing the spread of COVID-19. The target response from the survey was very impressive for the researcher to further make an analysis of the research data. The results of the research indicated that forensic accounting has started to gain some momentum in the banking sector in its quest to bring to clarity the issues of white-collar crime in South Africa. Forensic accounting was not a feature that was very important as banks, and other institutions made use of the general crime dictation methodologies. However, with the changes that are taking place in the business environment, forensic accounting is increasingly being used to support criminal investigation in the South African banking sector.

XOURNALS X

Table of Contents

Chapter One	1
Introduction	1
1.1 Introduction	1
1.2 Background of the study	1
1.3 Statement of the problem	3
1.4 Aims of the research	3
1.5 Research objectives	4
1.6 Research questions	4
1.7 Significance of the study	4
1.8 Chapter organisation	5
1.9 Conclusion	6
Chapter Two.	7
Literature Review	7
2.1 Introduction	
2.2 The concept of forensic accounting	
2.3 Financial Fraud	
2.4 Forensic accounting and financial fraud	9
2.5 Corruption and forensic accounting	
2.6 Theoretical framework	11
2.6.1 The forensic accounting theory	
2.6.2 Theory of crime	11
2.7 Conclusion	12
Chapter Three	13
Research Methodology	13
3.1 Introduction	13
3.2 Research methodology	13
3.3 Research philosophy	13
3.4 Research approach	14
3.5 Research strategy	15
3.6 Research Design	15
3.6.1 Explanatory research design	16
3.6.2 Exploratory research design	16
3.6.3 Descriptive research design	16

XOURNALS X

3.7 Target population and sampling		
3.8 Sampling	18	
3.8.1 Probability Sampling Techniques	18	
3.8.1.1Simple Random Sampling	18	
3.8.1.2 Systematic Random Sampling	18	
3.8.1.3 Stratified Random Sampling	19	
3.8.2 Non-probability Sampling	19	
3.8.2.1 Convenience Sampling	19	
3.8.2.2 Purposive Sampling	19	
3.9 Sample size	19	
3.10 Research instruments	20	
3.10.1 Questionnaires	20	
3.11 Pilot study	20	
3.12 Reliability and validity	20	
3.12.1 Reliability	21	
3.12.2 Validity	21	
3.13 Data analysis		
3.14 Data storage and protection		
3.15 Limitations and delimitations of the study	22	
3.16 Elimination of bias	22	
3.17 Research ethical consideration	23	
3.18 Conclusion	24	
Chapter Four	25	
Results, Discussions and Interpretation of Findings		
4.1 Introduction	25	
4.2 Presentation of results	25	
4.3 Response rate	26	
Table 4.1 Response Rate	26	
4 4. Demographic variables	26	
4.4.1 The gender distribution of the respondents	26	
Figure 4.1 Gender distribution of the respondents	27	
4.4.2 The age of the respondents	27	
Figure 4.2 Age distribution of the respondents	28	
4.4.3 Period spent in the banking sector	29	
Figure 4.3 period spent within the banking sector	30	

XOURNALS X

4.5 The importance of the concept of forensic accounting	31
Figure 4.4 The importance of the concept of forensic accounting	31
4.6 The role of forensic accounting	32
Table 4.2 the role of forensic accounting.	32
4.7 Management style in the banking sector	34
Table 4.3 management styles in the banking sector	34
4.8 Organisational culture and change	36
Table 4.4 Organisational culture and change within the banking sector	36
4.9 Need for forensic accounting within the banking sector in South Africa	37
Figure 4.5 need for forensic accounting within the South African Banking sector	37
4.10 Effectiveness of forensic accounting in support of the criminal investigation	38
Table 4.5 Effectiveness of forensic accounting in support of a criminal investigation	39
4.11 Conclusion	39
Chapter Five	41
Conclusions and recommendations	41
5.1 Introduction	
5.2 Findings from the study	41
5.3 Findings from the literature	41
5.3.1 Concept of forensic accounting	41
5.3.2 Financial fraud	
5.3.3 Forensic accounting and financial fraud	42
5.4 Findings from primary research	42
5.5 Conclusions	44
5.6 Recommendations	44
5.7 Areas for further research	45
5.8 Final conclusion	45
REFERENCES	46
7 Appendices	50
7.1 Appendix A: Questionnaire	50



List of figures and tables

<u> Table 4.1 Response Rate</u>	26
Figure 4.1 Gender distribution of the respondents	27
Figure 4.2 Age distribution of the respondents	28
Figure 4.3 period spent within the banking sector	30
Table 4.2 The role of forensic accounting	32
Figure 4.4 the importance of the concept of forensic accounting	31
Table 4.3 management styles in the banking sector	34
Table 4.4 Organisational culture and change within the banking sector	36
Table 4.5 Effectiveness of forensic accounting in support of criminal investigation	39
Figure 4.5 need for forensic accounting within the South African Banking sector	





CHAPTER ONE

Introduction

1.1 Introduction

The purpose of this research is to dig deep on the role of forensic accounting in support of criminal investigation in South Africa. Criminal activities have of late become so rampant in almost every facet of the economy within the country. It is against this background therefore that the research seeks to have a better and enhanced understanding with regards to the role that forensic accounting is playing in an attempt to combat criminal activities which have been seen to be affecting each and every sector of the economy. This chapter, therefore, acts in its capacity as the introductory chapter of the overall research. The introductory section of the research presents the background to the research, the problem that the research seeks to address, the research questions, the research objectives, as well as the significance of the research.

1.2 Background of the study

Forensic accounting is alleged to have evolved relatively inorganically in retort to certain emergent fraud interconnected encounters, and it has been triggered by the rising and falling of a number of professional criminalities (Enofe, Utomwen and Danjuma 2013). The outrages that in recent times stunned the corporate world with standard instances being the frequently mentioned Enron and WorldCom cases have also conveyed the field of forensic accounting to the forefront (Enofe et al. 2013). Forensic accounting is comprehended as compressing all the other areas in the practice of accounting for the purposes of investigating cases. The growing intricacy of certain crimes entail that forensic accounting must be added to the tools essential to convey the prosperous exploration and prosecution of those persons tangled in criminal undertakings.

According to AICPA (2004), forensic accounting is the implementation and execution of accounting principles, concepts, theories and discipline to facts or assumptions at issues in a legal dispute and embraces every single branch of accounting understanding. Forensic accounting is the multilateral exercise of applying accounting, auditing and investigative expertise to support in legitimate matters. It is the domain practice area of accounting that

1 | Page



outlines activities that result from authentic or projected arguments. Forensic accounting can consequently, be seen as a facet of accounting that is appropriate for legal evaluation, offering the maximum level of guarantee and comprising the commonly accounted meaning of having been arrived at in a technical manner (Apostolou, Hassell, and Webber, 2000).

According to Wallace (1991), forensic accounting has been characterised as the fastest-growing expanse of accounting nowadays. Despite the latest interest, forensic accounting is not new. The origins of forensic accounting date back to the early 1800s to Glasgow, Scotland, the forensic accounting profession stayed anonymous up until the plethora of prominent business scandals, stringent writing, and in-house control rules, which conveyed the significance of forensic accounting to the business world (Wallace, 1991). Current history specifies that Maurice E. Peloubet is endorsed with coming up with the term Forensic Accounting in his 1946 essay "Forensic Accounting". Even though the term may not have been used before the 1940s, a robust argument can be made that the principal eminent forensic accountant was Frank J. Wilson, the gentleman who led the operation to convict Alphonse "Scarface" Capone of tax evasion in 1931 (Joshi, 2003).

By this period, Forensic Accounting had established its value during the Second World War; nevertheless, formal measures were not in place up until the 1980s when significant academic works were published around the issues of forensic accounting. Throughout the classical O.J. Simpson trial, forensic accountants assessed his assets influencing the compensations given in the civil suit.

According to Crumbley (2001), the professional antiquity of forensic accounting can be traced back to 1992 when the American College of Forensic Examiners was institutionalised with the American Board of Forensic Accounts opening in 1997. The Journal of Forensic Accounting, Auditing, Fraud and Taxation instigated publication in the year 2000. In 2002, the Sarbanes-Oxley Act acknowledged the Public Companies Accounting Oversight Board (PCAOB) which was later charged with the development of auditing principles, piloting research and guaranteeing business acquiescence. Because of the Sarbanes-Oxley Act, there has been ongoing stress on forensic accounting. Forensic accounting is the novel division in accounting which has the solitary objective of exhuming falsified deeds in and outside an organisation so far as the third party's accomplishment is in any way philosophical on the actions of that organisation (Crumbley, 2003). As a discipline, it includes financial expertise, fraud understanding, and comprehensive knowledge and comprehension of business genuineness and the operation of the





national legal system. Zysman (2004) indicated that the evolvement of forensic accounting had been predominantly attained through on-the-job training as well as experience with probing officers and legal counsel.

South Africa, like any other nation in the world, has not been left out in terms of crime rates increases over the years. There has been a high inflow of people from other southern African nations like Zimbabwe, Mozambique, and Malawi coming into South Africa to look for employment as economic woes have threatened the employment industry in their diverse countries. Laws have been put in place to try and conquer the ever-increasing crime rates within the country, and it is therefore against this background that the research seeks to unearth the role of forensic accounting in support of criminal investigations in white-collar jobs in South Africa.

1.3 Statement of the problem

The South African government, lawmakers and practitioners, the various ministries around the Republic of South Africa have been facing a massive upsurge of crime rates in the country. The business community have been facing an influx of theft, being short-changed and corruption rocking the country and hence the continuous deterioration of the economy that is emanating from the ever-increasing professional crime rates in the country. Efforts, however, have been put in place in an attempt to try and curb the rate at white-collar crimes are taking place within the country, the systems put in place, however, some of which are being bypassed by the various criminals that are using various methodological approaches in an attempt to get that which they want. Forensic accounting has been developed in the early 1990s to try to curb the white-collar crimes around the world. However, despite the implementation of various forensic accounting approaches and methodologies white-collar crimes are still happening around the country. This research, therefore, seeks to explore the role of forensic accounting in support of criminal investigation in South Africa.

1.4 Aims of the research

The research aims at exploring the role of forensic accounting in support of criminal investigation in the South Africa banking sector. The research is going to implement a quantitative research approach in an attempt to explore the role that forensic accounting is playing in order to support the criminal investigation, especially those criminals connected to white-collar banking jobs.





1.5 Research objectives

The research seeks to attain the following critical research objectives;

- To examine the role of forensic accounting in support of criminal investigations in the South African banking sector
- To analyse if there is a need for forensic accountants in the South African banking sector
- To ascertain if forensic accounting is an effective tool for addressing crimes in South Africa
- To recommend the effective systems to curb crimes in South Africa

1.6 Research questions

- What are the roles of forensic accounting in supporting criminal investigation in the South African banking sector?
- Is there any need for forensic accountants in the South African baking sector?
- Is the application of forensic accounting an effective tool in addressing crimes in South Africa?
- What recommendations can be put in place for an effective system meant to curtail crimes in South Africa?

1.7 Significance of the study

The study is a contribution to the available body of literature on the issues of crime and criminal support strategies. This research study will also be used as study material by other coming students to have an understanding with regards to the issues of crime and forensic accounting within the country.

The crime investigation department in the country will be able to use the results emanating from this research to understand their roles, as well as understanding the various methodological approaches that they have to use in an attempt to deal and solve various crimes profitably in the country. Crime investigations call for the massive understanding of the various levels under which those dealing with crimes are operating and hence the need for an improvement from the general ways and methodologies of dealing with crimes to enhanced approaches of handing crimes such as the use of forensic accounting in handling crimes.



XOURNALS

Policymakers can also make use of this research report in order to understand the various

approaches that can be used and implemented in the handling of crimes in various scenarios.

Crimes call for stakeholder working and coming together. The working and coming together of

various stakeholders is only possible if there are supporting documentations such as these

research documents where individuals have a better understanding of where they are coming

from and where they are going in terms of crime and the methodologies of handling crimes in

and around the country. This research, therefore, acts as a document that is tailored to bring

together the various stakeholders together and work towards creating a crime-free South Africa.

1.8 Chapter organisation

The five sections of this research report are structured as follows:

Chapter One: Introduction

This chapter provides the basis of the research study as it gives the reasons that prompted the

investigation. Chapter 1 articulates the background of the research study, aim, objectives,

research questions, problem statement, and significance of the study as well as accentuating the

organisation of the research study.

Chapter Two: Literature Review

The chapter outlines the available literature and reveals the relationship between the academic

fraternity and how the available studies relate to the research topic under study. The available

literature is analysed in this section of the research study.

Chapter Three: Research Methodology

This chapter presents how the research process was carried out. It includes the research design,

strategy, target population and sampling, data analysis strategies, and ethical issues regarding

carrying out the study.

Chapter Four: Results, Discussion, and Interpretation of Findings

This chapter presents the results, discussion, and interpretation of the research findings.

Chapter Five: Conclusions and Recommendations



The final chapter concludes the research study with what has been found in the study. This chapter presents the recommendations emanating from the findings of the study.

1.9 Conclusion

This chapter provided the introduction of the study where it clearly outlined the research background, the problem of the study as well as the critical objectives that the research seeks to attain at the end of the research process. Research questions that are going to be answered by the research have also been articulated in this chapter as well as the significance of the study and the critical path that the research will have to follow in an attempt to answer the research questions outlined. The next chapter seeks to analyse the various literature concerning the issues under research, the role of forensic accounting in supporting the investigation of criminal activities in South Africa.



XOURNALS 2

CHAPTER TWO

Literature Review

2.1 Introduction

The purpose of this chapter is to review the literature that exists around the issues of forensic accounting and their purposes about their support in terms of the criminal investigation. Various literature has been propounded on the issues of forensic accounting, and it is, therefore, the purposes of this section of the study to clearly analyse and make critical analysis on all the various literature in conjunction to the issues surrounding the impact of forensic accounting to supporting criminal investigation in the South African banking sector.

2.2 The concept of forensic accounting

Forensic accounting has seen a steady entrance into mainstream present-day accounting literature and has been well defined both theoretically and operationally by a sizable number of researchers. In the understandings of Howard and Sheetz (2006) forensic accounting is basically the procedure of construing, summarising and presenting multifaceted financial concerns clearly, concisely and accurately frequently in a court of law as an adept eyewitness. Forensic accounting is concerned with the use of accounting discipline to aid determine matters of facts in the business lawsuit (Razaee, Crumbley and Elmore, 2006). Consequently, forensic accounting has been put into the pole position of the movement against financial fraud (Rumaswamy, 2005).

Bolgna and Linquist (1995) well-defined forensic accounting as the application of financial expertise and an analytical approach to vague disputes, accompanied in the framework of the procedures of proof, confirmation and authentication. Manning (2002) more so defined forensic accounting as the use of financial accounting and exploratory abilities, to a standard satisfactory to the court of law, to address concerns in dispute in the perspective of the civil and criminal lawsuit. According to Damilola and Olofinsola (2007), Forensic accounting is the use of criminalities procedures and integration of the accounting analytical accomplishments and law procedures to identify and investigate financial criminalities and interconnected economic transgressions. Damilola and Olofinsola (2007) indicated that forensic accounting is an extremely practical and specialised area of practice in the philosophies and ethics of the





accounting profession. Damilola and Olofinsola (2007) further emphasise that it is not every forensic accounting commitment that ends up in the court of law.

The AICPA (2005) defined forensic accounting as "the use of accounting principles, theories, models and discipline to specifics at matters in a legal argument and embraces every single division of accounting expertise." The AICPA (2005) additionally categorises forensic accounting into two comprehensive groups, which are investigative services and lawsuit services. The AICPA has acknowledged forensic accounting services to usually involve the following; the use of expert knowledge and analytical abilities, Gathering, scrutinising and assessing the evidential matter, understanding and communicating outcomes in the courtroom, boardroom or other lawful/executive places. According to Crumbley (2006), forensic accounting is the application of expert knowledge and detailed proficiency to stumble upon the substantiation of economic transactions. Zysman (2001) postulates that forensic accounting is the amalgamation of accounting, auditing, and investigative expertise. In simple terms, forensic accounting refers to accounting that is appropriate for lawful analysis posing the utmost level of guarantee and comprising the currently commonly established suggestion of having been attained in a technical manner.

Coenen (2005) went on to state that forensic accounting encompasses the use of accounting theories and techniques to a legal problem. Forensic accounting calls for reporting, where the responsibility of the fraud is proven, and the report is reflected as evidence in the court of law or in the administrative proceeding. Forensic accounting provides an accounting exploration that is appropriate to the court, which will form the foundation of dialogue, debate and eventually dispute resolution (Zysman, 2001). According to Accounting Web (2002), forensic accounting is a field of speciality that has to do with providing information that is intended to be used as proof, particularly for legal purposes. Forensic accounting is the practice of arduous data collection and scrutiny in the areas of lawsuit support consulting, adept witnessing, and fraud investigation. According to Durkin and Ueltzen (2009), forensic accounting is satisfactorily comprehensive and thorough so that a certified public accountant, in his/her considered a sovereign professional verdict, can convey an outcome as to financial records, records, or the presentation. Thereof that is of such excellence that it would be justifiable in some argumentative legal proceeding, or in certain legal or administrative evaluation.





2.3 Financial Fraud

The theory of financial fraud is itself muddled; nevertheless, researchers differ meaningfully in their expressions around fraud. According to Bello (2001), citing Russel (1978) noted that the term crime is general and is used in several ways. Crime takes up in many diverse degrees and forms that courts are obliged to context themselves with merely limited general guidelines for its discovery and defeat.

Okafor (2004) furthermore stated that financial fraud is a generic term and encompasses all the manifold means which human ingenuity can formulate, which are resorted to by one individual to acquire gain over another in untruthful depiction. No certain and consistent rule can be put down as a universal suggestion in defining crime as it embraces surprise, hoax, astute and biased ways by which others are cheated.

Accounting fraud is performed by making counterfeit financial accounting statements where the figures are manipulated by exaggerating assets, false entries interrelated to sales and profit, embezzlement in taxes, or devaluing liabilities, debts, expenditures or losses. The accounting fraud is similarly well defined by accounting experts as deliberate and inappropriate handling of the recording of data in financial statements in an attempt to attain an operating profit of the business look much better than it truly is (www.accountingelite.com). Economically, financial fraud is becoming a more and more severe problem, and the effective identifying of accounting fraud has continuously remained an imperative; however, the multifaceted task for accounting specialists. The internal inspecting of financial matters in the businesses has to turn out to be a progressively more serious activity, and there is considerably substantiation that book cooking accounting practices are internationally applied for doing financial frauds.

Williams (2005) incorporates corruptions to his account of financial crimes. Other components of FCs as quoted in William" s (2005) explanation consist of bribes cronyism, favouritism, political donation, kickbacks, false pricing and frauds of all types.

2.4 Forensic accounting and financial fraud

The combination of accounting, auditing and investigative expertise results in the special field, which is known as forensic accounting (Crumbley, 2008). Forensic accountants have been defined as veteran auditors, accountants and investigators of legal and financial documents that are employed to closely look into probable suspicions of fake activity in a company; or are





engaged by a business who may just want to prevent fraudulent activities from happening in an organisation (McKittrick, 2009). Manning (2005) summaries that the services of forensic accounting are applied in areas such as accounting, antitrust, damages, analysis, valuation, and universal consulting. Forensic accountants have also been used in divorces, insolvency, insurance claims, personal injury claims, fake claims, construction, royalty audits, and tracking intimidation by exploring financial records.

Although the use of forensic accounting is not yet very much widespread in South Africa, the epidemic of financial abnormalities in South Africa particularly in the banking sector has placed emphasis on the necessity for forensic accounting procedures to be employed. According to the Centre for Forensic Studies (2010) report, the growing necessity for forensic and investigative accounting in the banking sector emanates from the nature of present-day banking which involves huge volumes of multifaceted documents, which makes it challenging to monitor those transactions by applying manual audit procedures. This, in turn, makes the control utility of inspecting incompetent. Practically all the weaknesses and challenges identified in the banking industry in South Africa's post-consolidation, and criminal investigations and prosecutions arising from them, are concerns for forensic accounting.

2.5 Corruption and forensic accounting

According to Ijeoma (2015), corruption has overrun the warp and woof of many societies, for example, in Nigeria, unlike most civilised cultures which are reliant on upon individuals doing the right thing. Irrespective of rewards, punishment, and discouragement, the resources necessary to entirely enforce all the laws would be astronomical. Even restriction is expensive to execute and does not pledge a satisfactory level of compliance. According to Ijeoma (2015) corruption as a concept is frequently challenging to define, because of its relativeness but one can put it in a perception when it is acknowledged for the determination of delineating techniques and means of combating corruption. Nye (1967) clarified that corruption is a behaviour, which diverges from the customary duties of a public role for a reason that of private; concerning family, close private elite, financial or status gain, or break up rules against the implementation of private-regarding effect. Corruption comprises such actions as bribery; nepotism and embezzlement.

Mukoro, et al. (2011) well-defined corruption as inclination and probability of doing what is wrong, malevolent or detrimental to one's neighbour in spite of the awareness of what is good.





It is an effort of sabotaging the rule of the game through the use of hoax to take community fund and spending them for one's personal interest and gains. The corrupt and illegal actions exhibited particularly by people in authority for their personal achievement is corruption.

2.6 Theoretical framework

The purposes of this section is to elucidate the various theories that were implemented in this research. These theories include forensic accounting theory and the theory of crime.

2.6.1 The forensic accounting theory

According to Ozil (2020), forensic accounting theory looks at exactly how the accounting and non-accounting verdicts and decisions are made at the beginning, during or at the end of the exploration process affects the choice of forensic recognition methods and procedures used, and the clarification of the findings of forensic examination. Forensic accounting theory indicates that the procedures and approaches used to identify fraud replicate the accounting and nonaccounting resolutions that were taken into account by the forensic investigator (Ozil 2020). The key proposition of forensic accounting theory is that the choice of forensic recognition approaches is not simply a result of the forensic investigator's understanding, expertise or knowledge however it largely depends on the accounting and non-accounting thoughts made by the forensic detective at the beginning, during, or at the end of swindle detection procedure (Ozil 2020). Consequently, forensic accounting theory proposes that the choice of approaches or procedures used to detect resourceful accounting or manipulations in financial recording, and the result of using such approaches or procedures, replicate the accounting and non-accounting decisions, resolutions and verdicts that were taken into account by the forensic accountant or investigator (Ozil 2020).

2.6.2 Theory of crime

White-collar crime can be well defined as a crime committed by an individual of reputable and high societal status in the course of his employment (Sutherland, 1983). Therefore, the requirement that wrongdoing cannot be a white-collar crime if not committed by an individual of "high social status". Sutherland's theory of differential association in White Collar Crime was a broad-spectrum theory of all crime, one whose simplification restrictions on a platitudinous reaffirmation of social learning (Albanese, 1995). Fredrichs (2007) elucidated that the only way





one crime contrasts from another is in the contextual background and features of its perpetrators. Furthermost, if not all white-collar offenders are illustrious by lives of pleasure, much of it with backgrounds in class disparity. It is projected that the bulk of white-collar crimes is hidden or if noticed, and it is not reported. This is because of the high prominence of the perpetrators of these crimes, which entails a vastly trained and qualified examiner or detective like the professional forensic accountant to project the rate of such high profile fraud (Ijeoma 2015).

2.7 Conclusion

The purpose of this section of the research study was to analyse the available literature about the issues of forensic accounting in providing support to criminal investigation exercises. The section also elucidated the various theories that are imperative when it comes to the issues of forensic accounting. The next chapter, therefore, is going to map out the research methodology that the research implemented in an attempt to gather primary data for a better understanding and comprehension on the role of forensic accounting in supporting criminal activities within the South African banking sector.



XOURNALS

CHAPTER THREE

Research Methodology

3.1 Introduction

In this chapter, the study targets qualifying the research design and methodology, which was instigated in the research study. This chapter expresses the population and sample size that the study used in describing the research participants in the research. The crucial objective of this chapter is, therefore, to put pronunciation on the research methodology that was implemented in the research with the zeal of solving the research problem as approved in the previous chapters of the research. As well as narrowing down the research gaps that are established with regards to the roles of forensic accounting in support of criminal investigations in the banking sector in South Africa.

3.2 Research methodology

According to Kothari (2016), research methodology is the systematic, theoretical analysis of techniques applied to a field of the research study. The methodology comprises of the procedures of unfolding, elucidation and forecasting sensations to solve a problem with a given study area; it is the "how"; the process, or techniques and procedures of conducting a research study. Research methodology encompasses concepts such as the research designs, research philosophy, population, sampling, and data collection instruments and data analysis procedure. It is the plan that is used to come up with diverse characteristics of the study. This is undertaken to make sure that the research problem has been fully addressed and all the gaps have been narrowed down. According to Kothari (2016), the research design is an outline, a roadmap and strategy of autopsy considered to obtain appropriate responses to research study questions; therefore, it is the fundamental part of any research study. Schwardt (2007) is of the understanding that research methodology is a thought of how an exploration must proceed.

3.3 Research philosophy

According to Schwandt, (2007) the research philosophy is buttressed by rational, philosophies, and expectations about society and the frame of how the world is regarded, which is termed a paradigm by social scientists. (A paradigm is an approach of unfolding a world understanding



that is conversant by logical assumptions concerning the nature of social certainty (known as an ontology – which questions the belief of the nature of realism), methods of knowing (identified as epistemology – which questions how persons recognise what they know), and ethics and value systems (known as axiology – which queries the accurate beliefs) (Patton, 2002). A paradigm, therefore, leads to specific inquiries and the consequent use of proper practises to systematic analysis (known as a methodology – which questions how to study the world).

There are two philosophical positions concerning science and knowledge, which are positivism and phenomenology. Being a positivist entails that the researcher operated with visible reality and that the product of such research can be the source of laws or law-like simplification, alike to those produced by the physical and natural scientist (Remeyi et al., 2005). Nevertheless, positivism has impediments since it might not offer treasured understandings into multifaceted matters such as attitudes and behaviours, which are imperious in the field of business and management studies (Easter-by-Smith et al., 2004). Positivism research consists of research done under the following classifications: quantitative, objectivist, scientific, experimentalist or traditionalist.

A phenomenological approach, on the other hand, comprehends how human behaviour impacts the research and emphases on studying and inferring the subject of the research from the perception of the individuals who are the subjects of the research (Saunders et al., (2016). As the research piloted was a case study based on banks and fell under quantitative research, as it was primarily explanatory research that was used to attain an understanding of fundamental reasons, sentiments and impetuses for a phenomenon, a positivism methodology was used (Wyse, 2011:4). Phenomenological research includes research performed under the following categories: qualitative, subjectivist, humanistic or interpretative. This research thus is going to implement a positivism research philosophy, because there is the necessity to detect the genuineness concerning the role of forensic accounting in support of criminal investigation within the banking sector in South Africa.

3.4 Research approach

The research is going to embrace an empirical research approach since it is making use of the use of a quantifiable research methodological approach in an endeavour to provide several strategic answers to the research problem acknowledged in the research problem.





3.5 Research strategy

According to Remeyi et al. (2005), research strategy offers the total direction of the research study. The research strategy, which is determined by the research study objectives, period, budget and the researcher expertise, would answer back to a broad-spectrum strategy of exactly how the researcher will go about providing significant answers to the research questions that have been set (Saunders et al., 2016). The choice of these approaches is coherent with the research study design, predominantly guided by the research study questions and objectives, in an attempt to empower researcher to retort those questions and conduct the thesis conveyance (Cameron and Price, 2009) magnificently. With regards to this research study, the research stratagem reflected the research study objectives and pursued a means to meet these research objectives by carrying out either a quantitative or qualitative research strategy. Quantitative research is executed in an attempt to gain intuition into respondent's attitudes, behaviours, value systems, apprehensions, inspirations, ambitions, beliefs or lifestyles (Saunders et al. 2016). The research study embraced the use of surveys in order to collect data from several carefully chosen respondents in the research study. Because of the concerns to do with the covid19 pandemic in an attempt to observe the World Health Organisation (WHO) covid19 regulations, the research is also going to use the online electronic system in order to deal with the dissemination of the surveys to the various respondents through electronic mails and other online platforms to practise social distancing.

3.6 Research Design

According to Kothari (2016), the research design is a plan, a roadmap and blueprint stratagem of exploration apprehended to obtain responses to research study questions; therefore, it is the core of any research study. Research design is a structure for conveying the research onus, which specifies the details of how the research project must be accompanied (Leedy & Ormrod, 2013). According to Strydom (2012), the research design is the strategy to be followed in research in order to respond to the research study questions and offer a packed clarification to the research study problem. This research implemented the quantitative research procedure in an endeavour to offer answers to the research questions and closing down the research study gap as well as providing an enhanced comprehension of the issues of forensic accounting in support of criminal investigations in the banking sector in South Africa. The quantitative research design permits the researcher to have a considerable sample size, and it also gives an extensive acuity of the





issues under research from a diverse number of respondents. This study assesses the role of forensic accounting in support of criminal investigation within the banking sector in South Africa.

3.6.1 Explanatory research design

Exploratory research is defined by Burns and Groove (2001) as research that is piloted to gain distinctive understandings, institute innovative thoughts, and for a comprehensive understanding of the phenomenon under research. The research study endeavours to explore the role of forensic accounting in supporting criminal investigation in the banking sector in South Africa. When a problem is sufficient and not overtly dissimilar, the researcher implemented probing research as a beginning step. Exploratory research studies are an appreciated means of comprehensive what is happening; to follow new perceptions; to ask research questions and to assess the phenomenon in a new light (Yin, 2011). An explanatory study sets out to clarify and account for the descriptive data. Consequently, while descriptive studies can ask 'what' kinds of research questions, explanatory studies chase to ask 'why' and 'how' questions (Grey, 2014). It builds on exploratory and descriptive research and goes on to establish certain explanations a phenomenon occurs. Explanatory research guises for reasons and details and offers substantiation to support or refute an elucidation or extrapolation. It is piloted to ascertain and report exact connections among diverse characteristics of the phenomenon under research study.

3.6.2 Exploratory research design

Exploratory research is piloted when adequate is not known about a sensation and a problem that has not been defined (Saunders et al., 2016). It does not anticipate offering the final and absolute answers to the research study questions, nonetheless instead essentially exploring the research topic under study with varying levels of gravity. Accordingly, its theme is to challenge new glitches on which fragile or no preceding research has been done (Brown, 2006). Exploratory research forms the basis for more definite research and controls the initial research design, sampling approach and data collection technique (Singh, 2007).

3.6.3 Descriptive research design

A descriptive design is prudently selected because of its high level of representativeness and the truthfulness in which a researcher feasibly will get the participants' opinion concerning the





research study topic (Polit & Beck 2014). Descriptive research encompasses collecting data that designate proceedings and then consolidates, tabularises, portrays and describes the data collection. Descriptive research can be either quantitative or qualitative. Descriptive research was implemented in this research study because of its high level of representativeness and its capability to be straightforward in terms of obtaining the participant's opinions concerning the issues under study. A descriptive study resolves to contribute to a representation of a situation, individual or occasion and demonstrate how things are interrelated to each other as it logically emerges (Blumberg, Cooper & Schindler, 2011). Nevertheless, descriptive studies cannot explain why an incident has occurred and is substantial for a reasonably unique or unexplored research area (Punch, 2005). Consequently, in circumstances of productive descriptive data, other research strategies such as explanatory or exploratory methodology are encouraged to buttress the descriptive research design approach.

As illustrated in previous sections of the research report, the critical determination of the research study was to assess the role of forensic accounting in support of the criminal investigation. To achieve this, it appeals statistical, quantitative results and more expected to bid clarifications on the documented rapport with a qualitative study. Thus, the appropriate research design is the explicitly explanatory type that answers to both the how and why facets of the vital research study questions.

3.7 Target population and sampling

Creswell (2017) defined the target population as any distinct substance or people or group under the concerns of the research study purposes. The sample cautiously selected must be representative in that the researcher need be capable of drawing, binding, discerning, instinctive and reliable deductions that will methodically bear a semblance to the research outcomes of the research study if the research is performed to a comprehensive population. About this research, the target population are the key members and stakeholders in the banking sector, the accounting experts and the consultants within the banking sector in South Africa. The research study is pursuing a populace of 1236 individuals upon which the research sample size is going to be drawn from the target population.





3.8 Sampling

Awoyini (2011) is of the view that the sample implies to any proportion of the population discreetly selected for the study and on whom information required for the research study is attained. A sample is a subset and representation of the whole populace that is wisely selected for research, and it comprises of a collection of participants from the population.

3.8.1 Probability Sampling Techniques

According to Showkat and Parveen (2017), in probability sampling, each participant of the sample size has an equal chance of being nominated. This technique of sampling offers the probability that the sample size is the wholesome illustrative of the whole populace. Probability sampling techniques comprise of;

3.8.1.1Simple Random Sampling

Showkat and Parveen (2017) point out that simple random sampling is an entirely random technique of selecting a sample in which all the components and each mixture of components in the population have an equal chance of being selected as a part of the research sample. This technique is an unbiased approach to selecting a sample as each member of the populace has the same opportunity of being nominated; simple random sampling is the best-known probability sample. The researcher engaged this technique of sampling to the general staffs that form part of this research within the South African banking sector.

3.8.1.2 Systematic Random Sampling

Systematic random sampling is a development of the simple random sampling technique. Showkat and Parveen (2017) quantified that this technique involves ample statistics and facts about the populace. In this sampling method, the researcher selects one component from the sampling frame and then make calculations to draw the subsequent elements are completed based on the interval range. The researcher engaged this operational methodology in the selection of the management to take part in the research study.





3.8.1.3 Stratified Random Sampling

According to Showkat and Parveen (2017), stratified random sampling is an upgrading of systematic sampling. In this method, the population components are alienated into sections grounded on some uniqueness and from each of these smaller equal groups draws at random a prearranged number of individuals to take part in the research study.

3.8.2 Non-probability Sampling

Different from the probability sampling technique, non-probability sampling technique uses nonrandomised approaches to acquire the research study sample size. Non-probability sampling technique often encompasses judgment (Showkat & Parveen 2017). Instead of randomisation, research study participants are sensibly selected since they are easy to access. Non-probability techniques include:

3.8.2.1 Convenience Sampling

Showkat & Parveen (2017) are of the view that in this type of sampling, researchers need participants as per the convenience of the participants. The researcher, therefore, selects the neighbouring conscious individuals as research respondents. Inconvenience sampling, individuals who are devotedly reachable and available to the researcher are carefully chosen.

3.8.2.2 Purposive Sampling

In this group of sampling, the researcher picks out the research participants as per his/her own choice, keeping back in mind the tenacity of the study (Showkat & Parveen 2017). This research sampling procedure uses the judgment of an expert in choosing circumstances with an exact drive in mind. The researcher executed probability and non-probability sampling methodologies mainly on the selection of participants from the management side of the organisation.

3.9 Sample size

According to Creswell and Creswell (2017), sample size depicts persons from the entire population that are cautiously selected to take part in the research study upon which the data collection will be undertaken. For this research, 120 individuals across the banking sector in South Africa formed part of the research sample size.



3.10 Research instruments

According to Zohrabi (2013), research instruments are the many measures that are used for the gathering of research data. The key tools that are used in quantitative research consist of closedended, open-ended questionnaires, interviews and observations. For this research, the researcher is going to make use of the questionnaires to gather the data from the many respondents in the research study.

3.10.1 Questionnaires

According to Richards and Schmidt (2002), questionnaires are certainly one of the main nittygritties of accomplishing data in any research study undertaking, and the momentous opinion is that when designing a questionnaire, the researcher needs to make sure that it is "valid, dependable and clear". Close-ended questionnaires make accessible the inquirer with quantitative or arithmetical data and open-ended questionnaires with qualitative or text data. According to Muga (2013), questionnaires are supplementary valuable during data collection because of the uniformity of the questions whereby every respondent gets the same set of questions conveyed in precisely the same manner.

3.11 Pilot study

According to Saunders et al. (2016), a pilot research study is performed before the final datagathering exercise is accompanied to support in cleansing the research instruments. Testing the recording material, measure the strength of the research questions, assurance everything is impeccable, time allocated is adequate, confirm the data collection techniques chosen are acceptable, suitable and to measure the trustworthiness of the data collected. The pilot study will permit for a full dry run of the discussion processes in that way, testing the variables and addressing any trepidations or hiccups. Afterwards, the final data collection strategy can be conscripted, grounded on the pilot study. Concerning this research, 10 individuals will be nominated across the sample size to take part in the pilot study.

3.12 Reliability and validity

According to Golafshani (2013), the implementation of reliability and validity are correlated in both quantitative research and qualitative research paradigm.





3.12.1 Reliability

According to Joppe (2010) reliability as the degree to which outcomes are unwavering over time and a precise exemplification of the whole population under study is signified to as reliability. If the results of a research study can be simulated under an equivalent procedure, then the study tools are considered reliable. The study-heightened reliability by creating questions, which are immaculate and unadulterated for all the various levels of participants, involved in the research study to have an enriched understanding of the considerations of the research study.

3.12.2 Validity

According to Borsboom (2010), validity is "the gradation to which confirmation and theory support the compassions of test scores necessitated by the anticipated uses" of a test. The research study had an opportunity to correct errors and rearrange awkward parts of the research tools before the survey to endorse the instrument were enumerating what it is thought to measure. In this research report, use was made of surveys as bases of substantiation. According to Yin (2011), establishing an arrangement of confirmation is done by authorising the support of any ratification, from the pilot research question to reach the final acute case-study conclusion.

3.13 Data analysis

According to Kothari (2016), data analysis means categorising, accumulating, treatment and summarising the gathered data to obtain retorts and reactions to the research questions. The persistence of data analysis is to attain logic from the collected data. After an arduous exercise of the congregation of data, the researcher embarked on reviewing all completed questionnaires to check for uniformity and if they are correctly completed. The researcher will then assign arithmetical codes to the data gathered according to classes or categorisations enunciated this was to support in the interpretation of the data analysis using the statistical package for social scientists (SPSS) software, which was chosen as it is comprehensively used for analysing and exploring survey data and similarly it is user-friendly.

3.14 Data storage and protection

All the congregated data will be put in safekeeping in project files while waiting to be evaluated. The data will be stored and kept where no water and other damaging features can reach the data.





For the data that will be availed through electronic means, files will be created, and the data kept in electronic format through the researcher will print the returned surveys and keep the data as hard copy for back up tenacities.

3.15 Limitations and delimitations of the study

The following were some of the limitations that the researcher come across during the time of conducting the research;

The data collection procedure had been accomplished during an unnatural period due to the lockdown conveyed by the Corona Virus pandemic COVID 19. Some of the targeted respondents were pre-occupied with their personal work remotely and hence to curb this limitation the researcher secured consent letter from the Chief Director in charge for all research work in the Department to lead to the suitable officials retorting exceptionally and professionally to the matters under study.

Insufficient finance was similarly a strain that the researcher encountered during the period of carrying out of the research. Research work needs financial support since it includes making long calls, sending emails through data procured and moving from one office to the next in search of the relevant data. However, to ease the risk of finance, the researcher has done the transcription services and obtained some finance to travel to the other locations to hold meetings as well as the massive utilisation of online platforms for effective communication and cost-cutting methodology.

3.16 Elimination of bias

It had been imperious to the study to ratify that individual unfairness in terms of the attitudes of participants whose groups may be embroidered did not play an unwanted part in the research process. The study anticipated conducting the research granting to sound methodical values and practices at all times. The research study had tried to espouse to the trustworthiness of the data so as surety that personal understanding of the development in the organisation inhabits no part in scrutinising the data. Every individual that falls under the sample size in the research managed to take part in the study, taking into account the issues of gender, race, ethnicity or culture.





3.17 Research ethical consideration

According to Fouka and Mantzorou (2011), research ethics are a system of philosophies, which can judgmentally change preceding considerations about adoptions and actions. Ethics is the subdivision of philosophy that deals with the dynamic forces of decision-making about what is right and wrong. Ethical issues are obtainable in any kind of research. The research process fashions tension between the research objectives to make simplifications for the enhanced of others and the rights of all partakers to uphold their privacy. Ethics transmits to doing well and circumventing harm to participants. Damage can be circumvented or reduced through the solicitation of suitable ethical philosophies. Consequently, the fortification of human participants in any research study is essential.

3.17.1 Ensuring participants have given informed consent

According to Gravetter and Forzano (2017), the principle of informed consent entails all available information about a research study to be provided so that a participant can make a balanced, well-versed decision to take part in the study. The key objective of informed consent is that participants must decide to partake of their own free will. They must be in no way forced into partaking. The following statements will be encompassed in the cover letter of the questionnaire to confirm that all participants are accordingly informed.

"By participating in this study, you understand your involvement". Participants will be made to comprehend that the study is unpaid and that they are in no way forced into participation. Participants are conscious of the nature and particulars of the research being also piloted the study's participants are aware of the right to stop in this research study if they feel that they cannot continue with the research for various reasons.

3.17.2 Ensuring no harm comes to the participants

Saunders et al. (2012) noted that harm could be both physical and psychological. Participants are doubtful to answer fairly if they feel that there is a jeopardy to their job or working relations. Participants will be conversant that the survey is harmless to both their work and their life in general.

3.17.3 Ensuring confidentiality and anonymity



XOURNALS

According to Cottrell and McKenzie (2013), the two procedures that are used to safeguard the confidentiality of research participants are anonymity and confidentiality. Confidentiality exists when there is a connection between individual information and the research participant's individuality; nonetheless, that information is secured from others. Anonymity occurs when there is no linkage between personal information and the participant's identity. The following determinations will be made to certify and confirm that participants of the research study are protected:

- Participants will not be obligatory to fill in their names, employee numbers or company designations on the questionnaire;
- Age bands will be used as an alternative of asking participants for their exact age;

3.17.4 Ensuring permission is obtained

The plan for this research study will be presented to the appropriate Department authorities for endorsement through letters that will be disseminated on time to permit the data collection phase to be commenced with sufficient time for the research to be able to follow appropriate and substantial guidelines.

3.18 Conclusion

The vital objective of this chapter of the research was to give in detail the research methodology that the research implemented in an endeavour to provide a vital response to the raised research questions as well as providing a realisation to the research objective. The following section of the research study is intended at providing the presentation of the data as attained from the respondents with surveys in the data collection exercise.



XOURNALS 2

CHAPTER FOUR

Results, Discussions and Interpretation of Findings

4.1 Introduction

The main purpose of this chapter of the research is to present, discuss and interpret the findings of the study. The data congregated through the questionnaires from the various stakeholders within the banking sector in South Africa were recorded on the questionnaire. The research findings made available answers to the research questions that were raised in the previous chapters and provide elucidations to the research problems that were expounded in the early chapters of the research. The data is presented in a quantitative methodological style enhanced by a qualitative style with an emphasis on scholars who have discussed issues concerning the role of forensic accounting in supporting criminal investigations in the banking sector in South Africa.

4.2 Presentation of results

All the data that has been assembled using the research instruments that comprise of the questionnaire as well as all the observations that have been carried out to all the participants, the data is now therefore analysed and meaning given to the presented data. The data presented is also linked to the literature that has been reviewed in the previous literature review section of the research. All the data that is presented has a beneficial purpose of providing reactions to the research questions and constricting down the research gap that has been accentuated in the statement of the problem in the introductory chapter of the research. The information presented is also going to close the research gap that has been acknowledged within the South African Banking sector concerning the issues of white-collar crimes in the banking sector, how the implementation of forensic accounting has brought some change with regards to the rate at which criminal activities are happening within the banking sector. The researcher made use of the Statistical Package for social science SPSS in the presentation, analysis and interpretation of the research data.





4.3 Response rate

The researcher distributed 120 questionnaires to the various respondents within the research. The response rate is now presented in table 4.1

Table 4.1 Response Rate

Instrument	Distributed	Retuned	Variance	Response Rate
Questionnaire	120	110	10	92%

The response rate was deliberated a crucial element that the researcher had to look at before moving on to start and analysing the findings of the research. The researcher distributed 120 research questionnaires that were evenly distributed to the various stakeholders within the banking sector. A 92% response rate was attained. According to Fincham (2008), a response that is around 60% for most researches must be the goal and undoubtedly are the anticipations for the research to go on and make analysis to the research findings. This response rate represented one hundred and ten questionnaires that were retained with full details completed and ten questionnaires that were not returned hence the response rate was well thought out to be favourable for the researcher to analyses the gathered data further.

44. Demographic variables

Demographic variables were considered during the data-gathering exercise and were acknowledged very important about them addressing the research problem that has been flagged in the inception of the research study. The demographic variables that were found to be of unique apprehension in this research study include the age of the respondents, level of education of the respondents as well as the working experience of the respondents. The demographic variables are now presented concerning the role of forensic accounting in support of criminal investigations within the banking sector in South Africa.

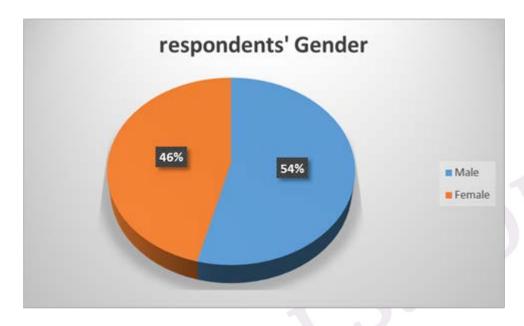
4.4.1 The gender distribution of the respondents

The researcher distinguished that it is of vital significance to look into the respondents' gender and have an enhanced understanding of the gender distribution of the respondents in the research



study. Figure 4.1 is a representation of the gender distribution of the respondents as elucidated in the findings of the congregated research data.

Figure 4.1 Gender distribution of the respondents



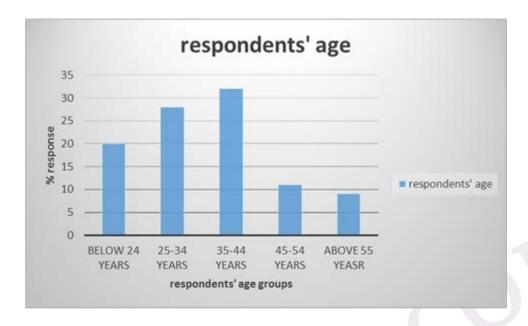
The congregated data indicated that there is a 54% male respondent and 46% female respondents. This suggests that within the banking sector in South Africa, the many individuals who took part in the framework of this research are males. In several industries in and around the world, the issues of femininity are pivotal, and hence in many research studies, it can be distinguished that male supremacy is commonly the norm. However, with the concerns of globalisation which has brought about equal opportunities for both males and females, the femininity notion is gradually declining since there have been some noticeable changes with regards to females undertaking male-dominated jobs as well. The sector previously was male-dominated; nonetheless, at this moment, females are considerably participating and taking up the male jobs within the banking sector. This, thus, clarifies the 46% female response rate that was attributed to this research study.

4.4.2 The age of the respondents

The age distribution of the respondents was also deliberated to be an essential concern with regards to the data analysis in the confines of this research. The age distribution of the respondents is presented in Figure 4.2.



Figure 4.2 Age distribution of the respondents



The respondents' age group presents an exciting spectacle concerning the ages of the respondents. It can be indicated that 20% of the respondents specified that their ages fall below the age of 24 years. It has been noted that the mainstream of these respondents are still in school and are trying to find their way through their many professionals. Hence, they have petite interest about the issues that were under study; nevertheless, the 20% that was involved in the study delivered relevant information about the role of forensic accounting in the support it offers to the criminal investigation activities within the banking sector in South Africa.

The respondent age group of 25-34 years displayed a substantial increase from the previous age group, with a 28% response rate. This indicated that as the age of individuals goes up; their engrossment concerning the issues of understudy was also accumulating. These individuals are economically active and, hence, played a momentous part in constricting down the issues that were under study.

The age group of 35 to 44 years point to an increase in terms of partaking in this research. The response rate was at 32%, which shows a higher level of participant engrossment as their age goes up. These individuals are very energetic and have broad involvement working within the banking institutions within South Africa. They perhaps have worked in several banks and hence have been convoluted in numerous organisational change strategies and have an enhanced understanding when it comes to the issues of the role of forensic accounting in support of





criminal investigations in the South African banking sector. Their involvement in this research was massive.

The age group of 45-54 years was not significantly involved in the research study. The response rate was 11%. These individuals are very busy with strategic planning, and most of the times they are in the strategic meetings and reviews discussing organisational strategies particularly in this time of the year where COVID-19 pandemic is upon every industry, strategic planning is of great importance for mapping the way forward for the organisation. It was challenging to reach out to a large number of these individuals; conversely, the few that were reached provided ironic information about the roles of forensic accounting in supporting criminal investigations in the white-collar jobs within the banking industry in South Africa.

The research study attained a 9% response rate on the individuals above the age of 55 years. This was due to several work obligations and the delegation of duties to the lower-level employees. An issue of retirement was also raised to be a significant concern; it has been perceived that some of these individuals are already preparing for their retirement, and hence their participation in the research was minimal. Nevertheless, those that managed to participate provided the grease to the responses that have been given by their juniors. This was essentially because of the enormous exposure and experience that the various individuals that fall within this range have.

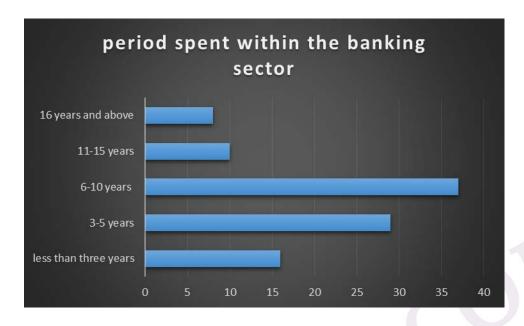
4.4.3 Period spent in the banking sector

The years spent within the banking sector was significant to this research because it would give the researcher of the emulsion with regards to how the bank has been implementing forensic accounting over the years and the responses with regards to the issues of the implementation of these forensic accounting measures in supporting criminal investigations within the banking sector. Figure 4.3 is a representation of the respondent's period spent within the banking sector.





Figure 4.3 period spent within the banking sector



The individuals who indicated that they have spent between 6 years and 10 years within the banking sector constitute the majority of the respondents with a substantial 37% response rate. These individuals have experienced enough and better understand the issues about the changes that have been happening within their organisations as the result of the implementation of forensic accounting strategies in the mitigation of criminal activities in the banking sector. They have a better view about how effective these strategies have brought criminal activities to its knees within the banking sector. Those individuals who have spent between three to five years within the banking sector have a response rate of 29% this resembles those individuals who are coming in and have to be staying in the sector, they have an enhanced view as well about the criminal investigation strategies implemented within their diverse organisations during their time. These individuals were of proliferating significance to this research study. In addition to that, 16% of the respondents indicated that they had spent less than three years within the banking sector.

Some are the students coming in for attachments and internships in the banking sector; they are still getting to learn and comprehend the cultural dynamics underpinning the criminal investigation strategic plans and developments around the diverse organisations in the South African banking sector. Those individuals who have spent 11 to 15 years in the banking sector are few as they are signified by 10% of the total respondents. More so, 8% of the respondents indicated that they had spent more than 16 years in the South African banking sector. These can resemble those few managers that the researcher managed to have an interface with during the





data collection exercise. They have enormous understandings concerning the roles that forensic accounting is playing in support of criminal investigations within the banking sector in South Africa. Their contribution to this research study is of vital significance.

4.5 The importance of the concept of forensic accounting

The researcher wanted to have a proper appreciation of the respondent's views and understanding with regards to the concept of forensic accounting. The impact that has been conveyed by the implementation of forensic accounting measures in the banking sector in South Africa with regards to the investigations of criminal activities, which are usually termed to be white-collar criminal activities. The significance of the concept of forensic accounting is now presented in figure 4.4

Figure 4.4 The importance of the concept of forensic accounting



According to the respondents, 50% of the respondents indicated that the concept of forensic accounting is fundamental to the banking sector in South Africa to curb and prevent white-collar criminal activities within the sector, hence the need for an effective engagement of forensic accounting methodological approaches in curbing corruption, crimes as well as criminal investigations within the banking sector. According to Makina and Keng'ara (2018), strategic change rises out of the need of an organisation to exploit existing opportunities and deal with predispositions and developments in the market; this was grounded on the 50% response where the respondents view the implementation of forensic accounting as an imperative element for combating criminal activities within the banking sector.





The research study findings indicated that 43% of the respondents buttressed the majority when they specified that that forensic accounting is vital for the organisations within the banking sector. White-collar criminal activities have been seen to be taking massive inclinations within the various sectors within the business environment. The implementation, therefore of forensic accounting can bring about positive changes that can transform the business environment in terms of getting riding of the white-collar criminal activities rocking the entire business community.

A trivial response rate of 2% conveyed that forensic accounting is not essential, and 5% stated that they were not sure about the significance of forensic accounting. The research study findings indicated that generally, forensic accounting is of great importance to the banking sector in South Africa and hence every institution within the banking sector has to effectually embrace all the possible approaches to implement forensic accounting in order to investigate and curb criminal activities in the banking sector. With the rapid changes that are taking place in the world of business with new customer demands, there is a huge need for change to be efficiently incorporated and appreciated by all the stakeholders within the banking sector. The embracing of this change includes the embracing and implementation of critical criminal investigation methodical approaches such as the use of forensic accounting in curbing the criminal investigations within the sector.

4.6 The role of forensic accounting

The role of forensic accounting in support of criminal activities within the banking sector is of rampant importance because of the high crime rates that for the past years have been recorded in the country. It is against this background that the researcher wanted to have a better understanding with regards to the role that have been played by the implementation of forensic accounting in its quest to curb criminal activities within the banking sector. The respondents responded in many ways as illustrated in table 4.2

Table 4.2 the role of forensic accounting

		Frequency	Per cent	Valid Percent	Cumulative Percent
Valid	Supporting white-collar criminal investigation	38	34.5	34.5	34.5



XOURNALS

Improve organisational performance	37	33.6	33.6	68.2
Detecting fraud	33	30.0	30.0	98.2
Monitoring fraud	1	.9	.9	99.1
Advising on measures to take to curb corruption	1	.9	.9	100.0
Total	110	100.0	100.0	

The implementation of an effective forensic accounting system within an organisation, especially the banking institutions have an imperative role to bring about sanity within the banking sector as a whole. According to the research study findings, 34.5% of the respondents are of the idea that the implementation of forensic accounting leads to the creation of an atmosphere of supporting the white-collar criminal investigation. White-collar criminal activities tend not to be investigated through the ordinary criminal investigation methodical approaches. However, it calls for a robust and innovative system that has the capacity of detecting and trace the corrupt activities significantly and hence the call upon of implementing a forensic accounting to help and aid the general criminal management and monitoring methodologies.

More so, 33.6% of the respondents indicated that the implementation of forensic accounting leads to improved organisational performance. For an organisation to effectively save the best interests of its clients and other stakeholders there must never within the organisation be a record of corrupt activities. When corruption is not part of the organisation, the organisation has high chances of exceeding its customer expectations within the framework of the times it has to be offering its services. Forensic accounting, therefore, comes in as a response to deal with the challenges that have been faced by the banking sector to eradicate corruption and fraudulent activities within the banking sector, hence leading to enhanced performance.

The findings indicated that 30% of the respondents are of the view that forensic accounting has a significant role to play of detecting fraud. Fraud actives have led to the downfall of some organisations within the world, and hence the development of a system that is meant for the detecting of fraud is critical so that there will be an enhancement of the business activities within the institution. Manning (2005) summaries that the services of forensic accounting are applied in areas such as accounting, antitrust, damages, analysis, valuation, and universal consulting. This, therefore, means that forensic accounting has a massive role to play in the proper execution of activities within a diverse industry.





The development of a unique system to detect and prevent fraudulent activities within the financial institutions is of great importance as it serves the best interests of the stakeholders within the organisation. Therefore, the respondents indicated that forensic accounting is critical as it leads to customer satisfaction among other vital elements of stopping criminal activities within the organisation.

4.7 Management style in the banking sector

Corruption and fraudulent activities usually start with the style of management that will be applied in the organisation. There are some management styles, which have weaknesses, and loopholes that calls for a practical, methodical approach to curb corruption. Hence, management gurus come up with forensic accounting in order to track, check, and detect corrupt activities and the root cause of these activities within organisations. The researcher, therefore, had to look for the various management structures and styles that are being implemented within the banking sector and how they respond to the issues of corruption, corruption management approaches and their effectiveness in combating corrupt activities within the banking sector. Table 4.3 is a representation of the various management styles that are implemented within the banking sector to curb and support the investigation of criminal activities within the banking sector in South Africa.

Table 4.3 management styles in the banking sector

		Frequen cy	Per cent	Valid Percent	Cumulative Percent
	Teamwork and collaboration is a characteristic of the banking sector management	38	35	35	35
	It allows for full implementation of forensic accounting	26	23	23	58
Valid	It discourages fraud activities	14	13	13	71
vand	It adapts to the ever-changing business environment and allows for the implementation of novel business ideas and methodologies	22	20	20	91
	It is unique by each bank	10	9	9	100.0
	Total	110	100.0	100.0	





The respondents were of the view that management style is of great importance in the curbing and prevention of fraud in the organisations within the banking sector. It has been noted that 35% of the respondents have specified that teamwork and collaboration is an element of the banking sector management. This meant that the management and staff of the banking institutions work together in dealing with fraudulent activities within the organisation. A democratic management style implemented targeting at supporting all the various activities within the banking sector that are aimed at the elimination of fraud, corruption and bad governance. This assertion is further strengthened by Voet (2015), who specified that change does not have to be stimulated to affect change within organisations. However, a closer analysis of the need to change and adapt to novel developments has to identify proper change structures which are organised with team commitment from the top management down to the lowest employee within the organisation.

This led to the full implantation of forensic accounting within the banking sector in South Africa 23% of the respondents indicated that a combined effort from the team leads to the effective implementation of a forensic accounting system within the banking sector.

It was also noted that 20% of the respondents were of the view that forensic accounting adapts to the ever-changing business environment and allows for the implementation of novel business ideas and methodologies. There have been robust changes in customer service delivery within the banking sector due to the implementation of forensic accounting systems which has led to customer satisfaction. According to Jalagat (2016), a high degree of the firmness in the change process is more comparable to certifying and supporting the change determinations and endeavours for the organisation's strategic purposes and aims. The implementation of a forensic accounting system to deal with the fraud activities within the banking organisations is very rampant in driving the vision and mission of the organisation as well as supporting the criminal activities within the sector.

Thirteen percent (13%) of the respondents indicated that the proper implementation of a robust management style leads to the discouragement of fraud within an organisation. Fraudulent activities can only become visible in organisations where no clear lines of communication are articulated. In those institutions and organisations where clear communication lines are well articulated, and management and the entire team work together, there will be a destruction to corrupt activities within organisations. 9% of the respondents indicated that each bank within the South African banking sector has a unique management style that suits the addressing of the





problems and challenges that the many bank encounter in the process of providing and offering the best services to the valued organisational stakeholders. The uniqueness within organisations is essential because organisations will be positioned to achieve the best services for their clientele base.

4.8 Organisational culture and change

This has been noted as an imperative element in identifying the implementation of forensic accounting within the banking sector. Those banks that cannot allow change to be initiated within their organisation will certainly not allow for the implementation of forensic systems in order to deal with the challenges within organisations. It is therefore vital to have an understanding about organisational culture and have a view of the impacts brought by the organisational culture concerning the implementation of a forensic accounting system that is aimed at stopping fraud activities within the banking institutions. Table 4.4 is an indication of the findings about the issues of culture and change management implementation within banking institutions in South Africa.

Table 4.4 Organisational culture and change within the banking sector

		Frequenc y	Per cent	Valid Percent	Cumulative Percent
Valid	Learning and development helps organisations realising their goals	25	22.7	22.7	22.7
	There is a culture of embracing new developments such as forensic accounting		42.7	42.7	65.5
	A culture of embracing new developments helps in fraud and criminal investigation	38	34.5	34.5	100.0
	Total	110	100.0	100.0	

According to Cameron and Green (2009) cited in Rissanen (2016), as organisational culture is a portrayal of views, opinions, and actions in it, it essentially describes the impression of how to be prosperous in an organisation. To this end, the majority of the respondents, 42.7% are of the view that there is a culture of embracing new developments such as forensic accounting within the banking sector in South Africa. The attainment of institutional goals translates to the realisation of the overall business objectives. Nevertheless, every activity that each organisation





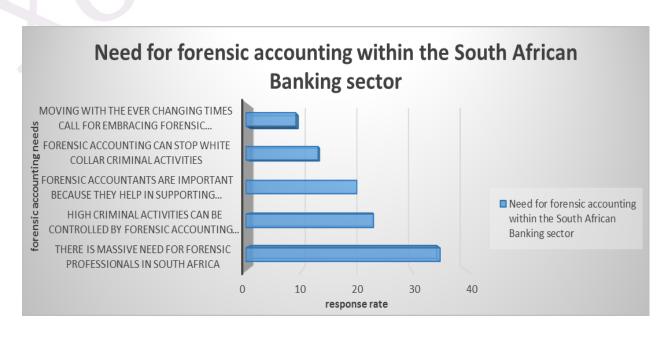
will be undertaking will have to be rigorously interconnected to the accomplishment of the organisational goals, which must be borne through the corporate culture ideologies, which were defined by Rissanen, (2016) as the collection of shared values, and behaviours that fashion the social and psychological atmosphere. In addition to that, 34.5% of the respondents indicated that there is a transparent culture of embracing new developments which help in fraud and criminal activities at the organisation.

Moreover, 22.7% of the respondents indicated that learning and development help organisations realising their goals. Culture has assisted and encouraged staff to live a high-performance. It is because of the organisational culture that the organisation is embracing new technology, new changes, and developments. If the organisation were not capable of adopting new changes, the blame would be on the organisation's cultural principles.

4.9 Need for forensic accounting within the banking sector in South Africa

Having looked at the various roles and interconnections that are there within the organisation, it is therefore of imperative importance to look closely at the need for forensic accounting within the banking sector in South Africa. The respondents were asked to give their thinking, understandings and views with regards to the needs for forensic accounting within the banking sector in South Africa. Figure 4.5 is a depiction of the findings with regards to the need for forensic accounting within the South African banking sector.

Figure 4.5 need for forensic accounting within the South African Banking sector







35% of the respondents in the research study indicated that there is a vast need for forensic accounting within South Africa. With the levels of corruption, criminal activities and fraud within the country, forensic accounting is a massive need and requirement that is needed for the South African country as a whole in order to curb and stop all the malpractices that are taking place in the country. With a massive implementation of forensic professionals, there will possibly be a reduction in terms of rates of criminal activities in the country.

23% of the respondents are of the view that forensic accounting professionals in South Africa can control high criminal activities. There is a need for the joining of the two critical criminal investigation methodologies. This implies to the massive use of forensic accounting in conjunction with the use of the ordinary criminal investigation methodologies that have been being implemented. High criminal activities are mainly due to the criminals having developed from just an ordinary criminal to the educated and scientific criminals and hence the need also to make use of such developments to curb criminal activities within the country in general. More so, 20% of the respondents indicated that a forensic accountant is critical in dealing with the various criminal activities within the country.

13% of the respondents indicated that forensic accounting could stop white-collar criminal activities in the banking sector in South Africa. White-collar criminal activities have turned out to be growing rapidly and hence the need to come up with a strategic methodological approach that can stop the white-collar criminal activities. The practical approach that has been noted to be of imperative importance is the use of forensic accounting in stopping the white-collar criminal activities within the country's various sectors. Nine (9%) of the respondents indicated that moving with the ever changing times call for embracing forensic accountants in the South African banking sector. Criminals are ever moving with the ever-changing times, and hence this call for the various individuals who are developing criminal software has to move along with the ever-changing times as well.

4.10 Effectiveness of forensic accounting in support of the criminal investigation

The researcher went on to ask the respondents concerning the effectiveness of forensic accounting in support of criminal investigation in the South African banking sector. The findings about the effectiveness of forensic accounting are presented in Table 4.5





Table 4.5 Effectiveness of forensic accounting in support of a criminal investigation

		Frequen cy	Per cent	Valid Percent	Cumulative Percent
Valid	With the implementation of forensic accounting, a criminal investigation has been made easy		47	47	47
	Low rate of white-collar criminal activities because of forensic accounting	30	27	27	74
	The implementation of forensic accounting can lead to zero white-collar criminal activities		8	8	82
	Forensic accounting a useful tool in curbing criminal activities	20	18	18	100.0
	Total	110	100.0	100.0	

47% of the respondents were of the view that the implementation of forensic accounting has made criminal investigation easy within the country. This means that forensic accounting implementation has brought some fundamental changes with regards to criminal investigations in the country, particularly in the banking sector were notable changes in terms of criminal activities are said to have dropped significantly. More so a 27% of the respondents indicated that there had been a low rate in terms of white-collar criminal activities within the country because of the implementation of forensic accounting in the country. This meant that forensic accounting had brought some significant changes within the banking sector, and continuous implementation of forensic account will result in the creation of a free crime economy in the whole country. 18% of the respondents indicated that forensic accounting is a useful tool in curbing criminal activities in the country. The amalgamation of forensic accounting and other fraud measuring and monitoring principles will result in the reduction of criminal activities in the various sectors in the country. 8% of the respondents indicated that zero white-collar criminal activities are possible through the implementation of forensic accounting in the country.

4.11 Conclusion

The essential point of this chapter was to present the findings linking them to the study objectives as well as the literature that has been studied in the earlier chapters. It can be noted that forensic accounting plays a crucial to aid in criminal investigations. As that is not enough, for practical



XOURNALS

and systematic implementation of the forensic accounting within the banking sector, there is robust need for the organisations to draw clear communication lines as well as working together through the implementation process from the lower level employee down to the highest employee within the organisation. This will lead to a better understanding of the need for the implementation of forensic accounting within the business fraternity, and its embracement will be easy amongst the various stakeholders in the organisation.

The next chapter acts as a concluding chapter of this research and presents the conclusions, recommendations, and areas for future research.



XOURNALS >

CHAPTER FIVE

Conclusions and recommendations

5.1 Introduction

This chapter is the closing chapter of the overall research work. It presents the summary of the research findings from the literature review, findings from the primary research, as well as providing conclusions for the whole study and the recommendations with regards to the role of forensic accounting in support of criminal investigation in the banking sector in South Africa.

5.2 Findings from the study

This section is the concluding part of the whole research, which deals with a closer look at the findings from both the literature that has been reviewed and the primary research. The literature entails all the data that was discussed in this research study and the impact it bears with regards to the role of forensic accounting in support of criminal investigations in the banking sector in South Africa. The findings from the literature are also going to form part of the concluding section of this study. The researcher is also going to look into the data collected, which is usually referred to as the primary data and draw conclusions regarding the role of forensic accounting in support of the criminal investigation.

5.3 Findings from the literature

The literature that has been reviewed in this research indicated a number of critical items that included the concept of forensic accounting. The issues to do with financial fraud as well as other issues that put together forensic accounting and financial fraud. To draw better understanding about these issues in the perspective of the role financial accounting plays in an attempt to curb the criminal issues.

5.3.1 Concept of forensic accounting

It has been noted that the concept of forensic accounting has been in existence for a long period. However, it has not been fully implemented within some countries, especially the developed countries. However, with the passage of time as well as the changes that are actually happening within the environment, the concept of forensic accounting started to gain some importance and



attention where a critical number of individuals and companies started to embrace the concept in their day-to-day activities. The forensic accounting concept is very imperative, as it has led to a reduction in terms of white-collar fraud. Criminal activities have been taking place within the professional industry, where fraud and corruption are the order of the day, however, with the proper implementation and execution of forensic accounting, a reduction can be noted as something that is possible because of the application of a monitoring system to curb and control the fraudulent activities within the banking sector.

5.3.2 Financial fraud

Financial fraud is usually seen in the business accounting books, where errors such as the errors of omission and commission can be purposively identified in the books of accounting. Financial fraud is also one of those critical issues that have been taking place in the business. This has not been monitored because of the lack of technology and innovation to monitor the systems. In some instance, businesses were hesitant to adapt to the various measures that could aid in the arresting of financial fraud in the business environment. This research managed to accentuate the issues of financial fraud and the negative impacts that are brought by financial fraud to a business. Looking at the banking sector in South Africa, conducting financial fraud leads to a whole lot of negative results that can lead to a decline in terms of the economy.

5.3.3 Forensic accounting and financial fraud

The research looked at the relationship that exists between forensic accounting and financial fraud and noted that forensic accounting could come into being and arrest all the financial fraud that may be happening within the business. Business needs to be conducted in a systematic format where there is the application of ethics in business, which leads to business development and growth. Failure to apply sound business management skills as well as failure to monitor the activities within the business are those activities which will intron lead to the organizations being found not compliant in terms of finance.

5.4 Findings from primary research

This section of the study presents the research findings that have been attributed to the questions that were asked the respondents in the data collection phase of the research study. The primary research covered issues such as the role of forensic accounting, the importance of forensic





accounting in the criminal investigation, the need for forensic accountants or professionals in the South African banking sector.

5.4.1 The importance of forensic accounting

The respondents indicated that forensic accounting is a very important business element, especially in the banking sector, because the thieves are now making use of information and communication and technology, to get that which they want. This, therefore, means that if there is the development of an accounting system that is meant to control and monitor the technological space, there will be a positive result in terms of financial and accounting management for the banking sector. It has been noted that financial accounting is very important in terms of managing and monitoring fraud issues that are happening within the banking sector. Generally, the findings in the research indicated that there is a huge importance level in terms of forensic accounting with regards to the management of businesses in South Africa.

5.4.2 Role of forensic accounting

The various respondents that were engaged in the research indicated that forensic accounting is very important and it has massive roles it has to play in the investigation of criminal activities especially those activities in relation to the financial fraud. Monitoring and detection of fraud were indicated as some of the roles that forensic accounting plays. The criminal investigation of white-collar cases is also a key element that has been looked at and said to be the role of forensic accounting from the respondents that were involved in the research. Generally, it means that forensic account plays an imperative role in the issues to do with criminal identification as well as providing strategic measures and ways to curb the issues of fraud and corrupt activities within the banking sector in South Africa.

5.4.3 Need for forensic accountants

There was also the need to look at the need for forensic accountants who will be better responsible for driving the vision and mission for the issues around forensic accounting. The respondent has indicated that these forensic accountants are very important in as much as driving accounting and investigation. With the profound changes, that are taking place in the technological space that means that there is a massive need for the implementation of forensic accounting measures in order to move along with the ever-changing technological space.





5.5 Conclusions

The objectives of the research were to identify the role of forensic accounting in support of criminal investigations in the banking sector in South Africa. It has been noted that the issues of forensic accounting are taking centre stage concerning the management and control of criminal activities. The criminal activities are now taking a new twist from being violent to being soft and are being committed by those individuals wearing suits and normally referred to as white-collar criminal activities. This, therefore, meant that there is also a massive need to implement and come up with financial software that can fight away these white-collar crimes. This, therefore, has led to the development of forensic accounting in dealing and combating these criminal activities. The implementation of forensic accounting started on a slow pace but rather went on to start to well-received by a number of institutions which meant that there are high levels of implementation of forensic accounting in terms of trying to fight away white-collar criminal activities within the banking sector in South Africa.

5.6 Recommendations

The research after undertaking a massive review of related literature as well as conducting primary research wishes to make the following critical recommendations:

5.6.1 Training and development

Training and development is an imperative way of in cooperating the issues of forensic accounting within the banking sector. The various accountants within the bank are needed to be trained and developed so that they have a better and enhanced understanding of forensic accounting in an attempt to minimize the white-collar criminal activities in South African banking sector.

5.6.2 Investment in the information and technology

This is an imperative element with the ever-changing business environment, and there is a need for massive investment into the information communication and technology. This will help in terms of moving information swiftly and identification of fraudulent activities quickly amongst the various stakeholders involved in the business.

5.6.3 Clear organizational culture





The organizational culture amongst the banking sector must be well articulated to involve the development of the various key stakeholders within the organization.

5.6.4 Clear communication strategy

Clear communication of the organizational vision and mission must be well implemented and executed such that there is a culture of implementing change within the organization according to the ever-changing business environment.

5.6.5 Stakeholder involvement

There must be a massive involvement of the internal stakeholders for effective implementation of the system that is needed for criminal investigation, especially within the banking sector.

5.7 Areas for further research

The must be a consideration of increasing the sample size. There must be the consideration and thoughts of involving other sectors such as the manufacturing sector to have an understanding of the implementation of forensic accounting. Forensic accounting needs to be implemented in every sector to curb criminal investigations in the country.

5.8 Final conclusion

Forensic accounting is an issue that has taken the criminal investigations to another level. The researchers noted that there is a need for organizations to adapt to changes that are happening within the business world. Security-wise the businesses need to embrace change so that they also remain relevant to their customers. The primary data indicated that forensic accounting is of rampant importance, and it needs to be embraced by the banking sector to curb and control the white-collar crimes that are happening within the banking sector. The advancement in technology around the world also calls for effective implementation of a robust system that technologically embraces technology in detecting, controlling and preventing crimes in the business fraternity.





REFERENCES

Accounting Web (2002): Financial scandals turn forensic accounting into a hot job. Available at http://www.accountingweb.com/cgibin/

Adegbite. FF, and Fakile. AS (2012): Economic and financial crimes in Nigeria: forensic accounting as an antidote. British journal of arts and social sciences, Vol 6, No 1; pp 37-50

Albanese, J. S. (1995). White-collar crime in America. Upper Saddle River: Prentice-Hall. NJ

AICPA (2005): Forensic Procedures and Specialists: Useful Tools and Techniques. Special Report by Business Valuation and Forensic and Litigation Services Section of AICPA.

Awoniyi, M.A. (2011). A Study of Ethnographic Marketing Patterns and Performance of Business Enterprises in Alaba International Market, Lagos, Nigeria

Blumberg, B., Cooper, D. R., & S.Schindler, P. (2011). Business Research Methods (2nd Europeans Edition Ed.). London: McGraw-Hill Higher Education.

Borsboom, D. (2010). A network theory of mental disorders. World Psychiatry, 16, 5–13. doi:10.1002/WPS.20375

Burns, N. and Grove, S.K. (2001) The Practice of Nursing Research, Conduct, Critique, and Utilization. Fourth Edition, W.B. Saunders Company, Philadelphia. Brown, T. A. (2006). Confirmatory Factor Analysis for Applied Research. New York: The Guilford Press

Cameron E and Green M, (2015) Making sense of change management. A complete guide to the models, tools and techniques

Centre for Forensic Studies (2010): Nigerian Institute of Advanced Legal Studies Lagos, Nigeria Roundtable on the Role of Forensic and Investigative Accounting: Challenges For the Banking Industry 19th July 2010.

Coenen, T.L. (2005), "Forensic Accounting": A new twist on bean counting".

Cottrell, R.R., and McKenzie. (, 2013). Health Promotion & Education Research Methods (2nd Ed.). Boston: Jones & Bartlett Publishers.

Creswell, J. W. (2017). Research Design: Qualitative, Quantitative and Mixed Methods Approaches (4th Ed.). Thousand Oaks, CA: Sage

Crumbley, D. L (2003) "What is Forensic Accounting". From www.edwardspub.com.







Crumbley, D. L (2006): Forensic Accountants Appearing in the literature. From www.forensicaccounting.com.

Crumbley, D. L. (2001) Forensic Accounting: Older than you think, JFA, 2 (2) 181

Effiong (2012): Forensic accounting education: an exploration of level of awareness in developing economies- Nigeria as a case study. International journal of business and management vol 7, no 4; pp26-34

Fouka G and Mantzoronu M, (2011) what are the major ethical issues in conducting research? Is there a conflict between research ethics and the nature of nursing, Health Science Journal?

Fincham J E (2008) Response Rates and responsiveness for surveys, standards and the journal, American Journal of pharmaceutical education

Fredrichs, K. (2007). Extract from Practices Bureau in Investigation. FBI Publishers, USA.

Golafshani H (2013) understanding reliability and validity in qualitative research, university of **Toronto**

Gravetter FJ and Farzano AB, (2017) Research Methods for the Behavioural Sciences 6th Edition

Grey, DE (2014). Doing Research in the Real World, London Sage Publishers

Grippo, F.I and Ibex, IW. (2003): "Introduction to Forensic Accounting"; the National Public Accountant; Washington.

Howard S. and Sheetz, M. (2006): Forensic Accounting and Fraud Investigation for non-Experts, New Jersey, John Wiley and Sons Inc.

Ijeoma NB (2015) empirical analysis on the use of forensic accounting techniques in curbing creative accounting, Department of Accountancy, Nnamdi Azikiwe University, Awka, Nigeria

Kasum, AS (2009): The Relevance of Forensic Accounting to Financial Crimes in Private and Public Sectors of Third World Economies: A Study from Nigeria. Proceedings of the 1st International Conference on Governance Fraud Ethics and Social Responsibility,

SSRN: http://ssrn.com/abstract=1384242

Jalagat R, (2016) the Impact of Change and Change Management in Achieving Corporate Goals and Objectives: Organizational Perspective, International journal of science and research







Joppe, M. (2010). The Research Process. http://www.ryerson.ca/~mjoppe/rp.htm

Kothari A, (2016) Research methodology: Methods and techniques, second revised Edition, new age international publishers

Leedy PD and Ormrod JE, (2015) Practical Research: Planning and Design, 10th Edition, Pearson Education,

Manning (2002): Financial investigation and forensic accounting. USA: CRC Press

Makina I & Keng'ara R (2018) Managing Strategic Change of an Organization's Performance: A Case Study of Nzoia Sugar Company, Department of Strategic Management, School of Business Studies and Economics, Maseno University Kenya

Mohd, SI and Mazni, A. (2008): An overview of Forensic Accounting in Malaysia; Kuala

Lumpur; University of Malaya Press Inc

Muga C.B. (2013) Change Management Practises. Nairobi Kenya

Mukoro, D., Yamusa, O., & Faboyede, S. (2013). The role of forensic accountants in fraud Detection And National security in Nigeria. Change and Leadership, 17: 90-106. Mukoro, D.O. Faboyede, S.O. & Edafejirhaye, V. I. (2011). Forensic Accounting and Fraud Management Perspective: An Integrated Approach. H-Link Excel, Lagos.

Nye, J. (1967). Corruption and Political Development: A Cost-benefit Analysis. American political science review, 16(2).

Ozil PK (2020) Forensic accounting theory

Polit, D.F. and Beck, C.T. (2014) Nursing Research: Principles and Methods. 7th Edition, Lippincott Williams & Wilkins, Philadelphia.

Remenyi, D.S.J.; Swartz, E.; Money, A. and Williams, B. (2015), Doing Research in Business and Management: An Introduction to Process and Method, SAGE Publications, London.

Richards JC and Schmidt RW, (2010) Longman Dictionary of Language Teaching and Applied Linguistics, Longman Publishing Group, 2002

Rissanen T, (2016) Introduction to Change Management; Tools for change, with a case study, Helsinki Metropolitan University





Saunders M, Lewis P and Thornhill A, (2016) Research Methods for Business Students, 5th Edition

Showkat N and Parveen H (2017) Non-Probability and Probability Sampling, Publisher: e-PG Pathshala

Singh, K. (2007). Quantitative social research methods. New Dehli: Sage Publications, Inc.

Strydom J, (2014) Principles of Business Management, Oxford

Sutherland, E. H. (1947). Principles of Criminology (4th ed.). Philadelphia: J. B. Lippincott. Sutherland, E. H. (1983). White-Collar Crime: the uncut version. New Haven, Ct: Yale **University Press**

Wallace, A. (1991): The Role of the Forensic Accountant. Retrieved on 20th March from www.ssrn.com

Voet J (2015) Change Leadership and Public Sector Organizational Change: Examining the Interactions of Transformational Leadership Style and Red Tape

Wyse, SE (2011) What is the Difference between Qualitative Research and Quantitative Research?

Yin, R. (2011). Case study research: Designs and methods. Thousand Oaks, CA: Sage Publications.

Yin, R. (2015). Qualitative research from start to finish. New York, NY. The Guilford Press.

Zarinpoush F, (2006) project evaluation guide for non-profit organizations: Fundamental methods and steps for conducting project evaluation, Canada

Zohrabi, M (2013) Mixed Method Research: Instruments, Validity, Reliability, and Reporting Findings. Theory and Practice in Language Studies, 3, 254-262.





7 Appendices

7.1 Appendix A: Questionnaire

This questionnaire was structured and designed in a way that you can share your experience with us about the role of forensic accounting in support of criminal investigation in the banking sector in South Africa.

Note that the information gathered using this questionnaire will be used towards the completion of my research study only and will be treated as confidential information as much as possible.

Honest and truthfulness in your answers are encouraged.

Thanking you in advance for your assistance.

CONFIDENTIALITY

Remember that any feedback given will be treated as classified and will only be used for this study.

INSTRUCTIONS

There are six sections in this questionnaire. Section A-F. Please complete all sections. Please mark with an X in the box of your choice.





