# Financial Statement Fraud: The Need for a Paradigm Shift to Forensic Accounting

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A thesis submitted in partial fulfilment of the requirements of

Sheffield Hallam University

For the degree of Doctor of Philosophy

April 2019

# DECLARATION

I hereby declare that:

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2. None of the material contained in the thesis has been used in any other submission for an academic award.

3. I am aware of and understand the University's policy on plagiarism and certify that this thesis is my own work. The use of all published or other sources of material consulted have been properly and fully acknowledged.

4. The work undertaken towards the thesis has been conducted in accordance with the SHU Principles of Integrity in Research and the SHU Research Ethics Policy.

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| Award | *PhD* |
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# ABSTRACT

The main aim of this study is to develop a forensic accounting system that will help in reducing financial statement fraud through not only its predictive properties; but also, the recommended forensic accounting procedures and policies which the accounting profession should adopt.

This study through a neo-empiricist inductive approach, that is premised on an objective collection of qualitative empirical data, has developed a forensic accounting system by exploring the perception of Accounting Academics, Forensic Accountants, External Auditors and Finance Directors using a purposive sampling method.

The findings revealed that the training of professional accountants', particularly external auditors, in forensic accounting skills, ethics, principles and procedures can increase their fraud detection capabilities which can, in turn, increase the chances of fraud detection in the financial statements and equally serve as a fraud deterrence mechanism.

The main output from this study was developed into a model called the "Forensic Accounting system". This model has three elements; Audit Concerns, Education, Accounting Standards and Regulations. These three elements are not mutually exclusive, but one element can be addressed per time. This new system stipulates that in order to reduce financial statement fraud, audit concerns (agency concern, role and responsibility of auditors, management responsibility and odd agency situation) need to be addressed. Of importance in the audit concerns element is the mandate of the auditors. The mandate of external auditors needs to include the detection of fraud in the financial statement.

Once the audit concerns have been addressed how auditors are educated will need to change. The changes that are required are some elements of forensic accounting to be incorporated into the curriculum and professional development of auditors. The last element of the new system is the accounting standard and regulations. Those grey areas that allow for the manipulation of the financial statements will need to be closed down by the standard setters. Two key issues here are the concept of materiality and auditors' responsibility.

This study has implication for standard setters on the need to make accounting and auditing standards fit for purpose to complement the corporate governance codes. Higher education and professional bodies should work along the changes in accounting standards and integrate some elements of forensic accounting into the education curriculum of professional accountants in order to increase their chances of detecting fraud in the financial statement and reduce financial statement fraud.

# ACKNOWLEDGEMENT

This thesis is dedicated to my family; to my Mum, I thank you for believing in my dreams and ability, and you never hold back support all through this process. I remain indebted to you till eternity. To my lovely wife, Bukola Gladys Awolowo, thank you for believing in the future I told you about. We started this journey on hope, believing by faith, that the future will be good. To my lovely kids, Martins Obafemi Awolowo and Victoria Ikeoluwa Awolowo, thank you for coming into my world. You both made me complete. **We Did It**

To my siblings, Oluwatobi and Itunuoluwa Awolowo, I really treasure you both.

My profound appreciation goes to my award-winning supervisory team – Professor Nigel Garrow, Dr Murray Clark and Dr Dora Chan. Thank you for your unrelenting mentorship, guidance, and support all through this journey. Thank you for creating the platform for me to grow and develop.

My appreciation also goes to Sheffield Hallam University for providing the facility and for their administrative support. I specifically want to thank Mrs Lesley Buick and Dr Lucian Tipi for their support and encouragement. I also like to thank all the participants used in this study.

I would also like to thank Dr Gabriel & Mrs Isy Mba for their encouragement and support all through this journey.

My appreciation also goes to Joseph Okoroafor, Tayo Surakat, Dr George & Dr Abimbola Yerima, Taiwo & Kehinde Olaomo, Oredola &Tobi Oni, Abiola & Adeola Adebayo, Modupe Ariwoola, Michael Apanisile, Olukemi Ogunjimi, Dr Khaled Kessaba, Dr Fazila Husain and other friends for their contribution and support in making this journey a success.

I bless the Almighty God who has made my dream come through. I have not been able to help myself; God helped me. …For **He Himself** has said, **I** will never leave you nor forsake you, so that you may boldly say: **The Lord Is My Helper**… (Hebrew 13:5-6).

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# LIST OF ABBREVIATIONS

AA - Accounting Academic

ACCA – Association of Chartered Certified Accountants

ACFE – Association of Certified Fraud Examiners

AIA – Association of International Accountants

AICPA - American Institute of Certified Public Accountants

ASB - Accounting Standard Board

CAQ – Centre for Audit Quality

CEO - Chief Executive officer

CFO – Chief Financial Officer

CPA – Certified Public Accountants

EA - External Auditor

FA - Forensic Accountant

FD - Finance Director

FRC – Financial Reporting Council

GAAP – Generally Accepted Accounting Principles

GAAS – Generally Accepted Auditing Standard

IAASB - International Auditing and Assurance Standard Board

ICAEW – Institute of Chartered Accountants of England and Wales

IFRS – International Financial Reporting Standard

ISA – International Standard on Auditing

PCAOB – Public Company Accounting Oversight Board

SAS - Statement of Auditing Standard

SEC – Security and Exchange Commission

SOA – Sarbanes Oxley Act

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# CHAPTER ONE: BACKGROUND AND RATIONALE

This chapter aims to give a detailed insight into what this study is all about. Specifically, the purpose of this study will be discussed. After that, the general background about financial statement fraud and the usefulness of forensic accounting in this age of information revolution will be highlighted, followed by a basic definition of forensic accounting, financial statement fraud, and paradigm. This chapter will also clearly explain the rationale for this study and define the coverage and scope of this research study. The key research questions will be highlighted, and the objectives of the study will be discussed.

The theoretical framework utilised in this study will be discussed briefly. The synopsis of how this study was carried out will be addressed, taking into consideration the philosophical underpinnings and the method of data collection. The structure in which this thesis will be reported will also be highlighted.

## 1.1 Purpose Statement

The purpose of this study is to develop a forensic accounting system that may help to reduce the incidence of fraud in the financial statement through not only its predictive properties but also, the recommended forensic accounting procedures and policies which the accounting profession should adopt.

This study has argued that the current accounting system of reporting and procedural auditing can no longer guarantee the prevention and detection of fraud in the financial statement (Smith & Crumbley, 2009). Through an understanding of the current perceptions of accountants, practitioners, regulators, and users of accounting services, this research has aimed to develop a plan that will enable the accounting profession to transition from an accounting system to a forensic accounting system.

Given the purpose of this study, the following section will provide my personal motivation for this research area and a general overview of the study.

## 1.2 Personal Motivation

Sixteen years ago, while I was undergoing my A ‘level program, I got introduced into buying shares by one of my lecturers after an exciting topic on issues of shares. I invested my pocket money into some companies that had an initial public offer at that time after consulting an investment broker that was introduced to me by my lecturer.

I was so excited about investing in my future. Two years after my investment into shares, everything looks pretty good as the value of the shares I bought have increased, giving me a good return on my investment plus the dividend I received every year from my investment made me happy. This motivated me to buy more shares, and I even encouraged my mum to invest in shares.

By late 2007, one of the companies I invested in went into liquidation without any warning signs as a result of financial statement fraud. I was so sad and depressed because I lost everything I invested in that company. I questioned why the auditors could not stop that fraud from happening.

Fast-forward into 2008; the global financial crisis caused another substantial damage to the value of my investment. I lost 80% of the value of my investment. Coincidentally, that was the same time I was undergoing my degree in accounting. I thought I was entering a noble profession that will protect the interest of the public. To my utmost surprise, all the modules I did during my undergraduate degree program never mentioned fraud detection, nor was I ever told that an auditor is responsible for detecting fraud in the financial statement.

This got me so worried. I then began to do my research on that aspect of accounting that has to do with fraud detection and investigation. In early 2009, I came across forensic accounting and after much reading around what it is all about; I said to myself, I am not going to be an accountant/auditor that cannot detect fraud. I will change my career path to forensic accounting.

During my research around where to study a master's degree in forensic accounting, I discovered at that time that no university in Nigeria and Africa offers forensic accounting courses. I saw two options in the UK (Sheffield Hallam University and the University of Portsmouth) and a few in the US. After much consideration, I opted for Sheffield Hallam University.

After undergoing an MSc in Forensic Accounting at Sheffield Hallam University and completing the Certified Fraud Examiners credentials, I now understand why auditors could not protect my investment by not detecting the financial statement fraud at that company. When I compared my training as an accountant up to professional level and the one I went through as a forensic accountant, there was a wide gap and I began to wonder why we can't train auditors in some of those elements of forensic accounting skills, ethics and principles that enables the detection of fraud in the financial statement or better still why can't we involve forensic accountants in audit engagement to increase the chances of fraud detection in the financial statements in order to protect the investment of people like me who invested their last penny to secure a future for themselves.

From the Royal Mail Steam Packet Company scandal of 1931, to Equity Funding scandal 1973, down to Polly Peck 1990, Enron 2001, Madoff 2008, Olympus 2011, Tesco 2014, Toshiba 2015, Patisserie Valerie 2018, the accounting profession still appears not to have learnt any lesson from corporate collapse as a result of financial statement fraud.

That was the point I told myself that it takes one person to make a difference. I will engineer a revolution in the profession of accounting. That revolution has just begun; the accounting profession must take responsibility for detecting fraudulent financial reporting. That was what led me to commit the last 3 and half years of my life as a self-funded student with a very young family to embark on this doctoral journey.

## 1.3 General Background of the Study

Over the past 500 years, the primary concepts of accounting and auditing have not changed (Silverstone, et al., 2012). Surprisingly, in this age of information revolution, the accounting profession still relies on an audit technique that was utilised before the industrial period. The reliance on this industrial age audit technique has resulted in an unrelenting series of embarrassing audit failures, corporate collapses and financial statement fraud which should call for greater concern by the accounting profession (Gray & Moussalli, 2006).

The series of embarrassing audit failures that have occurred over the past two decades, for example, should have caused the accounting profession to re-examine and re-establish the necessary accounting procedures, auditing techniques and accounting education (Apostolon & Crumbley, 2005) and are probably enough to stimulate a possible paradigm shift in accounting (Gray & Moussalli, 2006; Koh, et al., 2009; Awolowo, et al., 2018; Griggs, 2019).

At the turn of the millennium, we witnessed some high-profile companies around the world like Enron, WorldCom, Adelphia, Xerox, Quest, Tyco International, Parmalat, AIG and other companies engaged in financial statement fraud. Moreover, more recently we saw Olympus (2011), Tesco (2014), Toshiba (2015), and Patisserie Valerie (2018) among others repeating the same accounting scandal that brought down Enron, the $7^{th}$ largest company in America history (Farrell, 2015). While some of these companies that have engaged in financial statement fraud collapsed entirely (Wolfe & Hermanson, 2004), others filed applications to restate their financial statements (Carnes & Gierlasinski, 2001) or were forced by the accounting regulatory authorities to restate their financial statements (Smith, 2015).

In November 2017 in the UK, Palmer and Harvey went into Administration without any warning signs (Garrow & Awolowo, 2018). By January 2018, Carillion went into liquidation, again without any warning signs (Garrow, et al., 2019). By March 2019, Interserve joined the league of companies that have collapsed into administration (Plimmer, 2019; Ambrose, 2019). Toys “r” Us, BHS, House of Fraser, Pound-world, Maplin, and Cloggs, among others, all went into administration without any warning signs before mid-2018.

This kind of occurrence is a severe threat to the integrity of financial reporting and corporate governance systems (Hogan, et al., 2008; Smith & Crumbley, 2009; Bhasin, 2013)  and often result in a loss of confidence in the financial reporting process by investors and other stakeholders (Hogan, et al., 2008; Smith, 2015).

Take for instance, in the aftermath of the Enron accounting ‘shenanigans’, the Chair of Board and President of the American Institute of Certified Public Accountants issued the following joint statement: *“Our profession enjoys a sacred public trust and for more than one hundred years has served the public interest. Yet, in a short period, the stain from Enron's collapse has eroded our most important asset: Public Confidence”* (Castellano & Melancon, 2002, p. 1).

### 1.3.1 Financial Statement fraud definition

Fraud, particularly that which relates to financial statements is in the news virtually every week, if not daily (Carnes & Gierlasinski, 2001; Bressler, 2012). Financial statement fraud is a form of "occupational fraud" (ACFE, 2016), which involves the *"deliberate misrepresentation of the financial condition of an enterprise accomplished through the intentional misstatement or omission of amounts or disclosures in the financial statements to deceive financial statement users"* (ACFE, 2018).

### 1.3.2 Accounting Paradigm/System

The intensification of finance capitalism – the pursuit of profit (Edwards, 1938), poses questions about the knowledge base and skill set of auditors. For over a century, auditors have utilised methods of an industrial age in which tangible things could be examined, counted and measured and their values could be checked from invoices and vouchers. Such a world does not exist anymore. Complex financial instruments, e.g., derivatives have eclipsed it, whose value depends on uncertain future events and can be anything from zero to several million dollars/pounds (Sikka, 2009; ACFE, 2016).

The term Paradigm is a vague concept (Masterman, 1967). It was made famous by the classic work of Thomas Kuhn *"Structure of Scientific Revolution*" Paradigm according to Kuhn "*is a universally recognised scientific achievement that for a time provides model problems and solutions to a community of practitioners"* (Kuhn, 1962, p. x).

Following on from Kuhn's notion of paradigm, an accounting paradigm or better put system can be viewed as those set of principles, concepts, regulations, standards, and conventions that for a time governs how financial information are prepared, presented, reported and verified by the actors in the business community.

Following Kuhn, this study observed that a system is subject to change of time. As society changes, so does how businesses conduct around the world subject to change. Hence there is a need for the Accounting profession to respond to the current realities of the event in this age of globalisation and information revolution and step up the fight against financial deception.

Stephen Griggs, a senior managing partner at Deloitte UK, made the following remark in The Times newspaper on the 2nd of April 2019 "*For many years we have talked about the role that auditors play in providing trust and confidence in the capital market. Yet audit has not moved with times. We need to do more to evolve it to meet the expectations of all stakeholders*" (Griggs, 2019, p. 45)

Nowadays, the frequency at which corporate entities collapse because of financial statement fraud has raised a serious question on whether the current accounting system of reporting and financial controls are working (Smith & Crumbley, 2009; Garrow, et al., 2019). We recently witnessed the collapse of Patisserie Valerie into administration in early 2019 as a result of financial statement fraud (Uttley, 2019).

Financial statement fraud has now become a global phenomenon that can occur in any organisation regardless of size (Bhasin, 2013). It is, however, often the practice of the media to report only those high-profile fraud of large multinational corporations (ACFE, 2014). The reasons for reporting high profile fraud of multinational corporations is probably because this multinational corporation fraud usually has an enormous negative impact on a company's existence as well as market value (Hogan, et al., 2008).

The negative impact of financial statement fraud is not only threatening the going concern of the company, but impacting other stakeholders in various ways including, but not limited to, loss of jobs and pensions, reduction in stock prices and shareholders' values, and corporate reputational damage (Colby, 2013). Furthermore, financial statement fraud was claimed to be a significant contributor to the global financial crisis of 2008 (Black, 2010). Financial statement fraud is a threat to the efficiency, liquidity, and safety of both debt and capital markets (Black, 2010).

Organisations lose a considerable amount of money to corporate accounting fraud globally. The Association of Certified Fraud Examiners (2018) reports estimated the cost of corporate fraud globally to be $3.7 trillion. Financial statement fraud is detrimental to the safety, soundness, and efficiency of the financial markets globally (Rezaee & Wang, 2017).

Bhasin (2013) suggests that the corporate accounting scandals that occurred over the past two decades did not come as a shock because of the enormity of the failures but also that the discovery of these scandals questions the integrity and capabilities of the profession of auditing. The waves of 21st-century financial scandals have, therefore, raised the awareness of fraud and the responsibilities of auditors in detecting those fraud (Rezaee , et al., 2006; Hogan, et al., 2008; Holm & Zaman, 2012).

Sadly, the prevailing wisdom in the accounting profession might be seen as one of complete denial of the responsibility for the prevention and detection of fraud in the financial statement (Gray & Moussalli, 2006; Griggs, 2019). This denial is evident in the International Standard on Auditing (ISA) 240 which places the responsibility for the prevention and detection of fraud on those charged with the management and governance of the entities (ISA 240, 2009). This denial makes one wonder what the role of auditors is in reducing the scope of information asymmetry which is evident in an agency relationship which exists between shareholders and the management.

This denial has not prevented financial statement fraud from occurring; neither has it prevented the profession from been heavily criticised and questioned by stakeholders after any revelation of fraudulent financial reporting. The first question the business community is always quick to ask after any announcement of fraudulent financial reporting, is **who are the auditors?** (Carnes & Gierlasinski, 2001; Wolosky, 2004; Awolowo, et al., 2018).

Take for instance; two separate events that occurred in Britain and American between 15th of August and 16th of August 2017, Price Waterhouse Cooper (PWC) and KPMG were both fined £5.1 million and $6.2 million respectively for audit failures. KPMG was penalised for signing off an unqualified audit report of Miller Energy which later turned out to be fraudulent (Murphy, 2017), whereas, PWC was fined after admitting misconduct concerning RSM Tenon audit failure (The Irish Times, 2017).

Furthermore, PWC was hit with a record £6.5m fine in June 2018 by the UK accounting watchdog over misconduct about the Big Four accounting firms' audits of the retailer BHS two years before its collapse (Marriage & Samson, 2018). Their Audit partner, Steve Denison, was equally fined £325,000 and banned for 15 years by the watchdog for poor audit work (Butler, 2018). The conclusions of the Financial Reporting Council's (FRC) investigation come two years after it launched an investigation into audit work at BHS following the department store collapse into administration with the loss of 11,000 jobs (Marriage & Samson, 2018; Butler, 2018).

In addition, KPMG was fined more than £3m by the FRC for misconduct relating to the scandal-hit insurance software firm Quindell, which changed its name to Watchstone, in 2015. The penalty was reduced from £4.5m as part of a settlement agreement (Butler, 2018). Elsewhere in Japan, Japan's financial regulator fined Ernst & Young affiliate 2.1 billion yen ($17.4 million) after the firm's audit of Toshiba Corporation accounts failed to spot irregularities in the country's worst accounting scandal in years (Reuters, 2015).

Another dimension to this issue is that auditors are always the first set of individuals to lose their jobs after any revelation of fraudulent reporting. Such was the case of Tesco, who ended their 32 years audit relationship with PWC after the announcement of their accounting scandal and appointed Deloitte as a replacement in 2014 (TheGuardian , 2015).

Also in Japan, Olympus changed their auditor from KPMG AZSA LLC to Ernst & Young Shin Nihon LLC immediately after Michael Woodford exposed the most prominent corporate scandal in Japanese history in 2011 (Aubin & Uranaka, 2011). The same happened to Toshiba who also changed their auditor from Ernst & Young ShinNihon to PWC Aarata after the company was found overstating its profit by $1.3 billion in a fraud that spans over seven years (Inagaki, 2017).

One Japanese professor of accounting, Shinji Hatta made the following remark after the revelation of the Olympus accounting scandal which dated back to the 1990 "Maybe *KPMG AZSA accountants thought it was not important. But it was important and overlooking this, in my opinion, is a grave issue in terms of auditing*" (Reuters, 2011, p. 5).

Furthermore, the politicians in Japan also gave some remark in respect of the Olympus accounting scandal. The head of New Komeito, Japan's second-largest opposition party; Natsuo remarked that "*We may need to reassess the accounting system as a whole if auditors were unable to fully point out problems their clients were involved in*" (Aubin & Uranaka, 2011, p. 16).

What this suggests is that the business community demand auditors and the accounting profession to improve their fight against financial deception. This is, however, somewhat difficult with the current accounting system and culture of reporting and procedural auditing. Hence, the needs for a system shift to forensic accounting.

The high incidence of financial statement fraud led Congress in the United States in 2002 to legislate the Sarbanes Oxley Act (SOA) and abroad in South Africa was the King's Report (2009) and still elsewhere in the United Kingdom the UK Code of Corporate Governance (2012) was introduced which was then revised in (2014). A consultation was initiated in early 2018, but there were no remarkable changes when the final report was published in mid-2018 (Sikka , et al., 2018). The SOA, UK Code of Corporate Governance and other regulations around the world can be seen as an attempt to reduce the incidence of fraudulent financial reporting (Wolfe & Hermanson, 2004; Sikka , et al., 2018).

Even though the SOA of 2002 has successfully increased the responsibilities of auditors about fraud prevention and detection in the financial statement and also separated the position of the Chairman of companies from that of the Chief Executive officer (CEO) and Chief Financial Officer (CFO) (McConnell Jr & Bank, 2003) not much has been achieved.

The series of accounting scandals, audit failures, and corporate collapses that have occurred after the enactment of the SOA and other corporate governance codes have pointed out that the issue of financial statement fraud and audit failures is far from being solved (Hogan, et al., 2008). Besides, increasing auditors' responsibilities without commensurate training in forensic accounting will not help solve the problems (Awolowo, 2014).

### 1.3.3 Definition of Forensic Accounting

Forensic accounting is the application of accounting, tax, auditing, finance, quantitative analysis, investigative and research skills, and an understanding of the legal process for identifying, collecting, analysing, and interpreting financial or other data or issues in connection with litigation and non-litigation services (Rezaee , et al., 2006).

Wolosky (2004) posits that being a good accountant does not translate to a good forensic accountant. The training and the way transactions are looked at is different between a forensic accountant and an auditor. Being an excellent forensic accountant requires the professional to possess a broad spectrum of skills, ethics, and knowledge (Wolosky, 2004). These broad spectrums of skills and expertise are what make forensic accountants' standout in the crusade against financial deception (DiGabriele, 2009).

Hence, this study set out to develop a forensic accounting system which has the potential to help reduce the incidence of fraud in the financial statement by exploring the perceptions of accountants, practitioners, regulators, and users of the financial report on how this system shift can reduce financial statement fraud.

Moreover, more recently, evidence has shown that the perception of the business community, government, regulatory authorities, and even the courts is that a higher degree of expertise is required to analyse current complex financial transactions and events (DiGabriele, 2008; Garrow & Awolowo, 2018). As a result of this, forensic accounting is required to be thrown into the forefront of the crusade against financial deception (Rezaee , et al., 2006).

Having discussed the general background of this study, the following section will now provide the rationale for this study.

## 1.4 Rationale for the Study

### 1.4.1 Why is financial statement important?

The separation of ownership from control which is elsewhere called the Anglo-Saxon Model (Ahmad & Omar, 2016; Garrow & Awolowo, 2018) has made the financial statement the primary mechanism for monitoring the performance of a company by its shareholders (Cuervo, 2002). The audit which serves a vital economic purpose plays a very crucial role in controlling the performance of management in an agency relationship, thereby, reinforcing trust and confidence in the financial reporting process (ICAEW, 2005; Holm & Zaman, 2012; Mueller, et al., 2015).

The end product of an organisation's accounting cycle is to produce a financial statement. This financial statement represents the company's financial position and periodic performance (Albrecht, et al., 2015). The accounting cycle that organisations usually go through includes the procedures for analysing, recording, classifying, summarising, and reporting the transactions of a business or organisation (Power, 2003). Financial statements are a legitimate part of good management and provide relevant information for stakeholders (Epstein, et al., 2010).

Over the last fifty years, however, the business community has experienced a syndrome of ethical breakdowns worldwide, which includes exceptionally costly financial statement fraud (Albrecht, et al., 2015). In the past two decades, for example, many headline-grabbing cases of fraudulent financial reporting at public companies have rocked the capital market (Kravitz, 2012).

For example, in 2001, the news of Enron collapse rocked the capital market damaging investment of over $74 billion (Ackman, 2002); in 2002, WorldCom investors lost over $180 billion because of accounting fraud; then in 2003, accounting fraud of $20 billion black holes was discovered at Parmalat, an Italian milk processing giant (Boland, 2008); in 2011, Michael Woodford exposed the most significant corporate accounting fraud in Japanese history, the Olympus accounting scandal was over $1.7 billion (Greenfeld, 2012); in 2014, Tesco was caught overstating its profit by £263 million (BBC News, 2014); in 2015, the revelation of Toshiba inflating its profit by $1.2 billion came to limelight (Suzuki, 2015); in 2019, a £40 million accounting black hole was discovered in Patisserie Valerie (Uttley, 2019).

Interestingly, in the financial statement fraud cases listed above, their accounts were all audited, and yet this massive fraud were not spotted during the external audit. The question shareholders kept asking after the revelation of these accounting scandals is **who are the auditors?** What this suggests is that the current accounting systems which consist of reporting and procedural auditing might no longer be able to guarantee the prevention and detection of fraud in the financial statements in this age of information revolution and globalisation.

Moreover, holding the narratives that the job of the auditor is not to detect fraud might no longer stand in the foreseeable future considering the high level of criticism that usually greeted any revelation of fraudulent financial reporting (Mueller, et al., 2015). The assertion of Lord Justice Lopes in the late nineteenth century that an auditor is a watchdog and not a bloodhound (Baxt, 1986) might no longer hold water in the 21st century.

The reoccurrences of financial statement fraud and audit failures prompted Golden (2011) to make the following address to the senior accounting students at the University of Texas "*people wonder, investors wonder, legislators wonder, they wonder what is it that auditors really do. They wonder what value auditors bring, and I worry that the profession of auditing both internal and external may someday become irrelevant to the capital market"*.

The former Vice President of the American Institute of Certified Public Accountants (AICPA) once said that "*As long as investors suffer losses from a sudden and drastic drop in earnings or the bankruptcy of a corporation which was widely regarded as a good investment our profession is going to be criticized in the news media"* (Humphrey, et al., 1992, p. 138).

One fundamental point is that accounting constitutes a central element of any business success or failure. The role of accounting is vital to the capital market. Accounting enables businesses to keep a set of records, to give investors and other users a picture of how well or poorly the firm is doing (Jones, 2011). Therefore, the quality of the services the accounting profession offers to the capital market needs to be improved on, particularly the fraud detection capacity of professional accountants which have not been achievable in the current accounting paradigm/system.

Dipasquale (2000) cited in Wolosky (2004) believes that accountants must be attuned to detecting fraud at every level of service, including standard accounting services, compilation, reviews, and bank reconciliation. He argued that if there is fraud and you do not detect it, you are going to be sued and you will likely lose, as the public perception is that an accountant is a watchdog.

In a similar vein, Wells (2005 p. 13) contends that "*As a group, CPAs are neither stupid nor crooked. But the majority are still ignorant about fraud. For the last 80 years, untrained accounting graduates have been drafted to wage war against sophisticated liars and thieves. And as multi-billion-dollar accounting failures have shown, it has not been much of a fight*".

Wells (2005 p. 13) also went on to argue that *"accountants do not currently learn what motivates fraudulent conduct, how to spot the signals, how to prevent fraud from occurring and much more…as it stands now, auditors are fighting a war without being taught how to recognise the enemy. Until that changes, expect more heavy casualties".*

Even convicted felon Samuel Antar, on his websites http://www.whitecollarfraud.com made the strong remark that *"You are not getting courses in criminality or psychology. You are not getting courses in what motivates people like me to commit the crime that I committed that are going to destroy your careers possibly. They are going to cause investors to lose hundreds of millions of dollars"*

In a similar vein, Smith and Crumbley (2009) contend that an auditor's legal liabilities for not discovering their client's fraudulent financial actions are just not going to disappear. It is hard to understand how the liability for undiscovered fraud or other malfeasance can be reduced by continuing to strongly rely on the present rule-based, auditing-reporting model (Smith & Crumbley, 2009). Hence, there is a need for a system shift to forensic accounting.

An argument that Awolowo (2014, 2016) put forward is that until the present day accountants (mainly external auditors) are trained in the forensic accounting skills, ethics, principles and start acting like detectives, the way and manner in which fraud is hidden in nowadays complex financial transactions will continue to threaten the integrity of financial reporting and corporate governance. Therefore, it is imperative for the profession to have a critical look at the way forensic accounting is conceptualised in the accounting education syllabi and training protocols.

The critical context of this research is how long will the accounting profession keep shying away from the responsibility of providing credible financial reporting. The courts have often argued in most accounting scandal cases that the cardinal objective of a financial statement audit is to certify that the financial statements are free from material misstatement resulting from either errors or fraud (Britten, 2011).

With the increasing popularity and demands for forensic accounting services concerning fraud prevention, detection and investigation, the time may have come for a system shift in accounting to forensic accounting. To protect the integrity of the profession, and restore trust into the financial reporting process, there is a need to look for a more robust way of reducing the incidence of fraudulent financial reporting in our financial statements.

Just recently, Griggs remarked that the profession of accounting have a once-in-a-generation opportunity to create a forward-looking vision of an audit that is valuable to all stakeholders, meets the highest standards of quality and protects the UK as a world-leading capital market (Griggs, 2019).

More so that research has consistently confirmed that preventing fraud and uncovering deceptive accounting practices are in strong demand as companies respond to closer scrutiny of their financial activities by shareholders and government agencies (Kahan, 2006; DiGabriele, 2008).

Even the AICPA article in 2004 reasoned that there should be an increase in the use of forensic accounting procedures to detect fraud in the financial statement. The institute contends that forensic accountants and external auditors have different mindsets. As such audit teams need to be trained to incorporate more forensic accounting procedures into their audit practices and to retain more forensic specialists to help detect problems.

Since 2004 nothing has changed. Auditors are neither trained in forensic accounting skills, ethics, principle, and procedures nor were forensic accountants involved in the audit engagement. Revelations of fraudulent financial reporting have continued to come to the limelight, and the profession of accounting is always being questioned following any discovery of fraudulent financial statements. As such, there is a need for actions. Moreover, for this to happen, there is a need to understand the perceptions of stakeholders within the accounting profession and the users of financial statement about the forensic accounting system capacity in reducing financial statement fraud. The following section will discuss the theoretical framework adopted in this study.

## 1.5 Theoretical Framework

The two theoretical frameworks that underpin this study are the Agency Theory (Jensen & Meckling, 1976) and the Fraud Triangle Theory (Cressey, 1950). While Agency Theory was utilised in establishing the role of audit and the weaknesses of the current system in fraud detection, the Fraud Triangle Model was being used in giving the account of the three elements that could make management commit financial statement fraud. The two theories will be considered in more details and linked together in Chapter Two (Literature Review).

Some theoretical perspectives can be used in understanding how a corporation works. e.g., Stewardship Theory (Donaldson & Davis, 1991), Broken Trust Theory (Albrecht, et al., 2004) and Agency Theory (Jensen & Meckling, 1976). Each of these theoretical perspectives provides its mode of interpretation. An understanding of the nature of an organisation is primarily affected by the ability to analyse individual actions and behaviours in organisational settings (Chariri, 2008).

The choice of Agency Theory is based on its ability to inform the critical role audit plays in the capital market, making the Fraud Triangle Model highly compatible with Agency Theory in developing the forensic accounting system and its fraud prevention and detection capacity. The Fraud Triangle Model explains the three elements that are responsible for criminal violation of trust. Wolfe and Hermanson (2004) improved on the Fraud Triangle Theory and added the fourth element which they called capacity to form the Fraud Diamond Model. With these theoretical frameworks in mind, the following section highlights the research questions that this study hopes to answer.

## 1.6 Research Questions

Given the critical role audit plays within Agency Theory and an understanding of the Fraud Triangle Theory and the Fraud Diamond Model, the following research questions will enable the development of a forensic accounting system and a smooth transition from the current accounting system of reporting and procedural auditing to a forensic accounting system:

1. Could the training of professional accountants (particularly auditors of the financial statement) in the forensic accounting skills, ethics, procedures, and principles help reduce the opportunities to commit financial statement fraud by the agent (management)?

2. How might the training of professional accountants in forensic accounting skills, ethics, procedures, and principles increase auditors' fraud detection capabilities?
3. How might the involvement of Forensic Accountants in audit engagement increase the chances of fraud prevention and detection in the financial statement?

Having established the research questions of this study, the following section will highlight the research objectives of this study.

## 1.7 Research Objectives

The primary objective of this study is to develop a forensic accounting system which can help to reduce financial statement fraud through an understanding of the perceptions of statutory auditors, forensic accountants, Accounting academics and Users of financial statement (Finance Directors) in the United Kingdom on the subject matter.

### 1.7.1 Specific Research Objectives

1. Establish, if any, what the current accounting paradigm/system is. Its strength and weaknesses in fraud detection.
2. Develop the forensic accounting system and its fraud detection capacity
3. Develop a strategy for moving from the current accounting system of reporting and procedural auditing to the new system of forensic accounting.

With these objectives in mind, the following section will give a synopsis of the research methodology adopted in this study.

## 1.8 Research Methodology

This study adopts a Neo-empiricist inductive analytical approach. Neo-empiricism is a *"theoretical perspective that assumes the possibility of unbiased and objective collection of qualitative empirical data"* (Alvesson & Deetz, 2000, p. 62). Neo-empiricism is used to denote "t*hose management researchers who place reliance upon empirical evidence as capable of ensuring objective truth yet simultaneously reject the positivist ideal of discovering laws through deploying hypothetical-deductive methods*" (Johnson & Duberley, 2003, p. 181).

A qualitative research design was adopted with the interview being the primary data collection tool. Data analysis was guided by a general inductive approach which resulted in the emergence of three main themes which were utilised in the development of the forensic accounting system.

## 1.9 Thesis Outline

This thesis comprises of nine chapters. Chapter Two reviews the literature on occupational fraud and abuse (financial statement fraud), forensic accounting, and auditing. Agency Theory (Jensen & Meckling, 1976), Fraud Triangle Theory (Cressey, 1950) and Fraud Diamond Model (Wolfe & Hermanson, 2004) were used as a lens in understanding the role of audit and towards developing a forensic accounting system. Chapter Three justifies the research methodology adopted for this study. Specifically, the issue of ontology and epistemology were discussed from a neo-empiricist theoretical perspective which is the research paradigm that underpins this study.

Chapter Four examines the resulting data from this study. The process of data reduction through a general inductive approach will be discussed in this chapter. Chapter Five examines the first central theme of this study (Audit Concerns). Chapter Six looks at the second central theme of this thesis (Education). Chapter Seven examines the last central theme that emerged from the empirical investigation of this study and shows the development of the forensic accounting system. Chapter Eight highlights the contribution of this study to accounting theory and practice. Chapter Nine presents the conclusions from this research and their implications for standard setters, higher education and corporate governance. The final chapter includes recommendation for further research and investigation.

# CHAPTER TWO: LITERATURE REVIEW

This chapter synthesises the work of previous researchers on financial statement fraud, auditing, and forensic accounting. A purpose of this study is to explore the perception of stakeholders within the accounting profession about how a system shift to forensic accounting can reduce financial statement fraud through the development of a forensic accounting system. This chapter will be utilising the agency theory (Jensen & Meckling, 1976), the fraud triangle theory (Cressey, 1950) and the fraud diamond model (Wolfe & Hermanson, 2004) as theoretical underpinnings. These theoretical underpinnings will be used to inform the research questions for this study. The most widely used definitions of forensic accounting will be articulated, and the differences between forensic accounting and auditing will be explored.

Fraud will be looked at generally, and financial statement fraud will be looked at individually. The responsibilities of auditors concerning fraud detection in the financial statement will be discussed; the progression of how this responsibility has changed over time will be highlighted. The importance of forensic accounting will be examined by focusing on forensic accounting skills, attributes, and knowledge. After that, a provisional conclusion will be drawn based on the review of the literature on how a forensic accounting system might help to reduce the financial statement fraud.

## 2.1 Theoretical Framework

The two main theories that underpin this study are the agency theory (Jensen & Meckling, 1976) and the fraud triangle theory (Cressey, 1950). While agency theory will be utilised in establishing the role of audit and the weaknesses of the current accounting system in fraud detection, the fraud triangle model gives an account of the three elements that could enable management to commit financial statement fraud. The two theories will now be considered in more details and linked together.

### 2.1.1 The Fraud Triangle in Agency Theory

#### *2.1.1.1 What is an audit for?*

In order to understand and appreciate the role that an audit plays in the business community, mainly its role in the capital market, agency theory (Jensen & Meckling, 1976) will be utilised in providing insight and a theoretical argument.

The audit is regarded as a vital economic tool for accountability. It plays an essential role in serving the public interest by strengthening and reinforcing trust and confidence in the financial reporting process (ICAEW, 2005). The separation of ownership from control of corporations means that the financial statement is a crucial mechanism for shareholders to monitor the performance of management (Cuervo, 2002). Moreover, an audit which serves a vital economic purpose plays a crucial role in reinforcing trust (Mueller, et al., 2015) and confidence in the agency relationship that exists between principal and agent (shareholders and management respectively).

In an agency relationship, external audit is promoted as a trust engendering technology to persuade the public that the capitalist corporation and management are not corrupt, and that company and their directors are made accountable (Sikka, 2009). According to the ICAEW (2005), audit is perceived to be an independent check on the work of the agent and the information provided by the audit help to maintain confidence and trust. The audit was designed to serve as a mechanism for reinforcing trust between the principal (shareholders) and agent (management). Hence, the purpose and importance of audit to the business community, particularly the capital market, can best be understood from the agency theory perspective.

### 2.1.2 Agency Theory

There are a few theoretical perspectives that can be used to understand how a corporation works, for example, stewardship theory (Donaldson & Davis, 1991), broken trust theory (Albrecht, et al., 2004) and agency theory (Jensen & Meckling, 1976). Each of these theoretical perspectives provides its mode of interpretation.

An understanding of the nature of the organisation is primarily affected by the ability to analyse individual actions and behaviours in organisational settings (Chariri, 2008). Agency theory which is elsewhere called contracting theory is one of the theoretical perspectives that has been widely used in understanding organisations and has been seen to dominate current accounting research (ICAEW, 2005; Choo & Kim, 2007; Chariri, 2008). Agency theory was first introduced to management literature by Jensen and Meckling (1976) (Albrecht, et al., 2004; Choo & Kim, 2007; Colbert & Jahera, 2011).

Agency theory provides a foundation for understanding human organisational arrangements including incentives compensation, auditing, and many bonding arrangements (Choo & Kim, 2007). The agency theory serves as the most prominent and widely used audit theory (Chariri, 2008). It is regarded as a valid economic theory of accountability (ICAEW, 2005).

The theory provides a formal framework for studying agency relationships and has been recognised as a dominant research paradigm in describing and explaining the contractual relationship that exists between the principal and the agent (Chi, 1989). Within the agency theory, an organisation is viewed as the locus or intersection point for many contractual type relationships that exist among management, owners, creditors and other actors (Chariri, 2008).

In the classical work of Berle and Means (1932, p64), modern corporation is perceived as a "*means whereby the wealth of innumerable individuals has been concentrated into huge aggregates and where control over this wealth has been surrendered to a unified direction."*

In synthesising the early works of Berle and Means (1932), Jensen and Meckling (1976) described and analysed the abstract set of economic relationship that exists between firm managers and investors. They went ahead to define the agency relationship as "*a contract under which one or more persons (the principals) engage another person (the agent) to perform some service on their behalf which involves delegating some decision-making authority to the agent."*

The focus of Jensen and Meckling (1976) is on the analysis of the economic relationship that exists between the principal (shareholders) and the agent (management). Agency theory describes the principal-agent relationship that exists between shareholders and management, with top management acting as an agent whose personal interest do not naturally align with the company's and the shareholders interest (Jensen & Meckling, 1976).

Tipuri and Podrug (2010) observed that the agent will always seek to maximise personal goals and achieve economic objectives of the principal and the agent level of commitment will be a function of their perceptions about the expected value of rewards for the achievement of financial targets of the principals. Agency theory assumes that, by itself, the wealth of the principal will not be maximised because the agent and principal have different objectives, access to information and level of risk affinity (Tipuri & Podrug, 2010).

The agency theory is premised on the economic perspective which assumes that a conflict of interest characterises the relationship between the principal and the agent (Albrecht, et al., 2004; ICAEW, 2005; Choo & Kim, 2007; Chariri, 2008). The line of reasoning of the agency theory is from the economic models that argue that people are only motivated by self-interest and self-preservation (Albrecht, et al., 2004). In order words, the underlying agency theory is a set of behavioural assumptions about the agent. The assumption holds that all agents are unconstrained self-interest maximisers who do not act in the best interest of the principal (Albrecht, et al., 2004). Hence, there is a need to align the interest of both the agent and the principal.

The line of reasoning of the agency theory can be captured from the theory of motivation and management advanced by Douglas McGregor which is called theory X. Theory X posits that human beings are inherently lazy and have a dislike for work and wish to avoid responsibility and want security above all (McGregor, 1960).

Consequently, managers are perceived as individuals who solely act in their own interests, which may conflict with the organisation's best interest. Such conflict usually occurs between agent and principal. This conflict of interest usually occurs as a result of information asymmetry (Arnold & de Lange, 2004). Information within an organisation is very critical to decision making, and management working at the coal face of the operations are privy to essential information that can be manipulated to maximise their interest at the expense of the principal (ICAEW, 2005).

As a result of this, management (agent) have a competitive advantage of information within the company over that of the owners (principal). The information advantage that the agent has resulted in the inability of the principal to control the desired action of the agent (Arnold & de Lange, 2004).

This conflict of interest is called **agency problem** (Albrecht, et al., 2004). Because of information asymmetries and self-interest, principal lacks reasons to trust their agent and will seek to resolve these concerns by putting in place mechanism to align the interest of agents with those of the principal and to reduce the scope for information asymmetries and opportunistic behaviour (Albrecht, et al., 2004; ICAEW, 2005).

Several mechanisms can be used to align the interest of the agent with that of the principal and to allow the principal to measure and control the behaviour of their agent and reinforce trust in the agent. Brigham and Houston (2007) suggest several measures that can motivate managers to act in shareholders' best interest: managerial compensation, direct intervention by shareholders, firing, and threat of takeover.

Lasher (2010) suggests that the effective management of the agency problem includes monitoring of the agent's work. One of the mechanisms for effective management of agent work is intended to be the external audit. While some other mechanisms, such as good compensation plan, internal audit, and corporate governance are internal in nature, and can be overridden by management to suit their very purpose. External audit appears to be external in nature (Awolowo, et al., 2018). External audit serves as a fundamental mechanism in promoting confidence and reinforcing trust between the principal and the agent (ICAEW, 2005).

According to the agency theory, the very purpose of the external audit is to serve as an instrument for ensuring that financial reports figures and narratives have been subjected to independent scrutiny by competent external auditor (Wolk & Tearney, 1997). What the independent audit represents in this regard is a bastion of safeguards implemented by the principal in the agency relationship to monitor the agent (Arnold & de Lange, 2004).

Wolk and Tearney (1997) noted that audit attempts to give assurance to owners and outsiders regarding the governance of the enterprise by the management. An audit is intended to minimise the agency cost. This is so because an independent specialist auditor can monitor management behaviour, and report more efficiently and effectively than the principal (Godfrey , et al., 2003). This is very important because much of the time, the principal do not have the required skills and knowledge to monitor the performance of the agent. As such, they rely on the external audit.

As further observed by Sikka (2009), external audits are expected to produce comfort by reassuring the stakeholders that the technology provides an external and objective check on how the financial statements have been prepared and presented. External audit is an essential exercise in providing reassurance to all those who have a financial interest in companies (Sikka, 2009).

Within the agency relationship, external audit serves a dual role which is indicated in Figure 2.1. below. External audit is that unique link between the principal and the agent. It serves an investigative role to the agent and an attestation (assurance) role to the principal.

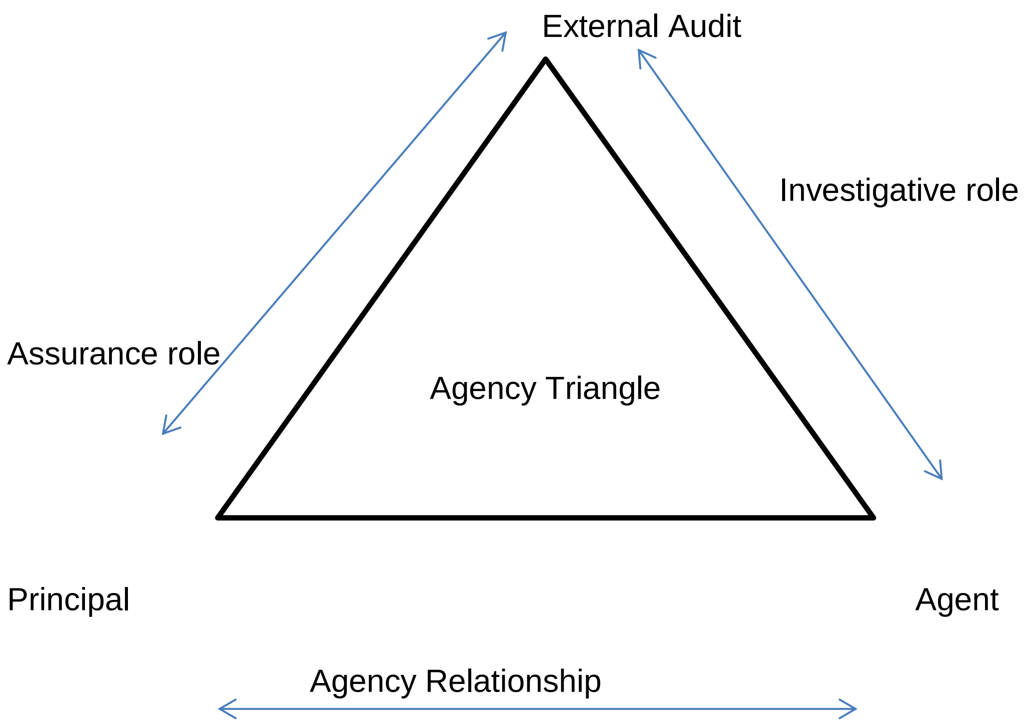



Figure 2.1: The Agency Triangle

Source: Author's theoretical development

The investigative role involves checking the accounts prepared by the agent (management) for errors and fraud and making sure that the accounts reflect a true and fair view of the entity affairs in order to safeguard the investment of the principal (shareholders and other stakeholders).

The attestation role entails giving assurance to the principals (shareholders) that the enterprise is a going concern and will yield a good return on investment. Furthermore, the attestation role provided by the external audit as depicted in figure

2.1 (The Agency Triangle) gives assurance and comfort to the principal that their investment is safe and that the reported result of the entity's affairs is correct and accurate.

The investigative and assurance role that audit is meant to play in the agency relationship is lacking in the current accounting system of reporting and procedural auditing. The principal needs assurance that the business is a going concern, and this can only be achievable when financial statements are free of errors and fraud. What the current system of reporting and procedural auditing gives at best is a reasonable assurance (Page, 2010). Whereas, investors want an absolute assurance that financial statements are free from errors and fraud.

This is because investors rely on audited financial statements in order to make investment decisions. The investigative role audit plays at best is too weak to combat fraud in this age of information revolution, thereby, making the current audit framework not fit for the future. Hence, the new system of forensic accounting is expected to fulfil these two requirements (assurance and investigation) that is lacking in the current accounting system of reporting and procedural auditing.

The agency theory will be utilised in developing the forensic accounting system and its fraud detection capacity. Since the principal does not trust the agent and has to rely on external mechanisms to investigate the work of the agent, then external audit, as presently constituted is lacking in the investigative and assurance role as depicted in figure 2.1. Therefore, shifting from the current accounting system to the new forensic accounting system that has been developed in this study should probably be able to reduce financial statement fraud — hence fulfilling the investigative and assurance role expected of external audit in agency theory.

External Audit plays a crucial role in agency theory, and it will be utilised in developing the forensic accounting system. The next section includes a review of literature to understand why the agent betrays their principal in the first place. Cressey (1953) "*criminal violation of trust*", helps explain what motivate agents (management) to commit financial statement fraud.

### 2.1.3 Why Do Management Commit Financial Statement Fraud?

Over the past few decades, the issue of fraud particularly management fraud has attracted the attention of several researchers in accounting and criminology (Abdullahi & Mansor, 2015). Researchers have been striving to detect the underlying logic and reasons as to why management commit fraud. The study of white-collar crime has not received much-needed attention because of the conceptual ambiguities, distinctions, and taxonomies embedded in a few areas of criminological investigation (Ramamoorti, 2008).

However, going forward into the future, business professionals particularly accounting students must be well equipped in the area of fraud prevention, detection and deterrence in this 21st-century era of governance and accountability ruin by the post-Enron and WorldCom environment (Ramamoorti, 2008).

Moreover, for this to happen, there is a need for a proper understanding of what motivates an individual (in particular managers) to commit fraud. An understanding of what motivates fraudulent conduct is the first step towards fraud detection and deterrence. It mirrors the saying "You need to think like a crook to catch a crook" (Johnston, 2012, p. 1). Wells (2004) once said "*As a group CPAs are neither stupid nor a crook, but the majority of the CPAs are still ignorant about fraud… For the last 80 years, untrained accounting graduates have been drafted to wage war against sophisticated liars and thieves, and as multi-billion dollars' fraud have shown, it has been much of a fight*". The fraud triangle theory will now be utilized in explaining why management commit financial statement fraud.

### 2.1.4 The Fraud Triangle Theory

Theoretically, anybody can engage in financial statement fraud (Centre for Audit Quality, 2010). Past research has shown that fraud perpetrators usually cannot be distinguished from other people by demographic or psychological characteristics. Some individuals who engaged in financial statement fraud had previous reputations for high integrity (Centre for Audit Quality, 2010).

Furthermore, the "80/10/10" saying suggests that just 10 per cent of the population will be honest; they will not steal, lie or cheat under any circumstances. Another 10 per cent of the population is assumed to be dishonest and will participate in criminal activities whenever they can. The remaining 80 per cent of the population, given enough pressures and the right opportunity, may behave unethically (Auditor of Public Accounts, 2011).

Historically, most major financial statement fraud have involved senior management, who were in the best position and possessed the necessary capabilities to perpetrate fraud by overriding controls and acting in collusion with other employees (Centre for Audit Quality, 2010). Such was the case of Enron, WorldCom, Olympus, BCCI, and Toshiba. Their senior management team were involved in the massive fraud perpetrated in these companies.

Few theories have explained why people commit occupational fraud or act dishonestly. The most famous of them is the work of Donald Cressey (1953), an American sociologist who highlighted the notion of the fraud triangle which is depicted in Figure 2.2. Cressey (1953) never called his hypothesis the fraud triangle model. It was over the years based on the usefulness of his hypothesis that it is now being referred to as the fraud triangle theory (Albrecht, 2014).

Cressey (1953) published a hypothesis about why people violate trust. He hypothesised that for any criminal violation of trust to occur; three elements which he called pressure, opportunity, and rationalisation must be present. Whatever form a deceptive act takes, be it fraud against a company such as employee fraud or fraud on behalf of a company such as management fraud, these three elements are always present (Albrecht, et al., 2011; Albrecht, 2014).

Cressey's (1953) aim was to gain an understanding of why people entrusted with authority and responsibility violated those trust. Questions such as why do trusted people violate trust led Cressey to interview 250 convicted criminals over a period of five months whose behaviours are classified based on two criteria: people who accepted responsibilities of trust in good faith and the circumstances that led them to violate such trust (Albrecht, 2014; Abdullahi & Mansor, 2015).

Cressey (1953) in his work titled *"other people's money"* postulated that "*trusted persons become trust violator, when they conceive of themselves as having a financial problem that is non-sharable and have the knowledge or awareness that this problem can be secretly resolved by a violation of the position of financial trust, and can apply to their conduct in that situation verbalizations which enables them to* *adjust their conceptions of themselves as a trusted person with their conceptions of themselves as users of the entrusted funds or property*" (Cressey, 1953, p. 742).

Albrecht (2014) observed that the fraud triangle is now universally accepted in almost every setting in which fraud is described or analysed. The fraud triangle states that when there is some perceived pressure, some perceived opportunity, and some way to rationalise the fraud as not being inconsistent with one's values, fraud will be committed by an individual (Albrecht, 2014).

This is mostly the case for financial statement fraud. When management (agent) feels the pressure of meeting analyst forecasts and can sense some laxity in the accounting systems and standards and can rationalise such behaviour as a way of helping the company stay competitive in the capital market, this management tend to end up getting themselves involved in creative accounting which eventually leads to committing financial statement fraud.

Cressey (1953) noted that none of these elements alone would be enough to result in embezzlement; instead, all three elements must be present. However, the three elements do not necessarily have to be of equal proportion. When one element is fully present, less of the other two is required for fraud to occur. Take for instance; when the perceived pressure is high, less of perceived opportunity and rationalisation is required for a criminal violation of trust to occur. The fraud triangle theory is depicted in Figure 2.2 below.

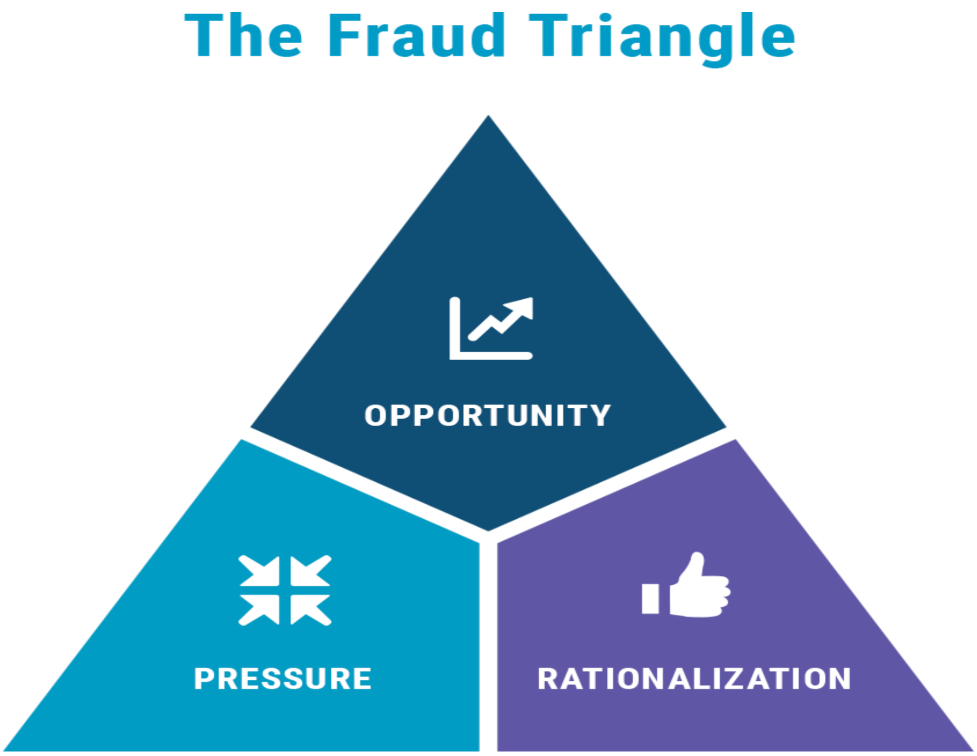



Figure 2.2 the Fraud Triangle

Source: Albrecht (2014)

The three fraud triangle elements will now be discussed in more details.

#### *2.1.4.1 Perceived Pressure*

Perceived pressure refers to those factors that lead an individual to behave unethically (Abdullahi & Mansor, 2015). The source of pressure as observed by Albrecht et al. (2006) can either be financial or non-financial, although more often, it is the financial pressure that leads to fraud. Albrecht (2014) argued that the pressure to commit fraud does not necessarily have to be real. Hence, he suggested that the word perceived pressure should be used instead of pressure on its own. If fraud perpetrators believed that they are being pressurised, such belief could lead to fraud (Abdullahi & Mansor, 2015).

Pressure according to the Oxford English dictionary, is a sense of stressful urgency caused by having too many demands on one’s time and resources. The motivation to commit financial statement fraud can arise due to pressure to meet analyst forecast, compensation and incentive structures, the need for external financing or poor performance (Hogan, et al., 2008).

All fraud perpetrators face at some point perceived pressure to behave unethically (Abdullahi & Mansor, 2015). Albrecht (2014) posits that pressures to commit fraud are most often generated by strong peer-group influence. In other instances, the pressure to commit financial statement fraud is because of management or board of directors setting unrealistic performance objectives and targets, thereby resulting in creative accounting which eventually leads to financial statement fraud.

Furthermore, Albrecht (2014) in his work “iconic fraud triangle endures” classified situational pressure into two categories viz those that encourage employees to commit fraud for the company and those that encourage employees to commit fraud against the company. Not meeting analyst forecasts, gross margin or earnings, having a cash shortage and delisting from the stock exchange market are examples of perceived pressure that could make employees commit fraud for their organisation.

Desperate people do desperate things (Auditor of Public Accounts, 2011). Perceived pressure can also be viewed as a situation where someone believes that they need to commit fraud (Albrecht, et al., 2008). Albrecht and his colleagues went further to categorise pressure into four types; financial, work-related, vices and other pressure.

Lister (2007) argued that pressure is a very significant factor for fraud to occur. He went further to liken pressure to commit fraud as a source of heat for fire. Nevertheless, having this pressure is not enough for fraud to occur; the other two elements must also play a significant role before fraud can occur. However, the proportion of each element do not have to be the same. Whichever one is greater, less of the other two elements are needed for fraud or criminal violation of trust to occur.

#### *2.1.4.2 Perceived Opportunity*

The second necessary element for an agent to commit fraud is a perceived opportunity. Fraud does not occur in isolation. All criminal violation of trust is a combination of motive and opportunity (Wells, 2004). Cressey (1950, 1953) indicated that for employees to commit any criminal violation of trust there must be a perceived chance to commit the fraud without being detected. If there is no perceived opportunity, then a fraud perpetrator will not commit fraud. Even in the presence of intense perceived pressure, executives who believe they will be caught and punished rarely commit fraud. However, executives who believe they have an opportunity to commit and conceal fraud most of the time give-in to their perceived pressure (Albrecht, et al., 2004).

The concept of perceived opportunity is premised on the assumption that people will take advantage of the circumstances available to them (Kelly & Hartley, 2010). Opportunity to commit financial statement fraud is often created by ineffective controls, weak monitoring mechanisms, poor governance and laxity in the accounting systems and standard (Abdullahi & Mansor, 2015).

Cressey (1953) observed that the lower the risk of being caught, the more likely it is that someone will commit fraud. Wilson (2008) asserted that an opportunity is power and the ability to override control. This is what makes internal audit not to be an effective and reliable fraud deterrence mechanism. Management has the power and ability to override controls within the organisation or even pressurise the internal audit department to override control to give room for accounting manipulations leading to financial statement fraud.

Albrecht and his colleagues in their work concluded that the opportunities to commit fraud are those that individuals create for themselves as well as those a company creates through lax internal controls and in other ways. Companies often create opportunities for fraud by allowing related parties' transactions, having a complex business structure, using different auditing and legal firms and having a fragile system of internal controls (Albrecht, 2014).

Whatever increases the capability and capacity for fraud to be perpetrated and concealed will increase the opportunity for fraud to occur (Albrecht & Albrecht, 2003). Factors such as the weak board of directors, inadequate internal control, laxity in the accounting and auditing standard and the ability to obfuscate the fraud behind complex transactions or related party structures are usually the perceived opportunities to commit management fraud (Albrecht, et al., 2004; Abdullahi & Mansor, 2015).

The tradition in accounting has always been to examine the opportunity to commit fraud within the context of weak internal controls, especially concerning the segregation of duties. However, over the years, this tradition has been subjected to scrutiny (Dorminey, et al., 2010).

#### *2.1.4.3 Rationalisation*

The last element of the fraud triangle model is a rationalisation. The concept of rationalisation as observed by Cressey (1953) is that a fraud perpetrator must formulate some morally acceptable idea to himself before engaging in a fraudulent or dishonest act. Because fraudsters do not view themselves as criminals, they must justify their misdeeds to themselves before they commit the crime. (Auditor of Public Accounts, 2011). If there is no moral justification for the crime, it is highly likely that such crime or dishonest behaviour will not occur (Abdullahi & Mansor, 2015).

Some examples of common rationalisations include; I was only borrowing the money, I was entitled to the money because my employer is cheating me, some people did it, so why not me, I had to steal to provide for my family (Cressey, 1953). Further examples of rationalization for management fraud are we need to keep the stock price high, all companies use aggressive accounting practice, it is for the good of the company or the problem is temporary and will be offset by future positive results (Albrecht, et al., 2004).

The fundamental observation of Cressey's hypothesis is that it takes the presence of all three elements (pressure, opportunity, and rationalisation) for any violation of trust (occupational fraud) to occur. Cressey's (1950) study on trust violation has been said to be seminal (Dorminey, et al., 2010). His fraud triangle theory is not only seen as an explanatory model that identifies the core elements that make a fraudulent act appear benign to the fraudster but also, the first of many steps towards developing our understanding of white-collar crime (Dorminey, et al., 2012).

The strength of Cressey's fraud triangle is that it highlights what we witness in our society. An individual in a problematic non-sharable financial problem with perceived opportunity and a morally defensible excuse may commit fraud. Nonetheless, Cressey's (1950; 1953) fraud triangle has been criticised for being an inadequate framework for deterring, preventing and detecting financial statement fraud (Albrecht, 2014). This is because the two elements of the fraud triangle theory (pressure and rationalisation) are not directly observable (Wolfe & Hermanson, 2004; Dorminey, et al., 2010; Dorminey, et al., 2012; Albrecht, 2014). This prompted the next discussion about the fraud diamond.

### 2.1.5 Fraud Diamond

In a bid to enhance the chances of fraud prevention and detection, particularly management fraud, Wolfe and Hermanson (2004) postulated the notion of the fraud diamond, as diagrammatically demonstrated in Figure 2.3. Wolfe and Hermanson (2004) believe that to enhance fraud prevention and detection, the fourth element, individual capability, needs to be added to the fraud triangle's three elements; pressure, opportunity, and rationalisation.

According to these authors, the personal traits and abilities of an individual play a significant role in deciding whether fraud may occur even with the presence of the other three elements. The proponent of the fraud diamond model argues that majority of the management fraud, particularly some of the multibillion-dollar ones (for example Enron, and WorldCom), would not have occurred without the right person with the right capabilities in place.


Figure 2.3 the Fraud Diamond

Source: Wolfe and Hermanson (2004)

Wolfe and Hermanson (2004) concluded that opportunity opens the doorway to fraud, and incentive and rationalisation can draw the person toward it. However, the person must have the capability to recognise the open doorway as an opportunity and to take advantage of it by walking through, not just once, but time and time again.

The primary contribution of the fraud diamond is that the capabilities to commit fraud are explicitly and separately considered in the assessment of fraud risk. Hence, the fraud diamond model moves beyond viewing fraud opportunity mostly in terms of environmental or situational factors (Wolfe & Hermanson, 2004).

### 2.1.6 The Fraud Scale

To help predict the likelihood of a fraudulent act, Albrecht, Howe, and Romney created the Fraud Scale to be a tool to help assess the likelihood of a fraudulent act through the evaluation of the relative forces of pressure, opportunity, and personal integrity. The Fraud Scale suggests that when pressure, opportunity, and integrity are considered at the same time, one can determine whether a situation possesses a higher probability of fraud (Albrecht, Howe & Romney, 1984).

The fraud scale provides that when situational pressures and perceived opportunities are high and personal integrity is low; occupational fraud is much more likely to occur than when the opposite is true. The Fraud Scale is depicted in figure 2.4.

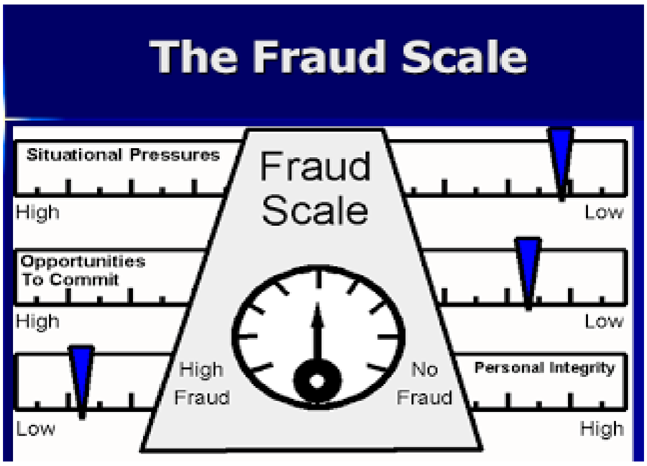



Figure 2.4 The Fraud Scale

Source: Albrecht, Howe, & Romney, 1984

Albrecht and his colleague initially criticised the Fraud Triangle on the ground that rationalisation cannot be measured. They substituted rationalisation with personal integrity in their Fraud Scale Model and concluded that a person with high personal integrity rarely commit fraud. However, Albrecht in his later work “Iconic Fraud Triangle Endures” remarks that overtime and through conducting more research project, he is convinced that Cressey’s labelling of the third element as a way to rationalised the behaviour as not being inconsistent with one’s personal code of conduct is more accurate than their label of personal integrity (Albrecht, 2014).

While perceived pressure, rationalisation and even capabilities are not directly observable, they are equally three elements which the accounting profession seems not to have control over as one cannot deduce who will commit fraud among the people with the right capability. The only element of the fraud triangle and fraud diamond that can be controlled is the perceived opportunity. *The question then is how the accounting profession can reduce opportunities to commit financial statement fraud by continuing to strongly rely on the current auditing reporting models and accounting system?*

Based on the purpose of this study which is to explore the perception of key stakeholders within the accounting profession on how a system shift to forensic accounting can reduce financial statement fraud, then controlling the perceived opportunity to commit financial statement fraud through a system shift to forensic accounting sound a great deal for the profession. When people are aware that they are being watched, they tend to behave ethically (Downe, et al., 2016). If an external audit is approached from the forensic accounting perspective with proper scrutiny of account, this might reduce financial statement fraud.

This is because a lot of the time, external auditors usually assume management is honest which is in sharp contrast to a forensic accountant thinking. Forensic accountants usually assume people will always tell lies and therefore carried out their checks to find out the truth (Crumbley, 2009). With this kind of approach to audit, financial statement fraud might decrease. Moreover, the investigative role audit serves in the agency relationship (see Figure 2.1) will be enhanced through a forensic audit of financial statements. Likewise, the attestation function audit serves to the principal will restore their confidence in the financial reporting process.

Given the theoretical frameworks for this study, the following section will highlight the research questions that emerged from the theoretical frameworks.

## 2.2 Research Questions

Given the critical role audit plays within the agency theory and an understanding of the fraud triangle model and the fraud diamond, the following research questions emerged. These questions will enable the development of a forensic accounting system and a smooth transition from the current accounting system of reporting and procedural auditing to forensic accounting:

1. Could the training of professional accountants (particularly auditors of the financial statement) in the forensic accounting **skills**, **ethics**, **procedures,** and **principles** help reduce the opportunities to commit financial statement fraud by the agent (management)?

2. How might the training of professional accountants in forensic accounting **skills**, **ethics**, **procedures,** and **principles** increase auditors' fraud detection capabilities?

3. How might the involvement of Forensic Accountants in audit engagement increase the chances of fraud prevention and detection in the financial statement?

### 2.2.1 Theoretical Framework Conclusion

The above critical evaluation of the agency theory, fraud triangle and the fraud diamond have help position this study towards developing the forensic accounting system and have led to the theoretical development of the Agency Triangle. It has also given birth to three research questions which this study intends to provide answers to. The next section will now expand on the meaning of fraud and justify why financial statement fraud is an important phenomenon to study.

## 2.3 The Concept of Fraud

### 2.3.1 What Is Fraud?

Fraud is elusive (Jones, 2011). Take, for instance; the United Kingdom does not have a legal definition of fraud. Fraud by itself is a general term rather than a specific one (Turvey, 2013). Fraud has different implications depending on the context (Albrecht & Albrecht, 2003; Ostas, 2007). Hence, this makes it an ambiguous term to define. On this note, there exists no single legal definition of fraud which covers all possibilities (Kapardis & Krambia-Kapardis, 2004). Fraud is better understood when viewed from the criminological construct with potential legal repercussion that varies depending on where and how it is committed (Turvey, 2013).

Fraud according to Black's law dictionary is an intentional distortion of facts and truth to induce others to give up something of value that they possess, or to relinquish a legal right that they might otherwise retain. It is additionally defined as (p.660) a false presentation of a matter of fact, whether by words or by conduct, by false or misleading allegations, or by concealment of that which should have been disclosed, which deceives and is intended to deceive another.

In a simple term, fraud involves working outside the regulatory framework (Jones, 2011). It entails breaking the law and violating the regulatory framework. Fraud can be classified into two categories; occupational fraud and non-occupational fraud. While non-occupational fraud is outside the scope of this study, it can be defined as those fraud that are committed by individuals against their fellow individual or company through deception and other unlawful means. Examples of these are advance fees fraud, phishing and scamming of various forms.

### 2.3.2 Occupational Fraud

Occupational fraud which is elsewhere called employee fraud (Turvey, 2013) is a concept that consists of two words - occupation and fraud. The former is much easier to define than the latter. The word occupation means the work that people do. According to Mariam Webster online dictionary, occupation is defined as the work that a person does; a person's job or profession; an activity that a person spends time doing.

The Association of Certified Fraud Examiner (ACFE) defined occupational fraud as those situations or events in which an employee, manager, officer, or owner of an organisation commits fraud to the detriment of that organisation. The ACFE have simplified the occupational fraud and abuse and classified it into three major parts which they called the **Fraud Tree** (ACFE, 2018). The three major types of occupational fraud according to the ACFE classification are Corruption, Asset

Misappropriation, and Fraudulent Statements. Each of these categories has several sub-categories. Each of the three categories of the fraud tree will be explained briefly. The study focuses primarily on the Financial Statement Fraud arm shown at the top right in figure 2.4. The classifications of fraud by the ACFE is presented in Figure 2.4.

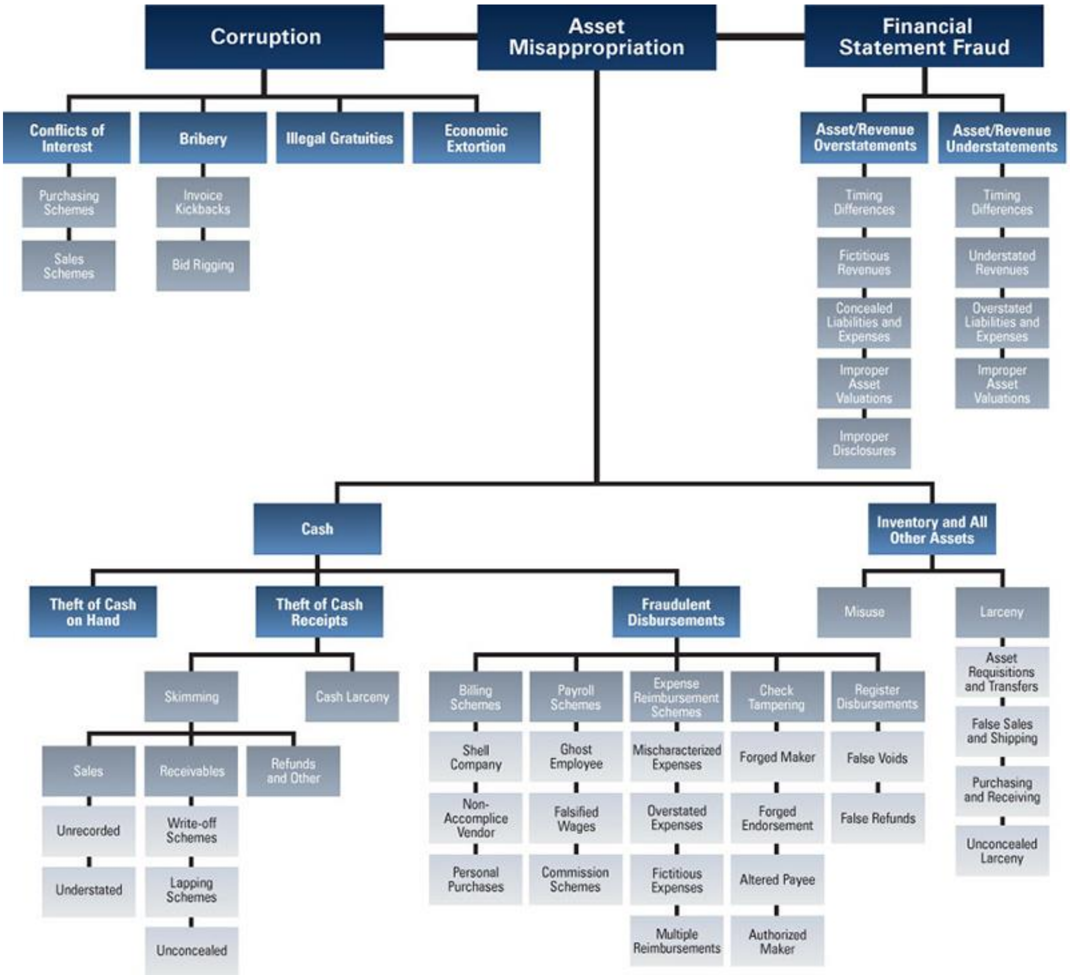



Figure 2.4 The Fraud Tree

Source: ACFE 2018

### *2.3.2.1 Corruption*

Corruption, as defined by ACFE (2018), is a scheme in which an employee misuses his or her influence in a business transaction in a way that violates his or her duty to the employer in order to gain a direct or indirect benefit. The Transparency International views corruption in a more general term as compared to the ACFE whose view of corruption is only limited to business settings. According to Transparency International (2016), corruption is "*the abuse of entrusted power for private gain."* The Transparency International definition of corruption appears broader and includes all settings in which corruption occurs.

According to the Transparency International (2016), corruption can be classified into three types; grand, petty and political. These classifications, however, depend on the amount that was lost and the sector in which corruption occurs. Grand corruption refers to those acts committed at a high level of government that distort policies or the central functioning of the state, enabling leaders to benefit at the expense of the public good.

Petty corruption consists of everyday abuse of entrusted power by low- and mid-level public officials in their interactions with ordinary citizens, who often are trying to access essential goods or services in places like hospitals, schools, police departments and other agencies (Transperency International, 2016).

Political corruption is a more advanced and sophisticated level of corruption. Political corruption aimed at manipulation of policies, institutions and rules of procedure in the allocation of resources, and financing by political decision-makers, who abuse their position to sustain their power, status and wealth (Transperency International, 2016).

Corruption according to the ACFE can be classified into four categories. These categories are conflicts of interest, bribery, illegal gratuities and economic extortion. The median loss to corruption according to the ACFE report to the nation on occupational fraud is $200,000 which constitutes the lowest of the three types of occupational fraud (ACFE, 2018).

#### *2.3.2.2 Asset Misappropriation*

Asset misappropriations are those fraud in which a perpetrator employs trickery or deceit to steal or misuse an organisation's resources (Albrecht, et al., 2008). Asset misappropriation schemes include both the theft of company assets, such as cash or inventory, and the misuse of company assets, such as using a company car for a personal trip (ACFE, 2016).

Asset misappropriation fraud occurs when people who are entrusted to manage the assets of an organisation steal from it. Asset misappropriation fraud can involve third parties or employees in an organisation who abuse their position to steal from the organisation through fraudulent activity (Action Fraud, 2016).

The Association of Certified Fraud Examiners' reports to the nation on occupational fraud and abuse (2018) categories asset misappropriation into different schemes which include; cash and non-cash asset (inventory and all other assets). Theft of cash is further classified into three schemes viz; theft of cash on hand, theft of cash receipt and fraudulent disbursement. Inventory and all other assets are further categories into two viz; misuse and larceny (ACFE, 2018). Figure 2.4 shows the breakdown of the fraud tree.

Asset misappropriation is by far the most common form of occupational fraud, occurring in more than 83% of cases. However, it has the smallest median loss of $125,000 (ACFE, 2018). Among the various forms of asset misappropriation, billing schemes and cheque tampering posed the most significant risk based on their relative frequency and median loss (ACFE, 2018).

#### *2.3.2.3 Financial Statement Fraud*

Financial statement fraud is the least common type of occupational fraud occurring in less than 10% of the cases according to the ACFE report to the nation on occupational fraud and abuse (2018). Financial statement fraud, however, has a median loss of $975,000 which is the highest out of the three categories of fraud on the fraud tree (ACFE, 2018). Financial statement fraud is now one of the biggest challenges in today's modern business world (Lawyers Connect, 2016).

Financial statement fraud is the deliberate misrepresentation of the financial condition of an enterprise accomplished through the intentional misstatement or omission of amounts or disclosures in the financial statements in order to deceive financial statement users (ACFE, 2016).

The negative impact of financial statement fraud on stakeholders is by far higher than corruption and asset misappropriation. Financial statement fraud often results in some investors committing suicide (Trefgarne , 2002). This was the case in Enron, WorldCom, and Toshiba. Financial statement fraud can also lead to loss of jobs and pension and could have a long-lasting effect on the economic growth of a country

(Mueller, et al., 2015). It also jeopardises the going concern of a corporation (Black, 2010).

This is the primary reason why this study set out to explore the views of major stakeholders in the industry on how to reduce financial statement fraud through a system shift to forensic accounting.

Financial statement fraud does not occur regularly as compared to other types of occupational fraud, but when it happens, the implications are usually significant. Just as Black (2010) pointed out that financial statement fraud at Enron and other companies contributed to the global financial crisis of 2008. The following section will now discuss how forensic accounting is conceptualised and its history.

## 2.4 Forensic Accounting

### 2.4.1 Definition of Forensic Accounting

Until recently, the detection of fraud and other forms of white-collar crime was thought to be part of the conventional accounting function (Taylor, 2011). Fraud was usually what the audit process (internal and external audit) was supposed to guard against through periodic audit (Bhasin, 2007). However, accountants are aware that auditors can only check for the compliance of a company's books to the Generally Accepted Accounting Principles (GAAP), auditing standards, and company policies. Thus, this creates a new category of accounting to detect fraud in companies that suspected fraudulent transactions. This new category of accounting is called **Forensic Accounting** (Bhasin, 2007).

The term forensic accounting is a combination of two words – ***Forensic*** and ***Accounting***. Separating the two words can make it simpler to understand (Hopwood, et al., 2012). The word "forensic" according to Merriam Webster online dictionary means belonging to, used in, or suitable to courts of judicature or public discussion and debate. The dictionary went further to give a simplified definition of forensic to mean relating to the use of scientific knowledge or methods in solving crimes; relating to, used in, or suitable to a court of law.

Accounting on the other hand according to business dictionary.com is a systematic process of identifying, recording, measuring, classifying, verifying, summarising, interpreting and communicating financial information. The combination of these two words is a sub-profession in the franchise of accounting whose result is far greater than the sum of two parts (Hopwood, et al., 2012).

The definition of forensic accounting has largely been misconstrued by many people to mean fraud examination (Hopwood, et al., 2012). While this was the case before the twentieth century, however, at the turn of the twentieth century, forensic accounting became more than just fraud examination (Smith, 2015). Till date, academics and practitioners' perceptions differ on what forensic accounting is all about. While professors still think forensic accounting is about fraud investigation, practitioners understand that fraud investigation and examination is only a small aspect of forensic accounting in today's world (Wells, 2004; Crumbley, 2009; Smith, 2015). Since forensic accounting is much more than fraud examination and investigation, the question then is "what is forensic accounting?"

Wolosky (2004) once said "*years ago. When I tell people, we are forensic accountants; they thought we look at dead bodies. We do not get that kind of comment any longer*". There appears to be no consensus in the literature on the exact definition of forensic accounting. This is probably because it is a fast-growing field. Moreover, the profession is responding to the constant change in the corporation, technology, and societal demand. Below are some of the leading definitions in the literature by professional bodies and scholars:

According to ACCA, forensic accounting is a term that is not strictly defined in regulatory guidance and therefore suggests that the meaning of forensic accounting is quite broad. The association defined forensic accounting as the application of accountancy skills and knowledge in circumstances that have legal consequence. The association further observed that there are many circumstances with legal consequences in which accountancy might be required; the most well-known is investigating alleged fraudulent activity. They, therefore, defined forensic accounting as those types of engagement that involves a whole process of carrying out a forensic investigation, including preparing an expert's report or witness statement and potentially acting as an expert witness in legal proceedings.

To the ACFE, forensic accounting is the use of professional accounting skills in matters involving potential or actual civil or criminal litigation, including, but not limited to, Generally Acceptable Accounting Principle; the determination of lost profit, income, assets, or damages; evaluation of internal controls; fraud; and any other matter involving accounting expertise in the legal system.

The AICPA defined forensic accounting as the application of accounting principles, theories and discipline to facts or hypotheses at issues in legal dispute and encompasses every branch of accounting knowledge. Bologan and Lindquist (1995) defined forensic accounting as the application of financial skills and an investigative mentality to unresolved issues, conducted within the context of the rule of evidence.

To Crumbley, et al., (2007), forensic accounting is the action of identifying, recording, settling, extracting, sorting, reporting, and verifying past financial data or other accounting activities for settling current or prospective legal disputes or using such past financial data for projecting future financial data to settle legal disputes. Hopwood et al., (2012) viewed forensic accounting as the application of investigative and analytical skills for the purpose of resolving financial issues in a manner that meets standards required by the court of law.

Huber & DiGabriele (2014) gave a more recent definition of forensic accounting. To them, forensic accounting is a multidisciplinary field that encompasses both a profession and an industry, where civil or criminal economic and financial claims, whether business or personal, are contested within established political structures, recognized and accepted social parameters, and well-defined legal jurisdictions, and informed by the theories, methods, and procedures from the fields of law, auditing, accounting, finance, economics, psychology, sociology, and criminology.

Forensic Accounting can simply be put as the use of accounting for legal purposes (Hopwood, et al., 2012). Joshi (2006) emphasising the relevance of forensic accounting in fraud prevention and detection observed that “auditors should be a watchdog and not be the bloodhound.” This quote alone is enough in making forensic accounting definition even simpler and helps differentiate a forensic accountant from other accountants and auditors. A forensic accountant is a bloodhound of bookkeeping (Crumbley, 2009).

These bloodhounds 'sniff out' fraud and criminal transactions in banks, corporate entities or from any other organisation’s financial records. They 'hound' for the conclusive evidence. External auditors are known to find out the deliberate misstatement only, but the forensic accountants find out misstatements deliberately. External auditors look at the numbers, but forensic accountants look beyond the numbers (Joshi, 2006). These are some of the attributes that make forensic accounting relevant in the fight against financial deception.

### 2.4.2 History of Forensic Accounting

The field of forensic accounting was a growing specialism before the Enron and WorldCom scandals which led to the enactment of the Sarbanes Oxley Act in the United States (Wolosky, 2004). While there is no well-documented history of forensic accounting, it is quite easy to think it is a new aspect of accounting with all the publicity given to it these days (Crumbley, 2009). However, it is not new. It has been around for a long time. Its history can be archaeologically traced back to the 3300-3500 BC in ancient Egypt. Where the scribes who are regarded as the “eyes and ears” of Pharaohs take inventory of the Pharaoh's assets ranging from livestock to crops. The scribes at that time were the accountants of their days. What the scribes did then was far more than mere audit evaluation (Buckstein, 2011). They were involved in the prevention and detection of fraud. One can term what they did as a high-level validation of the King’s asset. This is because whenever anything is missing, they reported back to the King, whoever was caught stealing from the King is made to face the consequence. The following section will discuss the responsibility of auditors in detecting financial statement fraud.

## 2.5 Auditors’ Responsibility for Fraud Detection in the Financial Statement

In this section, I will be discussing the responsibility of auditors concerning fraud detection in the financial statement. Some historical perspective to this issue will be looked at in detail to provide an understanding of how this responsibility has changed over time.

Ever since the Limited Liability Company became a business format, the gap between owners and manager has increased. This has brought the role that auditors must achieve to greater prominence (Taylor, 2011). However, there are some issues about what the role of auditors should be concerning fraud detection in the financial statement. The debate about auditors’ responsibility for fraud detection remains both a philosophical and policy issue (Chui & Pike, 2013). The responsibility of auditors for fraud prevention and detection in the financial statement is one of the most controversial issues in auditing (Gay, et al., 1997). The opinion among auditors themselves differs on the subject matter, let alone other stakeholders (Porter, 1997).

The controversy over auditor's responsibility for fraud detection is frequently debated among auditors, politicians, media, regulators and the public (Gay, et al., 1997). Auditors' responsibility concerning fraud detection has also contributed significantly to the audit expectation and performance gap literature (Porter, 1997). Alleyne & Howard (2005) argued that the responsibility of auditors concerning fraud detection had not been well defined from inception. The controversy over the role of auditors in fraud detection has existed for a long time (Alleyne & Howard, 2005). Also, it is highly regarded that an audit should be performed by competent, independent individuals and should involve the collection and assessment of evidence about information leading to a decision and report about the degree of correspondence between the information and specific established criteria (Arens, et al., 2003).

One of the most fundamental gaps in contemporary auditing literature is that accountants are not responsible for detecting fraud. In more than the 1000 pages of codified rules that are devoted to the 15-auditing standards that the AICPA, the Public Company Accounting Oversight Board (PCAOB) and the Securities and Exchange Commission (SEC) regards as authoritative, there appears to be no authoritative literature that has suggested that auditors should design audits with the intention of uncovering or detecting fraud (Kravitz, 2012).

The auditors' responsibility for fraud detection is not even discussed in the standard audit report that accompanies a financial statement. The word fraud is never mentioned in the audit report (Johnson, 2010). However, whenever any accounting scandal is uncovered, the first question investors usually ask is "where were the auditors?" (Porter, 1997; Johnson, 2010; Awolowo, et al., 2018).

The general belief of the business community is that someone who has an interest in a company is morally bounded to rely on its audited financial statement as a guarantee for its solvency, prosperity and business viability (Koh & Woo, 1998). However, whenever things go wrong, such that the business enters into serious financial difficulties without any warning signal, the highly circulated belief by the investing public is that somebody should be made accountable for this financial disaster, and that somebody is usually perceived to be the auditors of such financial statements (Koh & Woo, 1998).

Even among regulators and other financial statement users, they also shared the view that auditors should detect fraud in the financial statements (Asare , et al., 2015). For example, in 2004, the Chairman of PCAOB stated that “detecting fraud is the responsibility of external auditors and that with few exceptions they should find it.”

In supporting the views shared by Koh and Woo (1998), the Vice Chairman of business assurance services at Coopers and Lybrand LLP, Patrick McDonnell once said, “*When you are sitting in an audit committee meeting following the discovery of fraud, the first question is “where was the audit firm?”*. So, you want to be able to demonstrate what was done. McDonnell went on to add that “*the auditor cannot escape the responsibility to plan and conduct an audit in a way that enables him or her to detect fraud. To say that a financial statement audit was not designed to detect fraud that becomes a less defensible position”.*

With all the publicity surrounding the issues of financial fraud in the last decades, most auditors, investors and other professionals still do not understand it when it comes to detecting fraud. The truth is that those traditional financial statement audits were never designed to detect fraud (Coenen, 2013). The audit is merely a process by which auditors check the company’s math and application of accounting rules (Coenen, 2013). Auditors examine a tiny percentage of transactions. Fraud is rarely detected by financial statement audit because they are not aimed at doing so.

However, going back to the 19$^{th}$ century, auditors claimed fraud detection as the central objective of an audit. Lord Justice Lindley in Re: London and General Bank (No.2) [1895]2 CH.673 stated that it was the duty of the auditors to report to shareholders all dishonest acts which had occurred, and which affect the propriety of the contents of the financial statement.

Nevertheless, the learned judge was quick to point out that auditors could not be expected to uncover all fraud committed within the company, since the auditor was not an insurer or guarantor, but was expected to conduct the audit in a manner that reflects reasonable skill and care in any circumstances.

Wells (2002) argued that the hue and cry that auditors should detect the fraud at Enron is unfair in that context, mainly because accounting rules are not designed to detect fraud in the first place. The accounting rules were designed so that we would have a consistent measuring yardstick for comparing one company with another; it takes a whole different set of skills to detect fraud in most cases (Wells, 2002). The last time auditors admitted that they have the responsibility to plan an audit with the sole intention of detecting fraud was probably during the days of Montgomery.

Kravitz (2012) gave a profound and more practical explanation of the fraud detection capacity of auditors. He observed that the Generally Accepted Accounting Principles (GAAP), the International Financial Reporting Standards (IFRS) and the Generally Accepted Auditing Standard (GAAS) are not designed to uncover fraud and that auditors are not taught that they have a responsibility to protect the society and public interest. Although SAS 99 now recommend that auditors should use the Fraud Triangle developed by Cressey (1950; 1953) in assessing the likelihood of fraud.

The events of the massive accounting scandals that have occurred in this 21st century, the profession of accounting have been held virtually blameless even in the wake of the recent global financial meltdown of which many observers have concluded to be a crisis with countless victims but no perpetrators (Kravitz, 2012).

## 2.6 Historical Perspective (Changes to Auditors Duties Regarding Fraud Detection)

Kuhn (2012) once asserted that history, if viewed as a repository for more than anecdote or chronology, could produce a decisive transformation in the image of science by which we are now possessed. Since accounting itself is a science, then going back to the history of auditing concerning fraud detection becomes imperative, as this will give an understanding of how these responsibilities have changed over time.

Based on the history of auditing in the early days as far back as the 1500s, fraud detection was regarded as the fundamental objective of an audit (Albrecht, et al., 2001). Even the prime British auditing objective, which served as the basis for the American auditing objective during its formative years was centred on the discovery of defalcations (Albrecht, et al., 2001; Chong, 2013; Chui & Pike, 2013). During this period, auditors were taught that the primary objectives of an audit were to detect and prevent fraud and errors (Montgomery, 1921). Throughout this time, fraud detection was a more central objective of the accounting profession (Dicksee, 1909).

This assertion can be captured from the words of Dicksee (1909, p.23) *“the detection of fraud is the most important portion of the auditors’ duties, and there will be no need disputing the contention that the auditor who can detect fraud is – other things being equal – a better man than the auditor who cannot. Auditors should therefore assiduously cultivate this branch of their function – doubtless, the opportunity will not for long be wanting – as it is undoubtedly a branch that their client will most generally appreciate”.*

However, over the years, the emphasis on auditors’ responsibilities for fraud detection has faded away gradually. The changes started from 1933 to 1940 (Albrecht, et al., 2001). Long before the collapse of Enron was the McKesson and Robbins scandal of 1938 which is being regarded as one of the most notorious scandals of the 20$^{th}$ century (Clikeman, 2003). The McKesson and Robbins scandal brought the profession of auditing under the intense scrutiny of its inability to prevent and detect massive fraud. The auditing profession responded to this by requiring auditors to perform additional audit procedures on account receivables and inventories (Chong, 2013).

The McKesson and Robbin's financial shenanigans led to the formation of the Statement of Auditing Procedures (SAP) No. 1 *Extension of auditing procedures* (AICPA, 1939) which was set up to shift the focus of auditors away from fraud detection (Chong, 2013). The focus was then shifted to the determination of the fairness of the financial statements by the Generally Acceptable Accounting Standard (GAAP) (Chui & Pike, 2013). Immediately this was introduced, there was an outcry by the public and SEC on the need for the accounting profession to clarify the responsibilities and functions of an independent auditor in the examination of financial statement (Chui & Pike, 2013).

The next major audit failure of fraud detection was the Equity Funding scandal of 1973. In this fraud, auditors failed to discover a "phoney" transaction with a face value of over $2 billion (Hancox, 2016). In response to this, the AICPA formed the Cohen Commission to re-examine auditors’ responsibility to detect fraud. The Cohen Commission recognised that while it is important for auditors to actively consider the possibility of fraud in the financial statement, the limitations in the audit process dampen auditors' responsibility for detecting all material fraud (Cohen Commission, 1978).

Categorically, the commission expresses concerns on the challenges faced by auditors in detecting fraud that are concealed and derived from forgery or collusion by members of management. In response to the Cohen Commission report, the AICPA issued SAS No. 16, *The Independent auditors' responsibility for the detection of errors or irregularities.*

By mid- 1980, the volume and monetary value that was lost to fraud had increased tremendously, making redundant SAS No. 16 guideline. Then it appeared that auditors were not willing to accept increased responsibility to detect fraud which further widens the expectation gap (Chong, 2013).

The demands of the public and their outcries led to the formation of the Tread Way Commission which was charged with the responsibility of identifying causal factors that lead to fraudulent financial reporting and to recommend steps to reduce the incidence of fraud in the financial statements (Chui & Pike, 2013).

The Tread Way Commission concluded that auditors failed in at least 36% of the cases examined by the commission. The auditors failed to recognise or to view with enough scepticism certain fraud-related warning signs or red flags that would have been noted had the auditors been more diligent in their audit (The Treadway Commission, 1987).

In response to this, the Accounting Standard Board (ASB) in 1988 issued nine statements of auditing standards (SASs 53 – 61). These standards outline the external auditors' role in fraud prevention and detection and the potentially illegal activities of audit clients. The aftermath of this was that auditors were required to apply professional scepticism and not to assume management is neither honest nor dishonest.

Despite all these measures targeted towards reducing financial statement fraud, there is no significant decrease in audit failures of fraud detection in the financial statements. This is because more revelations of fraudulent financial reporting came to light. This stimulated a belief in the mind of the investing public that while it is the responsibility of auditors to detect fraud in the financial statements, auditors are neither willing nor capable of doing so (Chong, 2013).

After several criticisms of the auditing profession over its failure in preventing and detecting fraud in the financial statement, the POB proposed a series of recommendations to improve auditors' willingness to detect fraud. The AICPA supported the POB's recommendations of developing an auditing standard which will focus solely on financial statement fraud. Up to the introduction of SAS No. 82, the accounting profession has traditionally avoided the use of the word "fraud." They often substituted the word "fraud" for "irregularities" (Wolosky, 2004).

However, in February 1997, SAS No. 82 *Consideration of fraud in a financial statement* was introduced. The introduction of SAS No. 82 happens to be the very first-time fraud was included in the title of an auditing standard (Wolosky, 2004; Chong, 2013; Chui & Pike, 2013).

Although SAS No. 82 gave an additional assurance to the public that the external auditors have taken extensive steps towards ensuring that they did not overlook any underlying fraud and that financial statements are free of material misstatement. Nevertheless, the standard did not increase the responsibility of auditors for fraud prevention and detection in the financial statement beyond the critical concepts of materiality and reasonable assurance (Wolosky, 2004; Chui & Pike, 2013).

Then in 2001, when everyone thought that we had outgrown the issue of fraud in financial statements, Enron, the 7th largest company in American history filed for bankruptcy. The Enron financial shenanigans, using a quote credited to Carey (1939, p65) is like "a torrent of cold water which shocked the accountancy profession into breathlessness." The accounting profession, especially the auditing profession, came under heavy criticism for failing to carry out its fiduciary duty as gatekeepers who protect the interest of the public.

In response to this massive accounting scandal, the United State Congress passed the Sarbanes Oxley Act (SOX) and created the PCAOB. The primary purpose of the SOX was to restore public confidence in the financial reporting process. Although the PCAOB does not place the sole responsibility of fraud detection on auditors, it does require external auditors to report specific situations and events relating to fraud and illegal acts to the client's audit committee as well as to the authorised authorities.

The aftermath of the collapse of Enron resulted in continuous pressure on the accounting profession. This resulted in the issuance of International Standard on Auditing (ISA) 240 *the auditors' responsibility to fraud in an audit of financial statement* by the International Auditing and Assurance Standard Board (IAASB) in December 2009.

The ISA 240 completely shifted the responsibility of fraud detection away from the auditor to those charged with the management of the company. The ISA 240 stipulates that *"the responsibility for the prevention and detection of fraud rest with both those charged with governance of the entity and management. It is important that management, with the oversight of those charged with governance, places a strong emphasis on fraud prevention, which may reduce the opportunity for fraud to take place, and fraud deterrence, which could persuade individual not to commit fraud because of the likelihood of detection and punishment".* Thus, this standard completely shifted the responsibility for the detection of fraud from the auditors to those charged with management and governance.

However, since the turn of the millennium, the rising prevalence of financial statement fraud has not stopped the public from blaming the auditors whenever there is any revelation of fraudulent reporting. The above discussion reveals significant trend overtime on auditors' responsibility for fraud detection. Nevertheless, the big question is, has the progression of fraud related auditing standards equipped auditors better to detect fraud? Alternatively, has it increased their propensity for fraud detection? The truth is that in the presence of these standards, auditors still appear not to be capable of detecting fraud in the financial statement even if they have the responsibility to do so.

In September 2014, the news of Tesco (Britain's biggest supermarket chain) overstating its profit by £250 million was revealed (BBC-News, 2014). For many years now, ACFE has reported that the external audit uncovers only a small percentage of fraud cases. Hence, an external audit may not be the most effective way to detect or limit fraud (ACFE, 2014). Putting that into perspective, the accounting system of reporting and procedural auditing might not be adequate again in this information revolution age to detect fraud in the financial statement.

Highlighting the need for a more robust way towards fraud detection in the financial statement, Wells (2005 p. 13) contends that "*As a group CPAs are neither stupid nor crooked. But the majority are still ignorant about fraud. For the last 80 years, untrained accounting graduates have been drafted to wage war against sophisticated liars and thieves. And as multi-billion-dollar accounting failures have shown, it has not been much of a fight*".

Jamal (2008) sharing the contention of Wells', argues that fraud detection has become the auditing profession's Achilles heel. As further observed by Chui and Pike (2013), even convicted felons agree that auditors cannot detect fraud. One reality that needs to be accepted is that external auditors are not fraud examiners. Their training is limited to determining the fairness of financial statement in accordance with the Generally Acceptable Accounting Principles (GAAP). Fraud prevention and detection, unlike financial statement audit, requires a unique set of skills and forensic techniques (Jamal, 2008). These skills are developed explicitly for the sole purpose of fraud detection. Therefore, merely requiring auditors to be aware of the possibility of fraud in the financial statement audit is not enough to prevent and detect fraud.

Although standard setters have often resorted to issuing additional auditing standards as a response to restoring public trust after a widely publicised fraud but time and time again, auditors have proven not to be capable of detecting financial statement fraud even in the presence of these various standards. This is because in each of the highly publicised fraud (McKesson, Equity funding, and Enron) auditors fail to prevent and detect the fraud.

Chui and Pike (2013) observed that the failure of auditors in fraud prevention and detection could be attributed to the difference in skill sets and task objectives between external auditors and forensic accountants. Hence there might be a need to start training accountants in fraud detection techniques particularly auditors if indeed the profession is serious about preventing and detecting fraud in the financial statement.

This is because merely requiring auditors to detect fraud without proper training in forensic accounting skills, ethics and principle are comparable to pouring new wine into an old bottle (Chui & Pike, 2013), which means nothing has changed. Moreover, in this age of information revolution, there is a need for constant improvement in the services the accounting profession offers if the profession is to remain relevant to the capital market. Therefore, it seems to be that there is a need for a system shift to forensic accounting to reduce the incidence of financial statement fraud and restore investors' confidence in the financial reporting process and corporate governance. The following section will discuss the difference between forensic accounting and auditing.

## 2.7 Differences between Forensic Accounting and Auditing

Although there are some distinct differences between forensic accounting and auditing, there is enough common ground to train and deploy auditors to serve on the front line against financial statement fraud (DiGabriele, 2011). However, recent studies have shown that forensic accounting specialists performed much better than auditors in fraud related tasks (Okoye & Gbegi, 2013).

This does not suggest that external auditors are in any way inferior to forensic accounting specialists in terms of their education, training, experience, and professionalism. In an actual sense, there are some similarities between the two types of professionals. One of such similarities is that both are required to maintain a high degree of independence and objectivity; to be innovative; to avoid having any preconceptions and biases when evaluating evidence; to maintain professional scepticism at all time; to have in-depth knowledge of Generally Acceptable Accounting Principles as well as general business practice and processes (Bologna, 1984 cited in Chui and Pike, 2013).

Even though forensic accountants and external auditors may share some similarities, there still exists a significant difference between the two types of professionals. Their mission is different. A forensic accountant's mission is to make an absolute determination about the existence and source of fraud by gathering and evaluating evidence and interviewing all parties related to an alleged fraud situation. The mission of an external auditor is to examine whether the company's reported financial statements, taken as a whole, are stated fairly in all material respect in conformity with GAAP (Gerson, et al., 2006).

In the simple analogy offered by Gerson et al. (2006) to illustrate the difference between forensic accountants and external auditors, they liken external auditors to patrolmen and forensic accountants to detectives. Similar to external auditors, patrolmen circulate through their assigned districts with the objective of keeping peace in the community. Ideally, patrolmen would like to patrol through every location in their districts continuously. However, it would be both times and cost prohibitive for them to do so. Thus, to remain active, patrolmen have to balance risk and expectations in order to determine whether to focus or expand their patrols.

Unlike patrolmen, detectives do not go on patrol. They are tasked to investigate whether a crime has been committed. To accomplish their task, detectives would examine everything in the alleged crime scene to gather any clues that may help them solve the case. Crime investigation is a time consuming and very costly endeavour. Hence, detectives are expected to keep searching and piecing different clues together until they solve the crime.

Wolosky (2004) observed that being a good accountant or auditor does not imply that one will be a good forensic accountant. The training of a forensic accountant is different from that of the auditor, and the way they both look at transactions is different. Below are some of the differences between forensic accounting and auditing.

Table 2.1: Differences between Forensic Accounting and Auditing

| Forensic accounting | Auditing |
|---|---|
| The primary objective in forensic accounting is to determine whether fraud exists, irrespective of its size or magnitude. | The primary objective in auditing is to gather documentation to determine whether the company's financial statements as presented by management represent a true and fair view, in all material respect, in conformity with GAAP. |
| Forensic accounting experts often look at a single transaction or account to see if fraud exist and at times also look at a series of transactions since fraud may not necessarily occur in a single transaction or account. | External Auditors look at their clients' accounts either individually or in aggregate with other accounts. External auditors focus on account with a reasonable possibility of containing a material misstatement. |
| Forensic accounting does not work with the materiality level as such forensic accountants are not concerned with the concept of materiality. Everything is material to a forensic accountant because fraud may often occur below the materiality level. | Auditing is premised on the concept of materiality as such external auditors are concerned with material matters in an audit. |
| Forensic accounting does not operate by sampling. Everything is examined in great depth, and a forensic accountant would generally not rely on audit sampling. | Auditing operates based on sampling. External auditors are not expected to examine every transaction. As such, they rely on audit sampling. |
| In forensic accounting, any minor discrepancies are taken seriously. A | In auditing, minor discrepancies in any single account are not a concern. |

| | |
|---|---|
| forensic accountant is expected to assess and understand the nature of every minor discrepancy to determine if it is indicative of fraud. | External auditors will only be concerned if these discrepancies are indicative of a more significant problem. |
| The forensic accountant does not have a predetermined time budget for work. | External auditors generally have a predetermined time budget for work. |

Source: Author's computation (2017).

From table 2.1 above, the differences between forensic accounting and auditing clearly show that there are chances of fraud prevention and detection in the financial statements should there be a system shift from mere reporting and procedural auditing to forensic accounting. Forensic accounting procedures are more appropriate for fraud prevention and detection than auditing procedures. That means, if auditors are trained in the forensic accounting procedures, there might be better chances of fraud prevention and detection in the financial statement. Better still, if forensic accountants are involved in audit engagement, the chances of fraud detection and prevention in the financial statement will be significantly improved.

Given the similarities and differences between forensic accounting and auditing, the following section will evaluate forensic accounting skills, attributes and knowledge.

## 2.8 Forensic Accounting Skills, Attributes, and Knowledge

Pollack and Brant of Miami cited in Stimpson (2007) said "*the stakes are high. The tension is high. It takes more than just accounting skills to navigate these waters*". Wolosky (2004); Davis et al., (2010) observed that being an effective accountant does not translate into being an effective forensic accountant. Being an effective forensic accountant requires the professional to possess a broad spectrum of skills and knowledge (Wolosky, 2004). These broad spectrums of skills and knowledge are what makes forensic accountants' standout in the crusade against financial deception (DiGabriele, 2009).

Studies on the relevant skills of a forensic accountant are still ongoing as researchers are finding something new each time a study is conducted around forensic accounting skills and knowledge (Bhasin, 2013). The most emphasised skills, knowledge, and attributes in literature are highlighted below:

### 2.8.1 Deductive Analysis

DiGabriele (2008) and Bashin (2013) have identified deductive analysis is an important skill that makes forensic accountants' exceptional in the fight against financial deception. The deductive analysis is the ability to aim at financial contradictions that do not fit into the usual pattern of an assignment (Bhasin, 2013).

DiGabriele (2008; 2011) observed that taking into consideration the barrage of recent financial statement fraud, the deductive analysis is a skill that enables forensic accountants to meet the objective of uncovering a potential financial fraud. This is one of the reasons why a system shift to forensic accounting might be necessary.

Traditional accounting skills have been based on compliance with rules and procedures, but forensic accounting is concerned with problem-solving through deductive analysis. This suggests that with the skill of deductive analysis used by forensic accountants, they have successfully moved away from a narrow-based approach to more holistic techniques (DiGabriele, 2011).

Deductive analysis skill gives forensic accountants the liberty to be more open-minded. Deductive analysis skill infers on forensic accountants the ability to solve financial puzzles with an incomplete set of pieces (Bhasin, 2013). This is another reason why it is beneficial to the accounting profession to train accountants (particularly auditors) in the forensic accounting skills and equally get forensic accountants involved in audit engagement to increase the chances of fraud detection in the financial statement.

### 2.8.2 Critical and Creative Thinking

In the same research conducted by DiGabriele (2008) and Bhasin (2013) on the relevant skills of a forensic accountant, the findings reveal that critical and creative thinking is one of the skills sets that make a forensic accountant standout in fraud examination and investigation. Critical thinking is the ability to decode between opinion and fact (Bhasin, 2013). Critical and creative thinking skills empower forensic accountants to be able to discern fact from fiction in order to maintain credible testimony (DiGabriele, 2008).

Critical and creative thinking are essential skills that forensic accountants use in understanding, applying, and adapting concepts and principles in a variety of contexts and circumstances. These skills allow a forensic accountant to remove any non-corroborated opinion from expert reports and testimony (DiGabriele, 2008).

Forensic accountants think creatively to consider and understand the tactics that fraud perpetrators may use to commit and conceal fraudulent acts. Bashin (2013) observed that a forensic accountant’s professional scepticism and questioning management’s response involve critical thinking that entails an attitude of examining and recognising emotion-laden and explicit or hidden assumptions behind each question.

This is another strong reason why a system shift to forensic accounting is necessary in order to increase the chances of fraud detection in the financial statements. Critical and creative thinking are skills that are relevant in today’s business world, most importantly in detecting accounting fraud and in moving the franchise of accounting profession forward (DiGabriele, 2009).

### 2.8.3 Unstructured Problem-Solving Skill

Unstructured problem-solving skill is the ability to approach each situation uniquely (Bhasin, 2013). This is also one of the main attributes of a forensic accountant. A forensic accountant is always prepared to solve problems using an unstructured approach. This skill set, as argued by DiGabriele (2009), is in direct opposition with the traditional accounting skills. He observed that one of the shortcomings of auditors which hinder their capacity to prevent and detect financial fraud is the auditors’ "inability to see the proverbial forest beyond the trees"(DiGabriele, 2009 p78).

This skill again is another strong reason why there is a need for a system shift to forensic accounting if indeed the profession is serious about detecting fraud in the financial statements. If the auditor does not see the proverbial forest beyond the trees, then fraud prevention and detection become a much more difficult objective to achieve.

### 2.8.4 Investigative Flexibility

Investigative flexibility is the ability to move away from the standardised audit procedures by thoroughly examining a situation for any typical warning signs (DiGabriele, 2008; Bhasin, 2013). Investigative flexibility is one of those skill sets that makes it imperative for auditors to be trained in forensic accounting skills if indeed the profession is serious about detecting fraud in the financial statement.

DiGabriele (2011) observed that the future demand for audit services would be dependent on auditors' capability to detect and deter fraud. Forensic accountants are often seen to display an open mindset and embody investigative skills that include the methods of recognising fraud abuse.

### 2.8.5 Analytical Proficiency

Analytical proficiency is another skill set that makes a system shift to forensic accounting necessary at this time. Analytical proficiency is the ability to examine for what should be provided rather than what is provided (Bhasin, 2013). Putting into consideration the post-financial fraud regulatory environment, solving a financial puzzle with less than a complete set of pieces appears to be the direction in which the current business forum is heading (DiGabriele, 2011).

### 2.8.6 Communication Skill

One of those qualities which have distinguished forensic accountants from other accountants is communication skills (Murphy, 2014). This is because communication skills are an essential ingredient to succeed as a forensic accountant (Grippo, 2003). Communication skills include both oral and written communication. Oral and written communication skills are important skill set used by forensic accountants especially when gathering information from people who may not understand accounting and finance (Murphy, 2014). Communication skills involve the ability to be able to effectively communicate in writing via reports, charts, graphs, and schedules which form the bases of opinion (DiGabriele, 2011). Communication skill is particularly crucial in expert testimony when a forensic accountant explains findings to a judge or panel of judges.

Again, this type of skills supports why a system shift to forensic accounting is needed in detecting financial statement fraud. When fraud is detected, they need to be communicated to various parties, and that is where communication skills become very important. Moreover, during litigation, expert reports are usually examined, and the need to convey findings accurately is of utmost importance. The ability to communicate effectively, in both oral and written forms, is indispensable for today's accountants (Bhasin, 2013). This skill set further buttress the point of training auditors in the forensic accounting skills in order to detect financial statement fraud.

### 2.8.7 Legal Skill

Another vital skill set of a forensic accountant is specific legal knowledge. Specific legal knowledge is the ability to understand basic legal processes and legal issues including the rules of evidence (DiGabriele, 2011). Forensic accountants understand courtroom procedures. This understanding of courtroom procedures enables them to identify the types of evidence relevant and how such evidence can be preserved in a manner that meets the requirements of the court.

### 2.8.8 Experience

Grippo (2003) observed that the experience of a forensic accountant is the most critical ingredient for success. The experience a forensic accountant gains on a daily encounter with a situation is also an important skill. Experience helps a forensic accountant better in expert witnessing and in investigating. Accounting skills, auditing skills, internal control and communication skills are general skills for a forensic accountant (Grippo, 2003), the maturity gained in the profession is the key to success which is gained from experience with the daily situation.

## 2.9 Chapter Summary

This thesis aims to develop a forensic accounting system, a system that can reduce the incidence of fraudulent reporting through not only its predictive properties but the recommended forensic accounting procedures and policies which the accounting profession should adopt.

This chapter discussed recent studies in the field of auditing, occupational fraud and abuse, and forensic accounting. This discussion pertained to a broad range of issues that have to do with enhancing audit quality using forensic accounting skills and techniques. Specifically, agency theory was utilised in establishing the supposed role of audit. The adoption of the agency theory led to the development of the Agency

Triangle in Figure 2.1. Fraud triangle model was employed in emphasising the motives for criminal violation of trust and linked to why agents (management) commit financial statement fraud. The fraud diamond model was an improvement on the fraud triangle theory. These three theories serve as lens towards developing a forensic accounting system. The three models (The Agency Triangle, the Fraud Triangle and the fraud diamond) drive the empirical investigation and analysis of this study.

Auditors' current and historical responsibility for fraud detection in the financial statement was discussed and evaluated. The similarities and differences in the approach, work procedures, training and skill sets between accountants/auditors and forensic accountants have been compared and discussed. The specialist skills which forensic accountants hold and apply to fraud detection were highlighted. The literature review has led to an initial conclusion which suggests that a system shift to forensic accounting might be able to detect and reduce financial statement fraud through educating auditors the essential forensic accounting skills and techniques.

In achieving the development of a forensic accounting system and answering the three questions of this study, Chapter Three (Research Methodology) will embark on discussing the philosophical commitment and methodological assumptions that underpin this study.

# CHAPTER THREE: RESEARCH METHODOLOGY

The purpose of this study is to develop a forensic accounting system that will help to reduce the incidence of fraud in the financial statement through not only its predictive properties but also the recommended forensic accounting procedures and policies which the accounting profession should adopt. This will be done by exploring the perception of accounting academics, forensic accountants, external auditors, and finance director on how a shift to this forensic accounting system might reduce financial statement fraud.

The literature review (chapter two) elaborated on financial statement fraud and the role of audit. How forensic accounting is conceptualised, the relevant skills, techniques, and procedures used in forensic accounting and their importance in reducing financial statement fraud were considered. The progression of auditors' responsibility concerning fraud detection in the financial statement and the changes that have taken place over the past 50 years were also discussed.

The two theoretical frameworks that underpin this study were discussed. Agency theory (Jensen & Meckling, 1976) was utilised as a lens to help understand and establish the role audit play in the capital market. The fraud triangle theory (Cressey, 1950; Cressey, 1953) was used to explain why agents (managers) commit financial statement fraud.

The theoretical frameworks used in this study resulted in a few questions which this study along with its purpose intends to answer. These questions are:

1. Could the training of professional accountants (particularly auditors of the financial statement) in the forensic accounting skills, ethics, procedures, and principles help reduce the opportunities to commit financial statement fraud by the agent (management)?
2. How might the training of professional accountants in forensic accounting skills, ethics, procedures, and principles increase auditors' fraud detection capabilities?
3. How might the involvement of Forensic Accountants in audit engagement increase the chances of fraud prevention and detection in the financial statement?

In order to achieve the purpose of this study and to be able to explore the answers to the research questions identified above, the philosophical assumptions that underpin this study will be discussed in this chapter along with the rationale for research design, data collection techniques, sampling methods, and data analysis approach. This is necessary because findings are shaped by the assumption and experiences of the researcher conducting the study and doing data analysis (Thomas, 2006).

## 3.1 Qualitative Research Approach

Some issues are worth taking note of when starting a research project. While some of these issues are more practical by nature (relating to the research design and process, the planning of the practicalities concerning data acquisition, access to the research site, gathering materials and analysing them), other issues are more philosophical by nature (Eriksson & Kovalainen, 2008). Those issues relating to research design will be considered in this section.

There are two approaches to research design: quantitative and qualitative approach. Quantitative approach has its basis in positivism (Johnson & Clark, 2006) with an objectivist conception of social reality and objectivist epistemology that stresses the importance of measuring and quantifying phenomenon (Bryman & Bell, 2011).

Qualitative research, on the other hand, is difficult to define clearly. "*It has no theory or paradigm that is distinctively its own nor does it have a distinct set of methods or practices that are entirely its own"* (Denzin & Lincoln, 2011, p. 6). It is a broad umbrella term that covers a wide range of techniques and philosophies (Hennink, et al., 2011).

Qualitative research is a very 'broad church' and includes a wide range of approaches and methods found within different disciplines (Ritchie, et al., 2014). However, despite the inherent diversity within qualitative research, Denzin and Lincoln (2011: p3) describe qualitative research "*as a set of interpretive, material practices that make the world visible. These practices transform the world. They turn the world into a series of representations, including field notes, interviews, conversations, photographs, recordings and memos to self. Qualitative researchers study things in their natural settings, attempting to make sense of or interpret phenomena in terms of the meanings people bring to them*".

Most research studies that are interested in cause and effect relationship tend to adopt a quantitative research approach. However, because the purpose of this research is not to establish a cause and effect relationship, neither is it that this study want to quantify the attitude and value of actors' (accounting academics, forensic accountants, external auditors, and finance directors) in developing a forensic accounting system, a qualitative research approach was deemed appropriate and adopted for this study.

Qualitative research is multimethod in focus. It involves an interpretive and naturalistic approach to its subject matter (Anderson & Arsenault, 2005). Eriksson and Kovalainen (2008) observed that qualitative business research gives a researcher an opportunity to focus on the complexity of business-related phenomena in their contexts. It produces new knowledge about how things work in real-life business context, why they work in a specific way, and how we can make sense of them in a way that might bring change.

Financial statement fraud has become complicated to detect (DiGabriele, 2011). The accounting profession has struggled with this problem for so many years, and the inability of auditors to detect these fraud has compounded the problem for the profession, as the business community expects that auditors should be able to detect fraud in the financial statement (Koh & Woo, 1998). So, since auditors have not been able to detect these financial statement fraud, investor confidence in the financial reporting process and corporate governance have been declining (Hogan, et al., 2008; Mueller, et al., 2015).

Hence, developing a new system (forensic accounting system) that might reduce the incidence of fraudulent financial reporting have become inevitable in the wake of the series of accounting scandals, audit failures and corporate collapses that have occurred in recent time.

Therefore, exploring the perception of some stakeholders within the accounting profession and users of financial statement about developing a new system through a qualitative research approach in a way that might bring change and restore investors' confidence back in the financial reporting process is crucial to this study and can be best achieved through a qualitative research approach.

It is possible that the stakeholders under consideration in this study might hold different views on how a forensic accounting system might reduce financial statement fraud. Hence, understanding and interpreting their views are fundamental to this study. This is because, in a qualitative interpretive approach, the emphasis is on the understanding of the social world through an examination of the interpretation of that world by its participants (Bryman & Bell, 2011).

Through verstehen (Alvesson & Deetz, 2000; Denzin & Lincoln, 2011), qualitative researchers aim to understand other people's experience by inductively accessing the actual meanings and interpretations they subjectively and inter-subjectively deploy in making sense of their worlds and which influence their on-going social construction and accomplishment of meaningful action (Gill, et al., 2010).

Verstehen is central to qualitative research (Hennink, et al., 2011). Verstehen according to Oxford English dictionary is empathic understanding of human behaviour. Verstehen means studying people lived experiences which occur in a specific historical and social context (Snape & Spencer , 2008). It involves understanding the life of the people whom you study from their perspective, in their context and describing this using their own words and concepts (Hennink, et al., 2011).

Verstehen is vital in qualitative research because as a researcher, you want to know the subjective meaning that people attached to their views and experiences (Hennink, et al., 2011). This concept of verstehen makes the qualitative approach a good option for this study as I am interested in getting the subjective meaning of my research subject about a forensic accounting system and its chances at reducing financial statement fraud.

As further observed by Holloway & Wheeler (2010), qualitative research tends to focus on the way people interpret and make sense of their experiences and the world in which they live.

The choice of a qualitative research design for this study can further be captured from the words of Dabbs (1982, p.32). Dabbs (1982, p.32) observed that the "notion of quality is essential to the nature of things." Qualitative research allows for an in-depth understanding of a research problem (Berg, 2009).

A qualitative research approach can access directly what happens in the world, that is to examine what people do in real life rather than asking them to comment about it (Silverman, 2014). Adopting a qualitative research approach for this study allowed me to capture data on "the perception of my research participants in the context of their setting, through a process of attentiveness and empathetic understanding" (Miles & Huberman, 1994, p. 6). The following section will discuss the research paradigm that underpins this study.

## 3.2 Research Philosophy

The philosophical aspects and questions that creep around every research method and methodological approach are issues that should be considered at the beginning of a research project (Johnson & Clark, 2006; Eriksson & Kovalainen, 2008). This is because some research methods are in close connection to a research philosophy and to the ways new knowledge can be created through research (Eriksson & Kovalainen, 2008; Saunders, et al., 2015).

It is important to note that there is no single acceptable way of carrying out research (Ritchie, et al., 2014). How researchers proceed with their research depend upon a range of factors, including their belief about the nature of the social world (Ontology), the nature of knowledge and how it can be acquired (Epistemology), the organising principles that provide the procedures for guiding the research process (Methodology) and the techniques and procedures used in obtaining and analysing data (Method) (Eriksson & Kovalainen, 2008; Ritchie, et al., 2014; Saunders, et al., 2015).

Many researchers relate ontology, epistemology, and methodology together as a framework while other researchers see them as one unified view called paradigm (Eriksson & Kovalainen, 2008). This research will be adopting the later view which is called paradigm or better put as a theoretical perspective (Crotty, 1998).

### 3.2.1 Research Paradigm

Research paradigms which Crotty (1998) called theoretical perspectives are *"models or frameworks for observation and understanding which shape both what we see and how we understand"* (Babbie, 2007, p. 32). Research paradigms are terminology used in describing perspectives or ways of looking at reality (Crotty, 1998). They are the frames of reference that we utilise in organising our observation and reasoning (Babbie, 2007, p. 31) Guba and Lincoln (1994) defined research paradigm as the world view or the belief system that guides researchers in their work.

Research can be conducted using some theoretical perspectives (Lincoln & Guba, 2000). It was possible for me to have adopted a positivist, neo-empiricist, interpretivist, critical realist, postmodernist or even a pragmatist theoretical perspective in understanding the perceptions of stakeholders within the accounting profession and users of financial statement on how a forensic accounting system might reduce financial statement fraud.

However, after careful consideration of the various options available, a neo-empiricist theoretical perspective was considered the best research perspective to underpin this study. Bearing in mind that the purpose of this study is to develop a forensic accounting system and its fraud detection capacity by examining the perceptions of key stakeholders within the accounting profession on how a forensic accounting system might reduce financial statement fraud.

The field of forensic accounting is getting much attention because of the rising prevalence of occupational fraud and abuse worldwide (Wolosky, 2004). Interest is now shifting towards forensic accounting research. However, much of the research published to date has been dominated by the use of quantitative methods (DiGabriele & Huber, 2014) and has often been informed by the underlying functionalism and what might be 'loosely' termed a positivistic theoretical perspective.

This might well be due to the "fact" that accounting information is governed by the 'principle of objectivity'. Objectivity in the accounting sense implies that accounting information is prepared and reported in a neutral way and by all standards without bias. The sub-conscious belief, perhaps, being that objectivity can only be achieved by following the positivistic theoretical perspective in its epistemological sense.

As this study will argue, however, with neo empiricism, objectivity is achievable in an epistemological sense. The domination of the positivist theoretical perspective, however, in forensic accounting research limits the type of questions and methods accordingly (Moerman, 2010). As such, there is a need for a broader approach that allows for an empathic understanding of human behaviour through various qualitative research methods.

With the continuing interest in forensic accounting (Wolosky, 2004), there is a need for more diversity in forensic accounting research. Thus, it is suggested that within forensic accounting research, the subjective processes of the ‘key actors’ is very important to our theoretical explanations of the social world even though there is still, perhaps, a strong desire to retain the idea that there is a world out there that awaits discovery which may be investigated in an objective manner (Johnson & Clark, 2006). Thus, using a neo-empiricist paradigm appears to suit the purpose of this study.

Even though it might be suggested that many of the ‘qualitative methodologies’ assume some form of interpretivist agenda, they do, however, entail competing philosophical commitments that rely on different ontological and epistemological perspectives and views of human behaviour. They, therefore, present different rationales for what is taken for truth and the logic for engaging with the understanding of the social world (Gill, et al., 2010).

Importantly, Johnson et al (2006) argue, therefore, that the four modes of engagement (Positivism, Neo-empiricism, Critical theory, and Affirmative Postmodernism) are to some degree mutually exclusive in the sense that researchers cannot operate in two modes simultaneously in the same piece of research without some fear of contradiction in terms of epistemological exclusivity. A failure to fully engage with the consequences of such epistemological issues is often a cause of confusion when researchers talk of the subjective nature of their research. Often, they take this to be subjective in the epistemological sense rather than the subjectivity of the social actors

### 3.2.2 Neo-empiricism

The term neo-empiricism refers to an ‘interpretive’ focused theoretical perspective that assumes the possibility of unbiased and objective collection of qualitative empirical data following an inductive logic (Alvesson & Deetz, 2000, p. 62). Moreover, here it used to *“denote those management researchers who place reliance upon empirical evidence as capable of ensuring objective truth yet* *simultaneously reject the positivist ideal of discovering laws through deploying hypothetical-deductive methods"* (Johnson & Duberley, 2000, p. 1298).

Johnson et al. (2006) described neo-empiricists as those researchers who use qualitative data to 'develop inductively thick descriptions of the patterns in the inter-subjective meanings that actors use to make sense of their everyday worlds and who investigate the implications of those interpretations for social action' (p.138). Methodologies associated with such philosophically grounded views are those which use qualitative data to develop a theory that is grounded in the observations of empirical realities and thus supports claims for understandings that more meaningfully reflect the 'true nature' of the social order.

Although rival assumptions about the ontological status of human behaviour or action can be seen to differentiate neo-empiricism from positivism, Johnson & Duberley (2000) argue that both theoretical perspectives articulate objective epistemological assumptions combined with realist ontological assumptions concerning the nature of the social world.

A Neo-empiricist approach to management research is similar to positivism. They both embrace a commitment to the idea that our "sensory experience of the objects of reality provides the only secure foundation for social scientific knowledge" (Johnson & Duberley, 2000, p. 181). They assume the essential epistemic characteristic to be that of the availability of theory neutral observational language and that researchers may objectively discover 'truths' about the social world and hence inductively generate theory about it.

Although in the field of forensic accounting, no known research has adopted this mode of engagement before, there is a strong argument to make that the actors' subjective realm, is central to the development of theoretical understanding of fraud and its detection. Within the dominant positivistic philosophical stance, the accessing of individuals' subjective perspectives is often considered to be inappropriate because it is presumed this cannot be done objectively and neutrally.

In contrast, neo-empiricists argue that the subjective realm of the research subjects is not only crucial to the theoretical explanation of their behaviour, but it is also possible to access it, describe it, and hence theoretically use it to explain aspects of behaviour, objectively. Thus, the qualitative methods used by neo-empiricists to pursue their interpretive agenda have enabled them to increasingly assert its relevance to business and management research (Johnson & Clark, 2006). This led to the adoption of an *interpretive neo-empiricist* stance as an appropriate methodological positioning for this study.

Furthermore, neo-empiricists are committed to the concept of verstehen. Verstehen according to the Oxford English Dictionary means an empathic understanding of human behaviour. In the social sciences verstehen is used to refer to the idea that unlike objects in the natural world, human actions are not merely the result of external forces. Instead, individuals give meaning to the world through their own interpretation of it.

Neo-empiricists thus reject the idea of following a natural science methodology to research human action and suggest we need to understand the meaning of actions from the actor's point of view. By treating human actors as subjects, rather than the objects of our observations, neo-empiricists take the view that humans have an internal subjective logic, which must be understood in order to, make it intelligible, and it is this notion of subjectivity that is often confused with subjectivity in an epistemological sense (Johnson & Clark, 2006).

Hence, this study followed the postulation advanced by Gill and Johnson (2010) that the actors have subjective abilities, both emotional and cognitive, which influences how they consciously make choices about how to behave, where and when. People behave and act based on their perception and interpretation (Gill, et al., 2010). Hence, it is essential to understand why social actors behave and act in a certain way.

Neo-empiricists use inductive processes that they believe may be undertaken objectively so that the resulting data, the 'qualitative' descriptions, are not contaminated by the researcher who, as in mainstream positivist research, remains separate from the 'objects' of research to produce neutral findings (Johnson & Clark, 2006).

Hence, the term neo-empiricist is used for those management researchers who view the collection of qualitative empirical data as capable of ensuring objective truth in a correspondence sense (Alvesson & Deetz, 2000, pp. 60-74) even though they reject deductive methodology in favour of the inductive generation of theory ‘grounded’ in observation. The result is a separation of the knower-researcher from his/her inductive descriptions of other actors’ intersubjective cultural experience which awaits discovery (Johnson & Clark, 2006, p. xxxiii).

In positivism, the conceptualisation of a theory-neutral language manifests itself in the form of a subject-object dualism, whereby the knower (researcher) is separate from the known (the observed object of the research. In neo-empiricism the separation of the knower and the known (the dualism) is still prescribed, however, for neo-empiricists this is a subject-subject dualism., ‘a differentiation of the knower-researcher from their descriptions [observations] of what other knowers [research participants] know so as to enable the researcher’s ability to experience neutrally, and to provide an account of the other’s organizational experience [perceptions of organizational reality],’ (Johnson & Duberley, 2000, p. 181).

Thus, neo-empiricist methodologies (which adopt qualitative research approaches) have a commitment to epistemic objectivity and, therefore, ‘privilege the consciousness of the researcher who is deemed capable of discovering the ‘truth’ about the world’ (Johnson & Duberley, 2000). That is theoretical understanding which means that the theory developed by the researcher to conceptualise social phenomena correspond to reality as they are ‘grounded’ in observations of that empirical reality. The data collection technique employed in this study is discussed in the following section.

## 3.3 Data Collection Technique

The main data collection technique utilised in this study is the qualitative interview. Qualitative research interviews attempt to understand the world from the subject’s point of view in order to unfold the meaning of their experiences and to uncover their lived world prior to scientific explanation (Kvale & Brinkman, 2015).

In comparison to quantitative research, qualitative interviews are argued to offer greater ecological validity, providing rich, insightful accounts and the ability to help make sense of complex organisational realities (Eby, et al., 2009). A qualitative interview can take different forms to serve a different purpose. Journalistic interviews are a means of recording and reporting important events in society; therapeutic interviews seek to improve debilitating situations in people's lives. However, qualitative research interviews have the sole purpose of producing knowledge (Kvale & Brinkman, 2015).

The choice of the qualitative interview for this study is nothing covert. The qualitative interview was utilised in this study as a conversation that has a structure and a purpose. Qualitative interviews as a data collection tool for this study go beyond the spontaneous exchange of views in everyday conversation. It is a careful questioning and listening approach with the purpose of obtaining thoroughly tested knowledge (Kvale & Brinkman, 2015).

Using qualitative interviews for this study allowed me to reach areas of reality that would otherwise remain inaccessible such as people's subjective experiences and attitudes. Moreover, this method of data collection is a very convenient way of overcoming distances both in space and in time (Perakyla & Ruusuvuori, 2011).

The qualitative interview used was a semi-structured one. A semi-structured interview is one of the techniques used in collecting qualitative data by setting up a situation that allows the respondents the time and scopes to talk about their opinion on a particular subject (Berg, 2009).

Semi-structured interviews have been widely recognised as being able to facilitate this aim. This is because qualitative interviews provide us with a means to explore the points of view of our research subjects (Silverman, 2005).

The focus of the interview sessions was to find out if there any indicators from the lived experience of the stakeholders under consideration pointing towards a system shift to forensic accounting as a way of increasing the chances of fraud prevention and detection in the financial statement. The benefit of using the interview as against other qualitative data collection methods is that interviews allow researchers to have control over the line of questioning (Creswell, 2003).

Using interview technique in this study gave me the freedom to explore the respondents' perspective on the subject matter which is in line with the argument postulated by Denzin and Lincoln (2005) that interview is a conversation and not a neutral tool. This is because the reality of the interview situation is created by at least two people (Denzin & Lincoln, 2005).

## 3.4 Data Collection Procedure

The data collection procedure for this study was carried out in two phases.

### 3.4.1 Phase One

The first phase of this study was conducted in 2015 as part of my Master of Research in business degree (MRES). At this stage, six in-depth interviews were conducted, transcribed and analysed. The findings and lessons learned from this study help shaped the second phase of the data collection procedure and analysis.

When this study was initially conducted during my Master of Research in Business degree, only three categories of stakeholders were interviewed. These were External Auditors, Forensic Accountants, and Accounting Academics. There was an initial plan of including the fourth category which was the financial reporting council members, but after due consultation, I realised that the financial reporting council members fall into the earlier three categories. Hence, the idea was dropped.

The initial study at the MRES level gave me great insight into how best this study should be carried out. Based on the findings at the MRES level, adjustments were made to the research questions, the theoretical framework, and the interview themes.

### 3.4.2 Phase Two

At phase two, the research questions, theoretical framework, and line of questioning were modified, and a pilot study was carried out before data collection begins. The interview channels were all tested in order to give an intended result, and a new category of stakeholder was considered relevant to this study after due consultation with my supervisory team and coupled with the feedback I got from attending an international accounting and financial conference in Singapore in February 2016. The users of accounting services were the fourth category of stakeholder that was added. The users that were considered are the finance directors of fortune 350 companies.

The interviews were conducted through three channels. The first channel was for participants who live within 100 miles radius to me, in which case a face-to-face interview was scheduled and conducted at the convenience of the participants. The participants were also allowed to decide the venue where the interview took place.

The second channel was through Skype, and this was for participants who live outside the 100 miles radius to me. These categories of participants were allowed the freedom to choose a convenient date and time which was mostly weekends.

The third channel was through Facetime. This became an option where the participant does not have a Skype account and prefer to use Facetime. These categories of participants were also allowed the freedom to choose a convenient date and time and were also outside the 100 miles radius to me. The recording tools were adequately tested before the interview was conducted. I made use of two main recorders and a backup recorder.

A participant information sheet (see appendix ii) was sent to the potential participants by post and in some cases by email, and this was properly followed up. Once the participant agreed to participate in the study, a consent form (see appendix iii) was then sent to them which were all returned signed before the interviews were conducted.

All interviews conducted were audio recorded after seeking the participant's consent. The interviews conducted lasted on the average for around 45 minutes. The interview questions were informed from the review of the literature (see appendix iv). The researcher had a list of themes, and all themes were covered during the interview session with each participant, but there was flexibility in the order of questioning. This is consistent with a semi-structured interview method. It is not a rigid method as it allows for flexibility (Berg, 2009).

A basic question was asked at the beginning of the interview, the aim of which was to help make the participant comfortable answering all other questions. A question like "can you tell me briefly about your accounting background?" were asked at the beginning before asking participants if they have a concern about financial statement fraud before asking them to share some of those concerns.

The interview was conducted in batches for easy administration. I found this approach helpful, as it made it easy to manage the interview and it was an exciting process. Three interviews were conducted, transcribed and analysed in each batch. This made the data collection process long, but it was interesting and productive as lessons were learned and improved upon in subsequent batches of interviews that I conducted.

Take for example, how stakeholder (Accounting Academics) understood the word paradigm is different from how other stakeholders (Forensic Accountants, External Auditors, and Finance Directors) understood the concept. Therefore, in subsequent interviews with practitioners (Forensic Accountants, External Auditors, and Finance Directors), I avoided the use of the word “paradigm” and instead I used the word “change” which was easily understood by them. Thus, saving me the time I would have used to explain what I meant by the term paradigm to them.

The interviews were saved on OneDrive, Dropbox and University Computer. There was an additional backup on Google Drive and an external hard drive. On all the devices and platforms where the interviews were saved were all password protected. The interviews were transcribed verbatim through www.transcribewilley.com. Transcribe-Willey is an internet transcribing platform that enables audio-recorded interviews to be transcribed into words. After transcribing each interview, the transcribed interviews were sent back to the participants for verification. This was done to make sure that everything the participant said was captured. A few typos were corrected, and the interview was ready for analysis.

## 3.5 Sampling Selection Technique

In the journey to provide an answer to the purpose of this study and to answer the research questions identified in this study, another important technique that needs to be explained is the sampling strategy. Generally, the aim of qualitative research is not to impose preordained concepts but to provide an in-depth understanding of the phenomenon that is being considered (Wilmot, 2005) . Hence for this to happen, knowledge has to be seen through the eyes of the participants. This is consistent with my philosophical position.

The sampling selection technique that was used in recruiting participants from each of the accounting stakeholders under consideration is purposive sampling technique. The purposive sampling method is the most common method of non-probability sampling technique used by qualitative researchers (Miles & Huberman, 1994; Wilmot, 2005; Patton, 2015). Purposive sampling technique is a non-probability sampling technique that enables researchers to use their judgment in selecting cases that will best enable them to answer their research questions and meet their objectives (Saunders, et al., 2015).

Furthermore, Creswell (2003) suggests that the main idea that underpins interpretive research is to purposefully select those participants that are viewed as most likely to help the researcher understand the problem and the research question. Hence, using a purposive sampling technique for this study placed a demand on me to think critically about the parameters of the populations under study and therefore, the sample cases were carefully chosen on this basis (Silverman, 2005). This is because the objective of a non-probability sampling strategy is usually to develop a theory that reflects an understanding of a phenomenon (Bowen, 2008).

Probability sampling techniques were not considered because it is inappropriate for qualitative research (Wilmot, 2005). Wilmot (2005) observed that in a probability sampling technique, members of the research population are chosen at random and have a known probability of selection. Groups are represented in the sample in their true proportions; or, where unequal probabilities are used the data are reweighted back to the true proportions. The aim is to produce a statistically representative sample, suitable for hypothesis testing. However, qualitative research uses non-probability sampling as it does not aim to produce a statistically representative sample or draw a statistical inference (Wilmot, 2005).

Guest (2006), observed that where possible all research work should use probabilistic sampling techniques. However, research that is driven by its field nature, and one that is dealing with subjective actors, and that which is not concerned with statistical generalisation tend to use non-probability sampling techniques (Guest , et al., 2006).

In a purposive sampling technique, participants are usually selected according to predetermined criteria that are relevant to the phenomenon under study (Guest , et al., 2006). The characteristics of the participants are the basis of selection. Therefore, the number of participants interviewed is less significant than the criteria used in selecting them (Wilmot, 2005).

The participants for this study were selected based on their relevance to the purpose of this study. The statutory auditors are the ones saddled with the responsibility of providing credible financial reporting. The statutory auditor is that unique link in the agency relationship that exists between the principal and the agent. Therefore, they reinforce trust between the principal and the agent.

Forensic accountants are the specialist on fraud matters; they possess those skills capable of uncovering financial deception because they look not only at numbers but the underlying logic behind those numbers. The accounting academics are those tutors at universities, colleges and professional accounting trainers who teach both the statutory auditors and forensic accountant. They trained these two sets of professionals. The fourth category of participants are the finance directors of companies which have been classified as the users of the financial statement. They employ the services of auditing firm in an agency relationship.

The participants selected are a reputable individual with a mixture of industry and academic experiences. Table 3.1 below shows their experience and academic qualification.

Table 3.1: Participant Information

| **Participant ID** | **Gender** | **Highest Academic qualification** | **Current position** | **Professional Affiliation** | **Years of experience** |
|---|---|---|---|---|---|
| **Accounting Academic (AA1)** | Female | PhD | Professor of Accounting | ACCA, ACFE | Over 25 year |
| **Accounting Academic (AA2)** | Female | MSc | Principal Lecturer | ACCA, ACFE | Over 25 years |
| **Accounting Academic (AA3)** | Female | MSc, PhD in View | Senior Lecturer | ACCA | Over 15 years |
| **Accounting Academic** | Male | PhD | Senior Lecturer | ICAEW | Over 10 years |

| | | | | | |
|---|---|---|---|---|---|
| **(AA4)** | | | | | |
| **Forensic Accountant (FA1)** | Male | PhD | Director | ACCA, ACFE | Over 25 years |
| **Forensic Accountant (FA2)** | Male | MSc | Senior Partner | ICAEW, ACFE | Over 25 years |
| **Forensic Accountant (FA3)** | Male | MSc | Fraud Examiner | ACCA, ACFE | Over 15 years |
| **Forensic Accountant (FA4)** | Male | MSc | Senior Partner | ICAEW, ACFE | Over 20 years |
| **External Auditor (EA1)** | Male | BSc | Senior Partner | ACCA | Over 15 years |
| **External Auditor (EA2)** | Female | MSc | Partner | ACCA, ACFE | Over 6 years |
| **Finance Director (FD1)** | Male | DBA | Director | ACCA | Over 12 years |
| **Finance Director (FD2)** | Male | MBA, DBA in View | Director | CIF | Over 15 years |

Source: Author's computation

A total of 12 interviews were conducted. Four interviews each for accounting academics and forensic accountants and two interviews each for external auditors and finance directors. The objective of the researcher is not to maximise the numbers of interviews but to be saturated with information on the area of study (Padgett, 2008). The data collection and analysis started in February 2017 and finished in May 2018.

While the issue of justifying numbers of participants in qualitative research has been a subject of debate in recent time, there is still no consensus in the qualitative research literature on the number of participants that is appropriate for qualitative research (Guest , et al., 2006; Saunders & Townsend, 2016).

What is considered methodologically valid differs between communities of qualitative scholars (Baker & Edwards, 2012) and diverging philosophical commitments (Johnson , et al., 2006). For instance, in community-based research on anti-poverty conducted by Bowen (2008), he reached saturation after eight cases. He then concluded that saturation could be reached at a point when no new insight is added to an existing category (Bowen, 2008)

Because the data collection and analysis were carried out in batches, I believed that I had reached data saturation after the second batch of interviews and analysis was carried out. However, I went ahead and conducted the third batch of the interview because partly the interview has been scheduled and partly because the researcher wanted to be sure that no new information will be added from the already created category from the stakeholders under consideration mainly external auditors and finance directors who were only two participants each. The following section will discuss the data analysis approach and procedures adopted in this study.

## 3.6 Data Analysis Approach and Procedures

Social science research mainly focuses on explanations of human action which are generated inductively during data collection to develop an understanding of the interpretations deployed by actors who are being studied (Denzin & Lincoln , 2000).

The purpose of this study is to contribute to both theory and practice by exploring the perception of external auditors, forensic accountants, accounting academics and finance directors on how a forensic accounting system might reduce financial statement fraud. Bearing in mind that the unrelenting series of embarrassing financial statement fraud has damaged the reputation of the accounting and auditing profession, this study adopts a general inductive approach for the interpretation of data.

### 3.6.1 General Inductive Approach

The process of induction follows the logic of proceeding from empirical to theoretical results (Eriksson & Kovalainen, 2008). Locke (2007) observed that the method of induction is the process of proceeding from particular to the general universe. General inductive approach process usually starts with an observation or something that is puzzling which needs exploration and ends up in a new theory. Hence taking this approach in this study means that the researcher is attempting to generate a theory at the end of this research.

Generalisation is questionable in qualitative research (Bryman & Burgess, 1994). The scope of the qualitative investigation is often restricted which make it impossible to know how the findings of one or two cases can be generalised to other settings or better still be a representation of all cases (Bryman & Bell, 2011). Nevertheless, one way to generalise beyond empirical findings is that of generalisation to theory (Eriksson & Kovalainen, 2008) which is elsewhere called analytic generalisation (Yin, 2009). Therefore, it is the quality of the theoretical inferences that are made out of the qualitative data that is crucial to the assessment of generalisation (Darabi & Clark, 2013).

Gill and Johnson (2010) contend that human beings can attach meaning to the events and phenomena that surround them. Therefore, examining the perception of external auditors, forensic accountants, accounting academics and finance directors who might hold different understanding and views about a system shift to forensic accounting is highly necessary.

This is because they are from different backgrounds. Hence getting their views and reporting it objectively will provide excellent contrast and comparison and thereby confronts the emergent theory with the patterning of social events under different circumstances just as analytic induction is a set of methodological procedures that try to generate theory grounded in observation (Johnson, 2004). Hence this approach shaped the researcher’s thought in applying an analytic induction for data analysis.

In developing a neo-empiricist/inductive analytical approach for this study, data from forensic accountants, accounting academics and external auditors and finance directors were collected using audio recorder app and then subsequently transcribed through a website by name www.transcribedwiley.com. Transcribed-Wiley is an internet-based platform that enables audio interviews to be transcribed into a word document. This website is particularly useful because it allowed me to slow down the pace of the recording, thereby making the process of transcribing a much easy one. The website also has an automatic save features which prevented data losses and equally works both online and offline.

The interview transcripts were analysed, and a provisional list of some common features and some irregular cases were identified. After that, cross-case analysis of the data from forensic accountants, accounting academics and external auditors and finance directors was carried out with the aid of Nvivo 11 software, which resulted in some themes and sub-themes leading to a tentative model for preventing and detecting financial statement fraud called the forensic accounting system.

Nvivo 11 software is a Qualitative Data Analysis Software (QDAS) that allows for easy coding of qualitative data (Saldana, 2016). The choice of Nvivo is based on its simplicity. Nvivo 11 software allows for the importation of all interview transcripts and coding respectively. The software saves time and allows for easy cross-case analysis (Saldana, 2016). The following section addresses the ethical issues related to this study.

## 3.7 Ethical Consideration

This research gave utmost priority to research ethics. Ethical issues were considered throughout the whole process of this research, i.e., before and after data collection. Because human participants were involved in this study, a research proposal was sent to Sheffield Hallam University Research Ethics Committee for approval (see appendix i). This is a standard requirement because a human being is involved in the study and the university ethics committee needs to make sure that the research will not harm the participants (Diener & Crandall, 1978).

A participant information sheet was sent to potential participants (see appendix ii). The aims of the research were clarified to the participants in the participant information sheet that was sent to them. The participants were made aware that the research is being conducted for academic purpose and one that will lead to an award of Doctor of Philosophy (PhD).

Participants were also informed about their confidentiality and anonymity of the interview contents and were asked if they would like to participate or not. The participants were also made aware that the interview will be audio recorded as it might not be possible for the researcher to capture everything that the participant said through writing.

As soon as the participants agreed to participate in the study, a consent form (see appendix iii) was sent to each of the participants to sign before any interview took place. The researcher makes sure that the consent forms were returned before conducting the interviews. The participants were allowed to choose the venue and time of the interview. This was done to avoid the issue of invasion of privacy (Diener & Crandall, 1978). While some participants opted for face-to-face, others opted for an online platform through skype and Facetime.

The Academy of Management (AOM) Code of Ethical Conduct recommends that issues relating to confidentiality and anonymity should be agreed with the potential research participants before data collection take place (Bryman & Bell, 2011). This issue still must be taken into consideration when findings are being published to ensure that organisations and individuals are not identified or identifiable (Bryman & Bell, 2011).

The researcher considered this while discussing the findings of this study. For example, participant one was anonymised using their category as against their names which were already identified by the researcher. The first category of stakeholder under consideration is accounting academics in which case the researcher denotes this using AA. For forensic accountant category, the researcher uses FA -1 for the first forensic accountant interviewed. External auditors were denoted using EA while finance director was denoted using FD.

## 3.8 Chapter Summary

This chapter discussed the research philosophy that underpins the researcher's scholarship which in turn guides the research designs, method, and methodology. The justification was given on why the researcher considered Neo-empiricism as a theoretical perspective to follow. The purpose of this study is to develop a forensic accounting system by exploring the perceptions of accounting academics, forensic accountants, external auditors and finance directors on how a forensic accounting system might reduce financial statement fraud. The purpose of this study shaped the researcher philosophical choice and research method.

A qualitative research method was adopted for this study since the researcher is interested in exploring the perceptions of accounting stakeholders on how a forensic accounting system might reduce financial statement fraud. Qualitative research was used because it can facilitate this aim. The semi-structured interview was utilised as a data collection method, and the interviews were conducted in batches for easy administration and management. A total of twelve interviews were conducted. The process of data collection and analysis started in February 2017 and finished in May 2018. A purposive sampling technique was utilised in recruiting participant for this study.

The process of analysis includes transcribing, data cleaning, coding, and categorisation which will be explained in detail in the next chapter (chapter four). A general inductive approach was adopted for data analysis. This approach involves detailed readings of the raw data, and this drives the identification of concepts, themes, or the identification of a model through interpretations made from the data by the researcher (Thomas, 2006).

The issue of research ethics was also addressed. The participant was given an information sheet which summarises the purpose of the study and the issue of their confidentiality and anonymity. The consent of participants was sought once they agreed to participate in the study. Their consent was expressed by signing a participant consent form, and no interview was conducted until this has been duly signed by the participants.

The next chapter (chapter four) will discuss the process of data reduction through a general inductive approach and how the three main themes emerged from this study.

# CHAPTER FOUR: DATA ANALYSIS PROCEDURE AND FINDINGS

This chapter explains the procedures that were undertaken for analysing the resulting data from this study. This includes the data reduction method and how the main themes came about. This chapter will also discuss the demographics of the participants and their similarities. The analysis process will be discussed in detail on a step-by-step basis. From the transcription process to the data cleaning process, to coding, to cross-case analysis, down to categorisation of data and finally to the emergence of the main themes. This chapter will also highlight the contribution of this thesis to accounting theory and practice.

The purpose of this study is to develop a forensic accounting system that could help in reducing financial statement fraud through its predictive properties and procedures by exploring the perception of stakeholders within the accounting profession and users of accounting services with regards to how a system shift to forensic accounting could help reduce financial statement fraud. The following research questions which emanated from the theoretical framework and review of literature were considered in this study:

- Could the training of professional accountants (particularly auditors of financial statements) in forensic accounting skills, ethics, procedures and principles help reduce the opportunities to commit financial statement fraud by the agent (management)?
- How might the training of professional accountants in the forensic accounting skills, ethics, procedures and principles increase auditors' fraud detection capabilities?
- How might the involvement of Forensic Accountants in audit engagement increase the chances of fraud prevention and detection in the financial statement?

The overall objective of this study is not only to advocate for a system shift to forensic accounting but also to begin to develop the forensic accounting system. The following section will give a descriptive characteristic of the participants of this study.

## 4.1 Descriptive Characteristics of Participants

This section of the analysis aims to give a descriptive characteristic of all the participants that were interviewed in this study. This is done to understand the context in which the research was conducted and to enhance the credibility of the findings of this study.

This research focused on stakeholders within the accounting profession. Stakeholders are people who have vested interests in an entity and who are affected by the decisions of such entity. The stakeholders considered in this study are:

Accounting Academics (AA)

External Auditors (EA)

Forensic Accountants (FA)

Finance Directors (FD)

The justification for these four stakeholders was considered in the previous chapter (Chapter Three - Research Methodology). The geographical context of the study is the United Kingdom. United Kingdom is among the countries that have the best corporate governance systems and practices in the world (OECD, 2017). For anonymity sake, the participants' names were changed to their category name, i.e. AA stands for Accounting Academics; EA stands for External Auditor; FA stands for Forensic Accountant while FD stands for Finance Director. Each of the participants represents a case. Table 4.1 below shows the case classification of each participant.

Table 4.1: Case classification

Cases

| Name | Sources | References | Created On | Created By | Modified On | Modified By |
|---|---|---|---|---|---|---|
| AA1 | 1 | 1 | 30/04/2018 20:47 | IF | 30/04/2018 20:51 | IF |
| AA2 | 1 | 1 | 30/04/2018 20:47 | IF | 30/04/2018 20:51 | IF |
| AA3 | 1 | 1 | 30/04/2018 20:47 | IF | 30/04/2018 20:51 | IF |
| AA4 | 1 | 1 | 30/04/2018 20:47 | IF | 30/04/2018 20:51 | IF |
| EA1 | 1 | 1 | 30/04/2018 20:47 | IF | 30/04/2018 20:51 | IF |
| EA2 | 1 | 1 | 30/04/2018 20:47 | IF | 30/04/2018 20:51 | IF |
| FA1 | 1 | 1 | 30/04/2018 20:47 | IF | 30/04/2018 20:51 | IF |
| FA2 | 1 | 1 | 30/04/2018 20:47 | IF | 30/04/2018 20:51 | IF |
| FA3 | 1 | 1 | 30/04/2018 20:47 | IF | 30/04/2018 20:51 | IF |
| FA4 | 1 | 1 | 30/04/2018 20:47 | IF | 30/04/2018 20:51 | IF |
| FD1 | 1 | 1 | 30/04/2018 20:47 | IF | 30/04/2018 20:51 | IF |
| FD2 | 1 | 1 | 30/04/2018 20:47 | IF | 30/04/2018 20:54 | IF |

| Name | | Sources | References | Created On | Created By | Modified On | Modified By |
|---|---|---|---|---|---|---|---|
| AA1 | | 1 | 1 | 30/04/2018 20:47 | IF | 30/04/2018 20:51 | IF |
| AA2 | | 1 | 1 | 30/04/2018 20:47 | IF | 30/04/2018 20:51 | IF |
| AA3 | | 1 | 1 | 30/04/2018 20:47 | IF | 30/04/2018 20:51 | IF |
| AA4 | | 1 | 1 | 30/04/2018 20:47 | IF | 30/04/2018 20:51 | IF |
| EA1 | | 1 | 1 | 30/04/2018 20:47 | IF | 30/04/2018 20:51 | IF |
| EA2 | | 1 | 1 | 30/04/2018 20:47 | IF | 30/04/2018 20:51 | IF |
| FA1 | | 1 | 1 | 30/04/2018 20:47 | IF | 30/04/2018 20:51 | IF |
| FA2 | | 1 | 1 | 30/04/2018 20:47 | IF | 30/04/2018 20:51 | IF |
| FA3 | | 1 | 1 | 30/04/2018 20:47 | IF | 30/04/2018 20:51 | IF |
| FA4 | | 1 | 1 | 30/04/2018 20:47 | IF | 30/04/2018 20:51 | IF |
| FD1 | | 1 | 1 | 30/04/2018 20:47 | IF | 30/04/2018 20:51 | IF |
| FD2 | | 1 | 1 | 30/04/2018 20:47 | IF | 30/04/2018 20:54 | IF |

Source: Author's Nvivo output

The participants interviewed were reputable people with a good number of years of experience in both industry and academia. An understanding of who the participants interviewed for this study are essential. This will help understand their reality and lived experience which often shaped their biases. This is consistent with the philosophical positioning of this study. Each participant will now be considered in detail, and the similarities between the participants will also be established. Table 4.2 shows the participant characteristics.

Table 4.2: Participant Characteristics

| Participant ID | Gender | Level | Occupation | Prior Experience | Years of Experience | Qualifications |
|---|---|---|---|---|---|---|
| Cases\\AA1 | Female | Professor | Accounting Academics | Auditor/Forensic Accountant | 25 | PhD, CFE, ACCA |
| Cases\\AA2 | Female | Principal Lecturer | Accounting Academics | Auditor/Forensic Accountant | 33 | ACCA, CFE |
| Cases\\AA3 | Female | Senior Lecturer | Accounting Academics | Auditor/Forensic Accountant | 16 | ACCA, MSc |
| Cases\\AA4 | Male | Senior Lecturer | Accounting Academics | Auditor/Fraud Examiner | 10 | PhD, ICAEW |
| Cases\\EA1 | Male | Audit Partner | External Auditor | Risk Management | 18 | ACCA, MSc |
| Cases\\EA2 | Female | External Auditor | External Auditor | Forensic Accountant | 6 | MSc, ACCA, CFE |
| Cases\\FA1 | Male | Senior Associate | Forensic Accountant | External Auditor | 18 | PhD, ACCA, CFE |
| Cases\\FA2 | Male | Senior Associate | Forensic Accountant | External Auditor | 19 | ICAEW, CFE |
| Cases\\FA3 | Male | Director | Forensic Accountant | External Auditor | 23 | ACCA, CFE |
| Cases\\FA4 | Male | Senior Associate | Forensic Accountant | External Auditor | 25 | ACCA, CFE |
| Cases\\FD1 | Male | CFO | Finance Director | Accountant | 18 | DBA |
| Cases\\FD2 | Male | CFO | Finance Director | Finance | 16 | DBA in View |

Source: Author's Nvivo output

### 4.1.1 Accounting Academics

Four accounting academics were interviewed. The section below highlights some of their unique characteristics.

#### *4.1.1.1 Accounting Academics 1 (AA1)*

AA1 is a female. She is an accounting professor in one of the universities in the UK. She has over 25 years' experience in the industry where she undertook different roles from being an external auditor to a forensic accountant before undertaking a PhD. AA1 has been a professor of Accounting for over 12 years. She has been a consultant for the government and financial reporting council for over 15 years. AA1 has also served as an external examiner for the accounting professional bodies such as ACCA, ICAEW and some other accounting association in the UK.

#### *4.1.1.2 Accounting Academics 2 (AA2)*

AA2 is a female who has 33 years of industry experience, both as an auditor and a forensic accountant at one of the "Big Four" accounting firms before joining a top business school in the country in the last ten years. She is a Principal Lecturer and a Course Leader. She is a member of the UK Board of Governance of an anti-fraud organisation and an external examiner for ACCA. She specialises in forensic accounting and counter fraud education.

##### **4.1.1.1.1 Similarities Between AA1 and AA2**

There seems to be some similarities between AA1 and AA2. Apart from the fact that both are female, they both have over 15 years' industry experience and have both worked previously as external auditors and forensic accountants before joining their respective universities in a teaching capacity. Figure 4.1 below shows their similarities.

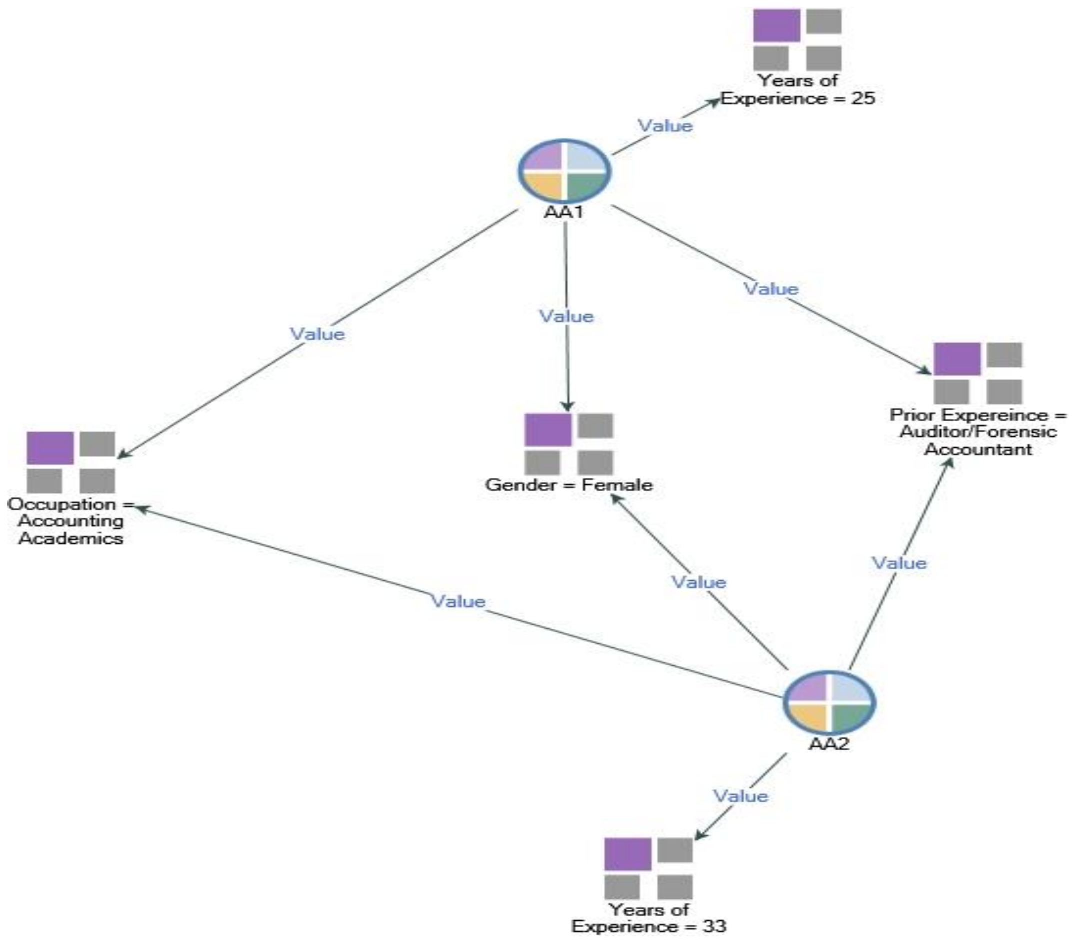



Figure 4.1: Project Map: Similarities between AA1 and AA2

Source: Author's Nvivo output

The similarities between the participants will help in understanding why they answered the interview questions in a certain way. This approach is consistent with the neo-empiricist theoretical perspective. Since it is how participants make sense of their lived experience that I am interested in reporting objectively.

#### *4.1.1.3 Accounting Academics 3 (AA 3)*

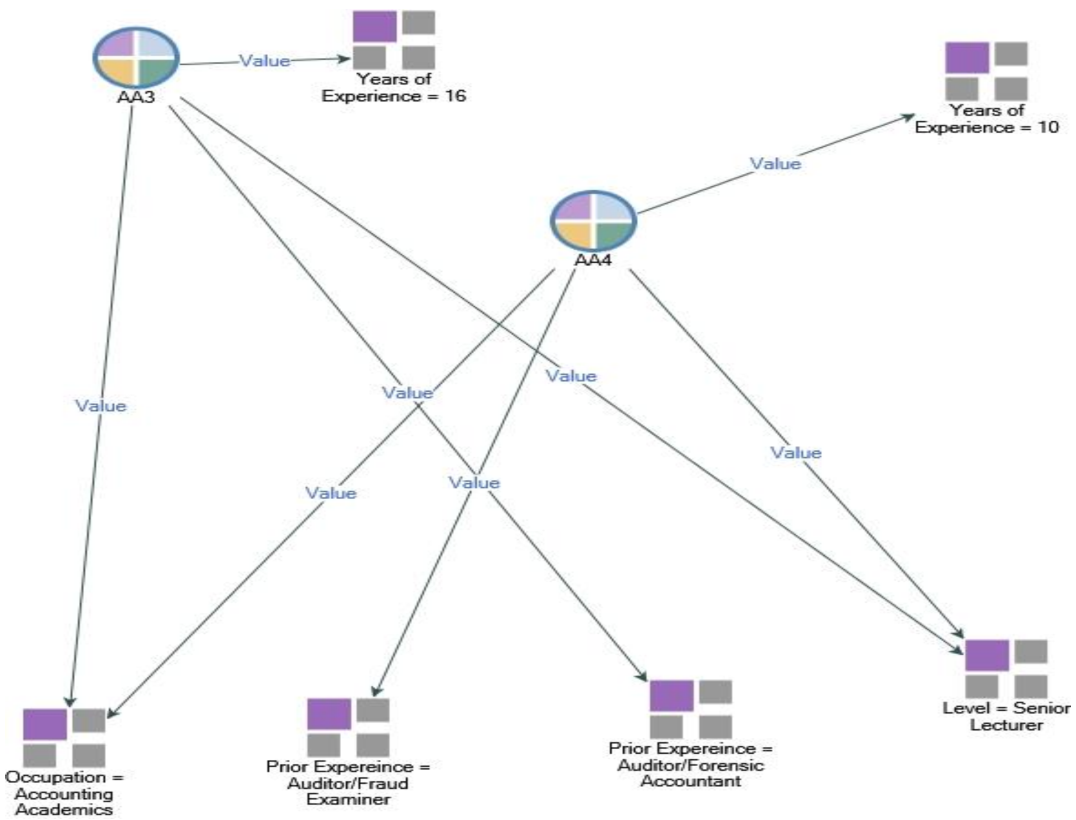
AA3 is a female. She has 16 years of industry experience, and before working in higher education. AA3 worked as an auditor before venturing into forensic accounting. She is a senior lecturer in one of the leading business school in the country. She teaches accounting and finance, as well as forensic accounting. She is a member of the largest anti-fraud organisation and Northern Forensic Accounting Association.

#### *4.1.1.4 Accounting Academics 4 (AA 4)*

AA4 is a male. A Certified Fraud Examiner with ten years of industry experience. AA4 had worked previously as an auditor before joining one of the leading universities for his PhD in counter fraud and forensic accounting. AA4 is currently a senior lecturer for the same university where he did his PhD. He has published in the area of audit quality and forensic accounting.

#### 4.1.1.1.2 Similarities Between AA3 and AA4

AA3 and AA4 are both a senior lecturer in their respective university. They both had over ten years of industry experience working as an auditor. While AA3 is a forensic accountant, AA4 has previous experience working as a fraud examiner which is part of the functions of a forensic accountant or specialisation. Figure 4.2 shows their similarities.




Source: Author's Nvivo Output

Figure 4.2: Project Map: Similarities between AA3 and AA4

### 4.1.2 External Auditor

Two external auditors were interviewed. The section below highlights some of their unique characteristics.

#### *4.1.2.1 External Auditor 1 (EA 1)*

EA1 is a male, an ACCA qualified accountant with eighteen years of audit experience. He has previously worked for the Police and has experience in risk management. He is an audit partner at one of the Big Four accounting firms.

#### *4.1.2.2 External Auditor 2 (EA 2)*

EA2 is an ACCA qualified accountant who has had six years of post qualification experience at one of the big four accounting firms. EA2 is a female and she had previous experience working as a forensic accountant after undertaking a master’s degree in forensic accounting. She is a Certified Fraud Examiner.

##### **4.1.2.2.1 Similarities Between EA1 and EA2**

EA1 and EA2 both share some similarities. They are both ACCA qualified accountants and both work for one of the Big Four accounting firms. EA1 and EA2 both have over five years post qualification experience in audit. Figure 4.3 below highlight their similarities.

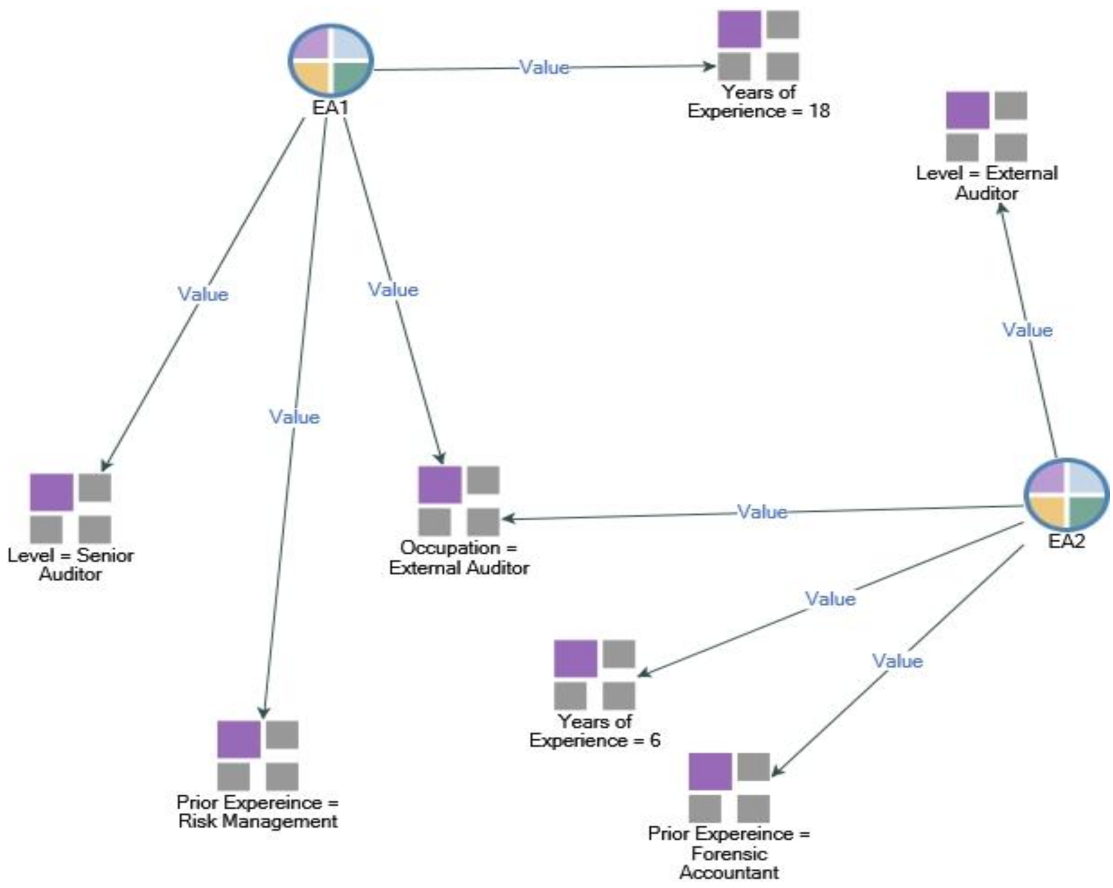



Figure 4.3: Project Map: Similarities between EA1 and EA2

### 4.1.3 Forensic Accountant

Four forensic accountants were interviewed. The section below highlights some of their unique characteristics.

#### *4.1.3.1 Forensic Accountant 1 (FA 1)*

FA1 is a male with eighteen years of industry experience. He is a Certified Fraud Examiner and a Qualified Accountant. He is a senior associate at one of the big four accounting firms. FA1's prior experience was in audit and has undertaken different roles in the audit. The last role in the audit was as an external auditor.

#### *4.1.3.2 Forensic Accountant 2 (FA 2)*

FA2 is a male, a senior associate in one of the big four accounting firms. FA2 has worked in the industry for the past nineteen years undertaking different roles ranging from internal audit to external audit. Before he moved into the field of forensic accounting seven years ago. FA2 is a Certified Fraud Examiner (CFE) and a Fellow of Association of Chartered Certified Accountants (ACCA).

#### 4.1.3.3.1 Similarities Between FA1 and FA2

FA1 and FA2 both share somethings in common. They are both male and senior associates at one of the Big Four accounting firms. They have both held the Certified Fraud Examiners credentials and chartered accountancy qualification from the Association of Chartered Certified Accountants (ACCA). They both have over 15 year’s industry experience and have previously worked as external auditors before venturing into forensic accounting. Figure 4.3 below shows their similarities.

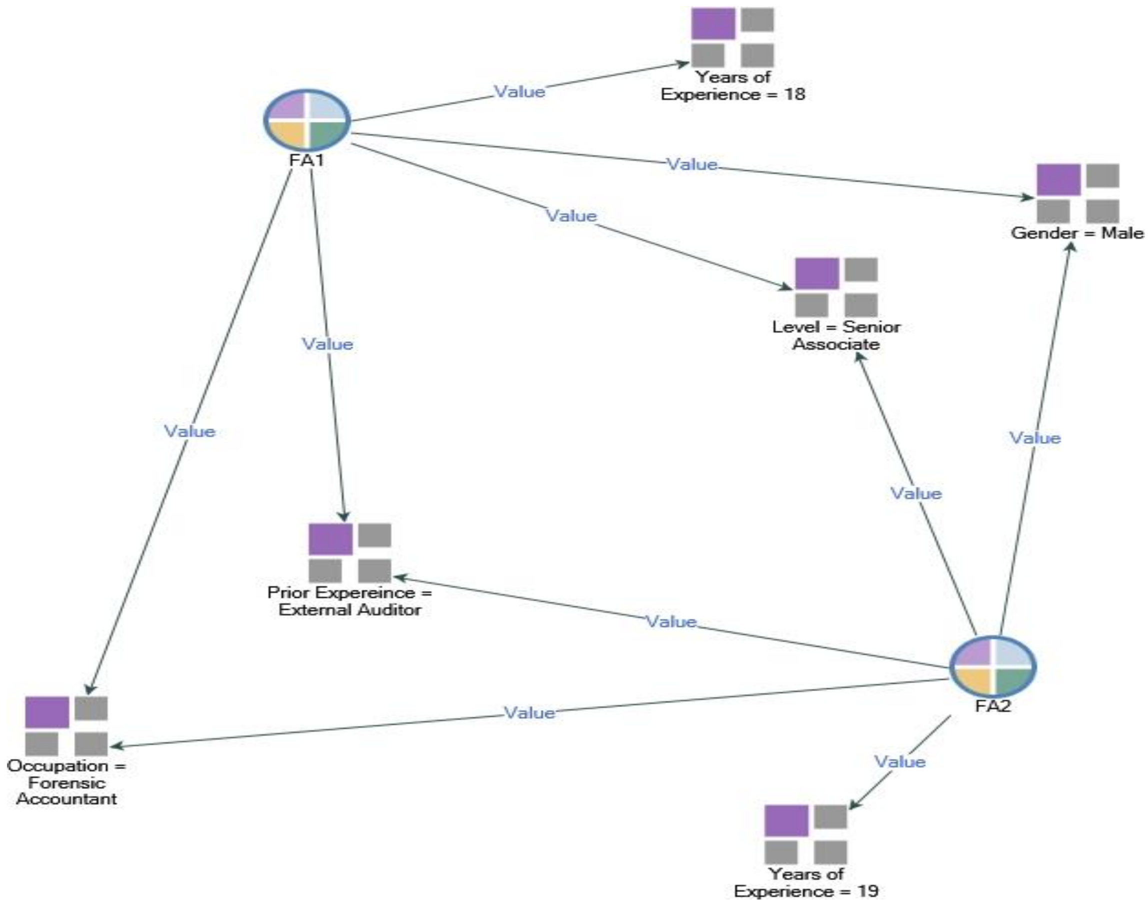



Figure 4.4: Project Map: Relationship between FA 1 and FA 2

Source: Author's Nvivo output

### *4.1.3.3 Forensic Accountant 3 (FA 3)*

FA3 is a male. He is a member of the financial reporting council and has previously worked as an external auditor. FA3 is a director of the forensic accounting unit in one of the big four accounting firms. He is a Fellow of the Association of Chartered Certified Accountant and a Certified Fraud Examiner. FA3 is a member of the governing body of the UK branch of the Association of Certified Fraud Examiner. He is a counter fraud specialist and a well sought-after anti-fraud speaker around the world. FA3 has an industry experience that spans across 20 years, and he has served as an expert witness in leading audit failures and fraud cases in the UK.

#### *4.1.3.4 Forensic Accountant 4 (FA 4)*

FA4 is a male. He has over twenty years of industry experience, and he is a proud member of the Association of Certified Fraud Examiner where he holds the Certified Fraud Examiner (CFE) credential. He is a Fellow of the Association of Chartered Certified Accountants (ACCA). FA4 is a senior associate in one of the big four accounting firms where he works as a forensic accounting expert. He has been an expert witness in some audit failures and financial statement fraud cases in the UK.

#### 4.1.3.3.2 Similarities Between FA3 and FA4

FA3 and FA4 are both male and share some unique characteristics. They are both Fellows of the Association of Chartered Certified Accountant, and both hold the Certified Fraud Examiner credentials. They have both worked for one of the big four accounting firms, and before that, they had both worked as an external auditor. They both have over 20 years of industry experience. Both FA3 and FA4 have served as expert witnesses in leading audit failures and fraud cases in the UK. Figure 4.4 below shows their similarities.

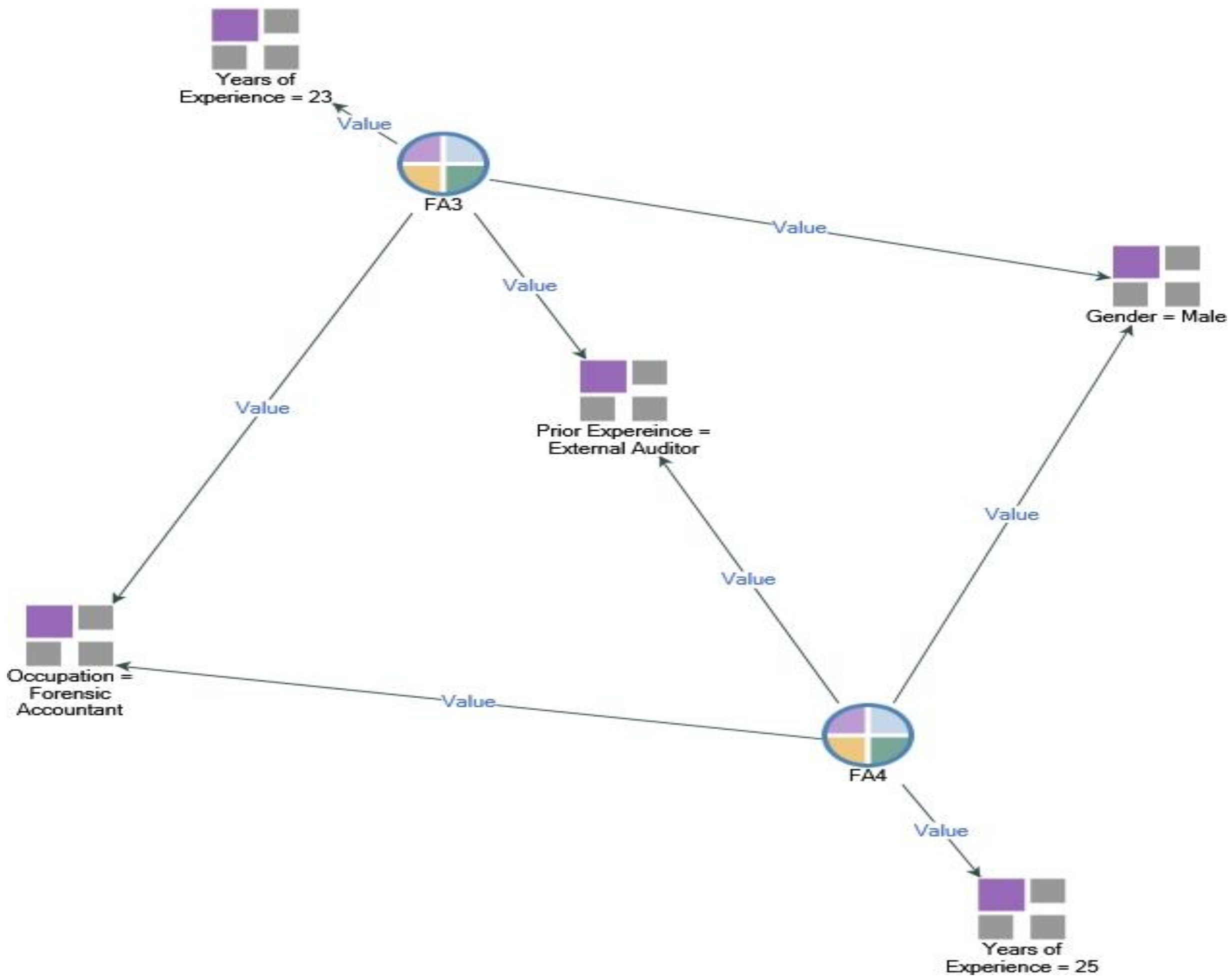



Figure 4.5: Project Map: Similarities between FA 3 and FA 4

Source: Author's Nvivo output

### 4.1.4 Finance Director

Two finance directors were interviewed. The section below highlights some of their unique characteristics.

#### *4.1.4.1 Finance Director 1 (FD 1)*

FD1 is a male with industry experience in oil and gas. Started from being an accountant for one of the Fortune 350 companies, FD1 rose to the position of a Finance Director in a major oil and gas company. He has over fifteen years' experience overseeing join ventures. He holds a Doctor of Business Administration degree (DBA) from one of the leading business schools in the country.

#### 4.1.4.2 *Finance Director 2 (FD 2)*

FD2 is a male. He is a Finance Director for a Fortune 350 company. FD2 was once interviewed for a Finance position at Enron before its collapse. He has over sixteen years of industry experience and served as the Chief Financial Officer in a multi-national company. FD2 is currently pursuing a Doctor of Business Administration in one of the Business Schools in the country. He is also a guest lecturer in one of the universities in the Midland.

##### 4.1.4.4.1 Similarities Between FD1 and FD2

FD1 and FD2 both share some unique characteristics. Apart from the fact that they are both males, they both worked for the Fortune 350 companies. They both have over 15 years of industry experience. The two finance directors have a quest for knowledge by pursuing a Doctor of Business Administration degree. They both rise to the position of Finance Director from a junior position in their respective company. They both have international exposure having worked for multinational companies. Figure 4.5 below shows their similarities.

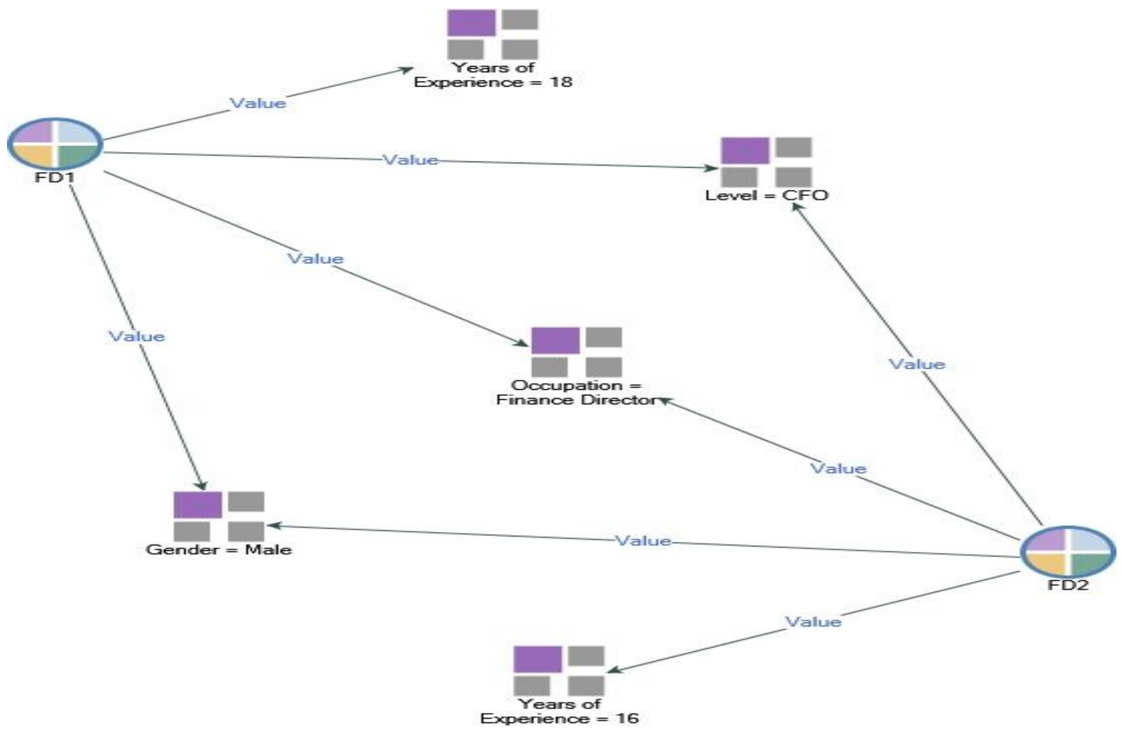



Figure 4.6: Project Map: Similarities between FD 1 and FD 2

Source: Author's Nvivo output

## 4.2 Data Analysis Procedure and Approach

Qualitative data analysis is usually an ongoing process which involves the breaking down of data into meaningful parts for the purpose of examination. The goal of breaking the data into meaningful parts is to make sense of the data (Merriam & Tisdell , 2016). Thomas (2006) observed that the procedures for the evaluation of qualitative data is common, but the knowledge about the efficient and defensible procedures for analysing such is less common.

A wide range of literature has documented the underlying assumptions and procedures associated with analysing and evaluating qualitative data (Thomas, 2006). Many of which have specific approaches or traditions such as grounded theory (Strauss & Corbin, 1998), phenomenology (Van Maanen, 1990), discourse analysis (Potter & Wetherell, 1994) and narrative analysis (Lieblich, 1998). General inductive approach, however, has been widely used as a strategy for analysing qualitative data (Dey, 1993; Bryman & Burgess, 1994).

For this research a general inductive approach was adopted for data analysis. This justification for this was discussed in Chapter Three. Inductive approach is a systematic procedure for analysing qualitative data where the analysis is likely to be guided by specific objectives (Thomas, 2006). The general inductive approach involves detailed readings of the raw data, and this drives the identification of concepts, themes, or the identification of a model through interpretation made from the data by the researcher (Thomas, 2006).

In a general inductive approach, the researcher begins with an area of study and allows the theory to emerge from the data. Thus, building an understanding of data analysis and theory in a manner that is consistent with Strauss and Corbin's (1998) grounded theory methodology. The researcher adopted this approach. The researcher spent much time reading the interview transcripts in order to get a proper understanding of the participants' perception of how a system shift to forensic accounting might reduce financial statement fraud.

This research has followed a systematic procedure with the aim of reducing mass raw data through coding and categorisation of data without losing their meanings, such that a clear link between the research objectives and findings could be derived while ensuring that these links were both transparent and defensible. The primary purpose of adopting an inductive approach is to allow research findings to emerge from the frequent, dominant, or significant themes inherent in raw data, without the restraints imposed by structured methodologies (Thomas, 2006).

### 4.2.1 Transcription Process

Transcription is a practice that is central to qualitative research (Davidson, 2009). It is a "*selective process reflecting theoretical goals and definitions*" (Ochs, 1979, p. 44). The process of transcribing all the interviews enabled the researcher to get very close and familiar with the content of the data. This is because, through the process of typing up the interview transcripts, the researcher became very familiar with the content of the interview as a result of pausing and rewinding the audio recording. Transcription in this research became a result of a series of choices in need of explication (Ochs, 1979).

Audio files of the interviews conducted from the four groups of stakeholders (accounting academics, external auditors, forensic accountants and finance directors) were transcribed verbatim through a website by name www.transcribewiley.com. This was a time-consuming process, although using this website made the transcription a lot easier for the researcher as against the traditional way of transcribing. The traditional way of transcribing is a time consuming and tiring process. This is because the researcher will not have the opportunity to slow down the pace of the recording. Hence the researcher will have to type very fast or the researcher will have to pause and rewind several times in order to capture fully what was said by the participants.

However, using a website allowed me to slow down the pace of the recording which allows for comfortable typing at the researcher's pace. The transcriptions were automatically saved on the website, and the website allows the researcher to work both online and offline. The transcripts can equally be exported as a word document from the website.

Immediately, the transcription was completed; it was exported as a Microsoft word document. This process of transcribing on its own is a form of data analysis (Bailey, 2008). This is because, as the researcher was slowing, pausing the recording, it allows the researcher to get more acquainted with the content of the data.

Furthermore, during the process of transcribing the interviews, the researcher was able to take note and recollect where participants show some emotion. This was documented in the memo tab on Nvivo.

### 4.2.2 Data Cleaning

As soon as the interview transcript was exported into a word document, the researcher conducted a data cleaning process. Data cleaning in this regard is a process of arranging interview transcripts for all participants base on the interview themes. What this means is that the responses for interview theme 1 - financial statement fraud, was arranged under this heading even if this was answered last by one of the participants. The responses of all participants to the sub-questions/themes were also arranged under the main interview theme. The researcher makes use of Microsoft word formatting tools for this aspect.

Data cleaning was carried out in order to make data analysis more transparent. Using this technique allows for easy arrangement into Nvivo software for analysis and cross-case analysis. It also shows the step by step approach that the researcher follows in arriving at the main themes that emerged in this study which also increase transparency and credibility.

This approach is similar to that which is usually carried out when analysing quantitative data. However, in quantitative analysis it is called data cleansing which is sometimes called data scrubbing. Data cleansing is the process of editing, deleting and updating information in a database. The researcher, however, did not have to delete any information nor conduct any process of editing because of the researcher's philosophical underpinnings which are to make sense of how participants make sense of financial statement fraud, its detection and the responsibility of auditors. It is the inner subjective logic of participants that neo-empiricists are interested in accessing and it is believed this can be done objectively. Thus, suggesting why no data was deleted or reworded.

What was done by the researcher was merely a case of data rearrangement. i.e. arranging participants responses based on the questions asked. This has made analysis a lot simpler and easy to follow. This is the reason why the researcher chose to call the process undertaken data cleaning as against data cleansing. The result of this process was a well-arranged data ready for analysis. It also means the researcher will be able to compare and contrast the responses from participants to each interview question. Figure 4.7 below shows an example of the cross-case analysis carried out in this study with aid of an Nvivo software.

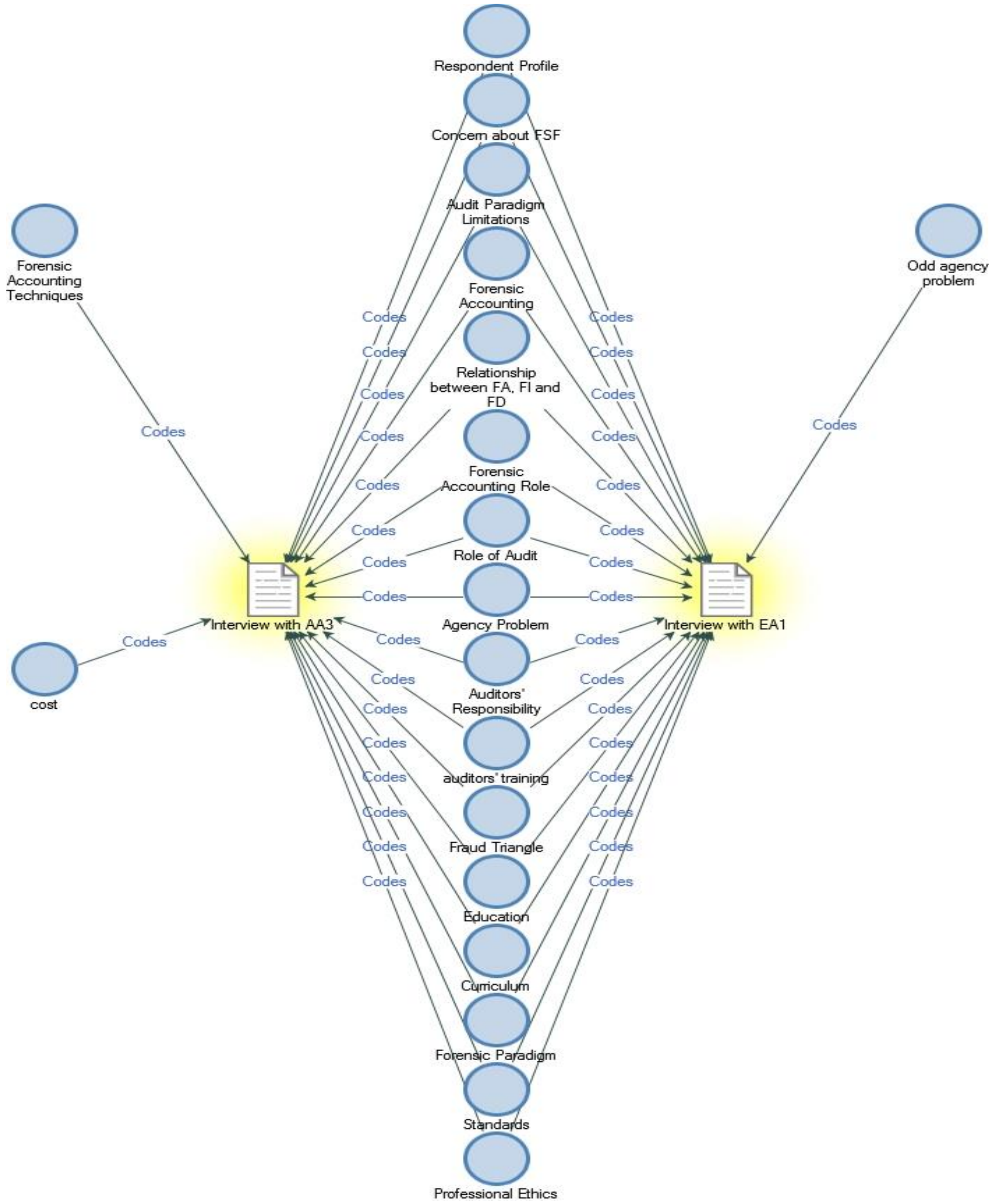



Figure 4.7: Cross-Case Analysis Between AA3 and EA1

Source: Author's Nvivo Output

## 4.3 Computer Assisted Qualitative Data Analysis Software (CAQDAS)

### 4.3.1 NVIVO Software

The researcher has two choices on how to manage the interview transcripts for data analysis. The two choices were a manual method or to use Computer Assisted Qualitative Data Analysis Software (CAQDAS). The researcher chose the latter after undergoing intensive training on qualitative data analysis software. Nvivo 11 then became the preferable software for the researcher to manage the data analysis process.

Nvivo is a data management tool and not a method of analysis (Zamawe, 2015). It is good for organising data and helping one to make sense of it during the process of analysis. The Nvivo software is primarily employed in organising data into themes, to make the retrieval of such data quicker and more efficient. Nvivo 11 has features such as character-based coding, rich text capabilities and multimedia functions that are crucial for qualitative data management.

The software is invaluable in helping the researcher index segments of text to particular themes, to link research notes to coding, to carry out complex search and retrieve operations, and to aid the researcher in examining possible relationships between the themes (Zamawe, 2015). The strength of Nvivo software lies in its high compatibility to research designs. The software is not methodological specific; it works well with a wide range of qualitative research designs and data analysis methods such as discourse analysis, grounded theory, conversation analysis, ethnography, literature reviews, phenomenology, and mixed methods (Zamawe, 2015).

## 4.4 Data Analytical Journey of this Research - How Nvivo Was Employed

The participants were anonymised using their specialisation. i.e. AA was used to denote Accounting Academics; EA was used to denote External Auditors; FA was used to denote Forensic Accountant while FD was used to denote Finance Director. Each transcript was imported into Microsoft word document. All interview questions were arranged using Microsoft word formatting tools, i.e. First interview theme was labelled heading one including any sub-questions asked, while the second interview question was labelled heading two, up to the last interview theme. This was done to allow for easy cross-case analysis in Nvivo. i.e. comparing the responses of each participant to a theme and sub-questions. An example of the cross-case analysis carried out in this study is depicted in Figure 4.7. Each transcript was read several times, and analysis was then carried out with the aid of Nvivo 11 software.

The analysis began immediately; the interviews were conducted until data saturation was reached. Data saturation theoretically occurs when the researcher is no longer hearing or seeing new information (Savin-Baden & Major, 2013). Because data collection was done in batches, as soon as the researcher realised that there is repetition in the answers to interview questions and there is no new information presented by the participant, the researcher stops data collection at this point. Just as Lincoln and Guba (1985) advised that the process of coding can be finalised when the categories are saturated, incidents can be readily classified, and enough repetition occurs in the data. For example, when participants were asked “why do auditors find it difficult to detect fraud in the financial statement?” their answers were similar, and hence there was nothing new to add to the category that has been created. Therefore, the researcher stopped the data collection.

All the interview transcripts were imported into Nvivo. Each interview response was coded separately resulting in several codes which are called nodes in Nvivo. After the individual coding of interview transcripts, a cross-case analysis was carried out, resulting in categorisations of themes. The categorisation of themes allows for individual themes that are similar to be merged. It was the process of categorisation that resulted in the final themes that emerged in the study.

### 4.4.1 The Coding Process

Coding is the process of identifying significant information about what a participant said about a subject matter (Adu, 2016). In qualitative enquiry, a code is often a word or short phrase that symbolically assigns a summative, salient, essence-capturing, and evocative attribute for a portion of language-based or visual data (Saldana, 2016). Codes are assigned a descriptive label that captures the meaning of each data segment (Savin-Baden & Major, 2013).

In Nvivo, codes are called nodes which can be described merely as a container (Adu, 2016). A total of 42 nodes have emerged from the data analysis of this research. The nodes references were 979. Table 4.3 below shows the nodes (codes)

Table 4.3: Nodes Table

| Nodes | | Sources | References | Created On | Created By | Modified On | Modified By |
|---|---|---|---|---|---|---|---|
| Accounting standards | | 10 | 54 | 24/05/2017 23:38 | IF | 13/03/2018 14:39 | FA |
| Materiality | | 6 | 18 | 24/05/2017 23:06 | IF | 06/03/2018 14:12 | FA |
| Agency problem | | 9 | 21 | 24/05/2017 23:29 | IF | 13/03/2018 14:21 | FA |
| Odd agency situation | | 8 | 22 | 24/05/2017 23:29 | IF | 13/03/2018 14:20 | FA |
| Audit | | 7 | 20 | 24/05/2017 16:19 | IF | 13/03/2018 13:51 | FA |
| Assurance | | 7 | 20 | 24/05/2017 23:19 | IF | 22/02/2018 15:41 | FA |
| Audit limitations | | 10 | 18 | 24/05/2017 23:02 | IF | 13/03/2018 14:36 | FA |
| Audit Weakness | | 8 | 29 | 24/05/2017 16:21 | IF | 06/03/2018 18:10 | FA |
| Skill gap | | 7 | 13 | 24/05/2017 16:33 | IF | 18/01/2018 22:04 | FA |
| Expectation Gap | | 7 | 17 | 24/05/2017 22:57 | IF | 06/03/2018 14:04 | FA |
| Changes to the audit report | | 2 | 2 | 24/05/2017 22:59 | IF | 06/03/2018 14:13 | FA |
| Financial statement fraud | | 7 | 13 | 24/05/2017 23:09 | IF | 06/03/2018 14:03 | FA |
| forms of financial statement | | 1 | 6 | 04/07/2017 11:53 | IF | 04/07/2017 12:15 | IF |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| fraud | | | | | | | |
| How financial statement fraud take place | | 1 | 5 | 04/07/2017 11:58 | IF | 04/07/2017 12:13 | IF |
| inexperience auditors | | 9 | 17 | 24/05/2017 23:35 | IF | 06/03/2018 18:04 | FA |
| Pressure | | 2 | 5 | 24/05/2017 23:22 | IF | 06/07/2017 13:02 | IF |
| Role of Audit and auditors' responsibility | | 12 | 54 | 24/05/2017 22:51 | IF | 13/03/2018 14:36 | FA |
| Auditors' responsibility | | 5 | 15 | 12/06/2017 12:23 | IF | 06/03/2018 18:14 | FA |
| Cost and Time | | 8 | 39 | 21/06/2017 10:49 | IF | 06/03/2018 15:06 | FA |
| Education | | 9 | 29 | 24/05/2017 16:36 | IF | 13/03/2018 14:41 | FA |
| Curriculum | | 9 | 26 | 24/05/2017 16:37 | IF | 13/03/2018 14:43 | FA |
| Professional qualification | | 9 | 17 | 24/05/2017 23:52 | IF | 13/03/2018 14:43 | FA |
| Training | | 12 | 50 | 24/05/2017 16:36 | IF | 13/03/2018 14:42 | FA |
| Financial Statement Fraud Concern | | 12 | 20 | 24/05/2017 15:56 | IF | 13/03/2018 13:46 | FA |
| News media | | 2 | 6 | 24/05/2017 15:59 | IF | 12/06/2017 12:25 | IF |
| Out of | | 1 | 1 | 24/05/2017 | IF | 24/05/2017 | IF |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Court Settlement | | | | 16:01 | | 16:01 | |
| Forensic Accounting | | 11 | 41 | 24/05/2017 16:05 | IF | 13/03/2018 14:13 | FA |
| Definition | | 8 | 12 | 24/05/2017 16:06 | IF | 13/03/2018 14:10 | FA |
| Forensic Accounting Role | | 9 | 24 | 24/05/2017 16:15 | IF | 13/03/2018 14:17 | FA |
| Forensic Accounting skills and techniques | | 9 | 21 | 24/05/2017 16:25 | IF | 13/03/2018 14:12 | FA |
| Relationshi p | | 8 | 15 | 24/05/2017 16:09 | IF | 13/03/2018 13:54 | FA |
| Fraud Triangle | | 6 | 13 | 25/05/2017 00:04 | IF | 13/03/2018 14:44 | FA |
| Behavioural factors | | 3 | 12 | 22/02/2018 15:50 | FA | 13/03/2018 14:46 | FA |
| Opportunity | | 4 | 8 | 25/05/2017 00:05 | IF | 13/03/2018 14:44 | FA |
| Management responsibility | | 6 | 15 | 24/05/2017 23:48 | IF | 06/03/2018 18:18 | FA |
| Paradigm Shift | | 12 | 74 | 24/05/2017 16:35 | IF | 13/03/2018 14:46 | FA |
| Respondent Profile | | 12 | 13 | 24/05/2017 15:46 | IF | 24/05/2017 15:53 | IF |
| Academics | | 4 | 4 | 24/05/2017 15:48 | IF | 13/03/2018 13:42 | FA |
| External Auditors | | 2 | 2 | 24/05/2017 15:49 | IF | 06/07/2017 12:15 | IF |
| Finance Directors | | 2 | 2 | 22/02/2018 15:28 | FA | 06/03/2018 17:56 | FA |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Forensic Accountants | | 4 | 4 | 24/05/2017 15:51 | IF | 05/03/2018 14:33 | FA |

Source: Author's NVivo output 2018

### 4.4.2 Categorization of Data

This section aims to review the findings in order to show how the nodes were merged into categories which eventually resulted in the main themes. These themes will also be depicted in the form of a triangle to show consistency with the theoretical framework which was established in Chapter Two – Literature Review. i.e. the agency triangle and the fraud triangle model.

This study being a business and management research which can equally be broadly called social science or humanity research focuses its analysis on the interpretation and explanation of behaviour and action which were generated inductively in order to develop an understanding of the interpretations deployed by the social actors who are being studied (Denzin & Lincoln , 2000).

In a general inductive approach, the data analysis is guided by the evaluation objectives, which identify domains and topics to be investigated. The analysis is carried out through multiple readings and interpretations of the raw data, the inductive component. Although the findings are influenced by the evaluation objectives or questions outlined by the researcher, the findings arise directly from the analysis of the raw data, not from a priori expectations or models. The evaluation objectives provide a focus or domain of relevance for conducting the analysis, not a set of expectations about specific findings (Thomas, 2006)

This study follows systematic procedures as observed by Thomas (2006) in the categorization of data and the aim was to reduce the mass of raw data, through coding and categorizing it, such that clear links between the research objectives and the findings could be derived, whilst ensuring that these links were both transparent and defensible.

At first, the researcher went through the transcripts several times in order to make sense of the participant responses, and then coding was done. The coding process was explained earlier in this chapter. After that, a cross-case analysis was conducted by the researcher. The researcher started looking for patterns, i.e. similarities and differences from participants responses, followed by categorisation of data, which eventually led to the three emerging themes. The systematic procedure will now be explained with data from the study. Table 4.4 below shows the list of categories created by the researcher. Each of the categories that emerged will now be explained in the following section.

Table 4.4: Categorisation of nodes

| | | |
|---|---|---|
| Accounting standards | 10 | 54 |
| Agency Concern | 0 | 0 |
| Audit | 7 | 20 |
| Auditors' Education | 0 | 0 |
| Financial Statement Fraud Concern | 12 | 20 |
| Forensic Accounting | 11 | 41 |
| Forensic Accounting Education | 9 | 29 |
| Paradigm Shift | 12 | 74 |
| Respondent Profile | 12 | 13 |

Source: Author's Nvivo output

The four groups of stakeholders under consideration in this study, i.e. Accounting Academics, Forensic Accountant, External auditors and Finance Directors all shared their concern about financial statement fraud when questions about their financial statement fraud were asked. One of the participant responses was that “I am still concerned by it, and it bothers me that it keeps happening over and over again” This created the first category for this study which is **Financial Statement Fraud Concern**.

*Category One: Financial Statement Fraud Concerns*

This category has sub-categories. Some other nodes were merged into this category because of their similarities. Moreover, their meanings can be directly linked to concern. The stakeholders under consideration express their various concerns on the issue of financial statement fraud. The sub-categories are news media, opportunity and out of court settlement. Behavioural factors, agency problem, old agency situation, and fraud triangle were later merged to this category because of their close association to concern for financial statement fraud. Impression management was a dominant node from the interview transcripts. However, this was merged to behavioural factors because it can directly be linked to it. This will be explained further in the discussion chapter. Table 4.4 shows the category and subcategory.

Table 4.5: Category 1 Financial Statement Fraud Concern

| | | |
|---|---|---|
| Financial Statement Fraud Concern | 12 | 20 |
| Fraud triangle | 6 | 13 |
| Behavioural factors | 3 | 12 |
| Management responsibility | 6 | 15 |
| News media | 2 | 6 |
| Opportunity | 4 | 8 |
| Out of Court Settlement | 1 | 1 |

Source: Authors Nvivo output

*Category Two: Agency Concern*

The second category that was created is Agency Concern. Participants express their concern about the agency problem and how it impacts on financial statements. The led to the creation of this category. This category also has a sub-category which is the old agency situation. This was created because of concerns expressed by participants about the fact that auditors are appointed by directors and then ratified by shareholders at the annual general meetings.

It is the management who pay the auditors which probably suggests why auditors' loyalty is to the management as against the shareholders whom they are meant to protect in theory. This led to the creation of an old agency situation category. Table 4.6 shows this category and its sub-element.

Table 4.6: Agency Concern

| | | |
|---|---|---|
| Agency Concern | 0 | 0 |
| Agency problem | 9 | 21 |
| Odd agency situation | 8 | 22 |

Source: Author's Nvivo output

*Category Three: Audit*

The third category that was created is Audit. This encompasses the role of audit in the financial reporting framework and auditors' responsibility concerning fraud detection in the financial statement. This category equally has sub-categories which are called child nodes in Nvivo. These sub-categories are the role of audit, auditors' responsibilities, assurance, audit limitations, expectation gap, changes to audit report and pressure. Table 4.7 shows this category and its sub-categories.

Table 4.7: Audit

| | | |
|---|---|---|
| Audit | 7 | 20 |
| Assurance | 7 | 20 |
| Audit limitations | 10 | 18 |
| Expectation Gap | 7 | 17 |
| Changes to audit report | 2 | 2 |
| Pressure | 2 | 5 |
| Role of Audit | 12 | 54 |
| Auditors' responsibility | 5 | 15 |

Source: author's Nvivo output

*Category Four: Forensic Accounting*

The fourth category that was created is Forensic Accounting. Like the previous categories, this category also has subcategories. However, unlike the other category, this category includes the definition of forensic accounting. This is because there is no consensus in forensic accounting literature on the exact definition of forensic accounting.

Moreover, academics and practitioners have been observed to view forensic accounting differently from literature. The other subcategories are forensic accounting role in fraud detection, forensic accounting skills and techniques, the relationship between fraud detection, fraud investigation and forensic accounting. The table below shows this category and its sub-categories.

Table 4.8: Forensic Accounting

| | | |
|---|---|---|
| Forensic Accounting | 11 | 41 |
| Definition | 8 | 12 |
| Forensic Accounting Role | 9 | 24 |
| Forensic Accounting skills and techniques | 9 | 21 |
| Relationship | 8 | 15 |

Source: Author's Nvivo output

### *Category Five: Education*

The 5th category that was created is forensic accounting Education. This category also has subcategories. These subcategories are curriculum, professional qualification, training. This category was created because of participants responses to questions around forensic accounting education and anti-fraud training. The table below shows this category and its sub-elements.

Table 4.9: Forensic Accounting Education

| | | |
|---|---|---|
| Forensic Accounting Education | 9 | 29 |
| Curriculum | 9 | 26 |
| Professional qualification | 9 | 17 |
| Training | 12 | 50 |

Source: Author's Nvivo output

### *Category Six: Auditors' Education*

This sixth category is the Auditors' Education. This category deals with the current education of professional accountants (auditors of the financial statement) and accounting major in general, its coverage and limitations and how their training could be enhanced to reflect some element of forensic accounting. This category was created because of participants responses to questions around auditors training and auditors' education. This category has four subcategories. These sub-categories are auditor's education weakness, skill gap, financial statement fraud and inexperience auditors. Table 4.10 shows this category and its sub-elements.

Table 4.10: Auditors' Education

| | | |
|---|---|---|
| Auditors' Education | 0 | 0 |
| Auditors' education Weakness | 8 | 29 |
| Skill gap | 7 | 13 |
| Financial statement fraud | 7 | 13 |
| inexperience auditors | 9 | 17 |

Source: Author's Nvivo output

### *Category Seven: Accounting Standards*

The seventh category that was created is the Accounting Standard. All the participants kept referring to the limitations imposed by the rule book and how the rule book does not allow auditors to do more even if they want to. Then category accounting standard was created. This category also has a sub-category based on some of the comments of participants. This subcategory is materiality. Sampling was merged into this category as it can directly be linked to materiality. The table below shows this category.

Table 4.11: Accounting Standards

| | | |
|---|---|---|
| Accounting standards | 10 | 54 |
| Materiality | 6 | 18 |

Source: Author's Nvivo output.

*Category Eight: Paradigm Shift*

The last category that was created is a paradigm shift. The paradigm shift category denotes everything the participants said that suggested the need for a change in how things are currently being done in the accounting profession with regards to fraud detection in the financial statement.

This category equally explains participants' responses to the question "how can the accounting profession move forward concerning fraud detection in the financial statement. All the participant responses pointed out that the reporting mechanism and procedural auditing need to change to a forensic accounting type of investigation for the accounting profession to move forward. The table below shows this category. A subcategory was created. This subcategory is cost and time which are the limitations to the paradigm shift as suggested by participants. However, the issue of cost and time are outside the scope of this study. This is a potential area for future research. This will be discussed further in the discussion chapter. The following section will discuss the themes that emerged from the categorization of data.

Table 4.12: Paradigm Shift.

| | | |
|---|---|---|
| Paradigm Shift | 12 | 74 |
| Cost and Time | 8 | 39 |

Source: author's Nvivo output

## 4.5 Emerging Themes

The outcome of an inductive analysis is the development of categories into a model or framework that summarises the raw data and conveys key themes and processes (Thomas, 2006). The eight categories later resulted in the emergence of three main themes. These themes emerged by merging some closely related categories. The idea of reducing the eight categories into three themes is based on the advice of Thomas (2006) in conducting a general inductive approach. Thomas (2006) advised that most inductive studies report between three and eight main themes in their findings. Moreover, the researcher observed some connection in some of the categories which made it easy to merge them into a theme.

This section demonstrates how the themes and sub-themes emerged after the process of data categorisation. The dominant nodes were merged, and the less-dominant nodes were left out as they did not contribute towards the establishment of the main themes that emerged. The three themes that finally emerged are Audit Concern, Education and Accounting/Auditing Standard. The processes that led to the emerging themes will now be discussed in detail.

### 4.5.1 Theme One - Audit Concern

Audit Concern came about as a result of merging three categories of dominant nodes. These three categories are financial statement fraud concern, agency concern and audit. This led to the emergence of audit concern. Figure 4.8 below shows how this theme was created.

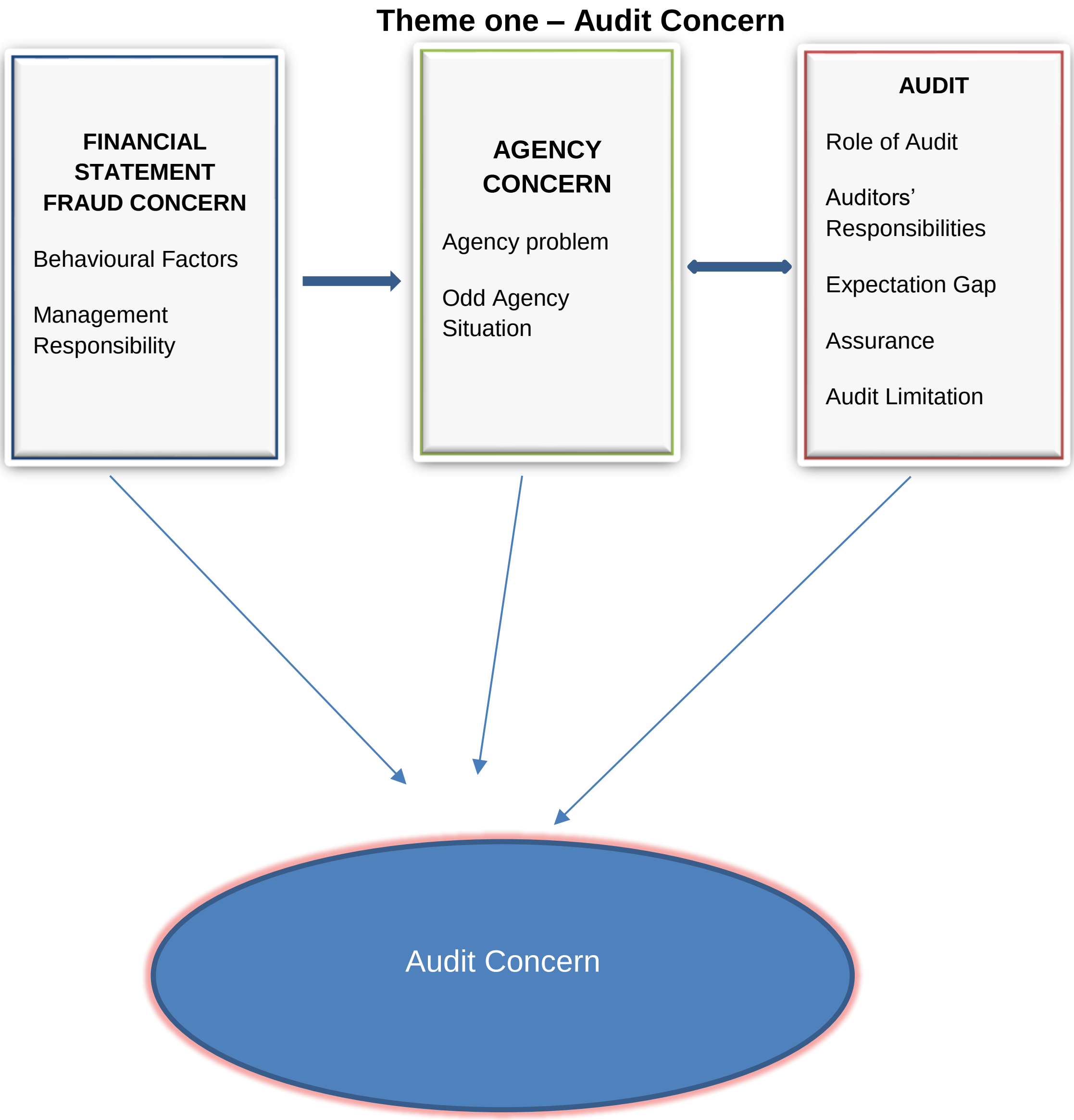



Figure 4.8: Audit Concern

Source: Author's output

Financial statement fraud concern will bring about agency concern and audit is that unique link that settles the score. This was captured in chapter two under the theoretical framework. The financial statement is critical in an agency relationship that exists between the shareholders and management as it brings about accountability. However, because of information asymmetry, the principal does not trust the agent. As such the principal relies on the audit as a mechanism for monitoring the agent and as a way of reducing the scope of information asymmetry and opportunistic behaviour.

It was because of this relationship between the three categories that led to the emergence of the first main theme of Audit Concern. This is an important finding of this study because it partly answers the first research question of this study. Can the training of professional accountants (particularly auditors of the financial statement) in the forensic accounting skills, ethics, procedures and principles reduce the opportunities to commit financial statement fraud by the agent?

Based on the findings of this study, there is a need for improvements in the current auditing mechanism because of its role in reducing the scope of information asymmetry and in reducing opportunistic behaviour. The second theme, education will corroborate and give a complete answer to the first research question of this study. This second theme will be expanded fully in the next chapter. Nevertheless, the sub-themes will be explained briefly.

Concerns about financial statement fraud were expressed by the participants and are one of the findings of this study. Previous literature has established that the issue of fraud in the financial statement should be a significant concern to the accounting profession. However, no empirical result has established this. Participants equally show concern about the issue of agency problem and how the role of audit in recent times has not been able to reduce the scope of information asymmetry.

The concern shared by participants also included the issue of impression management. Impression management in the context of this thesis is the sugar coating of annual reports by management to make their accounts look nice and presentable. This issue is not usually picked up during an external audit. There ought to be a mechanism to avoid the sugar coating of the annual report. This is another finding of this thesis.

Agency concern as expressed by participants also includes the odd agency situation. A situation whereby the management employs the auditors who are then ratified by shareholders at annual general meetings which often results in the loyalty of auditors going more to the management rather than the shareholders. Moreover, the fact that management is the one responsible for paying auditors their fees. All these issues boil down to concern. Hence merging these three categories to create a theme called audit concern became necessary. This is because what the participants expressed as their concern are all pointing towards the role of audit in the financial reporting framework and auditors' responsibilities concerning fraud detection in the financial statement.

A further key finding under the financial statement fraud concern is the International Standard on Auditing (ISA) 240 narratives. Under the ISA 240, "the primary responsibility for the prevention and detection of fraud rests with both those charged with governance of the entity and management. It is important that management, with the oversight of those charged with governance, place a strong emphasis on fraud prevention, which may reduce opportunities for fraud to take place, and fraud deterrence, which could persuade individuals not to commit fraud because of the likelihood of detection and punishment" (International Standard on Auditing 240, 2009, p. 4).

Participants expressed concern about the ISA 240 requirements. While the majority of the participants feels this requirement limits auditor's scope in terms of fraud detection and probably encourages auditors not to go after looking for fraud and can as well serve as their disclaimer, one of the participants felt that the management should have total responsibility because it is their company. This theme was tagged "management responsibility". This subtheme will be expanded in the next chapter.

A further key finding which is a sub-theme is auditors' responsibilities concerning fraud detection in the financial statement. Participants expressed their concern about how these responsibilities seem to have changed in recent time, but this perceived change is not reflected in the auditing and accounting standards. This finding can be directly linked partly to the expectation gap. However, considering the numerous cases of audit failures, fines and audit negligence claims, the time may have come for auditors to step up their game in the fight against financial deception. This finding will be developed further in the next chapter.

### 4.5.2 Theme Two – Education

The next theme that emerged is Education. This is as a result of merging three categories. These three categories are auditor's education, forensic accounting and forensic accounting education. Two of the categories talk about education while the last category looks at how forensic accounting is conceptualised. The first two categories talk about education with the former dwelling on auditor's education and its weakness in the fight against financial deception, the latter look at how forensic accounting education is different and some of the skills, techniques and methods used in forensic accounting that makes it adequate in the fight against financial deception. Hence the theme of education was created. This theme will be expanded in the discussion chapter.

This theme has some sub-themes. Figure 4.9 below shows the procedure for the emergence of this theme and its sub-themes.

**Theme two - Education**

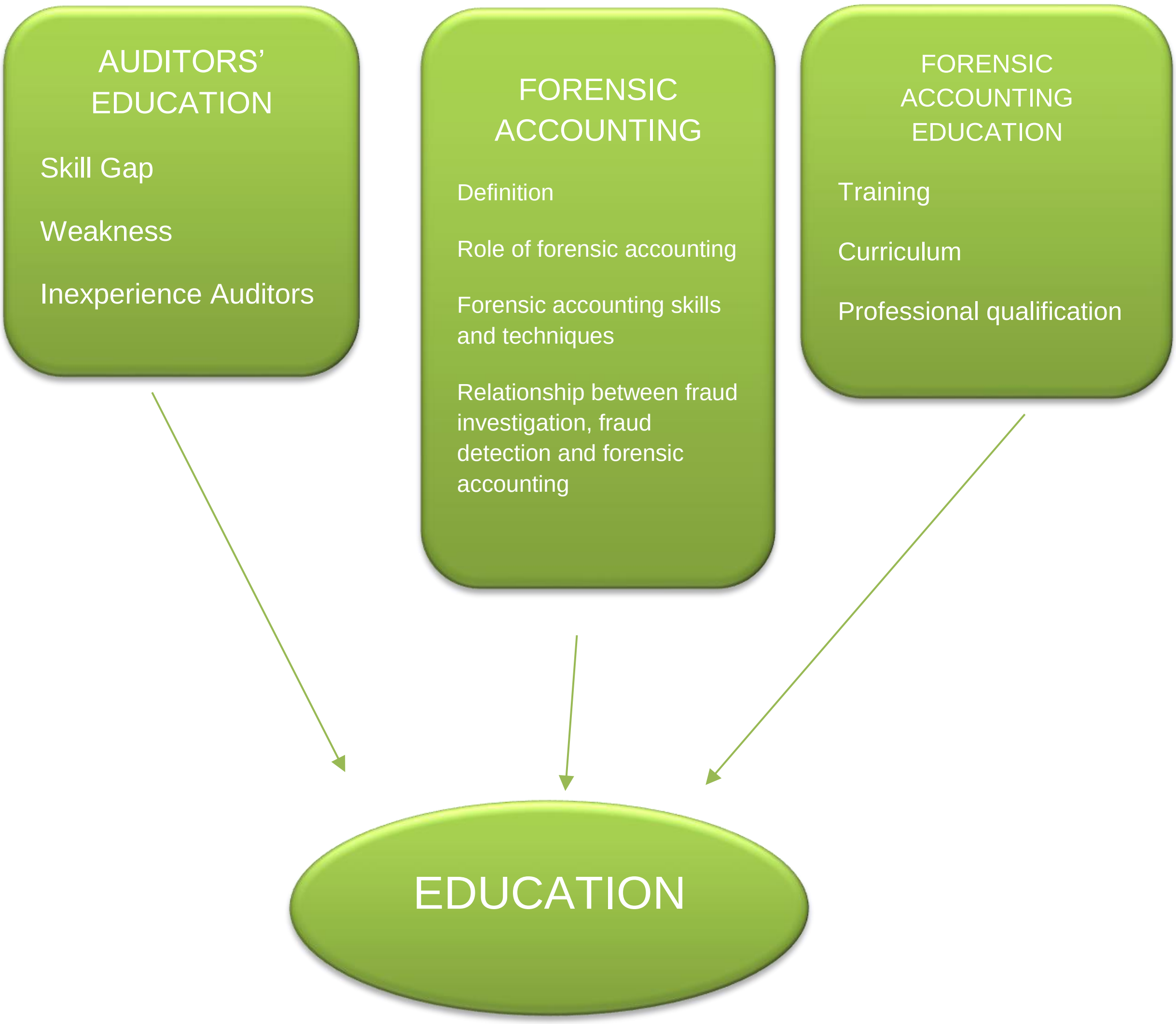



Figure 4.9: Education

Source: Author's Findings.

The findings of this study show that there is a significant difference between forensic accountants' education and that of the auditors. However, there is some common ground to suggest that auditors can be deployed to the forefront of the crusade against financial deception. This study found that a skill gap exists on the part of auditors' education which is a significant weakness in the fight against financial deception.

Auditors' education in the context of the thesis looks at those impediments that hinder an auditor's fraud detection capacity. One of the major ones according to the findings of this study is the accounting standard. Because accounting and auditing standards are not geared towards the detection of fraud in the financial statement, this affects the auditor's fraud detection capacity which is reflected in their training manual and curriculum. A look at the current training manual and curriculum of professional accountants (ACCA, ICAEW and AIA) indicated less emphasis on fraud detection mechanism and how to spot red flags. This sub-theme will be developed in detail in Chapter 6 of this thesis.

Nevertheless, looking at the curriculum and training manual of a forensic accountant, there are enough ingredients that are necessary for the fight against financial deception. The findings of this study indicated that forensic accounting education is more thorough and robust when it comes to the issue of fraud and how to preserve evidence. The forensic accounting training emphasises an understanding of human behaviour which is currently lacking in the current accounting system of reporting and procedural auditing. This sub-theme will be developed in detail in the next chapter.

The findings of this thesis also show that the stakeholders under consideration are in tune to what forensic accounting is about which negate earlier studies that have suggested that practitioners and academics differ on how they view forensic accounting. The findings of this thesis show that academics and practitioners are now 'on the same page' on what forensic accounting is all about and its relevance in the fight against financial deception.

Another notable finding under this category is the establishment of the relationship between fraud detection, fraud investigation and forensic accounting. This study has been able to find that a strong relationship exists between fraud detection, fraud investigation and forensic accounting. There has been some confusion on whether what auditors require is a forensic accounting training or just an awareness of fraud investigation approach. The justification has always been that forensic accounting is a vast area that is not limited to just fraud examination.

However, this study found that the stakeholders under consideration argued that when you engage in fraud investigation, the overall objective is to detect fraud. Moreover, fraud detection methods utilise the skill sets, and techniques used in forensic accounting. As such when one engages in fraud investigation, one has already started a forensic accounting exercise. This led the researcher to develop a new definition for forensic accounting in the context of this study.

The definition of forensic accounting that the findings of this thesis lead to is "*a high-level validation of accounting and financial information through an array of skills and knowledge from but not limited to accounting, auditing, information system, psychology (behavioural factors), criminology, economics and an and understanding of the legal system in an actual or potential civil or criminal proceedings".*

Hence the combination of three categories suggested that forensic accounting education is crucial which eventually led to the emergence of this theme. This theme (education) in conjunction with the first theme (Audit Concern) answered the first research question of this study and also partly answers the second and last research questions. The first research question of this study is: *Can the training of professional accountants (particularly auditors of the financial statement) in the forensic accounting skills, ethics, procedures and principles reduce the opportunities to commit financial statement fraud by the agent?*

The findings of this thesis reveal that by changing the current education curriculum of auditors and professional accountants in general, will not only reduce the scope of information asymmetry but should also deter the agent for engaging in opportunistic behaviour of which fraud is part. When management is aware that the auditor is coming in with a forensic accounting kind of mentality, findings reveal it might reduce the opportunity to commit financial statement fraud by the agent.

The second research question is; *Can the training of professional accountants in the forensic accounting skills, ethics, procedures and principles increase auditors' fraud detection capabilities?* The finding of this study has shown that by merely altering the education curriculum of auditors to includes some element of forensic accounting skills, ethics and principles, it will increase the fraud detection capacity and capabilities of auditors and professional accountants. The last research question will be explored under theme three and will be developed in detail in the next chapter.

### 4.5.3 Theme Three – Accounting and Auditing Standard

The last theme that was created is the Accounting Standard and Regulations. This theme was created as a result of merging two categories and their sub-elements. These two categories are Accounting Standard and Paradigm Shift. This theme in conjunction with the earlier two themes will be utilised towards developing a forensic accounting system. Figure 4.10 below demonstrates how this theme was developed.

**Accounting Standard and Regulations**

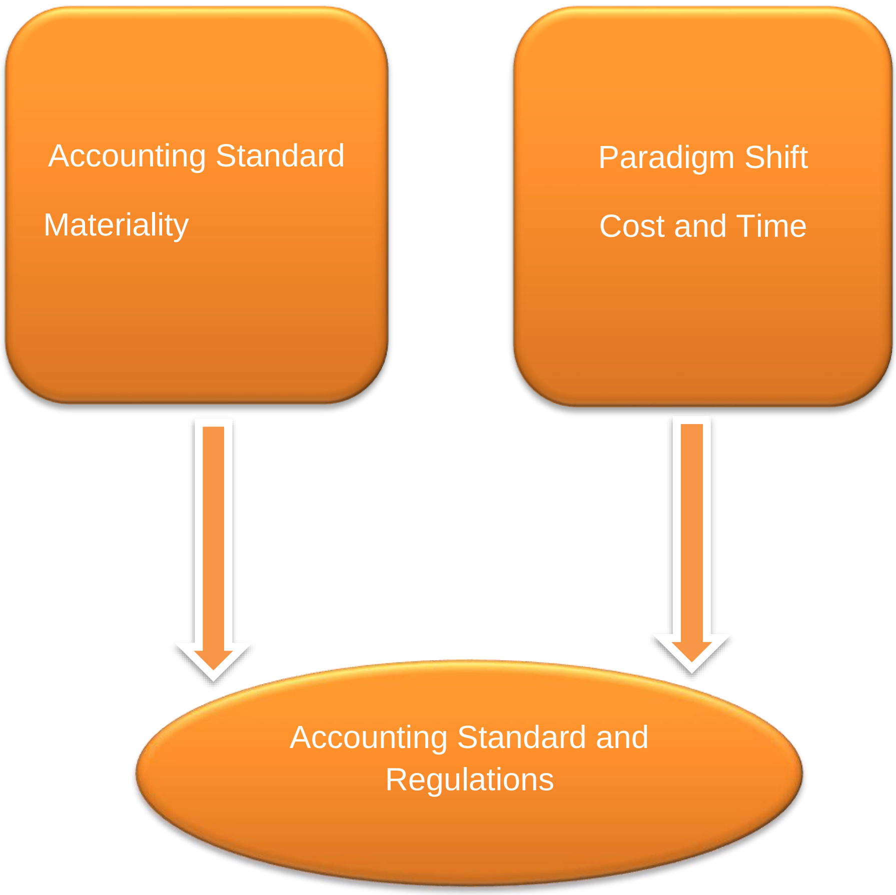



Figure 4.10: Accounting Standard and Regulations

Source: Author's Findings

This thesis found that the accounting and auditing standard as it stands poses a limiting factor to a system shift to forensic accounting. Therefore, for the accounting profession to transit from the current accounting system of reporting and procedural auditing to a forensic accounting system, findings reveal that the rule book will have to change. One of such changes is the concept of materiality. This study found out that the concept of materiality often limits what auditors can do. Forensic accountants do not usually work to a materiality level, and thus this shapes their mindset. This will be developed further in Chapter Seven.

This study found that the cost of the audit and the time taken to complete audit might increase in the event of a system shift to forensic. This can be seen as a limitation. However, at a later discussion, this thesis will argue that it might not necessarily be the case, considering the strategy for transiting from the current system to the new one that this study has developed. This will be discussed in chapter seven, eight and nine. The two suppose limitations identified are, however, outside the scope of this study and are areas that future study might investigate.

This theme together with the first two themes (audit concern and education) does provide an answer to the purpose of this study which is to develop a forensic accounting system and its fraud detection capacity by exploring the perception of stakeholders within the accounting profession on how this system might reduce financial statement fraud. The findings of this study reveal that a system shift to forensic accounting can reduce the incidence of fraud in the financial statement.

This forensic accounting system can be achieved by addressing the issue of audit concern as highlighted by this thesis. Thus, leading to a change in how auditors and professional accountants are educated by changing their curriculum and training manual to reflect some element of forensic accounting skills, ethics and principles. Also, changing the accounting and auditing standards to reflect a high sense of responsibilities concerning fraud detection in the financial statement, this would have successfully moved us away from the current accounting system of reporting and procedural auditing to a more holistic approach which is forensic accounting.

This framework is depicted in the form of a triangle and will be discussed in detail in chapter 7 and will be linked to the theoretical framework already established in this thesis to form a forensic accounting. The diagram below (Figure 4.11) shows the forensic accounting system framework.

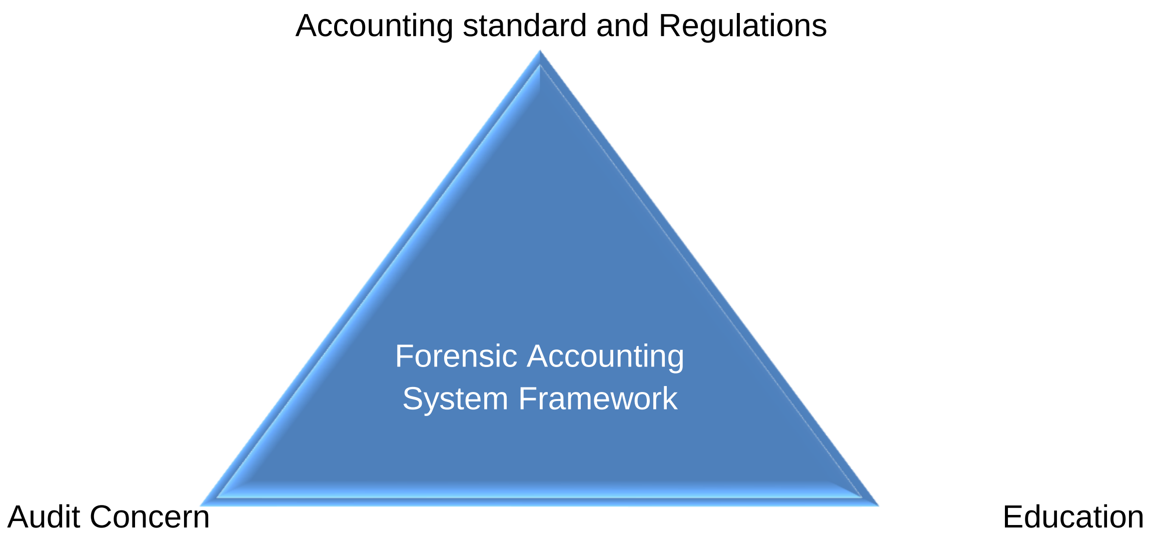



Figure 4.11: The Forensic Accounting System Framework

Source: Author's Framework for reducing financial statement fraud.

This framework will aid the reduction of financial statement fraud, enhance audit quality and restore investors' confidence in the combined financial reporting framework and corporate governance.

## 4.6 Chapter Summary

This chapter has discussed the primary concern of stakeholders under consideration about financial statement fraud and audit which led to the emergence of the three main themes of this thesis. The chapter showed how the researcher went from transcribing all interviews to how the analysis was conducted which eventually led to the emerging themes which now serve as a framework for reducing financial statement fraud.

The findings of this thesis can hence be summarised that in order to reduce the incidence of fraud in the financial statement, there is a need to address the issue of audit concern. Auditors responsibility concerning fraud detection in the financial statement needs to be clearly stated. Merely saying auditors do not have responsibilities for the detection of fraud in the financial statement might no longer be tenable in this era of information revolution as such auditors should drop this disclaimer.

Moreover, considering the numerous cases of audit failures and negligence claims against the auditor, the earlier the accounting profession admit the responsibilities for providing credible financial reporting, the better for the profession, otherwise auditors will continue to pay dearly for their inability to detect fraud in the financial statement. This is the first theme of this study which is a major finding and contribution of this thesis to accounting practice.

Once the issue of audit concern is addressed, how auditors are educated will need to change. Even if auditors assume the responsibility for the detection of fraud in the financial statement today, their training is not geared and tailored towards this which means the likelihood of them failing in this regard is very high.

Auditors training is tailored to accounting and auditing standard. As such, their training manual and curriculum will need to change as found in this study. Their training will need to reflect some elements of forensic accounting skills, techniques, ethics and principles. Previous studies have established that forensic accountants outperform auditors in fraud related tasks (Apostolon & Crumbley, 2005; Britten, 2011).

Hence, it makes sense going forward into the future to start deploying professional accountants, particularly auditors of financial statement to start acting in the front line against financial deception. Moreover, for this to happen, the education of professional accountants, particularly external auditors will need to reflect some elements of forensic accounting which are appropriate in the crusade against financial statement fraud.

This was the second theme of this thesis which constitutes a significant contribution of this thesis to accounting theory and practice. Auditors need to be educated differently. We can no longer rely on an education curriculum that was designed for the industrial age in this time of information revolution and globalisation. This theme will be discussed in more detail in chapter six.

The last theme that emerged in this study is Accounting Standard and Regulation which is equally a significant finding of this thesis and a contribution to accounting theory and practice. Accounting and auditing standards will need to be geared towards the detection of fraud in the financial statement. The findings of this thesis have shown that a system shift from mere reporting and procedural auditing to forensic accounting will increase the chances of fraud detection in the financial statement. This theme will be explored in detail in the seventh chapter of this thesis.

Once the issue of audit concern has been addressed, and how auditors and accounting major are educated can change to reflect some elements of forensic accounting skills, ethics, techniques and principles. Accounting and auditing standards need to be modified to reflect this new responsibility concerning fraud detection in the financial statement. Should this happen, the accounting profession would have successfully transitioned from the current accounting system of reporting and procedural auditing to the forensic accounting system.

The combination of these three main themes results in the forensic accounting system triangle. Moreover, if the theoretical framework for this study (Agency triangle and fraud triangle) are combined with the forensic accounting system triangle depicted in figure 4.12, that will give us the forensic accounting nuclear which is a holistic framework for reducing financial statement fraud. This will restore investors' confidence in the combined financial reporting process and corporate governance. It will equally reduce the opportunity to commit financial statement fraud by management. This framework will be discussed in detail in chapter seven and the conclusion and recommendation chapter of this thesis.

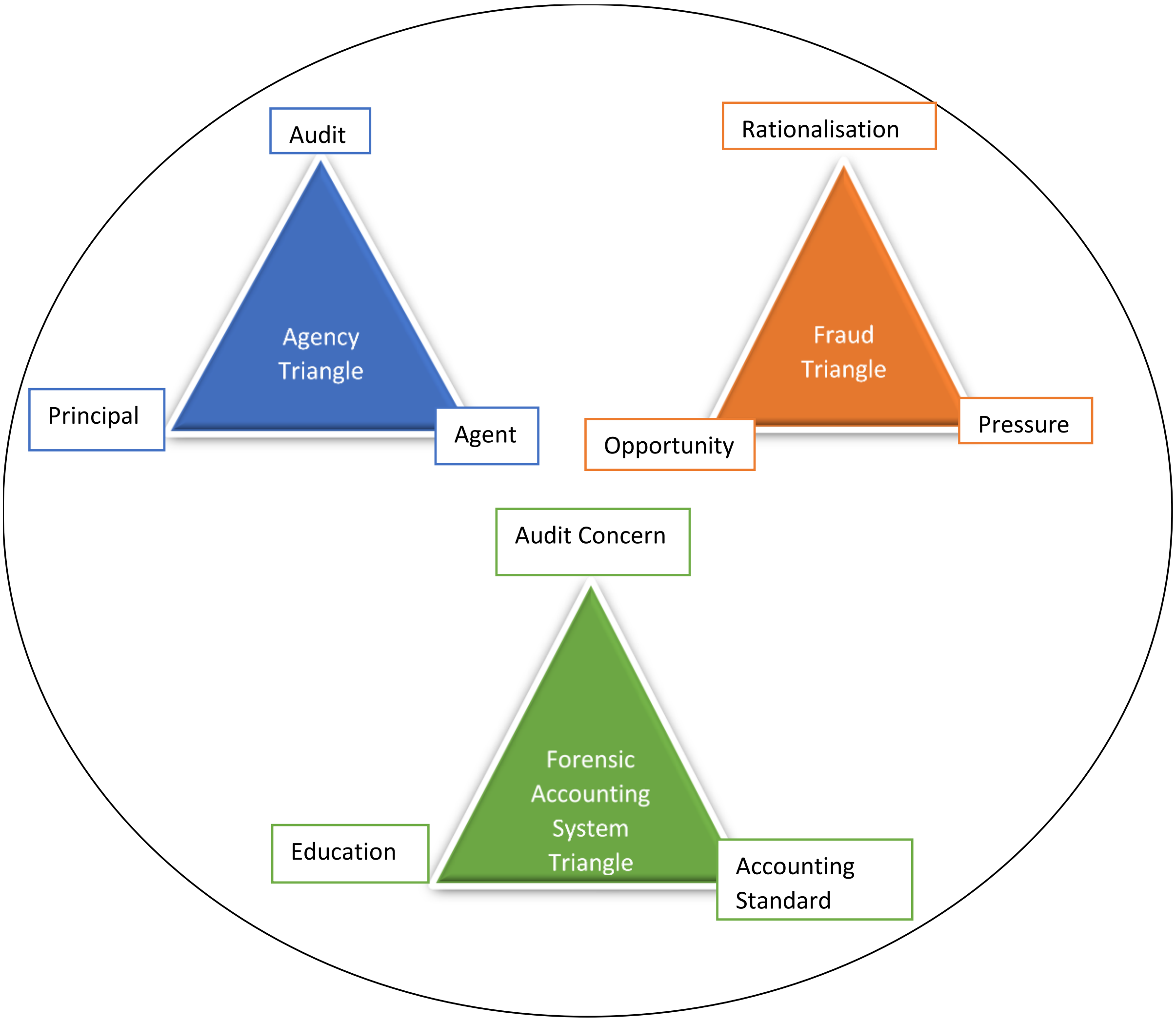



Figure 4.12: Forensic Accounting Nuclear

Source: Author’s empirical development

## 4.7 Key Points from Chapter Four

Audit Concern

- Financial Statement Fraud Concern
- Agency Concern
- Odd Agency Situation
- Role of Audit
- Auditors Responsibility
- Expectation Gap

Education

- Auditors Education Weakness
- Skill Gap
- Inexperience Auditors
- Forensic Accounting Definition
- Role of Forensic Accounting in Fraud Detection
- Relationship Between Fraud Investigation, Fraud Detection and Forensic Accounting
- Forensic Accounting Education

Accounting and Auditing Standard

- Materiality
- The Role of Accounting standard in Fraud Detection

Forensic Accounting System Framework

- Audit Concern
- Education
- Accounting and Auditing Standard
- Forensic Accounting Nuclear

Limitation to a System Shift to Forensic Accounting

- Cost
- Time

# CHAPTER FIVE: AUDIT CONCERN

The data analysis and findings chapter reviewed the data for this thesis which resulted in the emergence of the first theme of this study which is **Audit Concern.** Figure 4.8 showed how the audit concern theme emerged in chapter four. This chapter will expand on this theme. What Audit concern means in the context of this study will be discussed and how addressing this concern in the context of this study will be examined in order to shape accounting theory and practice. The audit concern theme represents the first element towards developing a forensic accounting system.

This chapter will also look at the sub-categories of each of the dominant sub-themes. The sub-themes will then be linked together and used in developing a forensic accounting system. These dominant sub-themes are:

1) Agency Theory and Concern
2) The Role of Financial Statement.
3) Financial Statement Fraud Concern.
4) The Role of Audit.
5) Auditors' responsibilities concerning fraud detection in the financial statement.
6) Management Responsibilities in fraud detection in the financial statement.

Therefore, this chapter aims to show how the responsibility of auditors will need to change in this age of information revolution and further use this theme to establish what the current accounting system is (reporting and procedural auditing). The Audit concern theme will be used in developing the forensic accounting system which is the purpose of this study. Before explaining audit concern, financial statement fraud concern and agency concern will be explained. This is a logical progression to follow. The linkage between the sub-themes and the main theme will be established through this progression. In the following section, audit concern will be discussed.

## 5.1 Audit Concern

Ever since the management of corporations have been dominated by the Anglo-Saxon model (Cuervo, 2002) (separation of ownership from control of corporation), the role of audit and the role it must play has risen to prominence. Audit plays a significant role in the financial reporting process and the management of corporations. It is regarded as a tool of accountability (ICAEW, 2005).

Hence, this made the issue of the audit, and some critical concerns about the present-day audit, a highly important phenomenon to look at considering the numerous cases of audit failures, corporate collapses and financial statement fraud that have occurred in recent time.

Audit concern in the context of this thesis critically looked at those critical issues in the current audit environment that constitute an impediment to audit quality, and how addressing this concern can lead to an improvement in audit quality and possibly reduce financial statement fraud, audit failures and corporate collapses.

Addressing this concern, in the long run, can restore investors' confidence and trust in the financial reporting process and corporate governance. Audit concern in the context of this thesis is a result of merging three categories. These three categories were discussed in chapter four, and they constitute the sub-themes for this theme. The audit concerns identified in this study are agency concern, financial statement fraud concern, the role of audit and auditors' responsibilities, management responsibilities concerning fraud detection in the financial statement and audit expectation gap.

While much of the research has tried to establish the role of audit (Alleyne & Howard, 2005; Gerson, et al., 2006; Coenen, 2013) and auditors' responsibilities (Asare , et al., 2015; Chong, 2013; Chui & Pike, 2013; Coenen, 2013; Clikeman, 2003), some have even gone ahead to discuss the issue of audit expectation and performance gap (Koh & Woo, 1998; Jamal, 2008; Klaus & Martin, 2014). No know research appears to have identified concerns about present-day audit beyond the ones identified above.

ICAEW has advanced some arguments about the critical role audit plays in the capital market. They observed that the audit serves the public interest by strengthening and reinforcing trust and confidence in the financial reporting process. However, no research has been identified that attempt to establish some of the concerns inherent in the present-day audit framework particularly the issue of auditors' mandate and agency concern.

This thesis looks at some of these concerns as expressed by participants interviewed for this study. These concerns will be discussed under seven different sub-themes. Based on the findings of this study I identified seven concerns associated with the present-day auditing which can equally be referred to as the current accounting system of reporting and procedural auditing. The following section will discuss the agency concern.

## 5.2 Agency Concern

Most of the research in the field of corporate governance is based on the assumption of agency theory. Agency theory is concerned with the potential for parties to a transaction to have conflicting interests and goals, thereby resulting in actions which produce an outcome which is positive for one party but not the other. Asymmetry in the information available to the different stakeholders tends to exacerbate the potential for conflict of interest (Garrow & Awolowo, 2018).

Jensen and Meckling (1976) claimed that agency problems are widespread in organisations. Eisenhardt (1989) explained that one of the problems in agency relationships is that the principal and the agent may prefer different actions because of their different risk preferences.

The conflict of interest in an agency relationship usually occurs because of information asymmetry (Jensen & Meckling, 1976). Information within an organisation is very critical to decision making, and management working at the 'coalface' of the operations of the company are privy to essential information that can be manipulated to maximise their interest at the expense of the principal.

This thesis identifies agency concern as a substantial issue for consideration in addressing audit concern and in developing a forensic accounting system framework to help reduce financial statement fraud.

What role does audit plays in an agency relationship that exists between the principal (shareholders) and the agent (management)? As already established in the theoretical framework for this study in chapter two, because of information asymmetry, the principal does not trust the agent. As such, the principal will rely on some mechanism to align his agent interest to that of his own.

One important mechanism to do this as already established in this study is the external audit. I viewed the audit as an external mechanism that can be utilised to monitor and investigate the action of the agent in an Anglo-Saxon business model. External audit in this regard is promoted as a trust producing framework to persuade the public that the capitalist corporation and management are not corrupt, and that company and their directors are made accountable (Sikka, 2009).

This study found that agency problem still exists in today's business world and the present-day audit cannot reduce or solve the problem. Principal still has a problem trusting the agent because of information asymmetry. Participants expressed concern about audit not being able to reduce the scope of information asymmetry which in theory, it should be able to reduce it.

Audit serves as a mechanism for reinforcing trust between the principal (shareholders) and the agent (board of directors). It is perceived to be an independent check on the work of the agent. Thereby, maintaining confidence and trust (ICAEW, 2005).

The role of the audit in an agency relationship is to reduce the scope of information asymmetry. However, in reality, it appears that the audit has not been able to perform this role. Referring to the theoretical framework established in this study, the audit is that unique link between the principal (shareholders) and the agent (management). To the principal, the audit is giving an assurance that the enterprise financial report has been looked at by an external eye while to the agent, the audit is meant to provide an investigatory role. The diagram below illustrates the suppose role that audit was meant to play in an agency relationship.

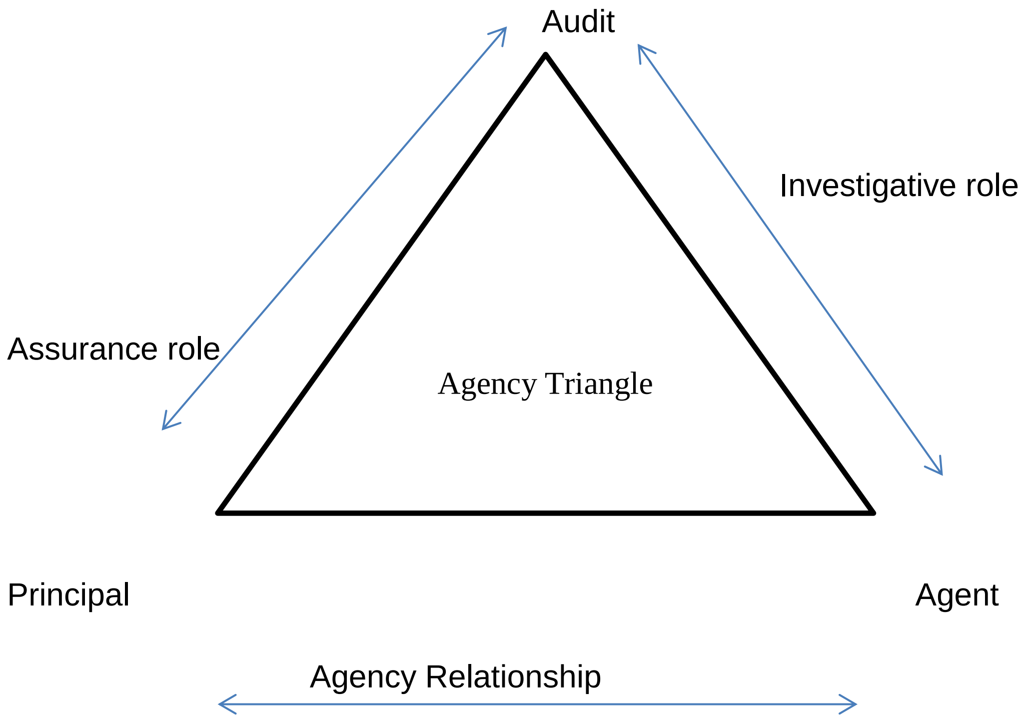



Figure 5.1: The Agency Triangle

Source: Author's theoretical development

To the principal, the audit is meant to assure that the enterprise results reflect a true and fair view. However, the auditing profession claimed to give reasonable assurance (Chui & Pike, 2013). To the agent, the audit is meant to serve as an investigative tool, i.e. to investigate all the transactions of the agent in order to reduce information asymmetry and opportunistic behaviour by the agent.

In one sense, the investigative role of the audit can be argued, is meant to prevent the agent from committing fraud against the principal. However, the accounting and auditing profession has always claimed that the job of the auditors is not to detect fraud. The inability of auditors to fulfil these two roles is termed the agency concern which in part is a limitation of the current accounting system of reporting and procedural auditing.

This resulted in concern for the participants of this study. Moreover, the fact that present-day audit is not designed to reduce that scope of information asymmetry is a concern. The accounting academics interviewed express some comments on present-day audit not being able to reduce the scope of information asymmetry.

*… Of course, we cannot hide from the fact that people, directors, mostly management tend to have an influence in terms of how they want the financial outlook of the company to be. Yeah, I want to believe to a large extent, that is what is meant to achieve but whether it is achieving that is another question. Yeah, I think that these auditors have been put in place so that they give the shareholders assurance that everything will be fair as it is occurring without painting any other picture…*

**Accounting Academics (AA) 3**

*…In theory that is what it should do, but I mean again we are changing, aren't we? So, to some extent, yeah, they could reduce the agency problem, but it does not seem to prevent problems taking place…*

**Accounting Academic (AA) 1**

The comments from the accounting academics imply that in theory audit is meant to reduce the scope of information asymmetry, but in practice, that does not seem to happen. This can be due to the fact the profession claims only to give a reasonable assurance and not absolute assurance. The finance directors' views on the issue bring another dimension to the agency concern. They argue that the capital market will perform better if auditors can help to reduce the scope of information asymmetry which in theory should be their mandate. Below are their comments;

*…I think it must reduce the issue between them. It must help in transparency. I think it is one of those sorts of chicken and eggs things, so I think there is an enormous and considerable amount of money spent on auditors which is not justified but there is no alternative and therefore, it is justified…*

**Finance Director (FD) 2**

*…the thing is the stock price will go up and sustain for longer years if the auditing firm is helping in this conflict between us the board and the shareholders. If it doesn't, it means we will not have a sustainable capital market…*

**Finance Director (FD) 1**

In theory, the comments of the finance directors interviewed can be argued to be valid. The shareholders expect that through audit, their investment is safe and before most investors invest in a particular company, they do review the annual report of that company which has been audited. However, one of the external auditors interviewed, and an accounting academic expresses a different view. They think audit can is not meant to reduce the scope of information asymmetry.

*… As it is now, am not sure how auditors will be able to minimise that. Yeah, am not sure what role auditors can play in minimising the conflict…*

**External Auditor (EA) 2**

*…there will always be that conflict between the directors and shareholders; the role of auditors is not necessarily to minimise those conflicts and how directors behave I do not think can be controlled by the auditors…*

**Accounting Academics (AA) 2**

To this end, one of the audit concerns, as the findings of this study have revealed, is the inability of audit in reducing the scope of information asymmetry and in preventing opportunistic behaviour by the agent.

This supports the findings of Sikka (2009), that audit is promoted as a trust engendering technology to persuade the public that the capitalist corporation and management are not corrupt and that companies and their directors are made accountable. If the audit is promoted as a trust engendering technology, then the presently constituted audit framework is ineffective in reducing the agency problem. These findings suggest that there is a significant weakness in the current audit which can also be called an accounting paradigm.

The agency concerns also support Colbert & Jahera (2011) claims that addressing the audit concern is essential. They claimed that based on the plea of the public, the role of audit in an agency relationship is of necessity expanding beyond a simple verification of transactions and account to a proper investigation of management activities.

This is because, traditionally, the audit is designed to monitor the agent in an agency relationship. The audit function exists in order to provide feedback to shareholders via the board of directors as to the behaviour of managers (Colbert & Jahera, 2011).

Their claims can be linked closely to agency concern. The role of audit in an agency relationship is to reduce the scope of information asymmetry, and as the current audit is, that role has not been fulfilled, and the outcry of the public on this issue will need to be listened to by the accounting profession if the profession is serious about providing credible financial reporting.

For corporate reporting to be credible, it needs to be fraud-free, and for this to happen, the role audit is meant to play in an agency relationship that exists between the principal and the agent will need to be adequately addressed.

Hence, in order to enhance audit quality, the agency concern needs to be addressed. This can be addressed in part through regulations that will expand the role of the audit beyond procedural auditing and through the forensic accounting system framework which will be discussed in later chapters of this thesis.

### 5.2.1 Odd Agency Situation

Another sub-category under the agency concern identified in this study is the odd agency situation. The odd agency situation refers to a situation whereby management is the one responsible for appointing the external auditor, which is then ratified by shareholders at an annual general meeting (AGM).

The odd agency situation usually results in the auditor being loyal to the management as against the shareholders whom they are meant to protect in theory. Auditors, in theory, are meant to safeguard the interest of the shareholders and other stakeholders. However, a situation whereby the agent is the one appointing a supposed investigator to look into how he or she has managed the principal's business becomes questionable and should raise some concern.

Moreover, because the auditors want to keep their jobs and do not want to upset their client, they tend to go along with management which can be to the detriment of the principal. An excellent example of this is the Enron financial shenanigans of 2001. Arthur Anderson went along with Enron’s management team leading to the collapse of the company (Ackman, 2002).

From the external auditors interviewed perspective, they argue that they do not want to lose their clients which make them a bit careful in raising some concern even when their client is committing fraud.

*… Also, the auditors most likely will deal with the board of directors and not the shareholders. Like any communication will go to the board and it does not go directly to the shareholders… It still comes down to keeping the client happy so to speak… I guess that is another difference between a forensic accountant and auditors. An auditor knows they are looking for a client; they want persons to engage them. So, how far do you go, do you want to offend them by saying I think you are committing fraud, it is a very thickly situation because you do not want to drive your client away at the same time you do not want to encourage wrongdoing…*

**External Auditor (EA) 2**

The fact that management is the one responsible for appointing the auditor seems to pose a problem for audit firms themselves. This is because they want to keep their job and hence at times, they must bend the rules to allow their client to carry on with whatever outlook they want the company to project.

Some other participants feel the auditors sometimes go along with whatever wrongdoing that management has in mind. This most of the time is to the disadvantage of the principal (shareholders).

*… I do not, honestly, do not believe that they do not detect it, I think they in most cases they knowingly go along with it…*

**Accounting Academic (AA) 2**

*… I think sometimes the auditing firm get into a partnership with the business that is not a professional partnership; they become some sort of friendship which is not professional at all…*

**Finance Director (FD) 1**

*… Sometimes they can go to the extent of bending the rules and sometimes with the assistant of the auditor, people who are supposed to be providing this oversight check…*

**Forensic Accountant (FA) 1**

The odd agency situation identified in this study has to do with the appointment of the auditor. While the board of directors in theory and practice are the one responsible for this, this creates a situation where the auditors become loyal to them as against the shareholders. This brings the issue of audit independence into play. With the way and manner in which auditors are appointed and paid, can they ever be independent? Alternatively, is it ok for the agent to appoint someone to investigate their work?

Interestingly with audit, shareholders and debtholders (principals) are more confident that the information they receive is fairly presented. The question that then arises from this is who the auditor is responsible to? Could there possibly be a potential conflict within the audit function itself? Are auditors ultimately responsible to the party that pays their fees (the board of directors) or to the other parties who use their reports (shareholders and creditors)? (Colbert & Jahera, 2011).

This conflict has not been adequately addressed by the auditors in recent times considering the series of audit failures, financial statement fraud and corporate collapses. These are the issues with the current accounting system of reporting and procedural auditing. Hence, the odd agency situation needs to be addressed to reduce financial statement fraud and any other opportunistic behaviour that the agent might want to use against the principal.

### 5.2.2 Section Summary – Agency Concern

This section has looked at the agency concern as a sub-theme of the audit concern. While the separation of ownership from control has elevated the role of the audit to a monitoring exercise, specific issues need to be addressed in order to make the audit more effective in its monitoring exercise. The agency concern addresses some of the limitations inherent in the current audit environment which constitutes an impediment to the audit function. The odd agency situation is another sub-category that emerged in this section. The odd agency situation looked at the supposed conflict of interest that auditors have to fight. Is their loyalty to those who appoint and pay their fees or to the real owner of the corporations (shareholders and creditors)?

The findings of this thesis have been used to support this sub-theme and its sub-category. The recent scale of corporate collapses, audit failures and financial statement fraud has shown that auditors have not been able to manage this conflict. Hence, in order to avoid more future casualties, the issue of agency concern and the odd agency situation will need to be addressed appropriately. How this can be addressed will be discussed in the subsequent chapter which is the development of a forensic accounting system framework. The following section will discuss the role of financial statement and financial statement concern.

## 5.3 The Role of Financial Statement

The separation of ownership from control of corporations has made the financial statement the primary mechanism for shareholders to monitor the performance of directors (ICAEW, 2005). An organisation accounting cycle ends with the production of a financial statement (Albrecht, et al., 2015). The perceived relevance of the financial statement in the financial reporting framework is, to provide information about the financial position, performance and changes in financial position of a firm that is useful to a wide range of users in making management and investment decisions (Anaja & Onoja, 2015).

Financial statements are often prepared in accordance with accounting standards and corporate governance code in order to allow for easy comparison of companies and more importantly to avoid financial statement fraud.

### 5.3.1 Financial Statement Fraud Concern

Financial statement fraud according to the Association of Certified Fraud Examiner (ACFE) is the deliberate misrepresentation of the financial condition of an enterprise accomplished through the intentional misstatement or omission of amounts or disclosures in the financial statements to deceive financial statement users. Financial statement fraud in the Association of Certified Fraud Examiner report to the nation on occupational fraud and abuse 2018 edition have a median loss of $800,000.

Most investment decisions are made solely on the enterprise financial statement. Moreover, when a financial statement relied upon to make this investment decision is fraudulent, it becomes a concern to the investors, and as it has been over the years, it reduces investors' confidence in the financial statement and the accounting profession.

Prior literature has established that the issue of financial statement fraud ought to be a concern to stakeholders in the accounting profession. Some authors have even gone ahead to study the concern of investors. However, there appears to be no known empirical study that has examined the concern of stakeholders within the accounting profession, which is why the question about concern about financial statement fraud concern was asked in this study.

The findings of this study showed that all the participants express a high level of concern about financial statement fraud. Some participants expressed concerns that financial statement fraud damages the reputation of the accounting profession.

*…I mean financial statement fraud destroys our reputation as a profession because investors want to be able to rely on the financial statement and I do not blame them. I have got investment in a few companies, and I just relied on the audited financial statement to decide on whether to invest or not but if that decision is now based on a fraudulent financial statement, it will make me very sick, and I will not have faith the financial statement again…*

**Forensic Accountant (FA) 2**

Other participants see financial statement fraud as damaging shareholders value. This is because investors are usually the one that suffers most in the event of any financial statement fraud. Most notably, share price always drops drastically after any revelation of fraudulent reporting costing investors fortunes.

*…Of course, any fraud you know means that the shareholders' value is not safeguarded. So, you know it diminishes shareholders value. It is not good for the economy as well…*

**External Auditor (EA) 1**

The comment from external auditor (EA 1) about financial statement fraud hurting the economy support the claim by Black (2010) that financial statement fraud was a significant contributor to the global financial crisis of 2008.

*…That is a vast question, yes you must be worried about it, and it continues to happen. People are trying to hide things internally which leads to hiding things externally in order to demonstrate a better outcome and as a community of practitioners, a world that does not seem to solve the problems which continue to happen…*

**Finance Director (FD) 2**

Remarks by some other participants echo a concern about financial statement fraud. Below are some of the concerns expressed by participants:

*…Obviously, as an academic who teaches those subjects at university in terms of the forensic accounting topics that I teach, I do have a concern. Moreover, as a forensic accountant, I have a concern because that is what I used to investigate in terms of financial statement fraud…*

**Accounting Academics (AA) 2**

*…Yes, I am concerned about it. I mean you know to some degree financial statement fraud has a big status, but it was a bigger issue now than it was historically. So, I am still concerned by it, and it still happens but if you go back to the 90s and obviously, we have the entire financial crisis in the US around Enron. So, we have pits. Now it is less of mediation…*

**Forensic Accountant (FA) 1**

*… Generally, yes, especially now that I am in the field of audit, I now understand why and how it can go undetected in a regular financial statement audit…*

**External Auditor (EA) 2**

*…Yes, I mean, I am concerned with the issue of financial statement fraud just as I am concerned with the issue of fraud in general. You know, I am very concerned because it is taking or using the skills and the knowledge and the discipline to your personal advantage, for personal enrichment…*

**Accounting Academic (AA) 4**

These findings support the claims by Gray & Moussalli (2006) that the issue of financial statement fraud should be of more significant concern to the accounting profession. There is evidence that the stakeholders interviewed for this study have concerns about financial statement fraud mostly because it damages the reputation of the accounting profession and partly because it diminishes shareholders value and makes stakeholders lose faith in the financial reporting process and corporate governance. This will make the contention that financial statement fraud should cause the accounting profession to re-examine and re-establish the necessary accounting procedures, auditing techniques and accounting education a valid point (Apostolon & Crumbley, 2005).

The accounting profession (particularly external auditors) is meant to safeguard the interest of the public. i.e. shareholders and other stakeholders. When financial statement fraud occurs and could not be picked up during the external audit, investors and other stakeholders lose money and, this betrays their trust in the financial reporting framework and corporate governance (Hogan, et al., 2008; Smith & Crumbley, 2009; Bhasin, 2013).

The findings showed that accounting stakeholders are as much concerned about financial statement fraud as investors and other stakeholders. They acknowledge that this is a severe problem because investors and other stakeholders rely on financial statements to make investment decisions.

Financial statement fraud does not just happen. A whole lot of the time, it usually starts small through creative accounting and then gets bigger to the point that it goes out of control and eventually leads to fraud. While creative accounting in its sense is not fraud, it can be likened to impression management. However, the end result of impression management is fraud.

For example, Enron wanted to create the impression that their company was the best in America; they ended up using the mark-to-market accounting, which at the time was legal and acceptable in the US GAAP but was overstretched to the point of leading to fraud. Olympus Corporation was trying to hide losses from the Japanese bubbles using various mergers and acquisitions and by employing the **tobashi** scheme which means to fly away which eventually led to $1.2 billion fraud.

The series of financial statement fraud that have occurred since the turn of the millennium has brought into question the role of audit and the responsibilities of auditors in an agency relationship that exists between the principal and the agent and partly concerning fraud and reducing the scope of information asymmetry.

### 5.3.2 Behavioural Factors

Behavioural factors have been recognised as the reason why fraud take place (Cressey, 1950; Dittenhofer , 1995; Sandhu, 2016). The 10/80/10 principle has been used in fraud prevention circles to assess the chances of fraud taking place (Buchanan-Cook, 2006). The 10/80/10 principle suggests that just 10 per cent of the population will be honest; they will not steal, lie or cheat under any circumstances. Another 80 per cent of the population given enough pressures and the right opportunity may behave unethically. The remaining 10 per cent of the population is assumed to be dishonest and will participate in criminal activities whenever they can. (Buchanan-Cook, 2006; Auditor of Public Accounts, 2011).

Behavioural factors can be utilised in explaining why an agent (management) betray the trust of their principal (shareholders). Cressey (1950, 1953) postulated a hypothesis on why people entrusted with trust positions violated those trust. He postulated that for any criminal violation of trust to occur, three elements which he called pressure, opportunity and rationalisation must be present. These were discussed extensively in chapter two.

This study found that behavioural issues are responsible for why the agent (management) commit financial statement fraud. However, auditors of financial statement seem not to understand these behavioural factors, which often suggest why some of this massive fraud go undetected during the regular annual audit. Below is a participant comment about the behavioural issue.

*… Fraud is a human problem, and that is why it should start to be approached as such and that is why forensic accounting is necessary because we in our function incorporate the human aspect with our knowledge. We begin to understand human psychology; we begin to understand the other sociological aspect. So, I think if every part of the process is implemented and these collective efforts are always considered, then yes, I think there will be some improvement, some change, some paradigm shift…*

**Accounting Academics (AA) 4**

There is a need for an understanding of human behaviour on the part of the auditors to increase the chances of fraud detection in the financial statement. An understanding of how fraud is committed is the first step towards preventing and detecting it. One of the finance directors interviewed gave an interesting perspective on this.

*… It has to do with more about understanding behavioural issues than numerical issues. The financial world has a reputation that is generally maths. As people who can talk numbers but cannot talk to other people. They are good at numbers but not good at understanding the behaviour of people. They need to understand behaviour dynamics. Why people might do what they do. They need to understand the power dynamics, which notably played out in Japan in the Olympus case. The way to move forward is by understanding the behaviour…*

**Finance Director (FD) 2**

One behavioural factor identified in this study is impression management. Our findings reveal that present-day auditors do not understand the human behaviour which limits their capacity to detect fraud in the financial statement. Participants' comments are substantial on the issue of behaviour and how a lack of this understanding by auditors results in their inability to detect fraud. Below are some of their comments by participants about behavioural factors:

*… There must be some psychological preparation for the auditors not only by training and giving a curriculum and syllabus to study, no, also to prepare them as humans to understand what they are going to do. An aspect like friendship, trust and building trust and communicating with the client properly…*

**Finance Director (FD) 1**

*… There are so many factors which drive management to commit those fraud or to prevail over their juniors…*

**External Auditor (EA) 1**

*… I think auditors are not trained to some extent, but you have got actually to be a really good auditor. You have got to have an excellent imagination because you have got to be able to go in and say how will somebody steal, how will things occur, what will somebody do. This is where it comes back to what are the systems like, what the people like, it is all that bit of the audit where you are assessing the business…*

**Accounting Academics (AA) 1**

This supports the findings of Cressey (1950, 1953). Cressey (1950, 1953) in his work titled "other people's money" and "criminal violation of trust" postulated that "*trusted persons become trust violator, when they conceive of themselves as having a financial problem that is non-sharable and have the knowledge or awareness that this problem can be secretly resolved by a violation of the position of financial trust, and are able to apply to their own conduct in that situation verbalizations which enables them to adjust their conceptions of themselves as a trusted persons with their conceptions of themselves as users of the entrusted funds or property"* (p 742).

However, when the person that have the responsibility of protecting the interest of the principal does not understand the motive behind the fraud then fraud detection becomes an impossible task to achieve. This probably suggests why auditors struggle to detect fraud in the financial statement.

Hence, an understanding of behavioural factors is the first step towards detecting financial statement fraud. However, present-day auditors do not have this understanding. Wells (2005 p. 13) observed that "*As a group, CPAs are neither* *stupid nor crooked. But the majority are still ignorant about fraud… for the last 80 years; untrained accounting graduates have been drafted to wage war against sophisticated liars and thieves. And as multi-billion-dollar accounting failures have shown, it has not been much of a fight*".

Anta (2005), a convicted CFO of Crazy Eddie who masterminded the largest securities fraud uncovered during the 1980s gave a sharp remark that echoes a lack of understanding of human behaviour by auditors of financial statement and why an understanding of behavioural factors needs more consideration. He said *"You are not getting courses in criminality or psychology. You are not getting courses in what motivates people like me to commit the crime that I committed that are going to destroy your careers possibly. They are going to cause investors to lose hundreds of millions of dollars* (Antar, 2005, p. 5)

Furthermore, hubris (Roll, 1986) and narcissism (Chatterjee & Hambrick, 2007; Higgs, 2009) have frequently been cited as causes or contributors to deleterious financial performance arising from a merger or acquisition. It is therefore probable that both these behavioural traits are influential in terms of performance outcomes in other business situations which traditional audit methodologies take no account of. These characteristics are present within an organisation, and hence there is no 'red flag' for them in Annual Reports.

Behavioural factors will be discussed again in the next chapter to emphasise the need for education on the part of auditors of financial statements and as a necessary step towards reducing financial statement fraud. One crucial element of behavioural factors identified in this study is impression management.

### 5.3.3 Impression Management

Senior management at publicly traded companies usually want to report positive news and impressive financial results that will please investors and at times to meet analyst forecasts in order to drive the share price higher. While most companies act ethically and follow prescribed accounting rules and corporate governance regulations when reporting their entity financial affairs and performance, some take advantage of the grey areas in the rules (creative accounting) in order to portray their entity financial results in a misleadingly positive way (Schilit, 2010).

The act of portraying the results of an entity in a misleadingly positive way to drive shares up or encouraged investors and other creditors to part with their money is what this thesis refers to as impression management.

Impression management has become popular in today's business world. Management has now formed the habit of creating an impression about their company that is misleading, and there appears to be no mechanism to stop this from happening other than the conventional financial statement audit which lacks the capacity to detect fraudulent behaviour let alone prevent management from misrepresenting their companies.

A good example of this is Carillion, a British construction giant that went into liquidation in January 2018 without any warning signs. In their last Annual Report, Carillion explained their vision is “to be the trusted partner for providing services, delivering infrastructure and creating places that bring lasting benefits to our customers and the communities in which we live and work”. They present their values as: “We care, we achieve together, we improve, we deliver”. The Chairman stated in his Outlook (2016 Annual Report) “we have a good platform from which to develop the business in 2017”. They went into liquidation in January 2018 with almost £1 billion of debt, a pension deficit of over £500m, and questions around directors' bonuses and pay (Garrow, et al., 2019).

Another example of impression management and 'sugar coating' of annual reports and account is Palmer and Harvey. Palmer & Harvey was the UK's largest delivered wholesaler of grocery products. Their Chairman, in their 2015/16 Annual Report, stated that “the business now has a clear plan to deliver improvement to the financial results'; 'we have taken important steps to drive forward our strategic objectives'; 'we successfully completed a bank refinancing at the start of the year'. They went into administration in November 2017 with the loss of over 2,500 jobs, an escalating pension deficit, and directors taking dividends despite the firm being heavily indebted (Garrow & Awolowo, 2018).

There was virtually no indication in the two Companies last published accounts of the likely consequences of the continuing deterioration in the Company's performance on its stakeholders. The stakeholders under consideration express concerns about impression management and how there is no mechanism to checkmate this. Below are some of their comments:

*… I am not so interested myself in earnings management because that is quite a wide spectrum between the impression management and outright misleading information. So, they tend to mislead, and that barges into fraud. Some are just impression management; you know to try and get a particular message communicated at a particular time.…*

**Accounting Academic (AA) 1**

*… So yeah. Basically, people are trying to hide things internally which leads to hiding things externally in order to demonstrate a better outcome…*

**Finance Director (FD) 2**

*… So, there is earnings management which you will expect to some extent always to go on because of the nature of companies. Some earnings management obviously has intent to deceive; some is just impression management; you know to try and get a particular message communicated at a particular time…*

**Accounting Academic (AA) 2**

Impression management can potentially be addressed through an understanding of human behaviour by the auditors and in one sense by making directors and management accountable for whatever they write in their annual report. There is equally a need to create a mechanism to prevent impression management either through enhancing audit quality or through proper corporate governance regulation. One meaningful way of getting this done is by reducing the opportunity pose by accounting standards and regulations generally.

### 5.3.4 Section Summary – Financial Statement Fraud

This section has looked at the role of financial statements in an agency relationship and how fraudulent reporting has resulted in severe concern for stakeholders. While prior research has established the concerns of investors about financial statement fraud, none have looked at the concerns of the stakeholders in the accounting profession. This research has demonstrated that stakeholders within the accounting profession also have serious concerns about financial statement fraud and the fact that they go undetected during an external audit also gives them concerns.

This section has also looked at how behavioural factors are possibly an explanation for why management commit fraud. Impression management is one of the issues identified in this study. An understanding of human behaviour by the auditors of financial statements has been identified as key to reducing financial statement fraud and in safeguarding the interests of the shareholders and other stakeholders.

The next section will now look at the role of audit and the responsibility of auditors concerning fraud detection in the financial statement. Based on the findings of this study, this section will argue for the need to change auditors mandate and make them share some responsibility for detecting fraud in the financial statement.

## 5.4 Role of Audit

The role of audit can be closely linked to the responsibilities of auditors concerning fraud detection in the financial statement. An understanding of the role of audit will make the discussion about the auditor's responsibility easier and will equally make the discussion of how their responsibilities, concerning fraud detection in the financial statement might have changed without the accounting profession recognising this. The expanding role of the audit function in today's corporation raises the question of the responsibility the auditor has to the participants in the corporation (Colbert & Jahera, 2011)

An essential question for this study is "what is the role of audit"? The general role of the audit within the financial reporting framework is to provide an opinion about whether the accounts prepared by management represent a true and fair view of the entity affairs, in the context of a going concern. Within the agency relationship, audit is designed to monitor the agent (Colbert & Jahera, 2011; Chong, 2013)

Audit serves a vital economic purpose. It plays a crucial role in reinforcing trust and confidence in the agency relationship that exist between principal and agent (shareholders and board of directors) (ICAEW, 2005). The general belief of the business community is that someone who has an interest in a company is morally bound to rely on its audited financial statement as a guarantee for its solvency, prosperity and business viability (Koh & Woo, 1998).

Looking at the role of audit from the context of the agency theory as postulated in this study will be to reduce the scope of information asymmetry through monitoring. This monitoring process gives assurance and comfort to the principal. The very purpose of an external audit within an agency relationship is to serve as an instrument for ensuring that financial reports financials have been subjected to independent scrutiny by a competent external auditor (Wolk & Tearney, 1997).

According to one of the participants interviewed for this study (EA 1), He said: “Audit is meant to give comfort to the shareholders and other stakeholders”. This is like the argument of Sikka (2009) that audit is promoted as a trust engendering technology to persuade the public that the capitalist corporation and management are not corrupt, and those companies and their directors are made accountable.

This further reinforces Colbert & Jahera (2011) argument that traditionally, the audit is designed to monitor the agent. They went further to argue that the audit function exists in order to provide feedback to shareholders via the board of directors as to the behaviour of managers. Below are some of the participants comments on the role of audit:

*…Is to basically ensure or to give, to give assurance that the statement shows a true and fair view of the transactions. The review of the figure through audit gives that assurance and comfort to the reader or any stakeholders that they reflect a true and fair view of the transactions that have gone through that…*

**External Auditor (EA) 1**

*… The role of audit is a watchdog, a checker, to make sure that people are complying with what the company should be complying with and to ensure that the accounts reflect a true and fair view… Again, according to the law book, they have, they can give a true and fair view, and they can do as much as they need to do. They are fulfilling the audit purpose…*

**Accounting Academics (AA) 3**

The findings of this study reveal that what the independent audit represents within an agency relationship is to safeguard the interest of the principal (Shareholders). This finding agrees with Arnold & de Lange (2004) who regard audit as a bastion of safeguards implemented by the principal in the agency relationship to monitor the agent.

The participants interviewed comments about the role of audit is like what the auditing and accounting standards stipulated as the role of audit. The participants, however, express concern on how this role has changed in recent time. Below are some of the comments of the participants about the role of audit in an agency relationship and in part what ought to be the role of audit in practice:

*… Ok, I think that basically the financial auditor let me put it this way which is just performed by the chartered accountant is basically like; the primary role is to provide stakeholders with assurance in the form of audit opinion that the financials have been prepared in accordance with GAAP or that there is no material misstatement… So, when people engage financial auditor, they are basically shopping for an opinion which may differ from one auditor to another… Yeah, I think that these auditors have been put in place so that they give the shareholders assurance that everything will be fair as it is occurring without painting any other picture…*

**Forensic Accountant (FA) 3**

*… I mean traditionally, it has been obviously to ensure that the statement has been produced in accordance with laws and that they comply with the accounting standard which are legal status and that they do show a fair representation or true and fair view of the company on a particular date… So, the role of the auditor there is to ensure that the underlying system that produces the report, the governance of the company and the system that produce the numbers are robust. That the company have taken into account any risk and therefore people can rely on the financial statement. So, essentially that is the role of an external audit of the financial statement. It has never been to detect fraud. It is to provide a level of assurance… So, in other words, the very purpose of an audit is to say well actually, you have met all your legal obligation and you have presented the account in such a way that they can be comparable and relied upon…*

**Accounting Academic (AA) 1**

*… Well, in general, as it is presented in the auditor's report, it is to provide an opinion as to whether the balance sheet statements are prepared in accordance with the general accounting principles…*

**External Auditor (EA) 2**

*… The role of an external audit is an external eye helping my company to look proper, correct in the eyes of the stock market because otherwise, our company will not sustain, they will be fraudulent to the investors…*

**Finance Director (FD) 2**

While the participants reaffirm what the contemporary role of audit is which is to reflect a true and fair view, the findings of this study equally showed that they expressed concern on how the role might probably need to change. Below are some of their comments on the supposed role of audit in an agency relationship:

*…Can they do more, is there a reason for them to do more, Yes, I think there is the expectation, and the client will end up paying more…*

**Forensic Accountant (FA) 2**

*…that is why I do not blame investors whenever I hear them complain about this, because I could feel what they feel because I also have investment and I want the auditor to be able to protect it…*

**Forensic Accountant (FA) 1**

This makes the argument that we can no longer rely on an audit technique that was utilised before the industrial age (Sikka, 2009), a valid point in this age of information revolution. This is because whenever there is a revelation of fraudulent financial reporting; the first question the public is always quick to ask is who the auditors are?

The concerns about the role of audit equally reaffirm the remark of Professor Shinji Hatta, a Japanese accounting scholar, who gave a strong remark about the role of KPMG in the Olympus scandal that came to light in 2011. Hatta said *"Maybe KPMG, AZSA accountants, thought it was not important. However, it was important and overlooking this, in my opinion, is a grave issue in terms of auditing"* (Reuters, 2011).

The findings of this study support the claim of this Japanese's Professor. The present-day audit is not fulfilling the assurance, and investigative role demanded of it in an agency relationship. Hence, detection of fraud in the financial statement becomes problematic. The role of audit needs to be re-examined and re-established considering the various accounting scandals, claims against the auditors and the numerous fines auditors have been asked to pay in recent time by the regulatory authority.

For example, the auditors of BHS, PWC were fined £6.5 million in June 2018 by the UK accounting watchdog over misconduct. Their audit partner, Steve Denison was also fined £325,000 and banned for 15 years by the watchdog for poor audit work (The Guardian , 2018).

Furthermore, KPMG was fined more than £3m by the FRC for misconduct relating to the scandal-hit insurance software firm Quindell. Moreover, elsewhere in Japan, Ernst & Young affiliate was fined $17.4 million after the firm's audit of Toshiba Corporation accounts failed to spot irregularities in the country's worst accounting scandal in years (Reuters, 2015). Hence, the role of present-day audit needs to be addressed in an agency relationship in order to safeguard the interests of stakeholders (particularly shareholders).

### 5.4.1 Auditors Responsibilities in Fraud Detection

Media reports of corporate failures, globally and locally, have shone a spotlight on the role of auditors and what a financial statement audit entail. While reporting and criticism of the profession have been focused on the audit quality debate, understanding of the role of the auditor remains limited (Mackie, 2018).

The responsibility of management concerning fraud detection in the financial statement has been well defined in the accounting and auditing standards. Those of the auditors have not been well defined from inception (Alleyne & Howard, 2005).

The issue around the responsibilities of auditors concerning fraud detection in the financial statement has been a subject of debate, and this has not been appropriately spelt out by accounting and auditing standards (Chui & Pike, 2013).

The participants under consideration expressed some serious concern about the responsibilities of auditors in the detection of fraud in the financial statement. There is agreement among the participants that the responsibilities of auditors in this regard have changed in recent time even though this is not yet reflected in the accounting standards, let alone education. They are hence suggesting a change of mandate on the part of the auditor to include the detection of fraud in the financial statement.

Out of the four stakeholders under consideration in this thesis, three stakeholders (Accounting Academics, Forensic Accountants and External Auditors) agreed that an auditor does not have the responsibility for detecting non-material fraud in the financial statement. However, they admit that the environment is changing. Therefore, the audit should change.

*"…At the current instant, they should not be responsible. But as it stands today, the rule book as it is today, then no, they should not be responsible because it says they should not be responsible in my opinion. The rule book is the regulations, the accounting standard, the auditing standard, they are doing what they are told to do within the audit standards and for as long as they are doing that and doing it correctly, they cannot be held responsible for any more than their tools box are supposed to do within those auditing standard…"*

**Accounting Academics (AA) 3**

*…As an external auditor, your role in the current environment is that you are expressing an opinion on those financial statements in order to express that those financial statement gives a true and fair view. If you are talking about financial statement fraud, in my view, they are responsible already because they have got to express an opinion about whether that account gives a true and fair view. By definition of financial statement fraud, they are already responsible for detecting that in my view because, in order for it to be financial statement fraud, it has to be material. Therefore, it will have an effect on the true and fairness of those financial statements. What the auditors are doing is to come along and actually say yes, they do or no they do not…*

**Accounting Academics (AA) 2**

*…They have got a caveat saying, they will identify any fraud if they come across it, but they are not necessarily going to identify it. Do I think they could do more? But*

*they are service, and they provide a service which is not necessarily to detect fraud? Could they do more? Yes, are they required to do more, no and perhaps…*

**Forensic Accountant (FA) 3**

*…Normal audit in as much as they may suspect fraud, I do not think ultimately that responsibility falls on the auditor…*

**External Auditor (EA) 1**

However, the Finance directors believe that auditors should have the responsibilities for the detection of fraud in the financial statement. Below is the comment of the finance director interviewed.

*"…Definitely yes, you know Francis I will tell you something and this is just an opinion. When you sign off on a document, you have to expect your signature, you as an auditor, you represent your firm, if you are going to sign off on my balance sheet statement, this means that you concur and consent to each and every transaction and balance on this financial statement. If you do not respect your signature, you do not respect your firm, and accordingly, consequently, I do not respect your firm either…"*

**Finance Director (FD) 1**

Other participants feel strongly that with the current regulation, auditors do not have responsibility for the detection of fraud in the financial statement. Some of their comments are highlighted below;

*…Yea. The auditors' responsibility is to uncover material fraud or error, and that is their responsibility. You know if there are significant items on the balance sheet or P&L account which is incorrect, the auditor has an obligation to uncover them. There should not be any argument about this; however, if it is an immaterial fraud, then they may not be responsible for that because they work to materiality level…*

**Forensic Accountant (FA) 4**

*… The role of the auditor there is to ensure that the underlying system that produces the report, the governance of the company and the system that produce the numbers are robust. That the company have taken into account any risk and therefore people*

*can rely on the financial statement. So, essentially that is the role of an external audit of the financial statement. It has never been to detect fraud. It is to provide a level of assurance. You just have to ensure you are carrying out your work in such a way that you will detect any material differences, errors and whether they arise from fraud or anything else. I think auditors should do everything they can to detect material error…*

**Accounting Academic (AA)1**

The findings of this study show that there is a need to expand the responsibility of auditors concerning fraud detection in the financial statement. This supports the argument of Mackie (2018), a senior audit partner in Deloitte. Mackie in his opinion column of Business Day titled "*In defence of auditors: detecting fraud is not their main job — but that could change"* argued that the question that arises is whether the scope of the financial statement audit should be broadened to include the detection of fraud. A consideration of the role and scope of the audit should focus on what could and should be done to meet investor and societal expectations.

Mackie (2018) went ahead to argue that the status quo is unsustainable, and change is inevitable. A new consensus must be built around the role of the auditor and the scope and expectations of an audit. It should be the priority of the accounting profession to find workable solutions to address concerns and ensure we serve the public interest.

The findings of this study coincidentally agree with Mackie's (2018) argument. This current business environment has changed, as such audit and the role and responsibility of auditors must change in order to safeguard the interest of the public and for the profession to remain relevant to the capital market.

Golden (2011) in his address to the senior accounting students at the University of Texas stated that that "*people wonder, investors wonder, legislators wonder, they wonder what is it that auditors really do. They wonder what value auditors bring, and my worry is that the profession of auditing (both internal and external) may someday become irrelevant to the capital market"*.

This equally supports Smith & Crumbley's (2009) advocacy about the need for auditors to step-up their game in the fight against financial deception. Smith &

Crumbley (2009) observed that auditors' legal liability for not discovering their client's fraudulent financial actions is simply not going to disappear. It is hard to understand how the liability for undiscovered fraud or other malfeasance can be reduced by continuing to rely on the present rule-based, auditing-reporting model strongly.

One basic fact is that even with all the publicity surrounding the issues of financial fraud in the last decades, most auditors, investors and other professionals still do not "get it" when it comes to detecting fraud. The truth is that those traditional financial statement audits were never designed to detect fraud (Coenen, 2013).

Emphasising the need for a change, Coenen (2013), observed that the traditional financial statement audits were never designed to detect fraud. Auditors examine a very small percentage of transactions. Fraud is rarely detected by financial statement audit because they are not aimed at doing so. However, with some recent development in software and computer programs, auditors can do more.

Interestingly, auditors have in time past claimed that fraud detection is their primary responsibility (Albrecht, et al., 2001). This claim can be captured in the words of Dicksee (1909). Dicksee (1909, p.23) said *"the detection of fraud is the most important portion of the auditors' duties, and there will be no need disputing the contention that the auditor who is able to detect fraud is – other things being equal – a better man than the auditor who cannot. Auditors should therefore assiduously cultivate this branch of their function – doubtless, the opportunity will not for long be wanting – as it is undoubtedly a branch that their client will most generally appreciate".*

Therefore, I believe based on the findings of this study that now is the time to re-establish the role and responsibility of auditors with respect to fraud detection in the financial statement and for this to happen, the accounting profession need to move away from the current accounting system of reporting and procedural auditing to a forensic accounting system. The mandate of auditors has to change. They need to start acting like detectives in order to reduce financial statement fraud. This theme and its sub-themes will be used in subsequent chapters to develop a forensic accounting system framework.

### 5.4.2 Management Responsibilities

The International Standard on Auditing (ISA) 240 places the responsibility for the detection of fraud on the management of the corporation. This is contained in the ISA 240 "the responsibilities of auditors relating to fraud in the audit of the financial statement". The ISA 240 states that "*The primary responsibility for the prevention and detection of fraud rests with both those charged with governance of the entity and management. It is important that management, with the oversight of those charged with governance, place a strong emphasis on fraud prevention, which may reduce opportunities for fraud to take place, and fraud deterrence, which could persuade individuals not to commit fraud because of the likelihood of detection and punishment. This involves a commitment to creating a culture of honesty and ethical behaviour which can be reinforced by an active oversight by those charged with governance. Oversight by those charged with governance includes considering the potential for an override of controls or other inappropriate influence over the financial reporting process, such as efforts by management to manage earnings in order to influence the perceptions of analysts as to the entity's performance and profitability*" (ISA 240, 2009).

Participants expressed concern about the ISA 240 requirement. While the majority of them feel the responsibility for detection of fraud in the financial statement belongs to the management, others argued that it should be a shared responsibility between those charged with management and governance and the external auditor.

*…It is the responsibility of the directors and those charged with governance, yeah, they have got the responsibility to prepare true and fair account because they are the stewards, they are you know the agent of the shareholders, it is their primary duty to prepare those account to give a true and fair view. The next duty they have got is having internal controls in place. Yeah, as those charged with governance to stop fraud happening, to make sure those accounts do give a true and fair view. Yeah, and it is their duties to comply with laws and regulations. Yes, so, they are looking after that company, they should not be able to abdicate that responsibility to somebody else…*

**Accounting Academic (AA) 2**

*… So, I do not think it is the responsibility of auditors to detect financial statement fraud. Although, when we communicate with clients, we point out that it is the responsibility of the management and board of directors to implement proper internal controls and to implement measures to identify fraud and to deal with fraud. It is the responsibility of persons within the company to do that, and that is one of the purposes of having an effective board of directors to have that oversight…*

**External Auditor (EA) 1**

*… My view is that it is the responsibility of management which is in law. They have not done everything, or they have missed the obvious. But I do not think it can ever be the external auditor primary responsibility. I think in the end, it is got to be the responsibility of the company because they are looking after the company on behalf of the shareholders…*

**Accounting Academic (AA) 1**

While management may be responsible for running the company 365 days in a year, putting the total responsibility on them negates the very purpose of audit in an agency relationship that exists between the principal and the agent and this disclaimer has served as tools in defence of the auditors.

*… It is their company if we change what auditor do, then the auditor should be coming to check to a higher level to what they do now, what is going on with the organisation, but I do not think the responsibility should be taken away from the company. It is their company; they going to make sure their governance are correct; they are going to ensure that their internal control is in place. I do not think you should, in my opinion, take away that ultimate responsibility. You are giving your own firm to someone else, and you should have that in your heart that that is your responsibility to make sure that your firm is as clean as it can be…*

**Accounting Academic (AA) 3**

Placing the sole responsibility for the detection of fraud on those charged with management and governance negates the very purpose of external audit in an agency relationship. If an external audit is indeed a trust engendering technology, then external auditors should also share in that responsibility.

As already established, audit reinforces trust between the principal and the agent, as such; audit should play a vital role in the reduction of fraud from management against the shareholders and other stakeholders. This is because management can override control. An excellent example of this is the Olympus scandal. Kikukawa overrides every existing control in Olympus cooperation to cover up for fraud. Hence the role of external audit is critical in fraud deterrence and cannot and should not be left solely to those charged with management and governance. Therefore, the IAS 240 will need to be investigated by standard setters in order to make the standard fit for purpose in this era of information revolution and globalisation.

### 5.4.3 Expectation Gap

The finding of this study reveals that the issue of the audit expectation gap still exists. The accounting profession has not been able to provide a lasting solution to this issue. Investors only have confidence and trust in the capital market when stock prices are rising, and news about the economy and corporation are favourable. However, when there are an economic downturn and accounting scandals, investors' confidence and trust decreases (Rezaee & Crumbley, 2007).

In recent times, there has been an unprecedented decrease in trust and an erosion of confidence in published audited financial reports (Rezaee, 2004). This is as a result of financial statement fraud and sudden corporate collapses without warning signs (Rezaee, 2004; Alleyne & Howard, 2005; Hogan, et al., 2008). This study found that there is still a perceived expectation gap between investors' desire for quality financial information and what public companies disseminate to them.

Expectation gap in the audit is the perceived difference between what auditors claimed to be their responsibility and what the public assumed to be the responsibility of auditors. Audit expectation gap in the accounting profession refers to the difference between the public views on what auditors’ responsibilities ought to be and what auditors are willing to assume as responsibilities in accordance with their professional standard (Rezaee & Crumbley, 2007)

Koh and Woo (1998) in their study observed that the general belief of the business community is that someone who has an interest in a company is morally bounded to rely on its audited financial statement as a guarantee for its solvency, prosperity and business viability and whenever things go wrong, such that the business enters into serious financial difficulties without any warning signal, the highly circulated belief by the investing public is that somebody should be made accountable for this financial disaster and that somebody is usually perceived to be the auditors of such financial statement.

What participants of this study expressed still suggest that the public expects that auditors should be able to detect fraud in the financial statement. Some of their comments are highlighted below:

*…But I think there is a common misconception from the public about what the auditor is there to do, and I think there is a misconception about the big four being the best of the best where in fact they may employ the highest-level graduates, but that does not exempt them from accounting scandals…*

**Forensic Accountant (FD) 1**

*…that is why I do not blame investors whenever I hear them complain about this, because I could feel what they feel because I also have investment and I want the auditor to be able to protect it…*

**Forensic Accountant (FD) 2**

*…it about that expectation isn't it. And obviously, it is a big issue about the expectation gap. It is what shareholders believe an audit is doing for them and I think the audit profession is trying to spend quite a lot of time trying to explain to shareholders what exactly it is that they do. That is where that role definition is really important and that is what the auditors are trying to do in terms of explaining the expectation gap and say look this is the responsibilities of the directors, this is our responsibility. Yeah, to look at what they have done…*

**Accounting Academic (AA) 2**

*…People for some time believe that the financial audit was meant to find out just about everything and provide fact and it has not provided it; it left an expectation gap. And I think as long as there is audit expectation gap, it means that the stakeholders are not actually getting what they wanted to get out of audit…*

**Forensic Accounting (FA) 3**

*…But in terms of pointing fingers at the auditors, that has to do with the expectancy gap simply because they are not in the field. I mean people expect the general practitioners to do certain things they cannot do because they are not specialised in probably all things or something. So, I think from the auditors' side, it easy to point fingers and says it is the auditors' fault simply because they do not understand the responsibility of the auditors…*

**External Auditor (EA) 2**

The findings of this study show that the audit expectation gap is still a concern to investors. Investors still believe they are not getting much from audit as it is not geared towards fraud detection. The recent scale of accounting scandals and corporate failures have equally reinforced the concerns of investors on what audit should be giving them (Rezaee, 2004).

The former SEC Chief Accountant Lynn Turner once refer to the expectation gap as expectation chasm. He argued that there is a chasm as wide and as deep as the Grand Canyon between what the public expects from us and what we deliver in the way of an audit … We must close the chasm by changing what we deliver in the way of an audit and audit report, to conform to the desires of our customer (Turner, 2002).

There have been several attempts to narrow the expectation gap. The accounting profession at some point was trying to educate the public on what the role and responsibilities of auditors are. However, rather than educating the public, much energy should be channel towards educating auditors better concerning fraud warning signs. This appears to be the way forward for the future and a sustainable approach. This will be expanded upon in the next chapter.

## 5.5 Chapter Summary

This chapter has looked at some of the concerns inherent in the present-day audit framework. Concern about audit not being able to reduce the scope of information asymmetry was discussed. This further led to a discussion on the appointment of auditors by management which was termed odd agency situation. The appointment of auditors by management brought into question the issue of loyalty and audit independence.

Behavioural factors were identified as the reason why financial statement fraud take place. However, there is no mechanism in the present-day audit to check this. An understanding of human behaviour is key to detecting financial statement fraud, but auditors appear to lack this understanding.

The role of the financial statement was examined, and some of the concerns shared by participants about financial statement fraud were discussed. This chapter also looked at the role of audit and how that role can be enhanced to improved audit quality. Then a discussion about auditors and management responsibilities concerning fraud detection in the financial statement was considered.

The public perception of auditors' responsibility was equally discussed in light of the audit expectation gap. While management responsibility in the detection of fraud has been spelt out clearly in accounting and auditing standard, those of the auditors have not been well defined. This resulted in a gap which auditors called expectation gap which is the perceived difference between what the public expects from an audit and what auditors claimed to be their job.

Hence, in order to reduce the incidence of fraud in the financial statement, the audit concerns identified in this study will need to be addressed. Change is now inevitable for the accounting profession. The mandate of auditor will have to change. The audit concern identified in this chapter is the first element towards developing a forensic accounting system. This will be discussed further in chapter seven.

## 5.6 Key Points from Chapter Five

Audit Concern

Agency Concern

- The role of audit in an agency relationship is to reduce the scope of information asymmetry.
- The inability of present-day audit in reducing the scope of information asymmetry has resulted in opportunistic behaviour by the agent.
- The appointment of auditors by the management creates an odd agency situation.
- Auditors independent is compromised partly because they are paid by the management.

The Role of Financial Statement

- Most investment decisions are made solely on an enterprise financial statement.

Financial Statement Fraud Concern

- Financial statement fraud is a key concern for accounting stakeholders.
- Behavioural issues are responsible for why management commit financial statement fraud.
- Present-day auditors do not understand human behaviour which often limit their capability to detect fraud.
- Auditors needs to understand human behaviour to increase their chances at detecting financial statement fraud.

Role of Audit/Auditors Responsibility

- Audit plays a crucial role in reinforcing trust and confidence.
- Present-day audit is not fulfilling the investigative and assurance role demanded of it in an agency relationship.
- The mandate of auditors needs to change to include the detection of fraud in the financial statement.

Expectation Gap

- Audit expectation gap still exist in today's business world.
- One way to close this gap is to change the mandate of auditors and educate them better on fraud warning signs.

# CHAPTER SIX: EDUCATION

The previous chapter looked at audit concern and its various sub-themes. How addressing this concern might reduce financial statement fraud were also discussed (Chapter Five – Audit Concern). This chapter will expand on the second theme which is **Education.** The emergence of this theme is depicted in Figure 4.9.

This chapter aims to demonstrate the importance of forensic accounting (Anti-fraud) education in reducing financial statement fraud and in part addressing some of the key concerns about audit that were discussed in previous chapters. This chapter will also demonstrate the importance of training auditors in some of the elements of forensic accounting to increase their fraud detection capability based on the findings of this study.

This chapter will explain what the current education of auditors is, the weakness inherent in their current curriculum which it is argued has resulted in a skills gap and an inability to spot problems. This chapter will also explain how acquiring forensic accounting skills, ethics, techniques and procedures through education can increase the auditors' chances of detecting fraud in financial statements.

The order of discussion is as follow: first, auditors' education according to the findings of this study will be discussed along with the sub-categories identified in chapter four (data analysis and findings chapter). Second, a review of the examination papers and curriculum of three professional accounting bodies in the UK (ACCA, ICAEW and AIA). Third, how forensic accounting is conceptualised will be discussed, and the relevant skills, techniques and procedures used in forensic accounting that enables the detection of fraud. Finally, the role of forensic accounting in fraud detection and the benefit of training auditors in some element of forensic accounting will be discussed. All discussion will include the category and sub-categories that emerged from data analysis.

At the end of this chapter, the research questions 1 and 2 (see chapter 1) will have been addressed. This chapter will also contribute towards the development of a forensic accounting system framework that can enhance the detection of fraud in financial statements.

## 6.1 Education

“Education is fundamental to the prevention of crime and corruption and to the promotion of a culture of lawfulness that supports the rule of law and human rights while respecting cultural identities.” United Nations’ Doha Declaration (2015).

Going by the United Nation Doha Declaration, the importance of education, particularly the education of auditors, cannot be overemphasised in the fight against financial deception. However, it appears that the education of professional accountants, primarily external auditors, has not been geared towards the detection of fraud in the financial statement. The education of professional accountants generally and mainly auditors of financial statements has been designed more towards conformity to accounting standards and regulations (Coenen, 2010), leaving less room for innovation and critical thinking.

Fraud has become complex in recent times and requires a specialist sets of skills and knowledge to detect it (Wells , 2005). Hence, it is not enough to suggest that auditors should have the responsibility for the detection of fraud in the financial statement; their training will need to be tailored towards this course.

The argument from this thesis is that, until accountants (particularly external auditors) are trained in forensic accounting skills, ethics, principles and start acting like detectives, the way and manner in which fraud is hidden nowadays in complex financial transactions will, however, continue to threaten the integrity of financial reporting and corporate governance. While there is a significant difference between forensic accountants and auditors, there is enough common ground to start deploying auditors to act in the front line against financial deception.

Moreover, research has regularly confirmed that forensic accountants outperformed auditors in fraud related tasks and that very few cases of fraudulent reporting have been picked up by auditors during the external audit (Coenen, 2010; Chui & Pike, 2013).

### 6.1.1 Auditors' Education Weakness

The findings of this study show that auditors' education is not geared towards the detection of fraud in the financial statement which, in turn, often limits their capacity to detect fraud. This is a weakness in the fight against financial deception. Even the so-called material fraud is rarely picked up during an external audit (ACFE, 2016), let alone immaterial fraud.

Auditors' education is geared towards accounting standards. Their curricula are designed to enable them to give an opinion on the true and fair view of an entity affair. A look at the current curriculum of professional bodies in the UK supports this finding. Table 6.1, 6.2 and 6.3 below shows what is covered generally by the three main profession bodies that licence external auditors in the UK. The members of these professional bodies practice around the world.

ACCA claim to have achieved 208,000 members globally in March 2018 (ACCA, 2018), ICAEW has over 178,500 chartered accountants worldwide (ICAEW, 2018), while AIA has over 90,000 members worldwide (AIA, 2018).

Table 6.1: ACCA Curriculum

| **ACCA Knowledge Level** | **ACCA Skills Level** | **ACCA Essentials Level** | **ACCA Options (choose any two from four)** |
|---|---|---|---|
| F1 AB – Accountant in Business | F4 CL – Corporate and Business Law | P1 GR&E – Governance, Risk and Ethics | P4 AFM – Advanced Financial Management |
| F2 MA – Management Accounting | F5 PM – Performance Management | P2 CR – Corporate Reporting (UK or International) | P5 APM – Advanced Performance Management |
| F3 FA – Financial Accounting | F6 TX – Taxation | P3 BA – Business Analysis | |
| | F7 FR – Financial Reporting | P6 ATX – Advanced Taxation | |

| | | | |
|---|---|---|---|
| | (UK or International) | | |
| | F8 AA – Audit & Assurance (UK or International) | P7 AAA – Advanced Audit & Assurance (UK or International) | |
| | F9 FM – Financial Management | | |

Source: ACCA Global.

In the ACCA curriculum, there is little emphasis on fraud detection techniques in the audit examination paper which is less than 5% of the entire syllabus.

Table 6.2: ICAEW Curriculum

| Certificate level | Fraud detection mechanism | Professional level | Fraud detection mechanism |
|---|---|---|---|
| Accounting | 0% | Financial Accounting and Reporting | 0% |
| Assurance | 0% | Audit and Assurance | 0% |
| Management Information | 0% | Business Planning | 0% |
| Business, Technology and Finance | 0% | Business Strategy and Technology | 0% |
| Principle of Taxation | 0% | Tax Compliance | 0% |
| Law | 0% | Financial Management | 0% |

Source: ICAEW

The ICAEW curriculum does not have fraud awareness education or forensic accounting topics embedded in any of their modules.

Table 6.3: AIA Curriculum

| FOUNDATION LEVEL | Fraud awareness and detection | PROFESSIONAL LEVEL 1 | Fraud awareness and detection | PROFESSIONAL LEVEL 2 |
|---|---|---|---|---|
| 1 Financial Accounting 1 | 0% | 7 Auditing | 0% | 13 Financial Accounting 3 |
| 2 Business Economics | 0% | 8 Company Law | 0% | 14 Financial Management |
| 3 Management Accounting 1 | 0% | 9 Management Information | 0% | 15 Professional Practice (Auditing) |
| 4 Law | 0% | 10 Business Management | 0% | 16 Taxation & Tax Planning |
| 5 Auditing & Taxation | 0% | 11 Financial Accounting 2 | 0% | |
| 6 Information Processing | 0% | 12 Management Accounting 2 | 0% | |

Source: AIA

The AIA curriculum does not have fraud awareness or any element of forensic accounting training in their modules and exam papers.

The table above reinforces the findings of this study, namely that auditors lack primary fraud detection education. The evidence from this study suggests that the education of auditors is not adequate for fraud detection. From a forensic accountant who works for the big four audit firm point of view, his comments are as follows:

*… I think it will be useful if auditors were better informed about fraud and I think it will be useful if auditors were to, I mean we spend a lot of time in our firm with our*

*auditors. Forensic people spend time with our auditors to brief them, to explain the aspect of what is happening out there. There is room for improvement in terms of their knowledge base. The first thing that a forensic accountant could do is to increase the awareness of the auditors. Yeah, I think certainly to raise awareness and to ensure that they have some data analytic techniques. That will probably be enough for them to spot an issue, to spot normally or to begin to question information that they are given. I can see that we use that in our firm, we spend quality time with our auditors and could we spend more, should we spend more, I don't know, but certainly, in general terms, there is not enough time being spend at upgrading the quality of audit people. I think more could be done…*

**Forensic Accountant (FA) 1**

This comment echoes a lack of anti-fraud education on the part of the auditors, which is reflected in their professional examination papers. This finding supports the contentions of Wells (2005). Wells (2005) contends that accountants do not currently learn what motivates fraudulent conduct, nor do they know how to spot the signal or stop fraud from occurring.

From the academics' point of view, opinion seems not to differ from what practitioners think about the education of auditors. The comments below suggest a lack of education concerning fraud detection on the part of the auditors and why fraud detection education is going to be needed in the near future for the audit profession to remain relevant to the capital market.

*… I don't feel that enough stress is being given to the 240 standards, because it's not in any professional qualification yeah there is hardly anything about fraud detection, fraud warning sign, there is nothing, you know if you look at ICAEW professional qualification, there is nothing in there, nothing about it in any of the study book. So, it is not about saying I want to change the roles, to me, it is about more about education, and that is why I started off saying well really should you be educating your auditor more to be aware of this from a financial statement fraud point of view…*

**Accounting Academic (AA) 2**

*…Most accounting curriculum that I know are really not up to date with the computer side let alone analytics or artificial intelligence. So, I think where we are deficient is still on, if you think through, some of the textbooks that do the accounting are still done by hand, whereas in fact, we know that even your window key probably has to keep its account on an excel spreadsheet. So, we are turning up people who are not; two things are missing, one is the whole data side and understands that and how it is sufficient skills and understanding. It is not even having the skills; it is having the understanding and knowledge. And also having done some case study work, it is better to put hands on case study work, looking at say even one just fraud investigation on an audit…*

**Accounting Academic (AA) 1**

*…I think ACCA is the only one that has starting to develop their syllabus maybe slightly more and then if qualified accountant come out as a qualified accountant, and they've never hard a word forensic mentioned to them hardly at all, maybe one chapter of a book, they are not going to think forensic at all, and they go and become auditors…Unless we go back and revisit how we educate general accountants to give them more understanding of what forensic means…academically they are not prepared to be conscious of fraud…*

**Accounting Academic (AA) 3**

The finance directors' perspectives are equally similar to that of forensic accountants and accounting academics interviewed. They also echo the fact that auditors' education is not enough to allow them to detect fraud in the financial statement. Below are their comments which suggest a lack of anti-fraud training on the part of the auditors.

*… I assume fraud detection as a construct. If you are educating people, it would be understanding the different ways people do fraud so that you are more likely to spot it. So, I do not believe I was ever trained in that. The second thing that has come out from your question, if you prepare the auditors the way you described the training of forensic accountants, there is an implication that auditors in their normal role acting in their normal way would be more likely, would have greater ability to spot problem just through that training. It seems logical because the argument would be*

*the cost of auditing will probably not change, is just the way to train the accountants. You can extend the argument that all people with a finance background should have that kind of training. If the paradigm shift is about increasing the capability of the auditor so that their skill is more of a forensic skill, that sound to make a lot of sense.*

**Finance Director (FD) 2**

*… if I am an accountant or as an auditor, I have to care about the fraud, and now the training is not right because it does not target the end target or the end reason. They need to go into the details. They need to be like doctors, like medical doctors, like surgeons, they need to open the stomach of the patient and look at each and every organ inside it, they need to be very, I think forensic is the proper word, it needs to be 100% thoroughly reviewed. The auditor needs to be working with his own hand, he should not go with the idea, oh I am very good in accounting, and I want to do whatever I want without going into the details to know what is going on. So, if the training of the auditor is not going to help in that, then there is something wrong with the curriculum definitely, and there is something wrong with the training, and there is something wrong with how to prepare the person individually to know what fraud is. By the way, the auditor needs to have some personal and interpersonal skills…*

**Finance Director (FD) 1**

The comments from accounting academics, finance directors and forensic accountants reinforce the fact that even if the role of auditors changes today to include the detection of fraud in the financial statement, such that they now have the responsibility for the detection of fraud in the financial statement, they will struggle to do this because their education does not cover this. Fraud detection requires a whole different training and approach which is currently not covered in the curriculum used in educating auditors.

This finding reinforces the warnings of Wells (2005). Joseph T Wells, the founder of the Association of Certified Fraud Examiners in 2005 warned that present-day accountants (auditors) do not know what motivates fraudulent conduct, nor do they know how to spot the signals, or prevent fraud from happening, and much more. He warned that as the current education of auditors stands, auditors are fighting a war without being taught how to recognise the enemy and until that changes we should expect more heavy casualties.

Moreover, from what we have seen since the turn of the millennium, it has been casualties upon casualties resulting from audit failures, corporate collapses and the unrelenting series of financial statement fraud. e.g. Enron, WorldCom, Parmalat, Olympus, Tesco, Toshiba, Carillion, Palmer and Harvey, Toys R Us, to name a few.

Wells (2005), emphasising the importance of anti-fraud education, went further to argue that "As a group, CPAs are neither stupid nor crooked. However, the majority are still ignorant about fraud… for the last 80 years, untrained accounting graduates have been drafted to wage war against sophisticated liars and thieves. Moreover, as multi-billion-dollar accounting failures have shown, it has not been much of a fight" (p5).

How auditors and professional accountants generally are educated needs a total overhaul. The finding of this study suggests again that the current education curriculum of auditors is not adequate to detect financial statement fraud. Apostolon & Crumbley (2005) in their study concluded that the series of financial statement fraud that have occurred at that time should cause the accounting profession to re-examine and re-establish accounting education. This also supports Jamal (2008) study. Fraud detection has become the audit profession's Achilles heel (Jamal, 2008).

Hence, to increase the chances of fraud detection in the financial statement, there is a need for proper anti-fraud education and forensic accounting. This answers the second research question of this study which is "How might the training of professional accountants in forensic accounting skills, ethics, procedures and principles increase auditors' fraud detection capabilities?"

The findings of this study have shown that training professional accountants, particularly auditors of financal statements, in some element of forensic accounting will increase the fraud detection capability which might reduce financial statement fraud.

### 6.1.2 Skill Gap

What is often lacking in the fight against financial statement fraud is the skill set of the auditor. This skill set can be acquired through proper education and re-designing the current curriculum. Evidence from this study shows that the skill sets of the auditors are not adequate in the fight against financial deception. Some skill sets, such as investigative skills and mentality, questioning mind-set, understanding of the legal process and how to preserve evidence. Some of the research participants highlighted these skills as crucial skill sets that are lacking from auditors which are highly essential skills in fraud detection.

The forensic accountants interviewed commented on this skill as a valuable tool that auditors will need in the future if they are to detect fraud in the financial statement. Some of the comments of the forensic accountants and accounting academics who were interviewed suggest the need for a forensic accounting skill as part of audit skill sets and are shown below.

*…so, the skills that you learned as a forensic accountant opened that up to you, whereas as an auditor, I do not think auditors are probably trained in fraud detection…*

**Accounting Academic (AA) 2**

*…somebody may say that for me to able to detect fraud as an auditor, I need to be trained for that. I need to be maybe trained in law and principles of collecting court-admissible evidence and all those things; I need to be trained in investigating fraud…if you do not have the investigative skills in terms of asking questions because it goes beyond just looking whether there is a debit or credit. You have to also ask questions. You understand…In terms of giving them the basic skills of detecting fraud, I think that there should be something that should be useful to them going forward…*

**Forensic Accountant (FA) 2**

*…Which is another reason why I think legally probably more doesn't happen because you've got, if you were to going in and say to people you got to look for fraud and get the evidence, the danger is that people do not know how to handle that, they will go in, they compromise the computer, they will compromise the*

*evidence and you would not be able to use them in a case…So, that is actually a real danger legally and also practically you do not want some junior just out of college go in and do their own private detective work, and then you cannot use any of the evidence. So, that is outside of the forensic accounting training which teaches you how to handle evidence properly…*

**Accounting Academic (AA) 1**

These findings suggest that the skill set needed for fraud detection are not currently available to the auditors. Hence, for auditors to do a better job, these skill sets will need to be added to their toolbox. These skill sets are investigative skill, legal skill (particularly evidence), critical thinking ability, a questioning mindset and an understanding of human behaviour.

### 6.1.3 Fraud Detection Training

The accountancy professional bodies do not offer much help either. In their training manuals, there is no emphasis on fraud detection mechanism. The findings of this study show that it is only ACCA that mentions fraud detection methods in their training manual which is even less than 5%. The accounting academics interviewed were very critical of this in their responses. Below are some of their comments:

*…because it is not in any professional qualification yeah there is hardly anything about fraud detection, fraud warning sign, there is nothing, you know if you look at ICAEW hmm professional qualification, there is nothing in there, nothing about it in any of the study book. The only one that is seen is in ACCA, and the advance auditing paper, which I cannot remember what it is but that has only got a very small thing about forensic accounting and forensic auditing yeah…as part of your qualification being able to, you know it's like the first thing I teach within the module is about fraud warning signs, pressures, things to look out for, you know whether you are going to be an auditor or whether you are going to work in industry, it's still relevant information to be aware of, so it's not just necessary for audit but for, you know, for a professional qualification for accounting, that's really important…*

**Accounting Academic (AA) 2**

*… I have seen some of the questions, and I have seen some of the case study work, and it is really quite complex. So, I think on a qualification front, people have been*

*trained quite rigorously, but it does not contain a larger element of fraud investigation…*

**Accounting Academic (AA) 1**

Even the auditors interviewed admitted that the ACCA module does not contain elements of fraud detection mechanism.

*…I think like even ACCA, they need those elements to the very end you know at every level…*

**External Auditor (EA) 1**

*…I agree with the two examples you just mentioned because my training as a forensic accountant was entirely different from my training as an auditor. As an auditor we are more trained towards identifying departures from the accounting standard…*

**External Auditor (EA) 2**

From this research, professional accounting bodies need to start developing their syllabus more towards forensic accounting and anti-fraud education. This is because merely arguing that auditors should detect fraud in the financial statement without commensurate training in forensic accounting is like pouring new wine in an old bottle (Chui & Pike, 2013). This appears to be the easy way out of the embarrassment that financial statement fraud has brought to the accounting profession. Moreover, merely relying on the narratives that the detection of fraud is not the responsibility of their members may no longer stand in the foreseeable future.

### 6.1.4 Inexperienced Auditor

Another concern about auditors' education that this study found out is the fact that junior auditors who have just passed their professional exams are usually the ones who are allowed to do the ground auditing work. These new graduates, most of the time with little or no experience do not understand what fraud is, let alone spotting the signals. This is because this is not in their professional examination papers. They have probably not heard the words *forensic accounting* mentioned to them. These are professional accountants who have just passed their exams and have not been taught anti-fraud education.

The participants' comments were very strong on the issue of inexperienced auditors, and some of them even reflected on their personal experience.

*…while they are partner-driven, and you have an experienced senior manager leading or experienced auditor leading the team, it's by and large done by rooky auditors who go in ask a few questions, find a few answers, get the findings, go back ask their managers a few questions and then they go back with more questions to the auditee…*

**Forensic Accountant (FA) 3**

*…You do a job as a junior auditor, you know, and you are relying on the most senior people above you to look out, to direct you and tell you what all these things are about and it is for them to look for these risk factors. And so, as a junior auditor you are just doing your test, you are doing your ticking and you are going you know doing your inventory count, you are checking, your big task that non-assets are there, and you are relying on your supervisor, your manager and your partner to actually identify what the risk factors are and if they are not identifying them, then nobody is, or they should be looking at the accounting treatment…*

**Accounting Academic (AA) 2**

*…Now except against this is the fact that sometimes auditors do a really bad job because they really could have notice WorldCom and Enron a lot earlier than they did and other companies. It thinks it is more a case and you also must have experience as an auditor. And one of the big problems with the external audit is that a lot of the ground works are done by junior members of staff who maybe only have one- or two-years' experiences. You know, to actually detect fraud, it takes really just quite a lot of experience…*

**Accounting Academic (AA) 1**

Prior research by Choo and Trotman (1991) looked at the differences in judgement by experienced auditors and inexperienced auditors concerning the going concern of an entity. The findings of this thesis suggest that the experience of auditors could sometimes play a significant role in their ability to spot problems. The more experience an audit partner has, the more likely they will be able to spot a problem.

However, because most of the groundwork is done by junior auditors, who have little or no experience and are probably not aware of fraud warnings signs, most fraudulent activities get missed during an external audit.

This finding supports the schema-based psychological research of Fiske & Kinder (1981) and Lurigio & Carroll (1985). Both types of research argued that most of the tasks faced by auditors in a complex environment require experience. Experienced individuals have more detailed and complete schemata and more sophisticated ways of using their knowledge than inexperienced individuals (Choo & Trotman, 1991).

This finding is against the current business model utilised by audit firms, particularly, the big four. Audit firms rely on relatively inexperienced auditors to do the bulk of the field work. While this approach might make sense economically in terms of controlling the cost of audits, as it is expensive putting experience partners in the field, it is a terrible practice from a quality control standpoint (Coenen, 2010).

This finding agrees with Coenen’s (2010) claims that young auditors often do not know what questions to ask and are usually reluctant to ask difficult questions or challenge management assertion. They are often easily manipulated, influenced and misled because of their inexperience and naivety.

Junior auditors lack the primary anti-fraud education because this is not included in their educational curriculum or professional examination modules and papers. This again supports Joseph Wells’ claims that accountants do not currently know what motivates fraudulent conduct, nor do they know how to spot the signal or stop fraud from happening. He went on to argue that as it stands, auditors are fighting a war without being taught how to recognise the enemy and until that changes, he warned that we should expect more casualties.

Those experienced auditors, however, who might have some of this knowledge, spend less time in the field and are not always available to provide hands-on-supervision to those inexperienced auditors (Coenen, 2010). This often makes fraud detection in the financial statement difficult.

This further supports the claims of Samuel Antar, a convicted CFO of Crazy Eddie. Antar (2005), revealed that “most large accounting firms use relatively inexperienced kids right out of college to do basic audit leg work. They are supervised by slightly more experienced senior auditors who unfortunately depend on feedback from these inexperienced kids in making informed decisions." Antar further explained how he was able to corrode the auditors' professional scepticism as the auditors "did not want to believe we were crooks. They believed whatever we told them without verifying the truth." (Antar, 2005, p. 2)

Hence, based on the above evidence both from previous studies and the findings of this study, how auditors and professional accountants are educated will need to be looked at holistically in the light of recent accounting scandals, corporate collapses and audit failures in order to increase the chances of fraud detection in the financial statement even if most of the groundwork will be carried out by junior auditors.

What appears to be lacking, in the context of this thesis, are those elements of forensic accounting which are useful in the detection of fraud. Hence, in the future, auditors deployed to conduct an external audit will need to be educated on fraud warning signs, what the right questions are to ask, understanding of human behaviour and how to preserve evidence in order to increase their chances of detecting fraud in the financial statement and to reduce financial statement fraud.

### 6.1.5 Section Summary – Auditors' Education

This section has looked at the education of auditors and limitations imposed by their education in fraud detection. A review was carried out on the curriculum of each of the three major accounting professional bodies (Association of Chartered Certified Accountants, Institute of Chartered Accountants of England and Wales and the Association of International Accountants) in the UK who licence external auditors.

The findings of this section show that the education and training of professional accountants, particularly auditors of the financial statement, has not been geared towards the detection of fraud. Their curriculum is tailored towards accounting standards and regulations and to enable them to give an opinion on the true and fair view of an entity.

Going forward, the findings of this thesis have shown that for auditors to be able to detect fraud in the financial statement, their education will need to change. The change that is required is some element of forensic accounting skills, ethics and principles. As this will enable the auditors' skills to be upgraded in the area of investigation and questioning clients' activities, and how to preserve evidence.

Findings also revealed that asking junior auditors to do the ground auditing work is not the problem; the real problem is that these junior auditors lack the primary anti-fraud education and experience because this is not included in their curriculum. This study acknowledges that this is the current business model adopted by auditing firms mainly the big four; this will probably have to change.

The changes in part would be to include some fundamental element of forensic accounting and anti-fraud training in the curriculum (including professional qualification) of professional accountants particularly auditors of financial statements and partly by proper mentoring by the experienced auditors. The junior auditors, who typically are recently from university and undertaking the professional qualifications, need adequate supervision. This is because experience is one of the valuable skills used in forensic accounting and it takes time to build this experience.

This section together with its sub-themes have answered the first two research questions of this study which is whether the training of professional accountants in some elements of forensic accounting can increase their fraud detection capacity and ability which in turns might reduce financial statement fraud and whether the awareness by company management and board of directors that auditors are better trained in forensic accounting skills, ethics and principles will serve as a fraud deterrence.

This section in part has also answered the general purpose of this study. The purpose of this study is to develop a forensic accounting system by exploring the perception of accounting academics, forensic accountants, external auditors and finance directors on how a system shift to forensic accounting can reduce financial statement fraud.

The findings of this study have shown that the training of professional accountants (external auditors) in forensic accounting skills, ethics and principles will increase their fraud detection capacity and hence this might reduce financial statement fraud.

The next section will now look at what forensic accounting is about, their skills and attributes and the importance of incorporating some of these elements in the education of professional accountants particularly auditors of financial statements.

## 6.2 Forensic Accounting

The previous section looked at how professional accountants (particularly external auditors) are educated (including their professional examinations papers/modules) and the limitation imposed by their education in the fight against financial deception. This section, based on the findings of this study, will look at how forensic accounting is conceptualised, the relationship between forensic accounting, fraud detection and fraud investigation, forensic accounting skills, techniques and procedures, forensic accounting education and the benefit of educating auditors in forensic accounting.

The purpose of this section is to understand how forensic accounting is conceptualised in the fight against financial deception and the potential benefit this will have towards developing a forensic accounting system. Another aim of this section is to highlight the benefit of acquiring the skill sets used in forensic accounting by external auditors.

### 6.2.1 Forensic Accounting Definition

Prior research has claimed that practitioners and academics differ on what forensic accounting is all about (Crumbley, 2009; Hopwood, et al., 2012; Smith, 2015). While practitioners believe that forensic accounting is much more than fraud examination or investigation (Joshi, 2006; Hopwood, et al., 2012), it has been argued that academics think forensic accounting is about fraud examination (Crumbley, 2009).

The debate about the definition of forensic accounting has created a gap in the literature. As such, there is no consensus in the forensic accounting literature on the exact meaning of forensic accounting. This led this study to find out whether differences still exist between how academics and practitioners view forensic accounting and to attempt to define forensic accounting within the context of financial statement fraud.

The findings of this study show that academics and practitioners now seem to be on the same page on what forensic accounting is about in terms of its purpose. It now appears that the gap in the literature about the definition and purpose of forensic accounting has been closed. Below are some of the comments of accounting academics interviewed about forensic accounting.

*…forensic accounting, I personally believe is divided into three types of, three discipline or three parts. There is the investigation side which will cover financial statement fraud; there is the dispute part of the work which is where you are looking at a breach of contract, calculating the losses people have suffered and then the third thing is more about regulatory matters…*

**Accounting Academic (AA) 2**

*…forensic accounting with the word forensic means ultimately ends up in court, need to be some discourses, contentious issues…*

**Accounting Academic (AA) 3**

*…there is a straight understanding which is using accounting techniques to produce evidence which is going to be used in court. The forensic accounting side is the role of, is a particular type of audit or technique designed to detect fraud but more usually to demonstrate how fraud has taken place and so that evidence can be used either in court or arbitration…*

**Accounting Academic (AA) 1**

*…my understanding of forensic accounting without sounding too technical or by the book, it's accounting for legal purposes. When you talk about forensic accounting itself, it's an umbrella term so to speak…*

**Accounting Academic (AA) 4**

From the above comments of accounting academics, it can be argued that Accounting Academics are now attuned to what forensic accounting is all about. They know that fraud examination is only a part of forensic accounting. Using the exact words of Accounting Academic Four (AA 4), he defined forensic accounting as an umbrella term. Moreover, looking at how Accounting Academic Two (AA 2) viewed forensic accounting, she divided it into three parts (investigation, dispute and regulation).

Hence, the findings of this study show a shift in what academics believed to be what forensic accounting is all about. This finding will update the work of Crumbley (2009). Crumbley (2009) claimed that academics are not correctly informed about what forensic accounting is about as they think it is about fraud examination. This study, however, has now refuted that claim.

Practitioners do not view forensic accounting any differently from accounting academics. The comments of practitioners seem similar to those of accounting academics interviewed for this study. Below are some of the comments of practitioners that suggested a consensus on what forensic accounting is all about.

*…It is a very different discipline. The thing about forensic accounting and audit is that forensic accountant starts with an allegation, a concern, an issue. You do not send a forensic accountant into a business just on the basis of speculation. They go in for a reason…*

**Forensic Accountant (FA) 1**

*…So, the forensic accountant, in this case, is a fact provider instead of an opinion provider. Yes, I think forensic accounting is basically all about the three that you have mentioned…*

**Forensic Accountant (FA) 2**

*…I mean forensic accountants are very good investigators. So, we are in a very different place from auditors…*

**Forensic Accountant (FA) 3**

The comments from the accounting academics about forensic accounting seem more comprehensive than those given by practitioners interviewed. Hence, Academics now view forensic accounting to be much more than fraud examination as against the claims of Crumbley (2009).

Within the context of this study, based on participant responses, I attempted defining forensic accounting. I view forensic accounting as a high-level validation of financial/accounting information through an array of skills and knowledge from but not limited to accounting, auditing, information system, economics, finance, psychology, criminology, fraud investigation and an understanding of legal framework which can be used in actual or potential civil or criminal proceedings.

A recent attempt to define forensic accounting was by Huber & DiGabriele (2014). They defined forensic accounting as a multidisciplinary field that encompasses both a profession and an industry, where civil or criminal economic and financial claims, whether business or personal, are contested within established political structures, recognized and accepted social parameters, and well-defined legal jurisdictions, and informed by the theories, methods, and procedures from the fields of law, auditing, accounting, finance, economics, psychology, sociology, and criminology (Huber & DiGabriele, 2014).

While Huber & DiGabriele (2014) definition of forensic accounting is comprehensive, it does not seems to capture the context of financial statement fraud accurately. However, the definition advanced in this study appears to captures all scenarios (Investigation, litigation and dispute) where money matters are being discussed.

### 6.2.2 Relationship Between Fraud Investigation, Fraud Detection And Forensic Accounting

There has been an argument about the possibility of training auditors in forensic accounting (Coenen, 2010; Chui & Pike, 2013). The debate has been that forensic accounting is a vast and broad discipline as such it will be challenging to train auditors in all aspect of forensic accounting. The narrative has been that auditors only need to be educated in fraud detection techniques (Coenen, 2010).

While this study does not set out to join that debate, as doing so will be outside the scope of this study, there is an attempt to clarify what is needed by auditors to increase their chances of fraud detection in the financial statement. This led me to ask my research participants if there is any relationship between fraud investigation, fraud detection and forensic accounting. The comments below are some of the responses from participants about the relationship between fraud investigation, fraud detection and forensic accounting.

*… Ok, I think you cannot do fraud investigation without engaging in forensic accounting. So, there is quite an obvious link between a forensic investigation, fraud investigation and forensic accounting. You cannot do one without the other. I think it*

*is very good that you have separated them because there is an element of forensic work in detection. In other words, having a forensic investigation of your system to see whether there are anomalies, or unexpected trends and patterns. So, I think the two can be different because fraud detection tends to use forensic techniques before fraud has been found. Obviously, forensic investigation is using the techniques after the fraud has been found to establish what happened. I think that the detection and investigation are quite key in preventative tool…*

**Accounting Academic (AA) 1**

*…I mean fraud investigation and fraud detection I see as falling under the investigation part of a forensic accountant…*

**Accounting Academic (AA) 2**

*… Yes, I think forensic accounting is basically all about the three that you have mentioned…*

**Forensic Accountant (FA) 3**

The findings of this study imply that when people engage in fraud investigation, they rely on forensic accounting skills. Hence, there is a strong relationship and connection between forensic accounting, fraud investigation and fraud detection. One cannot engage in fraud investigation or fraud detection without using forensic accounting skill sets. Hence, to increase the fraud detection capacity of auditors and to increase the chances of fraud detection in the financial statement, those skill sets used in forensic accounting are not only relevant but required for auditors to do a better job. This, in the long run, will restore investors' confidence in the combined financial reporting process and corporate governance.

While this research is careful not to suggest that auditors should now become forensic accountants, those skill sets used in forensic accounting will enable auditors in fraud detection and fraud investigation, which in turn will, therefore, increase their fraud detection capacity and serve as a deterrent to fraud. This, as stated earlier, in the long run, has the tendency to reduce financial statement fraud based on the findings of this study.

These findings should probably settles the debate on whether or not auditors should become forensic accountants. It is those skills used in forensic accounting that aid fraud detection and fraud investigation that auditors need in their toolbox in the fight against financial deception — skill sets like investigative mentality, how to handle evidence, critical thinking and data mining techniques.

This finding supports the call by the Public Oversight Board (POB), in 2000, that auditors should use those skill sets of forensic accountants to detect financial statement fraud (Carnes & Gierlasinski, 2001). The recommendation by POB has been that forensic accounting should be introduced into an audit to aid the detection of fraud. Those skill sets used in forensic accounting are adequate in the fight against financial deception.

### 6.2.3 Forensic Accounting Skills, Techniques and Procedures

The findings of this study show that specific forensic accounting skills (Deductive analysis, Critical and creative thinking skills, investigative flexibility and legal skills) techniques (such as data analytic) and procedures are essential for fraud detection in the financial statement. Some comments from participants even suggested why forensic accountants are better than external auditors at detecting fraud and the importance of training auditors in these forensic accounting skills, techniques and procedures.

*…So, I think that for auditors to be expected to detect fraud, they need to include investigative skills more over the analytical skills they already have…*

**Forensic Accountant (FA) 3**

*…I think forensic test particularly computer test and particularly using data analytic and possibly artificial intelligence. To use some more up to date stuff probably do have a role in detection because what you will be testing is the underlying internal controls and the underlying transactions which must be there if somebody is committing a fraud. If you are looking for a statement that has been manipulated to cover up another fraud, then you will find things using forensic accounting techniques particularly if you use analytic and Artificial Intelligence…Then you've got the other side which is when you are training as a forensic accountant, you do learn something about investigative interviewing and expert witness work, and in fact, a lot*

*of audits is about asking the right questions, having that sense. So, I think there is the technique, but I think there is also the forensic accounting training that trains you to ask the right questions, you can then follow up. There is the other side that means you know how to handle the investigation, so you don't go in and compromise all the evidence just because you think you've found something which is the other problem…*

**Accounting Academic (AA) 1**

*…So the auditors don't start with the expectation that there is going to be something wrong whereas the forensic accountant starts from the perspective there is something wrong, let's work out what it is…*

**Forensic Accountant (FA) 1**

*…The second thing I think they can do is use data analytic techniques and work with audit to ensure that data analytic get used. I think we can raise awareness; we can ensure that data analytic techniques…*

**Forensic Accountant (FA) 2**

*…you need to have the accounting knowledge backed up with law knowledge within the frame of working in it and giving evidence in court. There is necessarily more technical knowledge required to be a forensic accountant. It's additional, the framework and contentious issues that you need to be aware of as a forensic accountant…*

**Accounting Academic (AA) 3**

This finding shows that investigative skills, technical ability, ability to preserve evidence through the knowledge of the legal framework, a questioning ability, data analytic techniques and a strong mentality are the unique skills of forensic accountants. These skill sets are what is required in present-day audit in order to be able to detect financial statement fraud.

These particular findings can be used to explain why auditors find it difficult to detect fraud. Their inability to detect fraud can be linked to a lack of these forensic accounting skills, techniques and mentality. Davis et al (2010) observed that being a good auditor does not translate to mean such auditor will be good at fraud detection. Because to detect fraud, such professionals must possess some forensic accounting skills, ethics and techniques (Davis, et al., 2010). It is these forensic accounting skills and techniques that make forensic accountants stand out in the crusade against financial deception (Wolosky, 2004; DiGabriele, 2009).

These forensic accounting skills, techniques and procedures open up the ability and capacity of individuals to detect fraud. This supports why this study is advocating the exposure of auditors to these forensic accounting skills, techniques and procedures in order to increase the chances of fraud detection in the financial statement which might further help to reduce financial statement fraud, which will be in the interest of all stakeholders.

This supports the findings of DiGabriele (2011) and Bhasin (2013) on the relevant skills of forensic accountants. The two studies concluded that deductive analysis, investigative skills, analytical proficiency, critical and creative thinking, legal skills and communication skills are the critical skills and techniques used in forensic accounting that enables fraud detection.

This section of the findings of this study answers the second research question that emerged from the theoretical framework namely "can the training of professional accountants particularly auditors of financial statement in forensic accounting skills, ethics, procedures and principles increase auditors' fraud detection capabilities?"

These findings show that the training of professional accountants (auditors of the financial statement) in forensic accounting skills, ethics, procedures and principles has the tendency of increasing auditors fraud detection capability which might reduce financial statement fraud.

### 6.2.4 Section Summary – Forensic Accounting

This section has looked at the relevant skills and techniques used in forensic accounting that can enhance auditors ability and capacity to detect fraud. Skills such as deductive analysis, legal, data analytic and investigative skills have proven to be practical skills in fraud detection. This section has equally answered the second research question of this study. The next section will look at the importance of forensic accounting in fraud detection.

## 6.3 The Role of Forensic Accounting in Fraud Detection

The previous section discusses the findings of this study that relate to forensic accounting skills, techniques and procedures and how having these forensic accounting skills ethics, procedures and principles can increase the fraud detection capacity and capability of professional accountants particularly auditors of financial statements. This section will look at the role of forensic accounting in the detection of financial statement fraud and how this can be deployed in the present-day audit.

The findings of this study show that forensic accounting has a role to play in reducing financial statement fraud. From the practitioners' and academics perspective, they all agree that the importance of forensic accounting in reducing financial statement fraud cannot be overestimated. As such, financial statement auditors have a lot to gain by possessing some of the skills used in forensic accounting and having a forensic accounting mentality can help to reduce financial statement fraud. Below are some of the comments of participants on the role of forensic accounting in fraud detection.

*… forensic accountants are very good at spotting issues, and some forensic accountants are very good at investigating and I think there if there are any some proportion of forensic accountant will be good if you were to send back some forensic accountant into audit work, some of them would be excellent at spotting irregularities… so I think we can raise awareness, we can ensure that data analytic techniques are improved and improving and I think the other aspect which happens now and again but probably not even though is that some forensic accountant who has got the ability to spot issues should go back and mentor or work with the audit team more effectively…*

**Forensic Accountant (FA) 1**

*… I still believe that actually I will be a far better auditor having done forensic accounting than I would when I was an auditor because you are tuned to look out for the risk factors, I don't just mean fraud risk factors, I just mean you are much more open to understanding risk factor of which fraud is one…*

**Accounting Academic (AA) 2**

*… If they are brought in at the appropriate time. I think that will help if they are part of the audit team rather than again being reactive. The regulation should say the team should include a forensic accountant who isn't working in that regulation; they are working in a different regulation…*

**Accounting Academic (AA) 3**

*… I think it comes back to what I was saying that it's about the underlying internal controls and the robustness of the transactions in an organisation. So, I think then the forensic accounting has a role at that point because you are basically using particularly computer-aided audit techniques to create analytics that will enable you to see the abnormal transactions and patterns. Patterns such as an abnormal number of journals or abnormal number of payment of the same amount…*

**Accounting Academic (AA) 1**

*… well if going by the answers to my previous question, considering that if a forensic accountant is actually allowed to do their job on the financial statement. Meaning now you look at the financial statement as an accountant, and you look at the financial statement with every other work of knowledge you know trying to understand the behaviour of the people in place. It's not just going to be looking for a few samples to make a judgement out of; you look at the organisation in total, you at the corporate governance structure to see if everything is in place. I think if forensic accountants are allowed to conduct forensic accounting in the financial statement, I think to an extent, it will prevent fraud, and I think it will materially reduce fraud…*

**Forensic Accountant (FA) 2**

The comments from both the practitioners and accounting academics suggest that forensic accounting has a role to play in the reduction of financial statement fraud. The role identified in this study is a dual role. In one sense, auditors need some of the skills and techniques utilised in forensic accounting to be able to detect fraud in the financial statement. This has been dealt with in the previous section. Acquiring these forensic accounting skills (investigative flexibility, legal skills, communication skills, analytical proficiency and unstructured problem-solving skills) and techniques may come through education and a change in the current curriculum, to include some of these elements of forensic accounting.

This finding supports the work of Smith and Crumbley (2009). Smith and Crumbley (2009) argued that forensic auditing is what will be required in the future in the fight against financial statement fraud. They observed that forensic auditing which is based on the principle of forensic accounting is the best choice for reducing financial malfeasance in a principles-based accounting world (Smith & Crumbley, 2009).

Furthermore, Smith & Crumbley (2009) highlighting the importance of forensic accounting and auditing in the current environment observed that auditors' legal liabilities for not discovering their client's fraudulent financial actions are just not going to disappear. They went on to argue that "It is hard to understand how the liability for undiscovered fraud or other malfeasance can be reduced by continuing to strongly rely on the present rule-based, audit-reporting model" (p 64).

DiGabriele (2011) advocated for the integration of forensic accounting into the current audit framework. He argued that it is only revisiting and integrating forensic accounting back into an audit that can lead to a sustainable solution to the menace of financial statement fraud.

This supports the findings of this study regarding a system shift to forensic accounting. It appears that it is probably a system shift to forensic accounting that can reduce financial statement fraud. This makes forensic accounting highly relevant in today's business world. This system shift will be discussed thoroughly in the next chapter (chapter seven).

The second part has to do with the involvement of forensic accountants in an audit engagement. The participants interviewed suggested that involving forensic accountants in audit engagement will increase the chances of fraud detection in the financial statement. Below are some of the comments by participants that indicated the involvement of forensic accountants in an audit engagement.

*… if there are any, some proportion of forensic accountant will be useful if you were to send back some forensic accountant into audit work, some of them will be excellent at spotting irregularities…*

**Forensic Accountant (FA) 1**

*... I think that will help if they are part of the audit team rather than again being reactive. The regulation should say the team should include a forensic accountant who isn't working in that regulation; they are working in a different regulation…*

**Accounting Academic (AA) 3**

*… Forensic people spend time with our auditors to brief them, to explain the aspect of what is happening out there…*

**Forensic Accountant (FA) 2**

The involvement of forensic accountants in audit engagement will further enhance the chances of fraud detection in the financial statement. This supports the call by the American Institute of Certified Public Accountants (AICPA) in 2004. The AICPA called for the inclusion of a forensic specialist in audit engagement and the training of auditors in some elements of forensic accounting to spot problems they will not be able to detect normally.

Smith & Crumbley (2009) have argued that present problems confronting the accounting profession can majorly be solved by training auditors to move away from a rule-based system to a principle-oriented system, like forensic accounting, and by involving forensic accounting experts in audit engagement will reduce the incidence of fraud in the financial statement.

### *6.3.1 Section Summary - The Role of Forensic Accounting in Fraud Detection*

This section has looked at the importance of forensic accounting in reducing financial statement fraud. The findings of this study have shown that forensic accounting has an active role to play in reducing financial statement fraud through training auditors to be more anti-fraud conscious by exposing them to some forensic accounting training, skills, attributes and procedures and in part by involving forensic accountants in an audit engagement.

## 6.4 Chapter Summary

This chapter has looked at the education of professional accountants particularly auditors of financial statements within the context of financial statement fraud and how the scope of their training is limited in the fight against financial deception. Auditors education has been channelled towards accounting standards and regulation. This chapter also looked at how forensic accounting is conceptualised; the skill sets used in forensic accounting that makes it relevant in fraud detection and the benefit of exposing auditors to some elements of forensic accounting skills, ethics and principles.

The findings of this chapter suggest that the way that present-day auditors are educated will need to change to increase their chances of detecting fraud in the financial statement. While there are significant differences between forensic accounting and auditing, there is enough common ground to start deploying auditors of financial statements to begin acting in the front line against financial deception. Auditors need to be aware of what motivates fraudulent conduct, the basic fraud warning signs, how to preserve evidence and how to ask the right question. All of this can be acquired through education. Hence, the need for a change in the current curriculum and professional development of auditors.

To conclude, for auditors to do a better (more effective) job concerning fraud detection in the financial statement, they will need to be trained in some elements of forensic accounting skills, ethics, procedures, techniques and principles based on the findings of this study. Just merely suggesting that auditors should be responsible for detecting fraud in financial statements without commensurate training in forensic accounting will not work. This is because being a good auditor does not translate to mean that such auditor will be good at fraud detection. The training and the way transactions are looked at is different where fraud occurs.

The chapter has answered the second research question of this study which is "*can the training of auditors in some element of forensic accounting skills, ethics and principles increase their fraud detection capacity?"* Findings have shown that including some elements of forensic accounting skills, ethics and principle through changing the current educational and professional curriculum of professional accountants particularly auditors of financial statement will not only increase their fraud detection capacity, it will also reduce financial statement fraud. Going by the United Nation Doha Declaration, "education is fundamental to the prevention of crime and corruption". Financial statement fraud is a crime that can be reduced through proper education of external auditors in forensic accounting.

Educating auditors in some elements of forensic accounting skills, ethics, techniques and principles might not necessarily increase the cost of the audit. Since it is how they are trained that now includes these elements of forensic accounting skills, techniques and procedures through a change in the educational curriculum, the cost of the audit should not necessarily increase. This appears to be a win-win situation for the profession of accounting. Their fraud detection capacity and capability would have been enhanced through education, and the cost of audit might remain unchanged. However, the issue of cost of audit increasing or not is outside the scope of this study. This will be discussed further in the next chapter. The next chapter will look at the last theme - Accounting Standard and Regulation and will also show the development of the forensic accounting system.

## 6.5 Key Points From Chapter Six

Education

Auditors Education Weakness

- Auditors education is not geared towards the detection of frauds in the financial statement.
- Auditors education is geared towards recognising departures from accounting standard.
- The current education curriculum of auditors is not adequate to detect financial statement fraud.

Forensic Accounting

- Forensic accounting is now defined as a high-level validation of accounting/financial information through an array of skills from a range of discipline including but not limited to auditing, accounting, finance, information system and law.
- Academic and practitioners now understand fully what forensic accounting is about.
- There is need for proper anti-fraud and forensic accounting education by the auditors to increase their chances of detecting financial statement fraud.
- There is a strong relationship between fraud investigation, fraud detection and forensic accounting.
- Forensic accounting skills, techniques and procedures will increase auditors' capabilities to detect fraud in the financial statement.
- The involvement of forensic accountants in audit engagement will further enhance the detection of fraud in the financial statement.

# CHAPTER SEVEN: ACCOUNTING/AUDITING STANDARD

The previous chapter looked at the current education of auditors and its weakness in fraud detection. The importance of educating auditors better through a change in their current curriculum to include some element of forensic accounting skills, ethics, procedures and principles were also discussed in the previous chapter. The concept of a new forensic accounting system is beginning to emerge through this research.

This chapter aims to discuss the last theme that emerged from the findings of this study which is '**Accounting Standard**'. This theme combined with the two previous themes (**Audit Concern and Education**) that have already been discussed in the previous chapters (chapter five and six) will be utilised in developing a forensic accounting system. In order to achieve this purpose, the meaning of paradigm shift in the context of this thesis will be discussed in this chapter.

The need for a system shifts to forensic accounting based on the findings of this study will also be discussed in this chapter, and the concerns that this new system might bring will be highlighted. Finally, how the accounting profession can transit from the current accounting system of reporting and procedural auditing to the new forensic accounting system will also be discussed. At the end of this chapter, the purpose of this study and the resulting research questions would have been addressed.

This study set out to develop a forensic accounting system that will help to reduce the incidence of fraud in the financial statement through not only its predictive properties but also the recommended forensic accounting procedures and policies which the accounting profession should adopt.

This study has argued that the current accounting system of reporting and procedural auditing can no longer guarantee the prevention and detection of fraud in the financial statement (Smith & Crumbley, 2009). Through an understanding of the current perceptions of accountants, practitioners, regulators and users of accounting services, this study will develop a plan to enable the accounting profession to transition from an accounting system to a forensic accounting system.

Aside from the general purpose of this study, the following research questions which emanated from the theoretical framework utilised in this study will be answered:

1. Could the training of professional accountants (particularly auditors of financial statements) in the forensic accounting skills, ethics, procedures and principles help reduce the opportunities to commit financial statement fraud by the agent?

2. How might the training of professional accountants in the forensic accounting skills, ethics, procedures and principles increase auditors' fraud detection capabilities?

3. How might the involvement of Forensic Accountants in audit engagement increase the chances of fraud prevention and detection in the financial statement?

## 7.1 Accounting Standard and Regulations

Accounting and auditing standards have a role to play towards reducing the incidence of fraud in the financial statement based on the findings of this study. The current regulation does not emphasise the detection of fraud in the financial statement (Johnson, 2010). The International Standard on Auditing (ISA) 240 places the responsibility for the detection of fraud on those charged with management and governance while auditors responsibility for the detection of fraud has not been clearly stated by accounting and auditing standards from their inception (Alleyne & Howard, 2005).

It has been argued that auditors do not have responsibility for the detection of fraud in the financial statement. The responsibility of auditors has been to give an opinion on the true and fair view of entity affairs. The traditional financial statement audit has never been designed to detect fraud (Coenen, 2013). All the participants in this study agreed that the current regulations would have to change to increase the chances of fraud detection in the financial statement. Auditors will need to assume more responsibilities concerning fraud detection in the financial statement through a change of mandate. Below is a comment from one of the accounting academics interviewed about the scale of the problem.

*… They are working to a framework; they have got to go for a certain proves, they have got to meet certain criteria and then to make it easy and realistic to do this, materiality is involved, you cannot dig dip enough to be a fraud investigator. But as long that there is a rule book there, I do not think they would do any more than they*

*need to do. They go in with a high-level overview of a set of account and a process to go through, and they tick boxes along the way to complete their audit rather than go in on the tangent that fraud might take you off on. The rule book is the regulations, the accounting standard, the auditing standard, they are doing what they are told to do within the audit standards and for as long as they are doing that and doing it correctly, they can't be held responsible for any more than their tools box is supposed to do within those auditing standards. Their framework is the audit regulations. They are going to work within that framework. Why would they come out of it? If they are doing what they are supposed to do why would they do more. Also, regulations are as they are today. They are not thinking outside the box because the regulation does not tell them they have to… Forensic accounting at the undergraduate and at the moment, there is not because the audit regulation framework does not state that. And we are also part of the problem if you want to say that, we are preparing accountants, the auditors towards standard and none of that framework says that they have to be a forensic accountant. Yeah, if they are trained, they have got the ability to do it, but the regulation does not make them do it. Risk approach to audit, if you are going to say to auditors you are responsible for fraud, then they cannot be held back. The regulations should not hold them back but allow them to go…*

**Accounting Academic (AA) 3**

Accounting standards and regulations seem to have limited auditors' capacity to hunt for fraud in the financial statement. Moreover, this has driven how auditors are educated and trained. Even if auditors' education changed today as reflected by the findings of this study, the audit concerns identified are addressed, and the regulations remain unchanged, fraud detection will be difficult, as auditors are not required to detect fraud in the financial statement by law (Wells , 2005; Kravitz, 2012; Coenen, 2013).

This finding is consistent with Jakubowski et al., (2002); Rezaee et al., (2003); McKee, (2010) and Kassem & Higson (2012) that changes in auditing standards and regulations have not resulted in an increase in auditors' ability to detect fraud or in an improvement in audit effectiveness in discovering fraud. They all argued that rather than issuing a new standard following revelation of another accounting scandal, auditors should own the responsibility for the detection of fraud in the financial statement, by clearly stating this in the auditing standard. This is because results from research studies indicated that external auditors might not be exerting enough effort when it comes to their responsibility for fraud detection (Jakubowski, et al., 2002; Rezaee, et al., 2003; McKee, 2010; Kassem & Higson, 2012).

The opinion of the forensic accountants interviewed is not different from that of the accounting academics. Below is a comment from one of the forensic accountants interviewed on how the accounting and auditing standards limit the ability and capacity of auditors to detect fraud in the financial statement.

*… Yes, I think that as long as the GAAP, IFRS are in their current form, they are not meant to detect fraud in the first place. You cannot be trained to detect fraud and at the same time trying to see whether your financials have been prepared in accordance with GAAP. If you are saying that preparing your account in another manner than GAAP is fraud, then I will say that it is adequate. But in terms of fraud detection, as we know it right now, I do not think the external auditor is well trained to detect fraud…*

**Forensic Accountant (FA) 3**

The finance directors interviewed expressed a strong opinion on why they feel the current regulation does not do justice to the detection of fraud in the financial statement by placing the sole responsibility for the detection of fraud on those charged with management and governance. They argued that auditors should also share in that responsibility.

*… For me that does not make sense. What they are saying is it is my responsibility, I am not trying to relegate from my responsibility but how as an internal person, as a finance director, how am I supposed to detect fraud if am managing various functions like I told you. I can detect fraud before signing off and check, I can detect fraud if I review the journal entries and stuffs like that, but once I signed off on the transaction, it's done, I need an external eye to tell that me yes you signed if off, but there was something wrong in the documentation, in the detail of the transaction. So, they need to dig deep. So, you cannot say it is only the responsibility of directors; I would not say it is not the responsibility of the directors but not only the responsibility*

*of the directors. Auditors also share responsibility. Why am I hiring them, they have to sign off, I paid them a lot of money? Why am I hiring this big company? Am I hiring them to get the money out of my company? They have to sign off; their signature means they are ok with everything…*

**Finance Director (FD) 1**

The views of the accounting academics interviewed are also similar to those of the finance directors. They feel strongly that until the auditing standards clearly state that auditors now have responsibility for the detection of fraud in the financial statement, this debate will not be over.

*… well unless it is clearly and explicitly stated in you know in the auditing standard. Unless it is professionally required now for auditors to detect fraud. Then I think, they are not only presenting their opinion of the health of the organization, unless part of their responsibility now or should I say legally and by legally I mean there is a law and the law recognises it, and it's within their jurisdiction and the confine of their responsibility to detect fraud, unless it is clearly stated as such, I don't think this argument will ever cease…*

**Accounting Academic (AA) 4**

Accounting and auditing standards will need to be refined to give more emphasis on fraud and make fraud detection a joint responsibility of those charged with management and governance and the external auditor. Going by the theoretical framework developed in this study (see Chapter two), external audit is the unique link between the principal (shareholders) and the agent (management) in an agency relationship. Moreover, because of information asymmetry, there is a lack of trust in the agent by the principal. Therefore, it will be better for the auditing standards to clearly state what the responsibilities of auditors are concerning fraud detection in the financial statement.

Just as Dicksee (1909) once said *"the detection of fraud is the most important portion of the auditors' duties, and there will be no need disputing the contention that the auditor who can detect fraud is – other things being equal – a better man than the auditor who cannot. Auditors should therefore assiduously cultivate this branch of their function – doubtless, the opportunity will not for long be wanting – as it is* *undoubtedly a branch that their client will most generally appreciate"* (Dicksee, 1909, p. 23).

Similarly, emphasising the need for the auditing standard to make fraud detection the critical element of audit clearly, McDonnell (2002) once observed that auditors could not escape the responsibility to plan and conduct an audit in a way that enables him or her to detect fraud. To say that '*a financial statement audit was not designed to detect fraud'* becomes a less defensible position.

Another issue that emerged from the findings of this study is loopholes in accounting and auditing standards. Some of the loopholes in accounting standards that allow firms to engage in creative accounting or accounting manipulations will need to be closed. Participants gave some comments that suggested the need to close the loopholes created by accounting standards.

*… I mean I know that Enron was a long time ago, but Enron was definitely about the accounting standards being the way they were drafted to allow Enron to do what they wanted to do… It is about looking at, you know there is a concept called substance over form, and really that should have been applied within the case of Enron. Because legally, they were ok with what they were doing but actually when you think about the substance of it, so the form was legally they were ok to do it but the substance of it, and substance over form. So, the accounting standard allowed a lot of Enron yeah to happen. The American standard allowed Enron to happen in my view… I know there are other things. Obviously, Andersen went along with it, and all that, and the directors went along with it, and you know and all that but actually the standard allowed them to do it in the first place.*

*Now in terms of Tesco, in terms of Toshiba, it all comes down to how you treat things like you know supplier discount for Tesco, Toshiba is about, there are a few things in there wasn't it for Toshiba but one of the big ones is about taking profit on contract too early, yeah, they were wrong about that, yeah , you take it over the life of the contract but then you are looking into the future, and you are guessing by saying how much profit will they make on it. Nobody can guarantee what the future is going to bring, but obviously there are rules about spreading your profit over the life of the contract so it's about well you know that is what you should do, but if somebody said well actually could we just take a little bit more earlier, it is up to them at discussion,* *isn't it, then the auditors. I do think that there is flexibility within standards that is allowing for some of these.*

**Accounting Academic (AA) 2**

*… Accounting standard in a way actually helps to limit the scope of what needs to be done. It is like a road map isn't it? They limit as well as provide width and length of how far they can go in their audit. So, it is yes and no. It is a yes and no in this case. They can help you know in terms of how far they can go; they can also limit because the provision which is in there you know, how much can they do. Yes, always those things need to be strengthened. If there are loopholes, and there must be loopholes, so strengthen regulations, accounting standard you know how we help. So, yes, I mean there is room as to the provision of regulation which will help safeguard shareholders' value or interest…*

**External Auditor (EA) 1**

*… If there were no accounting standard at all, an auditor's ability to spot fraud would be close to zero. It would be much harder because; there will be no similarity from one case to another, so you have to spend more effort. Accounting standards must have enables one's ability to spot fraud. The implicit question is as accounting standard gone so complicated to the point that it has a reverse effect and I will say there must be some form of argument for that. Because the accounting standards are so detailed that an auditor, by the time an auditor has dealt with all their basic points, they have already spent 10 million on the exercise such that they have not got time to spot something else. On a high level, that will lead me to say the level of details in accounting standard is now so great that I am not convinced that is necessary helping the situation…*

**Finance Director (FD) 2**

Accounting standards are helpful in some sense because they guide the preparation of financial statements and serve as a road map for the auditors. Accounting standards also allow for easy comparisons of companies. However, these standards give leverage to companies to engage in creative accounting. Creative accounting is the exploitation of loopholes in financial regulation in order to gain advantage or present figures in a misleadingly favourable light (Business Dictionary , 2018).

Bhasin (2016) described Creative Accounting, which is also known as Accounting Manipulation, as an accounting practice that may (or may not) adhere to accounting principles and standards but deviates from what those principles and standards intend to achieve, in order to present the desired business image.

Supporting the findings of this study on the issues of loopholes in accounting standards, the former Chief Financial Officer (CFO) of Enron, Andrew Fastow who masterminded one of the biggest financial statement fraud in America history has this to say in his address at a conference organised by Association of Certified Fraud Examiner in Singapore in 2016:

*"Every single deal I did at Enron was approved by the accountants at Enron, the outside auditors, the internal attorneys, the outside attorneys and the board of directors. How can you get approval from all of those people and still commit fraud? You can follow all the rules and still commit fraud at the same time. That is what I did at Enron in a nutshell. I followed the rules and committed fraud. I did not set out to commit fraud. I did not set out to hurt anybody"* (Coonan, 2016, p. 2).

Fastow went ahead to warn the fraud examiner present that "*finding transgressions is about more than making sure companies follow the rules. What I am talking about are people who technically follow the rules but undermine the principles of those rules. Is a loophole a good thing or a bad thing? Most people say it is a good thing, especially when it comes to paying taxes. At Enron, I found every loophole in the finance and accounting area. My title was a chief financial officer, but I should have been called chief loophole officer. I undermined every principle possible*".

Fastow chose accounting assumptions and engaged in structured finance transactions that fundamentally changed how Enron looked. It made Enron look like a healthy company when it was seriously ill. To illustrate this, he said Enron was graded BBB-plus investment grade, but if you took away all the transactions Fastow did, Enron would have rated BB-minus (Coonan, 2016).

He went on to say that *"the way I looked at it if there are complexity and ambiguity, it gives me the greater latitude to do what I want to do. Never when I did these transactions did, I think about the ethics. I simply said we have a rulebook; it is amoral, just a bunch of rules. When you are in the business world, it is a lot harder to* *recognise unethical situations than you think . . . Our financial statements were intentionally misleading. However, did I think that was wrong? No. I was just following the rules”* (Coonan, 2016, p. 3).

There is an industry of accountants, attorneys, consultants, and bankers that do nothing except figuring out ways to get around the rules, to find loopholes. By the time a new rule or regulation is codified, the bankers, accountants, attorneys and consultants have figured out ways to structure around those rules (Naidu-Ghelani, 2015).

The findings of this study agree with the conclusion of Bhasin (2016) on how easy it is to manipulate financial statements. He argued that it is relatively easy to manipulate corporate financial statements because the Financial Accounting Standards Board (FASB), which sets the accounting standards, provides a significant amount of latitude in the accounting provisions that are available to be used by corporate management.

This makes Andrew Fastow’s argument valid, namely that “Accounting is not straightforward - 10% is black and white, and 90% is in the grey area” (Naidu-Ghelani, 2015). If 90% is a grey area, then that creates many problems because this grey area can be interpreted differently to achieve different results. This thus negates the objectivity concept of accounting.

Interestingly, this is what happens in practice; companies take advantage of this grey area to portray an annual result that does not reflect a true and fair view, and yet is within the framework of the accounting standards. Below is a comment from an external auditor interviewed that buttresses the above point about companies taking advantage of these loopholes.

*… And of course, even though the financial statement may be presented in accordance with GAAP and IFRS, fraud can still occur because the client can use the loopholes within these standards to do what they want to do…*

**External Auditor (EA) 2**

Accounting standards give a significant amount of flexibility in their application. This makes it very easy for corporate management to paint a favourable picture of the financial condition of the company, which eventually may be misleading to investors (Bhasin, 2016; Garrow, et al., 2019). This brings back the issue of information asymmetry that is inherent in a principal-agent relationship (agency theory), with the audit expected to safeguard the interests of the public, but which may not do so (Garrow, et al., 2019).

While creative accounting practices might be legal since the perpetrators of such are acting within the ambit of the law, it negates the spirit behind the standards and brings into question the issues of ethics and morality. Financial statements that have been prepared using creative accounting mechanisms have already manipulated investors and creditors. This is because by creating a good impression about the financial performance of an organisation through creative accounting in order to achieve a particular result (such as meeting analyst forecasts, share price boosting, earnings management and bonuses) they deceive investors and other stakeholders. In a nutshell, such an account does not reflect the acclaimed 'true and fair view' which is a golden principle in financial statement preparation and thus, compromises the principle of objectivity, another golden concept in accounting which suggests that accounting information should not be bias.

There is usually a thin line between creative accounting and fraud. In some cases, creative accounting leads to financial statement fraud. Companies that have engaged in creative accounting with the intention of using such for a short period usually end up manipulating their figures. Such examples are Enron, WorldCom, Satyam, Olympus, Tesco, Toshiba, and Patisserie Valerie.

Similarly, the Financial Times (2018) in their investigation into reforming accounting standards suggested that accounting standards may be part of the disease-causing financial statement fraud. They concluded that current accounting standards are no longer fit for purpose (Financial Times, 2018).

There are some examples where companies' management have engaged in creative accounting or accounting manipulation to the detriment of investors and other stakeholders. Olympus engaged in "Tobashi scheme" to hide losses of over $1 billion (Suzuki, 2015). Tobashi scheme was an acceptable practice within the Japanese GAAP, but this was stretched to the limit by Olympus management, eventually leading to financial statement fraud.

Palmer and Harvey in the UK were paying dividends to preference shareholders even though the company was not making a profit. Eventually, the company went into administration in November 2017 (Garrow & Awolowo, 2018). While Palmer and Harvey seem not to break any accounting rules or regulation through the payment of dividends from losses, the moral and ethical ground of engaging in such practice is questionable. In Palmer and Harvey's case, the preference shareholders were board members and members of the management team of the company. This brings into question the issue of potential conflicts of interest.

Moreover, an external audit which is believed to protect the investors and other stakeholders, by the general public, hold the narratives that the prevention and detection of fraud in the financial statement rest with those charged with management and governance of an enterprise. Therefore, leaving investors and creditors with the option of doing their thorough investigation (forensic audit) before investing.

When companies engage in creative accounting, the resulting financial statement from such practices does not reflect a true and fair view as much crunching of financial numbers is done within the purview of applicable laws and prevailing accounting standards (Vyas, et al., 2015).

Accounting standards can be made better. The loopholes in the standards will need to be closed (Financial Times, 2018). An excellent example of this is the fair value measurement. The US GAAP and IFRS 13 pegs asset valuations to current market prices with the aim that a company's accounts reflect current economic reality, rather than historical cost. Companies, however, can value illiquid assets with no verifiable market price, using questionable estimates based on "models". They can account for long-term contracts with unprovable projections of income streams into the future which will not be useful to users of financial statements. This is because fair value accounting is based on logic (Financial Times, 2018).

Hence, there is need to strengthen accounting and auditing standards by closing those loopholes that companies utilise in engaging in creative accounting. Some accounting standards equally need to be reformed to erase any grey areas that can be used to manipulate financial statements.

### 7.1.1 The Concept of Materiality

Another limiting factor in the fight against financial deception based on the findings of this study is the concept of materiality. Materiality is one of the most critical issues in accounting and auditing both in terms of how items are accounted for, and how financial statements are audited (Brennan & Gray, 2005), yet it is not defined correctly. Materiality is a financial reporting rather than auditing concept (ICAEW, 2018). Materiality in an accounting sense is the threshold above which missing or incorrect information in financial statements is considered to have an impact on the decision making of users (Bragg , 2017).

The International Accounting Standard Board (IASB) in October 2018 released a press statement to clarify the definition of materiality. In their view, the amendment will make it easier for companies to make materiality judgements (IASB, 2018). The old definition defines materiality as "Omissions or misstatements of items are material if they could, individually or collectively, influence the economic decisions that users make on the basis of the financial statements" – IASB.

The new definition states that "Information is material if omitting, misstating or obscuring it could reasonably be expected to influence the decisions that the primary users of general purpose financial statements make on the basis of those financial statements, which provide financial information about a specific reporting entity" (IASB, 2018).

Materiality, therefore, relates to the significance of transactions, balances and errors contained in the financial statements. The information contained in the financial statements must, therefore, be complete in all material respects for them to present a true and fair view of the affairs of the entity.

While directors are responsible for preparing financial statements that show a true and fair view of the entity affairs, auditors are responsible for auditing the financial statements and reporting whether, in their opinion, the financial statements give a true and fair view of the company. Both the auditors and the board of directors have to address the issue of materiality.

The International Standard on Auditing (ISA) 320 however, did not define materiality. This might be due to the reason stated earlier that materiality is not an auditing concept. However, it does highlight the critical characteristics of materiality in planning and performing an audit. These characteristics are;

1. Misstatements are considered to be material if they could influence the decision of users of the financial statements.
2. Judgements about materiality are based on surrounding circumstances, including the size and nature of the misstatement.
3. Judgements are based on the user's common needs as a group (ICAEW, 2018).

The concept of materiality in effect builds flexibility into financial reporting. This can lead to abuse (Brennan & Gray, 2005). The participants in this study expressed some concerns on the concept of materiality and how it negatively impacts on financial statements. They believe it limits the ability of auditors to detect fraud in the financial statement. This is because materiality is based on the judgement of the auditors and it is usually carried out at the planning stage based on the size of the company. Most fraud happen below the materiality level. Moreover, what is considered not to be material over a long period can become a serious concern that can threaten the going concern of an entity.

Forensic Accountant (FA) 4 explains a dimension of materiality and how it can potentially be used by management to hide information from the auditor. Below is his comment:

*…I know what I was looking for when I was an auditor, so, if you put me in management right now, I will be able to give you that information and not give you what will land me in trouble you understand. Am not going to be for instance if I know that you have your materiality or your threshold is let say £50,000, I am not going to give you information, am going to ensure that the ledger that I give you will have transactions that are less than £50,000. I can break that transaction so that even if the total value is the right one, I will divide amount such that you will feel lazy to pick any transaction, you understand…*

**Forensic Accountant (FA) 4**

Materiality in itself is a subjective concept. Yet, objectivity is a key principle in accounting. In theory and practice, materiality is assessed from the eyes of the users of financial statements, yet the management decides and defines it in practice (Bellandi, 2018). This finding supports the claims by Bellandi (2018) that most of the internal management battles for what to filter through the internal reporting layers and what and how to disclose it in the external financial statements run on the verge of materiality.

Similarly, Brennan & Gray (2005) observed that Companies might intentionally record small errors within a defined percentage ceiling so that auditors will not scrutinise such errors (as they are not material). Management excuse errors by arguing that the effect on the bottom line is so small as not to matter – it is immaterial. These small errors can build up and mislead the stock market and other stakeholders. Management understands this concept and uses it against the auditors and investors. The comment from Accounting Academic (AA) 2 gave an insight into this.

*…So, you do have the concept then of materiality, which is obviously, if something you know, if something is material, then the auditor should find it whether is by error or whether is by fraud. Yeah, if it is not material, so if somebody is just stealing you know ten thousand pounds and the materiality level are million, you cannot be expected to find that, and so that materiality concept is quite an important point. What do you mean by financial statement fraud? Because financial statement fraud in effect have materiality linked to it. Because you are not committing financial statement fraud unless the financial statement is materially incorrect. Materiality is such a big part of financial statement fraud and the audit you can get away from that concept really…*

**Accounting Academic (AA) 2**

Most experienced people that prepare financial statements know that the discussion at top management and board level is usually on what to report and what not to report in the financial statement and this is always justified using the concept of materiality. Auditors are aware that unless they can prove that a misstatement is material and as such would impact on the financial statement, it will be difficult to question management (Bellandi, 2018). Management hides under the pretence of materiality, and this limits the auditor’s ability to spot potential problems.

Transactions or events that are considered immaterial are not reported separately in the financial statement. Therefore, that information that is considered immaterial by the accountants is not reported to investors, creditors and other users of financial statement (Juma'h , 2009). Hence, standard setters need to investigate this concept of materiality because of its impact on the auditor's ability to spot problems in the financial statement. Moreover, there is a need for the auditing standard to clearly define what materiality means in the context of the audit of the financial statement. Alternatively, materiality as a concept probably needs to be dropped for auditors to do a better job in detecting fraudulent financial reporting. With development in emerging technologies like data analytic techniques, machine learning, articificial intelligience and intuitive audit algorithms, more can now be done in the audit of financial statement. As such, the concept of materiality can now finally be dropped by the accounting profession.

### 7.1.2 Section Summary – Accounting Standards and Regulations

This section has looked at the limitations imposed by accounting and auditing standards in the fight against financial deception. These limitations were supported by evidence from the findings of this study. The loopholes in accounting standards that enable management to engage in creative accounting were also discussed. The concept of materiality was discussed and the challenges it imposes on auditors and how companies take advantage of this to conceal fraudulent activities. For auditors to do a better job at fraud detection in the financial statement, some of these accounting standards will need to be changed, and the grey area created by standard setters that enable companies to engage in creative accounting will need to be addressed.

Placing the sole responsibility for the detection of fraud on those charged with management and governance will have to change. Fraud detection needs to be a joint responsibility between those charged with management and governance and the external auditors. Relegating this responsibility to management alone negate the purpose of audit in an agency relationship that exists between the principal (shareholders) and agent (management).

The concept of materiality will need to be correctly defined by the auditing standard. The definition advanced by the accounting standards about materiality will probably need to be changed. Since most fraudulent activities are concealed below the materiality level, hence making it difficult for external auditors to detect since this fraud are hidden below the materiality level.

Perhaps, it is high time the profession reconsiders this concept of materiality and probably drop it as a concept in this age of information revolution. Through artificial intelligence and computer-aided testing, it is now possible for auditors to police every transaction of companies in real time.

The next section will now look at what the researcher means by the term system shift. The forensic accounting paradigm will also be developed in subsequent sections to follow in this chapter and the limitations to a forensic accounting system.

## 7.2 Paradigm Shift Concept

The concept of a paradigm shift that this study is clamouring for is a paradigm shift to forensic accounting. How forensic accounting is conceptualised has been discussed in the previous chapter (Chapter Six). The idea of paradigm comes from Thomas Kuhn, the author of the scientific revolution. Kuhn (1962) defines paradigm as *a "universally recognised scientific achievement that for a time provides model problems and solutions to a community of practitioners".*

While I am cautious in using the word paradigm because of the complex nature of it (Masterman, 1967) and equally understanding that there are some serious debates and questions about how and what Kuhn refers to as a paradigm, I want to state here that I am not interested in joining this debate, which is the reason why I have mostly use the word 'system' to imply 'paradigm' throughout this thesis. What I mean by the term paradigm/system in the context of this thesis follows from Kuhn's definition of paradigm- as a discovery that can help in reducing financial statement fraud at this time when there has been an unrelenting series of fraudulent reporting and corporate collapses around the world.

Traditionally, fraud detection used to be the core objective of audit (Albrecht, et al., 2001). Auditors were once taught that the primary objectives of an audit were to detect and prevent fraud and errors (Montgomery, 1921). Dicksee (1909 p23) captured this in his words when he said *"the detection of fraud is the most important portion of the auditors' duties, and there will be no need disputing the contention that* *the auditor who can detect fraud is – other things being equal – a better man than the auditor who cannot. Auditors should therefore assiduously cultivate this branch of their function – doubtless, the opportunity will not for long be wanting – as it is undoubtedly a branch that their client will most generally appreciate".*

However, along the line, this core objective was dropped in favour of giving an opinion on the true and fairness of the company's affairs. Some have argued that this change was a result of industrialisation and international trade (Albrecht, et al., 2001; Chui & Pike, 2013). In other words, the argument was that as companies grew bigger, it became practically impossible for auditors to police every transaction of companies.

The goal of every tradition is to preserve, protect and deliver established truth from one generation to the other (Munroe, 2018). Moreover, tradition can only be valid when it delivers the original truth (Munroe, 2018). The fact that companies have grown bigger is not enough reason to drop the core objective of audit from detection of fraud to giving an opinion on the true and fairness of financial statement. What this literally means is that truth about the core objectives of audit has been distorted.

However, I believe that in a world of information revolution and globalisation where it is now possible to invest in different countries, thanks to international trade and technology, there is a need for more scrutiny of companies' accounts than before to safeguard the interests of investors and other stakeholders.

In order words, because it is now very possible for companies situated in London to be listed on the New York Stock Exchange Market and for investors to buy shares of companies outside the shore of their country. This has now necessitated the need for proper scrutiny of companies' accounts using forensic accounting methods in order to safeguard the interest of investors (principal) who in agency theory do not trust the agent (management).

Moreover, considering the series of financial statements fraud (Enron, WorldCom, Tesco, Olympus and Toshiba) that have occurred in recent times, forensic accountants have been pushed to the forefront in the crusade against financial deception (Wolosky, 2004; Rezaee , et al., 2006).

Also, because there is evidence that the perception of the business community, government, regulatory authorities and even the courts is that a higher degree of expertise is required to analyse current complex financial transactions and events (DiGabriele, 2008; Garrow & Awolowo, 2018).

Forensic accountants have been utilised by attorneys to give evidence in court cases that relate to financial and non-financial issues. Forensic accountants may be asked to calculate economic damages that occurred as a result of a breach of contract. In most audit negligence cases, forensic accountants have been deployed to ascertain whether auditors were negligent or not in the discharge of their duties (Mukoro, et al., 2013).

That is why I used the word paradigm in the manner that Kuhn used it. To this end, I have already defined accounting paradigm in chapter one as those sets of principles, concepts, regulations, standards, and conventions that for a time govern how financial information are prepared, presented, reported and verified by the actors in the business community.

As observed from Kuhn (1962) definition of paradigm, a paradigm/system is subject to change. This is because in Kuhn's definition he said a paradigm is a *universally recognised scientific achievement that for a time provides model problems and solutions to a community of practitioners*. What I infer from this is that a paradigm/system is subject to change over a period of time.

Just as the accounting profession changed the core objectives of an audit of financial statements from detection of fraud to giving an opinion on the true and fairness of companies because at that time, they believe it was practically impossible for the auditor to police every transaction of companies.

However, with advances in technology and forensic accounting techniques, software has been developed in recent time that can go through companies' financial transactions quickly; artificial intelligence is now the order of the day in most professions. One of the accounting academics interviewed gave a cogent remark about this. She said *…you now have the opportunity to run far more audit test through the computer than you ever did and far more opportunity to detect and investigate fraud and anomalies than you ever did before… You are more likely to* *be able to place a forensic work on to that which you would not be able to do in the past because you are doing sample testing…*

**Accounting Academic (AA) 1**

Therefore, as society changes, so does how businesses are conducted around the world subject to change and hence the need for the accounting profession to respond to the current realities of events in this age of information revolution and globalization by moving away from the current accounting system of reporting and procedural auditing that hasn't guaranteed the detection of fraud to a more holistic approach that can guarantee the detection of financial statement fraud. Hence, the need for a system shift to forensic accounting.

Just as Smith & Crumley (2009) have argued that the high incidences of financial statement fraud and corporate collapses around the world have raised a serious question on whether the current accounting systems of reporting and financial controls are working. An unrelenting series of embarrassing audit failures over the last 50 years has prompted the need for a paradigm/system shift in accounting (Gray & Moussalli, 2006).

Hence, what I refer to as a paradigm shift or system shift is a change in the way auditing is approached. The current audit environment denies the responsibilities for the detection of fraud in the financial statement. Fraud discovery in the current environment has been relegated to the status of an incidental by-product of an audit whose purpose was to render an opinion on the fairness of presentation in accordance with generally accepted accounting principles (Gray & Moussalli, 2006).

However, what the accounting profession denied not to be their responsibility have haunted the profession because the public, shareholders, creditors, and other beneficiaries of public companies have never accepted the accounting profession's denial of their responsibility for fraud detection in the financial statement (Koh & Woo, 1998; Gray & Moussalli, 2006).

Therefore, change is inevitable. For the profession to remain relevant to the capital market, there is a need for a paradigm/system shift. The accounting profession can no longer deny the demands of the capital market. The fraud that auditors fail to detect have become legal liabilities for them (Wolosky, 2004).

A good example of this is the Enron accounting shenanigans that brought down Arthur Andersen, one of the big five accounting firms in the world before 2001. Just as Turner (2002) said in his keynote address at the AICPA's advanced litigation/national conference on fraud that "there is a chasm as wide and as deep as the Grand Canyon between what the public expects from us and what we deliver in the way of an audit … we must close the chasm by changing what we deliver in the way of an audit and audit report, to conform to the desires of our customer" (Turner, 2002). This is what this study set out to do. To develop a new system that can lead to the detection of fraud in the financial statement.

## 7.3 Forensic Accounting System Development

The forensic accounting system involves three elements based on the three main themes that emerged from the findings of this study. The first element is the audit concern. This was discussed in chapter five (Audit Concern). The second element of this system is education (see chapter six); the last element in the development of a forensic accounting system is the accounting standard. This was discussed in the earlier section of this chapter.

In order to increase the chances of fraud detection in the financial statement, these three elements are essential and are not mutually exclusive. Addressing one of these elements without addressing the other two will not provide the intended result which is to reduce financial statement fraud.

Hence in order to increase the chances of fraud detection in the financial statement, this forensic accounting system implies that the concerns inherent in the present-day audit will need to be addressed. These concerns have been identified and discussed in chapter five. The second element that needs to be addressed is how auditors are educated. Auditors' education will need to involve some element of forensic accounting skills, ethics, procedures and techniques in order to increase their chances of spotting problems in the financial statement. Once the issue of education has been addressed, the last element of the forensic accounting system is accounting standards and regulations. Accounting standards and regulations will need to reflect the issues identified in this study and more importantly, there will be a need for increased responsibility on the part of the auditors concerning fraud detection in the financial statement and this need to be clearly stated in accounting and auditing standards.

The forensic accounting system brings together the three research questions identified in this study and the discussion of audit concern, education and accounting standard into a unified framework called forensic accounting system. This can be depicted in the form of a triangle. The decision to use a triangle is to show consistency with the agency triangle that was already developed in chapter two and the fraud triangle theory utilised in this study (chapter 2). The diagram below (Figure 7.1) presents the forensic accounting system developed in this study. This is a model for the detection of fraud in the financial statement.

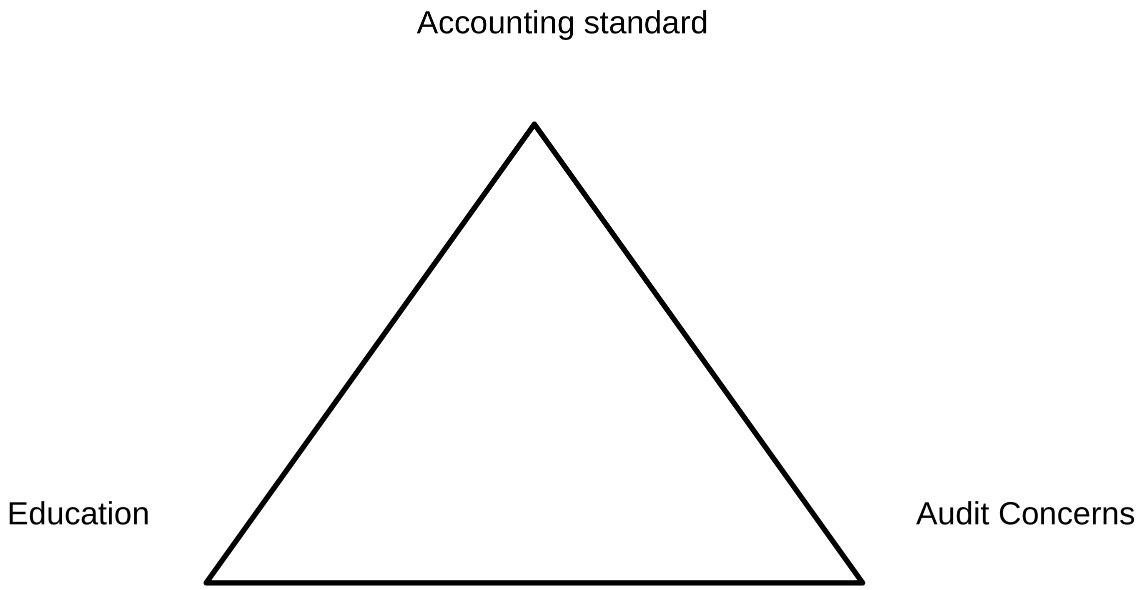



Figure 7.1: The Forensic Accounting System

Source: Authors empirical development

Each of the three elements of the forensic accounting system will now be discussed.

### 7.3.1 Audit Concern

The separation of the owner from control has placed an enormous responsibility on auditors to up their game in the fight against financial deception. Within an agency relationship, it is assumed that the principal does not trust the agent because of information asymmetry and will, therefore, rely on some mechanism to align its interest to that of his agent. The hope and expectation of investors and other stakeholders are that the financial statement audit conducted by external auditors will be able to detect financial statement fraud and help safeguard the interest of the principal (shareholders).

The narrative from the accounting profession, however, is that the purpose of an external audit is not to detect fraud. Instead, it is to give an opinion on the true and fair view of entities affairs. This narrative has brought into question the role and responsibilities of the audit and that of auditors. These issues have resulted in a concern which this study called Audit Concerns. The audit concerns have to do with the role of the audit within an agency relationship and the responsibilities of auditors concerning fraud detection in the financial statement. The diagram below (Figure 7.2) shows the agency triangle that was developed in this study. This diagram highlights the supposed role of audit in an agency relationship that exists between the principal (investors) and the agent (management)

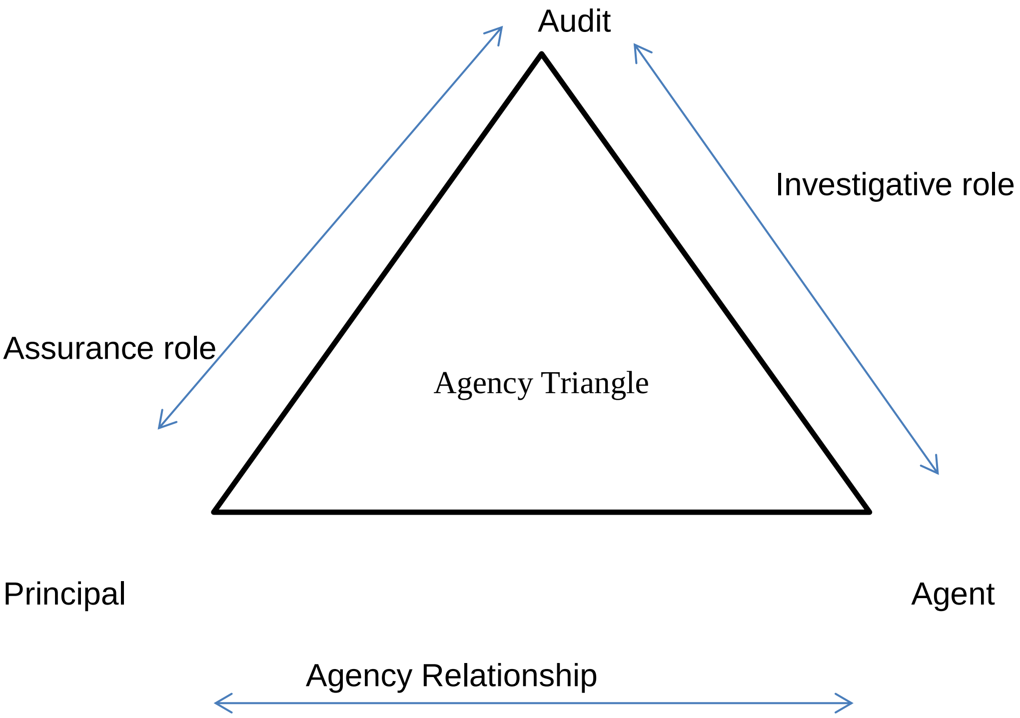



Figure 7.2: The Agency Triangle Framework

Source: Author's Development.

As a result of information asymmetry, the principal does not trust the agent. The principal, therefore, relies on the audit to investigate the performance of the agent. Audit in this regard is giving assurance to the principal in one sense and investigating the work done by the agent in another sense and then report back to the principal. However, the presently constituted audit has not been able to fulfil these two requirements which are the genesis of the audit concerns.

The ISA 240 has equally compounded the issue of audit concern by placing the sole responsibility for the detection of fraud on those charged with management and governance bringing into question the role and responsibilities of auditors. This has resulted in what auditors called the audit expectation gap. The audit expectation gap is the gap between what societies expects from an audit and what auditors are willing to accept as their responsibility.

The audit concern as the first element towards developing a new framework that can increase the chances of fraud detection in the financial statement implies that this concerns will need to be addressed to transition to a new system. Until the role and responsibilities of auditors are redefined, and their mandate changed, we will remain in the old system of reporting and procedural auditing which has not guaranteed the detection of fraud in the financial statement.

Hence, in order to reduce corporate collapses, audit failures and financial statement fraud, auditors will need to take an increased responsibility concerning fraud detection in the financial statement by way of a change of mandate. By so doing, the audit expectation gap will probably be closed. This will also restore investors' confidence in the financial reporting process and corporate governance.

### 7.3.2 Education

The second element towards developing a new framework that can increase the chances of fraud detection in the financial statement **is education**. It is not enough to increase auditors' responsibility concerning fraud detection in the financial statement without commensurate training in forensic accounting. How auditors are educated will need immediate overhauling.

Therefore, for auditors to do a better job at spotting financial statement fraud and detecting them, they need to be trained in some elements of forensic accounting skills, techniques and procedures. Auditors' education currently is geared towards recognising departures from accounting standards. That kind of education cannot lead to the detection of fraud in the financial statement and often suggests why auditors have been unable to detect fraud in the financial statement.

Hence, to increase the chances of fraud detection in the financial statement, the knowledge base of auditors will need to be addressed. A forensic accounting education can help address this. By training auditors in some elements of forensic accounting skills, ethics, procedures and having an investigative mentality will enhance their ability to detect financial statement fraud. The involvement of forensic accountants in audit engagement will also increase the chances of fraud detection in the financial statement.

In a nutshell, the current curriculum of auditors is no longer adequate in this era of information revolution and globalisation. The way forward seems to be forensic accounting. This will equally help auditors in the event of any litigation. They will be able to provide evidence of what was carried out during the external audit and potentially save the money lost to litigation and negligence claims against the auditors.

### 7.3.3 Accounting Standard

The last element of the forensic accounting system is the accounting standard. Once the audit concerns have been addressed, and the way auditors are educated has changed to reflect some elements of forensic accounting, accounting and auditing standards will need to be adjusted and refocused. Should this happen, that would have successfully taken us into a new system of forensic accounting.

One important concept that standard setters need to look into is the concept of materiality. Materiality has been used as a tool in the hand of management to conceal fraud. This concept does not help auditors either. It limits the ability of auditors to question management. This concept either needs to be dropped or should be defined appropriately by the auditing standard. Furthermore, those loopholes created by standard setters that enable companies to engage in creative accounting practices will need to be closed.

The ISA 240 will also need adjustment. Fraud detection in the financial statement should be a joint responsibility between those charged with management and governance and the external auditor. By placing the sole responsibilities for fraud detection on the agent (management) negate the purpose of audit in an agency relationship.

If the audit concerns are addressed, and how auditors are educated is changed to reflect some elements of forensic accounting, and the accounting and auditing standards are adjusted to show these changes, then the accounting profession would have successfully moved to a forensic accounting system. This is the mechanism for transiting from the current system of reporting and procedural auditing to a forensic accounting system.

In order words, accepting the responsibilities for the detection of fraud in the financial statement by the accounting profession and changing how auditors are educated to enable them to detect these financial statement fraud through forensic accounting skills, techniques and procedures and adjusting accounting and auditing standard to reflect a change of responsibilities with respect to fraud detection in the financial statement is the forensic accounting system.

## 7.4 The Relevance of a System Shift to Forensic Accounting

All the participants agreed that the forensic accounting system has the tendency of reducing financial statement fraud with an emphasis on how auditors are educated. From a user of financial statement and auditing services perspective, the finance director interviewed gave a profound argument for a forensic accounting system.

*…The second thing that is come out from your question, if you train the auditors the way you described the training of forensic accountants, there is an implication that auditors in their normal role acting in their normal way would be more likely, would have greater ability to spot problem just through that training. It seems logical because the argument would be the cost of auditing will probably not change, is just the way to train the accountants. You can extend the argument that all people with finance background should have that kind of training and education. If the paradigm shift is about increasing the capability of the auditor so that their skill is more of a forensic skill that sounds to make much sense…*

**Finance Director (FD) 2**

*…The accounting profession can move forward if you can prepare the auditors and the accountants to have depth knowledge in-depth knowledge of forensic accounting. Generally, I do not want an accountant to be an accountant related to standard only. I do not like it this way. I think that an accountant needs to be more like a business person. They need to start looking outside the book. A good accountant can become a good CEO. They must have an understanding of the business. Two 100% forensic. Three training on interpersonal skills in dealing with the environment. Sometimes accountants can be an introvert. They need to start speaking out…*

**Finance Director (FD) 1**

The comments of the finance directors interviewed about a paradigm shift to forensic accounting echo the purpose of this study and what the forensic accounting system developed in this study is all about. The forensic accounting system focuses on education and addressing audit concerns and accounting standards. Based on the findings of this study, if auditors are educated better in those elements of forensic accounting skills, ethics, principles, procedures and start acting more like a detective, financial statement fraud might reduce.

Similarly, the accounting academics view is not different from that of the finance directors. Below are some of their comments that suggest the importance of a system shift to forensic accounting.

*…if I am thinking about whether forensic accountants can reduce financial statement fraud, I see it from two angles, either you get forensic accountants in as part of the audit, yeah, to actually assist in an audit in that particular aspect whether it's fraud or whether it's just risk factors, or you train auditors better…*

**Accounting Academic (AA) 2**

*… well it is chasing a tail, I mean people are always, fraud is always happening, and we are not reacting reactively, a little bit more than what it should be, it should be perhaps more proactive in the fight against financial statement fraud. I think when it comes to forensic, everybody, yes, something happens, and a forensic accountant is*

*called in to try and solve the problem rather than being brought in maybe at an early stage to try and prevent the problem. I think that will help if they are part of the audit team rather than again being reactive. I think if in an ideal world the annual audit should occur, and part of that team should have a forensic accountant within it, I think that is the way we could perhaps tackle it. My suggestion is to include forensic accounting and not tied to that same rule book… They can go in and forget materiality. For as long as there is just true and fair view at the materiality level, then we will still be in the same paradigm… if we change regulation, then we have to change a lot, we have to get the student ready to understand part of their role when they become auditors if they become auditors is forensic, and therefore you need this training as well, but currently it is not part of the law…*

**Accounting Academic (AA) 3**

The comments from the accounting academics can be linked to the forensic accounting system framework. If auditors are to be educated better to enable them to detect fraud in the financial statement, regulations should not hold them back, and regulations must state clearly that auditors now have responsibilities for the detection of fraud in the financial statement. The mandate of auditors will need to be changed through legislation.

These findings can be summarised using the framework that this study has developed. These three elements are essential in the fight against financial deception. Audit concerns must be addressed by accepting responsibilities for the detection of fraud in the financial statement. This must then be backed up by accounting and auditing standards which will eventually lead to a change in the curriculum and training manuals of auditors and professional accountants. Should these three elements be adequately addressed, the accounting profession will have successfully moved from the current system of reporting and procedural auditing to a forensic accounting system.

Furthermore, the findings of this study show that when managements are aware that auditors are now better trained and better informed about fraud and how it can be committed, it could serve as a deterrent to fraud. Until present day auditors' skills are upgraded to those of forensic accountants, the way and manner in which fraud are perpetuated will continue to threaten the integrity of financial reporting (Awolowo, 2014).

*… yes, it will create an awareness you know by everyone and yes, if am an accountant on one side and I am aware of how forensic accounting would detect my fraud if I get to engage in a fraud, then I think I will be mindful when I am doing my work that I should not commit crime on purpose. Otherwise, draw the line, it will be uncovered…forensic accounting itself can be a control, and we should not be going into an organisation to discover fraud after it has happened…*

**External Auditor (EA) 1**

This is because the current auditing framework does not foster an adequate climate against fraud considering the numerous cases of financial statement fraud coming to light (Awolowo, et al., 2018). The main goal of a forensic accounting system is to protect organisations from potential financial statement fraud, asset embezzlements and any kind of occupational fraud within an organisation (Gligorić, et al., 2017).

*… We cannot rely on financial audit anymore. I believe that there must be some shift towards no longer providing just an opinion because the financial audit is basically like an opinion; now people have to deal with facts to drive the company forward. I believe that on top of the financial audit conducted by chartered accountants, there must be room at least which can be determined in terms of period, and now forensic audit can come in. So, I think there should be some training and the mandate now will have to expand…*

**Forensic Accountant (FA) 3**

Therefore, there is a need for a system shift to forensic accounting. When the mandate of auditors' changes to the detection of fraud in the financial statement and auditors are educated better in terms of forensic accounting and accounting and auditing standards are adjusted to reflect these changes, that is the forensic accounting system that this study sets out to develop.

## 7.5 Cost and Time

The main drawback to a forensic accounting system identified in this study is cost and time. In terms of cost, the cost of the audit should not necessarily increase if the change is driven through education. However, opinions differ among participants on the cost implications of a forensic accounting system. While finance directors believe cost should not necessarily go up, academics, forensic accountants and external auditors do think the cost of the audit will go up if you were to involve forensic accountants in an audit engagement.

The argument here is that the avoidance of fraud taking place through a system shift to forensic accounting will mean that a significant cost is avoided, more than offsetting any increase in audit costs.

*… if you train the auditors the way you described the training of forensic accountants, there is an implication that auditors in their normal role acting in their normal way would be more likely, would have greater ability to spot problem just through that training. It seems logical because the argument would be the cost of auditing will probably not change, is just the way to train the accountants…*

**Finance Director (FD) 2**

*… Can they do more, is there a reason for them to do more, Yes, I think there is that expectation, and the client will end up paying more… it is good. Perhaps I think if they do a few things in that line, they might go a little further but having said that they are paid as a service and they provide service, and that will be beyond their remix. So, they will be doing something which they are not necessarily paid for, and they are a profit-making organisation…*

**Forensic Accountant (FA) 3**

*…there is a fixed sum of money to do an audit. There is often tight budget; you do not have every facility or ability to do everything that you want. On investigation, you can do more… An audit is a commercial activity, and there are commercial parameters…*

**Forensic Accountant (FA) 2**

*… considerable expense, the cost of a forensic accountant is considerably high. If the traditional forensic approach is taking to audit, the cost will be so expensive…*

**Finance Director (FD) 2**

*… Because if you say auditor are now trained forensic accountant as well as auditor. They go out to say J Smith Ltd to do their audit, they would have quoted already that this audit cost £5000, halfway through their audit, they found possibility of fraud which could be a 3 months job to investigate, who at that point is going to say excuse me Mr Smith Ltd., this £5000 of audit will now need to be on site for 3 years or 3 months, or you could pay us to do that…*

**Accounting Academic (AA) 3**

The cost of the audit might not necessarily go up in a forensic accounting system. If the forensic accounting system is pursued through changes in accounting standards and education curriculum, the increase in cost might be insignificant. However, there are no known statistics to refer to regarding this. Even if the cost of the audit will go up, the benefit of a forensic accounting system will outweigh the cost. As this system might lead to a reduction in fraudulent financial reporting and safeguard the interest of investors and other stakeholders. This, in the long run, will restore investors' confidence in the financial reporting process and corporate governance.

### 7.5.1 Time

Participants expressed concerns that the time taken to complete an audit if there is a system shift to forensic accounting might be high. Some of their comments about time being a limitation are below.

*… The problem was that if you have forensic accountants doing an audit, the audit will never finish. You will be asking so many questions, the audit will never finish, and the audit must finish. They must be done in a certain amount of time because there is a specific requirement in the market place…*

**Forensic Accountant (FA) 2**

*… a big limit of that simply the time and when you have forensic accounting engagement. This can take years, audit you usually have a maximum of 4 weeks to complete an audit from start to finish and realistically, you can't complete an investigation in that time unless it's something extremely small…. it will be quite time consuming and inefficient and costly if we would approach every audit searching for fraud if there is no indication or if there is no fraud risk identified prior to starting the audit because like I said even if you know something, there have been fraud identify,*

*that investigation takes years, and if you approach an audit looking for fraud, it's going to really take a long time, it's going to be inefficient, and most time, audit is performed for statutory purposes, so they have deadlines, they have tax filing deadlines and shareholders, they want annual financial report by a certain period.*

**External Auditor (EA) 2**

There appears to be no known research that has investigated the implication of a forensic accounting system in terms of cost to an audit and the possible time such an approach to audit might take.

My predisposition is that the forensic accounting system might not necessarily increase the cost of an audit and the time taken to do an audit. This forensic accounting system is more about changing the mandate of auditors to detecting fraud in the financial statement and adjusting regulations and standards to reflect these changes and changing auditor's education to reflect some forensic accounting skills, ethics, procedures and principles.

Nevertheless, the issue of cost and time are both outside the scope of this study and will be worthwhile for future studies to investigate. However, if changing auditors mandate and educating them in some forensic accounting techniques, skills and procedures will increase their chances of detecting fraud in the financial statement and eventual reduce the incidence of fraudulent reporting; then I think the benefit might outweigh the cost, even if the cost of the audit will eventually rise.

## 7.6 Chapter Summary

This chapter has looked at accounting standards and regulations as the last element of the forensic accounting system developed in this study. The role accounting standards and regulations can play towards reducing financial statement fraud were discussed. Of importance in this discussion was the concept of materiality and how management deployed this concept to conceal fraud, thereby making it difficult for auditors to detect fraud. The issue of loopholes in accounting standards was also discussed, and the benefit of closing these loopholes was identified.

The meaning of the term paradigm in the context of this research was also discussed. The chapter went further to develop the forensic accounting paradigm/system. This system as discussed has three elements – audit concern, education and accounting standards. These three elements are said not to be mutually exclusive. Meaning the three elements need to be addressed to move into a forensic accounting system successfully. This system concludes that in order to reduce financial statement fraud, the mandate of auditors will have to reflect an increased responsibility concerning fraud detection in the financial statement as this will reduce or eliminate the audit expectation gap.

Once the audit concerns have been addressed through a change of mandate, how auditors are educated will need to be investigated. The current education of auditors is geared towards recognising departures from accounting standards. Until auditors are properly trained in forensic accounting skills, ethics, principles and procedures and start acting like detectives, the way and manner in which fraud is concealed by management will continue to threaten the integrity of financial reporting and corporate governance. Hence the need to educate auditors to enable them to spot not just departures from accounting standards but fraudulent financial transactions.

The last element of the forensic accounting system discussed is the accounting standard. It is not enough to change auditors mandate and education; accounting and auditing standards need to reflect these changes by changing and rewording some of the accounting and auditing standards that tend to create grey areas that companies used to engage in creative accounting. For example, the concept of materiality and ISA 240. Materiality concept is often used by management to conceal fraudulent transactions while the ISA 240 gives auditors the liberty of not hunting for fraud in the financial statement.

The limitations to the forensic accounting system were identified to be cost and time. While these limitations are outside the scope of this study, the benefit of adopting a forensic accounting system might outweigh the cost.

The development of a forensic accounting system has addressed the purpose of this study. The three research questions of this study have also been answered. The findings of this study have shown that training auditors in forensic accounting skills, ethics and procedures will reduce the opportunity to commit fraud by the agent as the agent will be aware that the auditors will be looking at every transaction. Therefore, serving as a fraud deterrence mechanism.

Findings equally showed that the training of professional accountants particularly auditors of financial statement in some elements of forensic accounting skills, ethics and principles will increase the fraud detection capacity of auditors and in turns lead to a reduction in financial statement fraud.

The last research question looked at the benefit of involving forensic accountants in an audit engagement. Findings revealed that the involvement of forensic accountants in audit engagement would increase the chances of spotting fraudulent reporting. This will restore investors' confidence in the combined financial reporting framework and corporate governance.

The next chapter will be discussing the contribution of this thesis both to accounting theory and practice and the implications of this study to policymakers and accounting standard setters.

## 7.7 Key Points From Chapter Seven

Accounting/Auditing Standards

- Accounting and auditing standards have a role to play towards reducing financial statement fraud.
- Accounting standard in their present form encourages creative accounting and limit auditor's ability to hunt for fraud in the financial statement.
- Accounting and auditing standards need to be refined to give more emphasis to fraud detection in the financial statement and make fraud detection a joint responsibility between those charged with management and governance and the external auditor.
- Loopholes in accounting and auditing standards that enables companies to engage in creative accounting should be close.

Materiality

- Materiality is a limiting factor in the fight against financial deception.
- Materiality builds flexibility into financial reporting which often lead to abuse.
- Accounting information is premised on the principle of objectivity, yet materiality is a subjective concept.

Forensic Accounting System elements

- Audit Concern
- Education
- Accounting/Auditing Standards.

Potential limitations of a system shift to forensic accounting

- Cost of audit might go up in the event of a system shift.
- Time taken to complete an audit might increase.

# CHAPTER EIGHT: CONTRIBUTIONS

## 8.1 Contribution to the Literature

Several kinds of literature have looked at forensic accounting skills and techniques (Carnes & Gierlasinski, 2001; Apostolon & Crumbley, 2005; DiGabriele, 2008; Bhasin, 2013). Some have even looked at the role of forensic accounting in fraud investigation and detection (Apostolon & Crumbley, 2005; Hogan, et al., 2008; Bressler, 2012). However, no known empirical research has underscored how forensic accounting might be useful in reducing financial statement fraud, neither has there been any study that has sought to understand the perception of stakeholders on how forensic accounting might help reduce financial statement fraud. This study represents an initial investigation towards developing forensic accounting as a system capable of reducing financial statement fraud by exploring the perceptions of key stakeholders in the accounting profession (Accounting Academics, Forensic Accountants, External Auditors and Finance Directors).

### 8.1.1 Contribution 1: Agency Theory and Audit

Several studies have looked at human organisation arrangement (Choo & Kim, 2007; Chariri, 2008) with reference to Agency Theory (Jensen & Meckling, 1976). Other studies have highlighted the role of audit (ICAEW, 2005; Sikka, 2009; Mueller, et al., 2015) but there appears to be a gap in the literature as no known research has highlighted the role of audit within the context of the agency theory. This study represents the first empirical research that has highlighted the critical role that audit plays in the agency relationship which exists between the principal (shareholders) and the agent (management). The development of an Agency Triangle Model is an important contribution of this study to Agency theory within the context of an audit. This study has built on the agency theory by using the theory to highlight the supposed role of audit to the capital market which led to the development of the agency triangle.

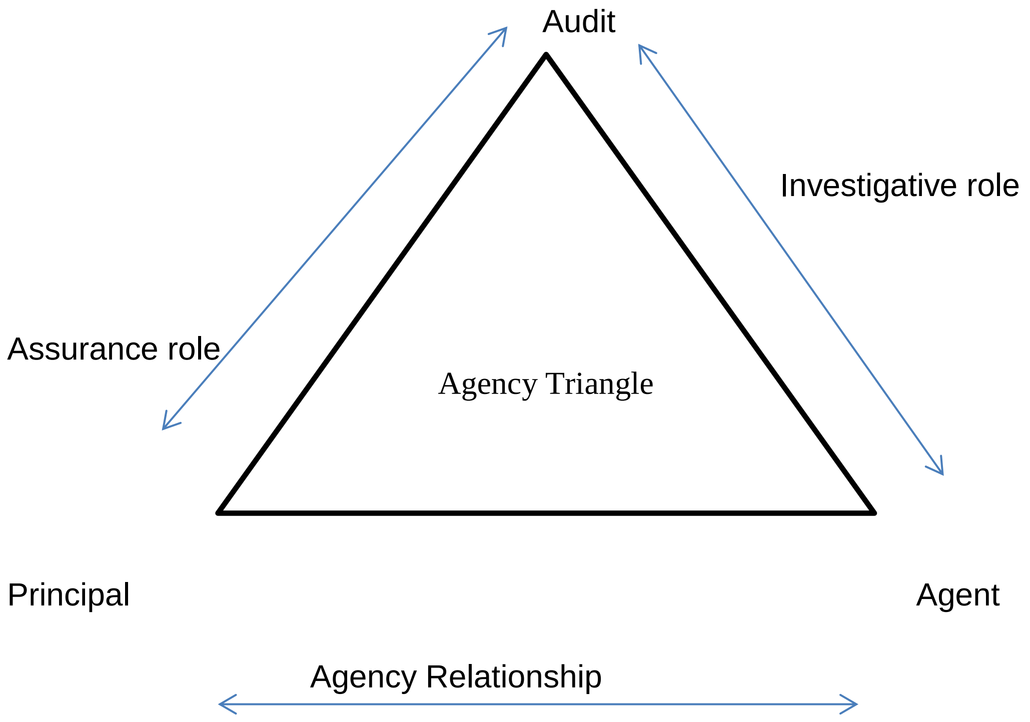



Figure 8.1: The Agency Triangle Model

As shown in Figure 8.1, the Agency Triangle Model has contributed to agency theory by highlighting the role audit plays between the two parties involved in an agency relationship (Principal and Agent). Within the context of the financial statement, the audit performs a dual role. To the principal (shareholders), audit serves an assurance/attestation role by providing comfort and assurance that the financial statement reflects a true and fair view of the entity's affairs. To the agent (management), the external audit serves an investigative role by checking the annual report produced by management and making sure that there are no errors or fraud in it.

### 8.1.2 Contribution 2: Forensic Accounting Definition

There has been no consensus in forensic accounting literature on the definition of forensic accounting. The most recent attempt to define forensic accounting was by Huber and DiGabriele (2014). They defined forensic accounting as a multidisciplinary field that encompasses both a profession and an industry, where civil or criminal economic and financial claims, whether business or personal, are contested within established political structures, recognized and accepted social parameters, and well-defined legal jurisdictions, and informed by the theories, methods, and procedures from the fields of law, auditing, accounting, finance, economics, psychology, sociology, and criminology.

While their definition appears to be comprehensive, it does not cover all financial scenarios, most importantly, it does not include the financial statement context. Considering the limitations in Huber and DiGabriele definition of forensic accounting, an enhanced definition of forensic accounting has been developed up based on the findings of this thesis. Forensic accounting is viewed as a high-level validation of accounting or financial information through an array of skills and knowledge from a range of disciplines like accounting, auditing, economics, criminology, psychology (with emphasis on human behaviour) and law in an actual or potential civil or criminal proceeding.

This definition appears to be more comprehensive, encompassing most, if not all scenarios where money matters are being discussed and as such has contributed to the forensic accounting literature.

Another significant contribution of this thesis to forensic accounting literature is the debate about how practitioners and academics view forensic accounting. Crumbley (2009) and Smith (2015) both asserted that practitioners and scholars differ on their conceptualisation of forensic accounting. They argued that academics think forensic accounting is limited to fraud investigation while practitioners hold the view that forensic accounting is much more than fraud investigation.

The findings of this thesis have now settled that debate. The findings of this study showed that academics and practitioners now understand what forensic accounting is all about. Academics now have a full understanding that forensic accounting is not limited to fraud investigation and examination. It is based on the comments of both the practitioners and academics interviewed that led to the advancement of a new definition of forensic accounting developed through this research.

### 8.1.3 Contribution 3: Fraud Triangle in Agency Relationship

Cressey (1950,1953) highlighted the notion of the fraud triangle theory in his seminal work “other people’s money” and “criminal violation of trust” by suggesting through his hypothesis that for any criminal violation of trust to occur, pressure, opportunity and rationalisation must be present. Wolfe and Hermanson (2004) built on Cressey’s work by arguing that even in the presence of pressure, opportunity, and rationalisation, if the fraud perpetrator does not have the capability, criminal violation of trust cannot occur. Based on their hypothesis, they added **capability** as the fourth element necessary for any fraud to occur. They called their theory the **fraud diamond**.

Some studies has argued that pressure, rationalisation and even capacity are not directly observable (Wolfe & Hermanson, 2004; Dorminey, et al., 2010; Dorminey, et al., 2012; Albrecht, 2014). The contribution of this study is the recognition that these three elements are equally not controllable by the accounting profession in terms of fraud prevention and detection. Pressure, rationalisation and capacity are outside the control of the accounting profession because they are external in nature and there is no right yardstick of measuring these three elements.

The only element that can be controlled and measured by the accounting profession is **Opportunity.** However, how can the accounting profession control opportunity by continuing to rely on the present auditing reporting model? The forensic accounting system developed through this research might enable the accounting profession to control the opportunity for committing financial statement fraud by addressing the audit concern, educating auditors in some element of forensic accounting skills, ethics and principles, and closing the loopholes in accounting and auditing standards. By controlling the opportunity (which is the doorway to fraud), it stands a better chance to detect and reduce financial statement fraud.

Even in the presence of high pressure, capability and rationalisation, of there is no opportunity; fraud will not take place. When the opportunity to commit financial statement fraud, is reduced to the minimum, it will deter agent (management) from engaging in financial statement fraud because the risk of discovery will be very high.

### 8.1.4 Contribution 4: Forensic Accounting Research

Most studies in the field of accounting and forensic accounting have been dominated by the use of quantitative methods (DiGabriele & Huber, 2014) and has often been informed by the underlying functionalism and what might be ‘loosely’ termed a positivistic theoretical perspective.

The principle of 'objectivity' governs accounting information. Objectivity in an accounting sense implies that accounting information is prepared and reported in a neutral way and by all standard without bias. The sub-conscious belief, perhaps, being that objectivity can only be achieved by following the positivist paradigm in its epistemological sense has dominated the mainstream accounting research and was subsequently adopted in the field of forensic accounting.

This study has argued that through a neo-empiricist theoretical perspective, objectivity is achievable in an epistemological sense and therefore contributes to forensic accounting research. In the field of forensic accounting research, no known previous studies seem to have adopted this theoretical perspective. However, there is a strong argument that the actors' subjective realm is central to the development of a theoretical understanding of fraud and its detection. However, through the findings of this study and the step by step approach of how neo-empiricism was deployed, there is now an argument to put forward that this theoretical perspective can lead to objective truth.

This research has challenged the domination of the positivist paradigm in forensic accounting research which limits the type of questions and methods of previous studies. With interest now growing in forensic accounting research, there is a need for more diversity in methodology. The adoption and usage of neo-empiricist inductive approach for this study have contributed to forensic accounting research literature and offered another theoretical perspective to forensic accounting researchers who are interested in accessing the subjective realm of their research subject and those who want to use this to explain an aspect of behaviour in an objective manner theoretically.

### 8.1.5 Forensic Accounting Nuclear

The development of the Forensic Accounting Nuclear is another notable contribution of this thesis to forensic accounting literature. The Forensic Accounting Nuclear bring together the Agency Triangle, the Fraud Triangle and the Forensic Accounting System Triangle into a unified framework which I called the Forensic Accounting Nuclear which is depicted in figure 8.2.

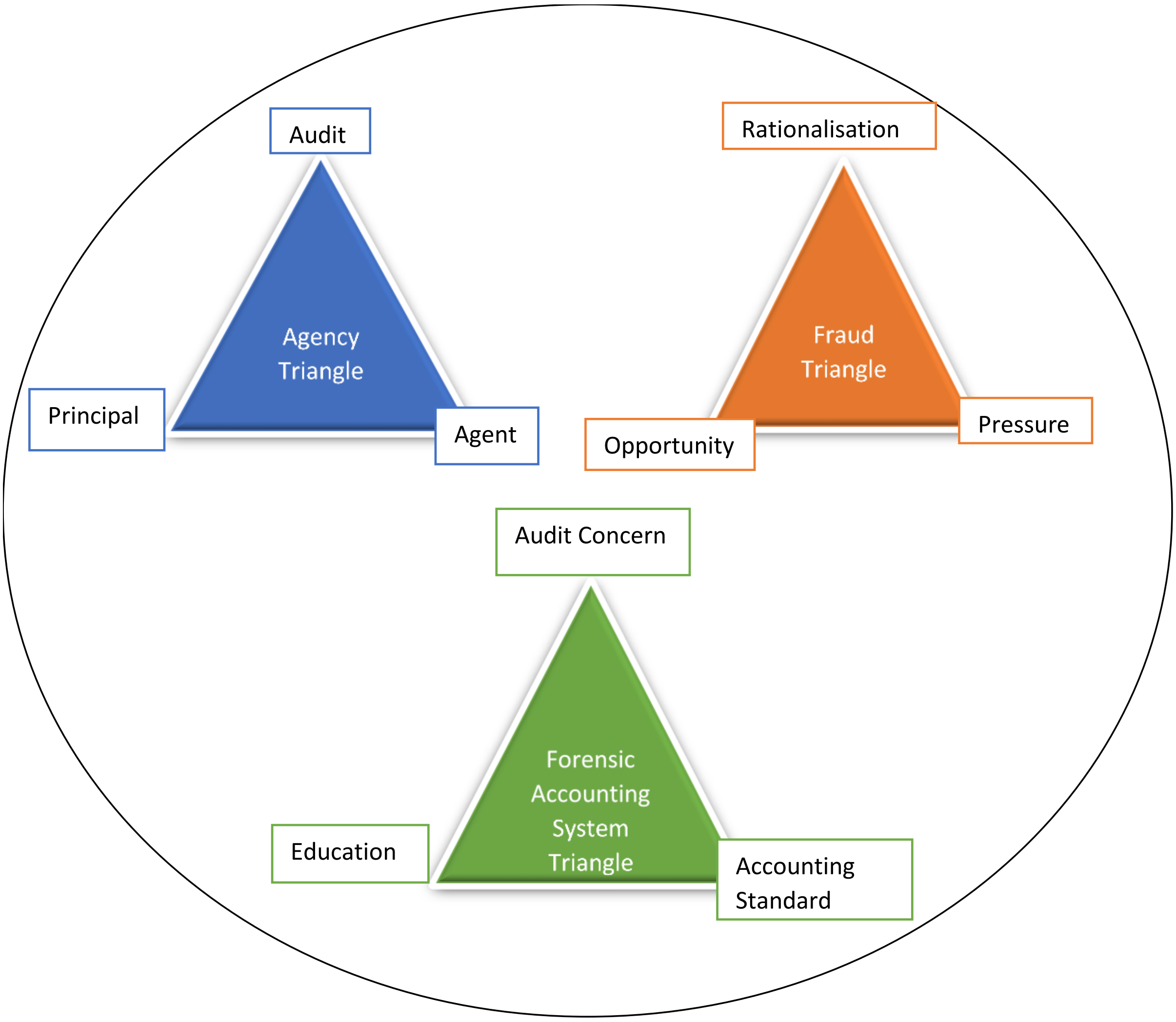



Figure 8.2: Forensic Accounting Nuclear

Source: Author's Development

This nuclear provide a good framework for understanding the role of audit in an agency relationship that exist between the principal and the agent and also explains the motivation for fraudulent practices by the agent, while the Forensic Accounting System provides the framework for detecting financial statement fraud by the auditors who in theory are meant to protect the interest of the principal (stakeholders).

## 8.2 Contribution to Practice

This study equally has made some vital contribution to accounting practice.

### 8.2.1 Contribution 1 – Audit Practice

The current audit practice is weak in detecting fraudulent financial reporting partly because external auditors are not mandated to detect fraud in financial statements. The findings of this thesis have a practical solution to the menace of fraudulent financial reporting confronting the accounting profession. The mandate of auditors needs to change. Auditors need to share the responsibility for the detection of fraud in the financial statements.

Relegating the detection of fraud responsibility only to those charged with management and governance negates the purpose of audit in the agency relationship that exists between the principal (shareholders) and the agent (management). Moreover, placing this responsibility for fraud detection on the management is like asking the agent to police his/her own affairs.

Hence, this study has demonstrated that a change of mandate on the part of the external auditor to include the detection of fraud in the financial statement has the tendency of reducing financial statement fraud. This change will enhance audit quality and potentially close the audit expectation gap and make the audit fit for the future.

### 8.2.2 Contribution 2 – Auditors' Education

The United Nations (2015) in their Doha Declaration suggested the importance of education when they declared that "Education is fundamental to the prevention of crime and corruption and to the promotion of a culture of lawfulness that supports the rule of law and human rights while respecting cultural identities."

This thesis has a practical implication for how professional accountants (external auditors) are educated. The current education of professional accountants is geared towards recognising departures from accounting standards. By adding forensic accounting and anti-fraud training into the accounting curricula, auditors will be better equipped to identify fraud red flags leading to a higher chance of fraud detection in financial statements. This improvement, in turn, will restore investors' confidence and trust in the combined financial reporting process and corporate governance.

### 8.2.3 Contribution 3 – Accounting Standards and Regulations

This research has contributed to how the accounting profession can improve accounting and auditing standards. Findings showed that accounting standards and regulations have a crucial role to play in reducing financial statement fraud. Specifically, those grey areas in accounting standards that allow firms to engage in creative accounting will need to be closed.

The concept of materiality is another crucial contribution of this thesis to accounting practice. While the accounting standard has defined materiality, it is not defined by the auditing standard. Materiality has been a tool in the hand of management to engage in fraudulent activities. With data analytics and artificial intelligence, it might be the right time for the accounting profession to drop this concept of materiality. This part of the findings of this study was discussed extensively in section 7.1.1. This might sound controversial to the accounting and auditing profession. However, based on the breakthrough in information technology and the findings of this study, the accounting profession can do without this concept. This concept of materiality should be thoroughly investigated by future research in order to make it fit for purpose.

### 8.2.4 Contribution 4 – The Forensic Accounting System

The successful execution of the three elements (audit concern, education and standard) of the forensic accounting system will contribute to accounting practice and lead the accounting profession away from the current accounting system of reporting and procedural auditing. The new forensic accounting system has the capacity to reduce financial statement fraud and can equally serve as fraud deterrence mechanism.

While these three elements are not mutually exclusive, each element could be implemented individually. However, the emphasis should focus on how auditors are educated. This is the suggested approach to enable the accounting profession to transition from the current mind and skill sets and the system of reporting and procedural auditing to a forensic accounting system.

Therefore, theoretically, the forensic accounting system provides a useful framework for understanding the role of audit in the financial reporting process and capital market, and how this system can enhance audit quality through its three elements (audit concern, education and standard).

Practically, the improvement made to audit concern, education and standard is expected to reduce fraudulent reporting, audit failures and unexpected collapse of companies. When management is aware that they are being watched and have the understanding that auditors are better trained to identify not only departure from accounting standards but fraudulent conducts. It could serve as a deterrence to fraudulent behaviour and thus reduce financial statement fraud. This, in the long run, will restore investor confidence in the financial reporting process and corporate governance.

## 8.3 Chapter Summary

This chapter has highlighted the contribution of this thesis to accounting theory and practice as well as forensic accounting research. The theoretical contribution of creating, the Agency Triangle can help practitioners, academics and policymakers understand the importance of audit to the capital market while the forensic accounting system can now be used to enhance audit quality through the three elements (audit concern, education and standard) of the forensic accounting system.

In the practical sense of it, the forensic accounting system is believed to have the capacity to reduce financial statement fraud, audit failures and the sudden collapse of companies through its predictive properties. The forensic accounting system might also serve as a deterrence to fraudulent conduct since management will be aware that auditors are now better trained about fraud and its detection.

The successful implementation of the three elements of the Forensic Accounting System will move the accounting profession away from the current system of reporting and procedural auditing to the forensic accounting system thereby restoring investors' confidence in the combined financial reporting process and corporate governance.

Methodologically, the adoption of a neo-empiricist inductive approach by this research has illustrated an alternative methodology for forensic accounting research as this approach can also lead to objective truth by assessing the 'subjective realm' of research subjects and theoretically using such findings for conceptualisations of how the research subjects make sense of their lived experiences.

The next chapter will bring this thesis to a conclusion. Some recommendations will be suggested for standard setters and policymakers. Suggestions for future research will also be highlighted.

# CHAPTER NINE: CONCLUSIONS AND AREAS FOR FURTHER RESEARCH

## 9.1 Overview

This thesis foundation is premised on three broad conclusions in auditing, occupational fraud and abuse and forensic accounting literature:

1. Fraud, particularly financial statement fraud is costly (ACFE, 2018), and occurs regularly (Carnes & Gierlasinski, 2001; Bressler, 2012). Financial statement fraud have a negative impact on the capital market and a range of stakeholders (Hogan, et al., 2008; Holm & Zaman, 2012); from reduction in shareholders wealth to loss of jobs and pension (Colby, 2013), down to jeopardising the going concern of enterprise (Centre for Audit Quality, 2010) and eroding investors' confidence and trust in the financial reporting process and corporate governance (Hogan, et al., 2008; Smith & Crumbley, 2009; Bhasin, 2013; Mueller, et al., 2015).
2. The knowledge base and skill set of auditors have come under severe questioning in the wake of the series of accounting scandals and audit failures that have occurred in recent time (Bhasin, 2013). There have been claims that the skill set of auditors is not adequate in the fight against financial deception (Wells, 2002; Sikka, 2009; Silverstone, et al., 2012; Chui & Pike, 2013).
3. The elevation of forensic accounting to the forefront of the crusade against financial deception has risen to prominence as a result of the inability of auditors to detect fraud in the financial statement (AICPA, 2004; Wolosky, 2004; Chui & Pike, 2013).

The review of literature produced three critical areas that are worthy of further research in developing a forensic accounting system: firstly, the role of audit in the financial reporting framework. Agency theory (Jensen & Meckling, 1976) was utilised in this regard in providing a detailed understanding of the supposed role of audit in the agency relationship that exists between the principal (shareholders) and the agent (management). This led to the development of the agency triangle in this thesis. Secondly, factors responsible for why agents (management) commit financial statement fraud. The fraud triangle theory (Cressey, 1950) and the fraud diamond model (Wolfe & Hermanson, 2004) were used in establishing the motivations for fraudulent conducts by the agent, lastly, how a system shift to forensic accounting can reduce financial statement fraud and reduce the opportunity to commit fraud by the agent (management).

These three areas of research were incorporated into the research questions that were addressed in this study. The findings generated through the interviews conducted with Accounting Academics, Forensic Accountants, External Auditors and Finance Directors in this study were:

### 9.1.1 Research Question One:

*Could the training of professional accountants (particularly auditors of the financial statement) in the forensic accounting skills, ethics, procedures, and principles help reduce the opportunities to commit financial statement fraud by the agent (management)?*

The finding was that the training of external auditors in some elements of forensic accounting could serve as deterrence to the agent in engaging in financial statement fraud. This is because through exposure to forensic accounting skills, ethics, principles and procedures by the auditors, the agent (management) become aware that the risk of discovery of any forms of financial statement fraud is now very high and as such the likelihood of dissuading management from committing financial statement fraud is high.

### 9.1.2 Research Question Two:

*How might the training of professional accountants in forensic accounting skills, ethics, procedures, and principles increase auditors' fraud detection capabilities?*

The finding was that there is a high chance of increasing the fraud detection capabilities of professional accountants (external auditors) through an adjustment of their current education curriculum to include the key elements of forensic accounting skills, techniques, and procedures. The current education and training of external auditors are geared towards recognising departures from accounting standard with little or no emphasis on fraud detection. Including some elements of forensic accounting skills, ethics, principles and procedures in the curriculum of professional accountants (auditors of the financial statement) will increase and improve their ability to spot financial statement fraud and hence detect it. Just as Wolosky (2004) observed that the tension is high, the stake is high. Therefore, it will take more than just accounting and auditing skills to navigate these waters. Hence validating the importance of training accountants in some of these forensic accounting skills.

### 9.1.3 Research Question Three:

*How might the involvement of Forensic Accountants in audit engagement increase the chances of fraud prevention and detection in the financial statement?*

The finding revealed that the involvement of forensic accountants in audit engagement could increase the chances of the audit team in spotting problems and detecting fraud in the financial statement thereby reducing financial statement fraud. It is suggested that the future audit team should comprise a mixture of auditors and forensic accounting experts in order to increase the chances of fraud detection in the financial statement.

## 9.2 Research Purpose: The Forensic Accounting System

The combination of the three research questions addressed in this study was utilised towards developing a forensic accounting system. This new system might be able to guarantee the detection of fraud in the financial statements through its predictive properties and procedures.

This forensic accounting system has three elements which are not mutually exclusive. In order words, these three elements will need to be addressed to increase the chances of fraud detection in the financial statements. However, each element can be addressed per time.

The three elements are Audit Concerns, Education and Accounting Standard. The Audit Concerns have to do with those issues such as agency problem, the role and responsibility of auditors that constitutes an impediment in the fight against financial deception. Specifically, the issue of the mandate of the auditors will need to be addressed to reduce financial statement fraud. Auditors will need to take an increased responsibility regarding fraud detection in the financial statement.

Once the audit concerns have been addressed, the next element that needs to be addressed is how professional accountants, (particularly external auditors) are educated. The current education of auditors has not placed much emphasis on fraud detection (Wells, 2002; Wolosky, 2004; Sikka, 2009). The education of auditors has been geared towards accounting standard. The missing skill sets are those elements of forensic accounting.

Hence, for auditors to do a better job, they will need to be given training in forensic accounting skills, ethics, principles and procedures. The training of auditors in some elements of forensic accounting and the involvement of forensic accountants in audit engagement has the tendencies of increasing the chances of fraud detection in the financial statements which in the long run will lead to a reduction in financial statement fraud, audit failures and corporate collapses.

The last element is the Accounting and Auditing Standards. Once the audit concerns have been addressed and how auditors are educated has changed to include some elements of forensic accounting skills, ethics, principles and procedures, the accounting and auditing standards should not hold the auditors back. The accounting and auditing standards will need to reflect these changes through new regulations and standards that explicitly spelt out the new improved and increased responsibilities of external auditors. One of such regulations that need changing is the ISA 240 which places the sole responsibilities for the prevention and detection of fraud on those charged with management and governance of enterprise. This standard will need to be revised to includes auditors in that responsibility.

Another concept that needs investigation by standard setters is that of materiality. Materiality has been a tool in the hand of management to commit financial statement fraud as this is a subjective concept which has been defined in accounting but not defined in auditing. The findings of this study revealed that materiality limit auditors' ability to detect fraud as management could hide under this concept to perpetuate fraudulent activities. Perhaps, it is high time the accounting profession do away with this concept. With the breakthrough in technology and artificial intelligence, auditors can now police every transaction of companies and do not need to work to any materiality level.

Once these three elements of the forensic accounting system have been addressed, that would have successfully moved the accounting profession away from the current system of reporting and procedural auditing to the new forensic accounting system. This new system has the tendencies of increasing the chances of fraud detection in the financial statements, thereby, reducing financial statement fraud, audit failures and corporate collapses and can equally help in restoring investors' confidence in the combined financial reporting process and corporate governance.

## 9.3 Chapter Synopsis

Following Chapter One, which set out the purpose, context and research question for this study, the Second Chapter reviewed occupational fraud and abuse, auditing and forensic accounting literature. The agency theory (Jensen & Meckling, 1976), the fraud triangle theory (Cressey, 1950) and the fraud diamond model (Wolfe & Hermanson, 2004) were used as theoretical lenses in understanding the role of audit and the motivation for fraudulent conducts. It was found that financial statement fraud diminishes shareholders value and the current audit framework lacks the capacity to reduce the scope of information asymmetry in the agency relationship that exists between the principal (shareholders) and the agent (management). Thus, elevating the importance of forensic accounting in the fight against financial deception to the forefront.

Chapter Three outlined the philosophical underpinning of this thesis (Neo-empiricist Inductive Approach). The research methodology (qualitative research design), data collection techniques and data analysis approach were discussed in this chapter.

The Fourth Chapter presented the techniques for data reduction, data analysis and findings of this thesis. Nvivo software was utilised for data analysis while a general inductive approach was adopted for data analysis. A total of 42 nodes emerged from data analysis with 979 nodes references. Through categorisation of data, these 42 nodes were reduced to eight. Similar categories were later merged leading to the emergence of three main themes of this study (Audit Concern, Education and Accounting Standards and Regulations) which were used towards developing the forensic accounting system.

The Fifth Chapter examined the first discussion chapter (Audit Concerns) of this thesis in detail. Six concerns were identified as critical concerns that affect the present-day audit. These concerns are agency concern, the role of the financial statement, financial statement fraud concern, the role of audit, auditor responsibility and management responsibility. The finding of this chapter revealed that in order to enhance audit quality, these concerns need to be addressed. One key finding that stood out is the responsibility of auditors concerning fraud detection in the financial statement which is transferred to those charged with management and governance according to the International Standard of Auditing 240.

The finding of this thesis revealed that auditors mandate would need to change in order to reduce the incidence of fraudulent reporting. As such, fraud detection in the financial statements ought to be a joint responsibility between those charged with management and governance and the external auditors. This is because the intended role of audit in an agency relationship is to reduce the scope of information asymmetry and to ask management to police their affairs do not add much value to the principal (shareholders).

The Sixth Chapter presented the second theme that emerged from this study (Education). The discussion identified what is currently covered in the current education of professional accountants and the limitations that their curriculum brings in the fight against financial deception. The finding showed that auditors' education is only geared towards recognising departures from accounting standards which can be closely linked to Audit Concerns.

It is because auditors are not currently responsible for the detection of fraud in the financial statement that drives how they are educated. Forensic accounting education proffers a better platform for auditors to be able to detect fraud in the financial statement, as such audit team needs to be well grounded in forensic accounting skills, techniques, principles and procedures to increase their chances of detecting financial statement fraud.

The Seventh Chapter examined the last theme (Accounting Standards and Regulations) that emerged from this study and the development of the forensic accounting system. Accounting and auditing standards both have a role to play towards reducing financial statement fraud. Standards and regulations need to clearly state that now auditors mandate includes the detection of fraud in the financial statement in order to reduce financial statement fraud.

Chapter Five, Six and Seven were used as elements (Audit Concern, Education and Accounting Standards and Regulations) in developing a forensic accounting system.

The three elements are not mutually exclusive; however, each element can be addressed per time. The successful implementation of these three elements will transits the accounting profession from the current system of reporting and procedural auditing that has not increase the detection of fraud to a forensic accounting system.

The Eight Chapter highlighted the contribution of this thesis to accounting theory and practice. Theoretically, the agency triangle will help in understanding the key role of audit in reducing the scope of information asymmetry in an agency relationship that exists between the principal and the agent.

The adoption of the forensic accounting system by the accounting profession might help increase the chances of fraud detection in the financial statements by auditors, which in the long run might reduce financial statement fraud, audit failures and corporate collapses. Thereby, restoring investors' confidence in the financial reporting process and corporate governance.

## 9.4 Policy Implications

This study has implications for policy makers, particularly the Financial Reporting Council. The financial reporting council did a consultation in 2018 on how to improve corporate governance in the UK. While corporate governance needs improvement, there is a need to look beyond corporate governance in the fight against financial deception. One way to do that is through the findings of this study which have now been developed into a Forensic Accounting System.

The adoption of the forensic accounting system by the regulatory authorities proffers a solution to the incidence of fraudulent reporting through the enhancement of audit quality. Once audit quality is enhanced, and the mandate of auditors' changes through legislation and proper education in some elements of forensic accounting, corporate accounting fraud, audit failures and corporate collapses might reduce.

The enhancement of audit quality through a system shift to forensic accounting will complement the existing corporate governance framework. The forensic accounting system has the tendency of serving as fraud deterrence. Since management will be aware that auditors are now better informed about fraud and how and why it is committed, thereby, forcing management of probably behave ethically and should they still want to carry on with any fraudulent activities, the chances of detection are very high in a forensic accounting system.

This study also has implications for accounting professional bodies in the UK on the need to start designing their curriculums to include the fundamental forensic accounting skills, ethics, principles, and procedures in order to help improve their members ability in detecting fraud and reducing fraudulent reporting. The current curriculums of these professional bodies have little or no areas that cover fraud detection mechanisms. This will need to be the new order in this age of information revolution and globalisation.

The UK higher education also have a lot to gain from this study through their accounting degree programs. There is now a need for them to start including some elements of forensic accounting either as a core module or an element of existing modules. As this will help prepare graduates better. Just like the United Nation Doha Declaration (2015) proclaimed, "*Education is fundamental to the prevention of crime and corruption and to the promotion of a culture of lawfulness that supports the rule of law and human rights while respecting cultural identities*."

The more our accounting graduates are aware of what fraudulent conducts are and how to spot the signal and stop fraud from occurring, the better the chances of detecting those fraud. Thereby reducing financial statement fraud and restoring investors faith and confidence in the financial statement.

## 9.5 Areas for Further Research

This research was conducted in the UK at a time when corporate collapses, audit failures and fraudulent reporting appear to be rampant. Future studies can look at a different context. For example, it will be good to get an understanding of the perceptions of stakeholders in countries such as Australia, United States of America, Singapore, Canada and other European countries that have good corporate governance systems on how a system shift to forensic accounting might reduce financial statement fraud.

This study has attempted to develop a forensic accounting system through a Neo-empiricist inductive approach. Future research can put this theory into test by developing some hypothesis and testing whether a forensic accounting system can increase auditors' capacity and capabilities in detecting fraudulent reporting. A cohort of undergraduate accounting students can be used in this regard. One set of undergraduate students can have an enhanced curriculum that includes some elements of forensic accounting while the other set of students should have the standard curriculum used in UK universities. Future research will help solidify the forensic accounting system developed in this study.

Cost and time were two issues that came up in the findings of this study as potential limitations to a forensic accounting system. Future research can look into the implications of a forensic accounting system on the cost of the audit and the time it might likely take to complete an audit in the event of the adoption of a forensic accounting system.

The concept of materiality needs further investigation. Future research can evaluate if the concept is fit for purpose. Furthermore, future research can expand on the number of stakeholders. This study has only utilised four stakeholders (Accounting Academics, Forensic Accountants, External Auditors and Finance Directors). Future research can expand on this number by including shareholders, creditors and politicians.

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# APPENDIXES

## APPENDIX I: RESEARCH ETHICS CHECKLIST (SHUREC1)

This form is designed to help staff and postgraduate research students to complete an ethical scrutiny of proposed research. The SHU Research Ethics Policy should be consulted before completing the form.

Answering the questions below will help you decide whether your proposed research requires ethical review by a Faculty Research Ethics Committee (FREC). In cases of uncertainty, members of the FREC can be approached for advice.

**Please note:** staff based in University central departments should submit to the University Ethics Committee (SHUREC) for review and advice.

The final responsibility for ensuring that ethical research practices are followed rests with the supervisor for student research and with the principal investigator for staff research projects.

Note that students and staff are responsible for making suitable arrangements for keeping data secure and, if relevant, for keeping the identity of participants anonymous. They are also responsible for following SHU guidelines about data encryption and research data management.

The form also enables the University and Faculty to keep a record confirming that research conducted has been subjected to ethical scrutiny.

- For postgraduate research student projects, the form should be completed by the student and counter-signed by the supervisor, and kept as a record showing that ethical scrutiny has occurred. Students should retain a copy for inclusion in their thesis, and staff should keep a copy in the student file.
- For staff research, the form should be completed and kept by the principal investigator.

Please note if it may be necessary to conduct a health and safety risk assessment for the proposed research. Further information can be obtained from the Faculty Safety Co-ordinator.

**General**

**Detail s**

| | |
|---|---|
| Name of principal investigator or postgraduate research student | IFEDAPO FRANCIS AWOLOWO |
| SHU email address | Francis.f.awolowo@student.shu.ac.uk |
| Name of supervisor (if applicable) | Dr. Murray Clark |
| email address | m.c.clark@shu.ac.uk |
| Title of proposed research | **Financial Statement Fraud: The Need for a Paradigm Shift to Forensic Accounting** |
| Proposed start date | 01/10/2015 |
| Proposed end date | 30/09/2019 |
| Brief outline of research to include, rationale & aims (500 -750 words). | **PURPOSE STATEMENT**<br><br>The purpose of this study is to examine the perceptions of Statutory Auditors, Forensic Accountants, Accounting Academics and Accounting Standard Setters (Financial Reporting Council) in the United Kingdom on how a paradigm shift to forensic accounting can help to reduce financial statement fraud. As it stands presently, it appears that the current accounting paradigm which consists of reporting and procedural auditing can no longer guarantee the prevention and detection of fraud in the financial statement.<br><br>**GENERAL BACKGROUND/ RATIONALE OF THE STUDY**<br><br>The unrelenting series of embarrassing financial statement fraud that have occurred over the last two decades calls for greater concern by the accounting profession. These series of embarrassing audit failures are enough to stimulate a paradigm shift in accounting (Gray and Moussalli, 2006; Koh, Arokiasamy, and Suat, 2009; Awolowo, 2014).<br><br>Fraud, particularly that which relates to financial statements is in the news almost every week, if not on a daily basis (Bressler, 2012). Financial statement fraud has been defined as a form of "occupational fraud" **Invalid source specified.**, which involves the "deliberate misrepresentation of the financial condition of an enterprise accomplished through the intentional misstatement or omission of amounts or disclosures in the |

financial statements in order to deceive financial statement users" (ACFE, 2018, p. 10).

The word Paradigm is a vague concept that has different meaning. In relation to accounting, paradigm can be view as a set of principles, concepts, standards, and convention that govern how financial information are presented, reported and verified by the actors in the accounting community. Accounting paradigm can be divided into two; reporting and procedural auditing. Reporting has to do with those principles, concepts and conventions that govern how financial information is represented and reported while procedural auditing involves those principles and standards that govern how financial information are verified by actors in the accounting community.

Recently, some highly successful companies around the world, for example BCCI, Enron, WorldCom, Adelphia, Tyco International, Hertz, Tech Data, IEC Electronics, AIG, Olympus, Tesco and Toshiba, just to mention a few were involved in huge accounting scandals (Farrell, 2015) and while some of these companies collapsed entirely, others filed applications to restate their financial statement (BBC News, 2014), and still others were forced by accounting regulatory authorities to restate their financial statements (Smith, 2015). This kind of occurrence is a serious threat to the integrity of financial reporting and corporate governance system (Smith and Crumbley 2009; Bhasin 2013) and often results in a loss of confidence in the financial reporting process by investors (Smith, 2015).

Financial statement fraud has become a global phenomenon that affects organizations regardless of their size (Bhasin, 2013). Although it is often the practice of the media to report only those high profile fraud of large multinational corporations (ACFE, 2018), this is probably due to the fact that high profile fraud of multinational corporations usually have an enormous negative impact on a company's existence as well as market value **Invalid source specified.**.

The truth is that a huge amount of money is lost to corporate accounting fraud globally (ACFE, 2018). The Association of Certified Fraud Examiners (2014) reports to the nations on occupational fraud and abuse estimated the cost of corporate fraud globally to be $3.7 trillion.

The frequency at which corporate entities collapse nowadays as a result of financial statement fraud has raised a serious question on whether the current accounting paradigms of reporting and financial controls are working (Smith, and Crumbley 2009; Koh, Arokiasamy, and Suat 2009).

The reoccurrences of financial statement fraud and audit failures made Golden (2011) to once state in his address to senior accounting students at the University of Texas, that *“people wonder, investors wonder, legislators wonder, they wonder what is it that auditors really do. They wonder what value auditors bring. My worry is that the profession of auditing (both internal and external) may someday become irrelevant to the capital market"*.

In a similar vein, Wells (2005 p. 13) contends that “*As a group CPAs are neither stupid nor crooked. But the majority are still ignorant about fraud… for the last 80 years; untrained accounting graduates have been drafted to wage war against sophisticated liars and thieves. And as multi-billion dollar accounting failures have shown, it hasn't been much of a fight”*.

The same Wells (2005 p. 13) went on to argue that *“accountants don’t currently learn what motivates fraudulent conduct, how to spot the signals, how to prevent fraud from occurring and much more…as it stands now, auditors are fighting a war without being taught how to recognise the enemy. Until that changes, expect more heavy casualties”*.

The key concern of this research is how long will the accounting profession keep shying away from the responsibility of providing credible financial reporting, just as the courts have often argued in most accounting scandal cases the cardinal objective of a financial statement audit is to certify that the financial statements are free from material misstatement resulting from either errors or fraud (Britten, 2011).

| | |
|---|---|
| | Moreover, there is evidence that the perception of the business community, government, regulatory authorities and even the courts is that a higher degree of expertise is required to analyse current complex financial transactions and events (DiGabriele, 2011). As a result of this, forensic accounting is required to be thrown into the forefront of the crusade against financial deception (Rezaee , et al., 2006).<br><br>And looking critically at Forensic accounting which involves the application of accounting, tax, auditing, finance, quantitative analysis, investigative mind-set and research skills, and an understanding of the legal process for the purpose of identifying, collecting, analysing, and interpreting financial or other data or issues in connection with litigation and non-litigation services (Rezaee , et al., 2006), there might be some possible way out of the embarrassment financial statement fraud brings to the accounting profession. |
| Where data is collected from human participants, outline the nature of the data, details of anonymisation, storage and disposal procedures if these are required (300 -750 words). | Semi-structured interview will be utilized in collecting interview data from accounting academics, forensic accountants, auditors and accounting standard setters in the United Kingdom. Semi-structured interview is one of the techniques used in collecting qualitative data by setting up a situation that allows a respondent the time and scope to talk about their opinion on a particular subject (Berg, 2009).<br><br>The concern and interest of this study is to get a detailed and deep picture of the interviewee's perception and understanding about how a paradigm shift to forensic accounting can reduce financial statement fraud. Semi-structured interviews have been widely recognized as being able to facilitate this aim. This is because qualitative interviews provide us with a means to explore the points of view of our research subjects (Silverman, 2005). As a member of the accounting community here in the UK, I already have an established contact for my data collection. Equally my MRES dissertation which I used as a pilot study for this research also gave me access to a number of key individuals who are relevant to this research |

| | |
|---|---|
| | *data will be stored on locked and password protected laptop and university computer* |
| Will the research be conducted with partners & subcontractors? | **No**<br><br>(If **YES**, outline how you will ensure that their ethical policies are consistent with university policy.) |

**1. Health Related Research involving the NHS or Social Care / Community Care or the Criminal Justice System or with research participants unable to provide informed consent**

| **Question** | | **No** |
|---|---|---|
| 1. | Does the research involve?<br><br>• Patients recruited because of their past or present use of the NHS or Social Care<br>• Relatives/carers of patients recruited because of their past or present use of the NHS or Social Care<br>• Access to data, organs or other bodily material of past or present NHS patients<br>• Foetal material and IVF involving NHS patients<br>• The recently dead in NHS premises<br>• Prisoners or others within the criminal justice system recruited for health- related research*<br>• Police, court officials, prisoners or others within the criminal justice system* | **No** |
| 2. | Is this a research project as opposed to service evaluation or audit?<br>*For NHS definitions please see the following website* http://www.nres.nhs.uk/applications/is-your-project-research/ | N/A |

If you have answered **YES** to questions **1 & 2** then you **must** seek the appropriate external approvals from the NHS, Social Care or the National Offender Management Service (NOMS) under their independent Research Governance schemes. Further information is provided below.

NHS https://www.myresearchproject.org.uk/Signin.aspx

* Prison projects may also need National Offender Management Service (NOMS) Approval and Governor's Approval and may need Ministry of Justice approval. Further guidance at: http://www.hra.nhs.uk/research-community/applying-for-approvals/national-offender-management-service-noms/

**NB** FRECs provide Independent Scientific Review for NHS or SC research and initial scrutiny for ethics applications as required for university sponsorship of the research. Applicants can use the NHS proforma and submit this initially to their FREC.

**2. Research with Human Participants**

| Question | | Yes |
|---|---|---|
| 1. | Does the research involve human participants? This includes surveys, questionnaires, observing behaviour etc. | **Yes** |
| *Note* | *If YES, then please answer questions 2 to 10* | |
| *If NO, please go to Section 3* | | |
| 2. | Will any of the participants be vulnerable? | **No** |
| *Note* | *'Vulnerable' people include children and young people, people with learning disabilities, people who may be limited by age or sickness or disability, etc. See definition* | |
| 3 | Are drugs, placebos or other substances (e.g. food substances, vitamins) to be administered to the study participants or will the study involve invasive, intrusive or potentially harmful procedures of any kind? | **No** |
| 4 | Will tissue samples (including blood) be obtained from participants? | **No** |
| 5 | Is pain or more than mild discomfort likely to result from the study? | |
| 6 | Will the study involve prolonged or repetitive testing? | **No** |
| 7 | Is there any reasonable and foreseeable risk of physical or emotional harm to any of the participants? | **No** |
| *Note* | *Harm may be caused by distressing or intrusive interview questions, uncomfortable procedures involving the participant, invasion of privacy, topics relating to highly personal information, topics relating to illegal* | |
| 8 | Will anyone be taking part without giving their informed consent? | **No** |
| 9 | Is it covert research? | **No** |
| *Note* | *'Covert research' refers to research that is conducted without the knowledge of participants.* | |
| 10 | Will the research output allow identification of any individual who has not given their express consent to be identified? | **No** |

If you answered **YES only** to question **1,** you must complete the box below and submit the signed form to the FREC for registration and scrutiny.

**Data Handling**

Where data is collected from human participants, outline the nature of the data, details of anonymisation, storage and disposal procedures if these are required (300 -750 words).

The data will be stored on locked and pass worded laptop and SHU computer and will be kept for at least 10 years. Anonymity will be maintained as each interview transcript will be coded with only 1 letter and not the names of the respondents.

If you have answered **YES** to any of the other questions you are **required** to submit a SHUREC2A (or 2B) to the FREC. If you answered **YES** to question **8** and participants cannot provide informed consent due to their incapacity you must obtain the appropriate approvals from the NHS research governance system.

### 3. Research in Organisations

| **Question** | | |
|---|---|---|
| 1 | Will the research involve working with/within an organisation (e.g. school, business, charity, museum, government department, international agency, etc.)? | **Yes** |
| 2 | If you answered YES to question 1, do you have granted access to conduct the research? *If YES, students please show evidence to your supervisor. PI should retain safely.* | No |
| 3 | If you answered NO to question 2, is it because: A. you have not yet asked B. you have asked and not yet received an answer C. you have asked and been refused access. | **A** |
| *Note* | *You will only be able to start the research when you have been granted access.* | |

### 4. Research with Products and Artefacts

| **Question** | | **No** |
|---|---|---|
| 1. | Will the research involve working with copyrighted documents, films, broadcasts, photographs, artworks, designs, products, programmes, databases, networks, processes, existing | **NO** |
| 2. | If you answered YES to question 1, are the materials you intend to use in the public domain? | |
| *Notes* | *'In the public domain' does not mean the same thing as 'publicly accessible'.* <br>– *Information which is 'in the public domain' is no longer protected by copyright (i.e. copyright has either expired or been waived) and can be used without permission.* <br>– *Information which is 'publicly accessible' (e.g. TV broadcasts, websites, artworks, newspapers) is available for anyone to consult/view. It is still protected by copyright even if there is no copyright notice. In UK law, copyright protection is automatic and does not require a copyright statement, although it is always good practice to provide one. It is necessary to check the terms and conditions of use to find out exactly how the material may be reused etc.* <br>*If you answered YES to question 1, be aware that you may need to consider other ethics codes. For example, when conducting Internet* | |

| | | |
|---|---|---|
| 3. | If you answered NO to question 2, do you have explicit permission to use these materials as data?<br>*If YES, please show evidence to your supervisor. PI should retain permission.* | |
| 4. | If you answered NO to question 3, is it because: A. you have not yet asked permission<br>B. you have asked and not yet received and answer<br>C. you have asked and been refused access.<br>*Note You will only be able to start the research when you have been* | **A/B/C** |

**Adherence to SHU policy and procedures**

| **Personal statement** | |
|---|---|
| I can confirm that:<br>− I have read the Sheffield Hallam University Research Ethics Policy and Procedures<br>− I agree to abide by its principles. | |
| **Student / Researcher/ Principal Investigator (as applicable)** | |
| Name: IFEDAPO FRANCIS AWOLOWO | Date: 15/12/2015 |
| Signature: F. AWOLOWO | |
| **Supervisor or other person giving ethical sign-off** | |
| I can confirm that completion of this form has not identified the need for ethical approval by the FREC or an NHS, Social Care or other external REC. The research will not commence until any approvals required under Sections 3 & 4 have been | |
| Name: MURRAY CLARK | Date: 15/12/2015 |
| Signature: | |
| Additional Signature if required: | |
| Name: | Date: |
| Signature: | |

**Please ensure the following are included with this form if applicable, tick box to indicate:**

| | Yes | No | N/A |
|---|---|---|---|
| Research proposal if prepared previously | ☐ | ☐ | ☐ |
| Any recruitment materials (e.g. posters, letters, etc.) | ☐ | ☐ | ☐ |
| Participant information sheet | ☐ | ☐ | ☐ |
| Participant consent form | ☐ | ☐ | ☐ |

| | | | |
|---|---|---|---|
| Details of measures to be used (e.g. questionnaires, etc.) | ☐ | ☐ | ☐ |
| Outline interview schedule / focus group schedule | ☐ | ☐ | ☐ |
| Debriefing materials | ☐ | ☐ | ☐ |
| Health and Safety Project Safety Plan for Procedures | ☐ | ☐ | ☐ |
| Data Management Plan* | ☐ | ☐ | |

If you have not already done so, please send a copy of your Data management Plan to rdm@shu.ac.uk
It will be used to tailor support and make sure enough data storage will be available for your data.

**Completed form to be sent to Relevant FREC. Contact details on the website.**

## APPENDIX II: PARTICIPANT INFORMATION SHEET

**Project Title:**

**Financial Statement Fraud: The need for a Paradigm Shift to Forensic Accounting**

You are being invited to take part in a research study. Before you decide whether or not to take part, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully.

**What is the purpose of the study?**

The purpose of this study is to examine the perception of key stakeholders in the accounting profession on a how a paradigm shift to forensic accounting can reduce financial statement fraud. As it stand, the current accounting paradigm of reporting and procedural auditing can no longer guarantee the detection of fraud in the financial statement.

**Why have I been invited to Participate?**

You are invited to participate in this study as you are:

- An Accountant
- Forensic Accountant
- Regulator
- Accounting Academic

**Do I have to take part?**

It is up to you to decide whether or not to take part. If you decide to take part, you will be given this information sheet to keep and be asked to sign a consent form. Your involvement in the project is voluntary and you are free to withdraw consent at any time, and to withdraw any unprocessed data previously supplied without giving reasons.

**What will happen to me if I take part?**

You will participate in an in-depth interview, scheduled for approximately one hour. The date and time will be scheduled at a convenient time for you. You can also choose to have a face-to-face or Skype interview, whichever is more convenient. The interview will be audio recorded with your permission.

**What are the possible benefits of taking part?**

Your participation will help in building a strong framework for reducing the incident of fraud in the financial statement. Moreover, as this research is being carried out as part of my partial fulfilment of a degree of Doctor of Philosophy (PhD), you will be helping out by your participation in getting this award.

**Will what I say in this study be kept confidential?**

All information collected will be kept confidential. Confidentiality, privacy and anonymity will be ensured in the collection, storage and publication of research material. Data generated by this study will be securely stored in devices and locations that are encrypted and password protected. The data generated in the course of the research will be kept securely in paper and electronic form for a period of ten years after the completion of a research project.

**Who has reviewed the study?**

This research has been approved by the university Research Ethics Committee of Sheffield Hallam University.

**Contact for Further Information**

For further information, contact me: Ifedapo Francis Awolowo
Francis.f.Awolowo@student.shu.ac.uk , Doctoral Researcher - Sheffield Business School, Unit 5 Science Park, Sheffield Hallam University, Howard Street, Sheffield. S1 1WB. Telephone 07778091414

Should the participant have any concern about the conduct of the study they can contact the chair of the university Research Ethics Committee on researchsupport@shu.ac.uk

**Thank you**

**Date**

## APPENDIX III: PARTICIPANT CONSENT FORM

Full title of Project:

**FINANCIAL STATEMENT FRAUD: THE NEED FOR A PARADIGM SHIFT TO FORENSIC ACCOUNTING**

Name, position and contact address of Researcher:


**Ifedapo Francis Awolowo**

Doctoral Researcher

Unit 5, Science Park,

Sheffield Business School

Sheffield Hallam University,

Howard Street, Sheffield. S1 1WB

Email: Francis.F.Awolowo@student.shu.ac.uk

Tel. xxxxxx


| *Please answer the following questions by ticking the response that applies* | *yes* | *no* |
|---|---|---|
| 1. I have read the Information Sheet for this study and have had details of the study explained to me. | ☐ | ☐ |
| 2. My questions about the study have been answered to my satisfaction and I understand that I may ask further questions at any point. | ☐ | ☐ |
| 3. I understand that I am free to withdraw from the study within the time limits outlined in the Information Sheet, without giving a reason for my withdrawal or to decline to answer any particular questions in the study without any consequences to my future treatment by the researcher. | ☐ | ☐ |
| 4. I agree to provide information to the researchers under the conditions of confidentiality set out in the Information Sheet. | ☐ | ☐ |
| 5. I wish to participate in the study under the conditions set out in the Information Sheet. | ☐ | ☐ |
| 6. I consent to the information collected for the purposes of this research study, once anonymised (so that I cannot be identified), to be used for any other research purposes. | ☐ | ☐ |

______________________________

**Name of Participant** **Date** **Signature**

______________________ ____________ ______________________________

**Name of Researcher** **Date** **Signature**

## APPENDIX IV INTERVIEW SCHEDULE

Thank you for agreeing to participate in this interview, your time and responses is highly appreciated. Your anonymity is guarantee and you have the right to withdraw at any point. This interview is part of my data collection process for my PhD at Sheffield Hallam University.

For any concern, you can contact me on xxxxxxxxx or my Director of studies Dr Murray Clark on xxxxxxxx.

The purpose of this research is to examine the perception of stakeholders within the accounting profession on how a change from the current accounting practice to forensic accounting can reduce financial statement fraud.

In doing this, I will be asking you questions around the themes of this research with the main theme being forensic accounting and financial statement fraud detection.

This interview will be recorded and transcribed, and I hope to share my findings with you once this project is completed.

**Financial statement fraud**

- Can you please briefly tell me your accounting background?
- Do you have any concern about financial statement fraud and the accounting profession generally?
- Can you share some of those concerns?

**Forensic Accounting**

- What is your understanding about forensic accounting?
- Is there is any relationship between forensic accounting and fraud detection/fraud investigation?
- What is that relationship?
- Do you think forensic accounting can reduce financial statement fraud?

**Role of audit**

- What is the role of financial statement audit?
- What are your views on audit minimising the agency problem (conflict of interest)?

- Do you think financial statement audit can reinforce trust between shareholders and management?
- Has the current audit practice been able to fulfil the assurance and investigative role of audit?

**Auditors' responsibility**

- Do you think auditors are responsible or should be responsible for fraud detection in the financial statement?
- Why do auditors find it difficult to detect fraud?
- What factors do you think could be responsible for auditors' inability to detect fraud?
- Do you think the accounting/auditing standards have contributed in any way to auditors' inability to detect fraud?

**Education**

- Do you think the current training of professional accountants (Particularly Auditors) is adequate to detect fraud?
- Do you think auditors' have trainings in fraud detection and investigation techniques?
- Do you think the current accounting/auditing practice and standards constitute any impediment to auditors' fraud detection capacity?

**Curriculum**

- Do you think there is need for improvement in the current accounting curriculum to include fraud detection and fraud investigation methods?
- What do you think of forensic accounting being included in the training of professional accountants?

**Paradigm/ Change**

- Do you think a forensic audit of financial statement can reduce the opportunity to commit fraud by management?
- Do you think that including some element of forensic accounting into the training modules of professional accountants can reduce financial statement fraud?

- If so, what aspect of forensic accounting should be included?
- How can the accounting professional move forward with regards to fraud detection in the financial statement?

## Appendix V: List of "Big Four" Accounting firms fines in the UK between late 2017 and mid 2019

| Name of Audit Firm | Year | Fine | Company Involved |
|---|---|---|---|
| KPMG | 2019 | £5M | Co-operative Bank audit |
| KPMG | 2019 | £12.5M | BNY Mellon |
| KPMG | 2019 | £6M | ESM Limited |
| KPMG | 2019 | £6M | Equity Red Star |
| PWC | 2019 | £4.6M | Redcentric |
| Deloitte | 2019 | £4.2M | Serco |
| PWC | 2018 | £5.1M | RSM Tenon |
| KPMG | 2018 | £2.1M | Ted Baker |
| KPMG | 2018 | £7M | Lloyd’s of London underwriter |
| PWC | 2018 | £6.5M | BHS |
| KPMG | 2018 | £3.2M | Quindell |
| PWC | 2017 | £5M | Connaught audit |
| KPMG | 2017 | £4.8M | Miller Energy audit |
| EY | 2017 | £1.8M | Tech Data audit |