



Forensic Anonymous Communication and Fraud Detection in Public Polytechnics in Oyo State, Nigeria

Amina Alopeke ALLI¹, Samuel Taiwo ABEY², Godwin Emmanuel OYEDOKUN³

^{1,3}Department of Management and Accounting, Faculty of Management and Social Sciences, Lead City University, Ibadan, Nigeria

²Department of Tax Investigation and Enforcement, Federal Inland Revenue Service, Nigeria, 7222068

KEYWORDS: Anonymous communication, Forensic accounting, Forensic auditing, Fraud detection, Public polytechnics

JEL Classification: G21, O32, R22

Corresponding Author:

Godwin Emmanuel OYEDOKUN

Publication Date: 23 Dec.-2024

DOI: [10.55677/GJEFR/07-2024-Vol01E7](https://doi.org/10.55677/GJEFR/07-2024-Vol01E7)

License:

This is an open access article under the CC BY 4.0 license:

<https://creativecommons.org/licenses/by/4.0/>

ABSTRACT

This study explored the impact of forensic anonymous communication on fraud detection in public polytechnics in Oyo state, Nigeria. Data was gathered from both primary and secondary sources using a well-structured closed ended questionnaire. The study employed survey research design. The population of the study comprised 50 staff of the bursary unit of each of the four (4) public polytechnics in Oyo state, Nigeria to make up the total of 200 participants. Findings from the simple percentage analysis revealed that anonymous communications are suitable forensic investigation techniques because they are efficient and transparent; and facts and figures can be gotten within a reasonable period. The study then concluded that Anonymous Communication with the combination of two or more techniques, should be used by forensic accountants, forensic legal practitioners, and all other similar parties so as to have flexibility to test different methods in the practice of forensic accounting and fraud investigation. Therefore, the study recommended that the use of anonymous communication methods should be encouraged as well as extensive awareness should be put in place for the use by the public as well as quick responses to queries should be encouraged; government should demonstrate more interest in forensic accounting for monitoring and pursuing suspected perpetrators in fraud cases which is critical in higher institutions, particularly among bursary staff and management; that forensic accounting techniques should be deployed to help prevent and reduce fraudulent activity.

INTRODUCTION

Dada and Jimoh (2020) stated that fraudulent diversion of public funds has been in existence for a long time in Nigeria and if not curbed, might result to worse state of the economy than one we are currently experiencing. Eze and Okoye (2019) identified different measures have been implemented by the federal government to lessen, if possible, eliminate series of fraudulent activities, but still its existence keeps extending which makes the general public lose confidence in the government and even the country. Esu and Inyang (2009) opined that public sector in Nigeria has suffered setbacks largely due to ineffective and inefficient management, adding that there is a general opinion that most of the public enterprises have failed to deliver on the purposes for which they were established. Forensic accounting practice is an important tool used for fraud detection in public sectors in Nigeria. The administrative competence of performance of some public sectors in Nigeria is faulted by poor credibility of some of this ministries/departments/agencies (Azih & Okoli, 2015). There are over estimation of government projects, cases of abandoned projects, payment of salaries to ghost workers amongst others. It is an aspect of forensic accounting that refers to the practical steps Certified Fraud Examiners or Forensic Accountants take to gather evidence relevant to alleged fraudulent activities. As stated by Oyedokun (2020) a forensic investigator is frequently hired to evaluate, interpret, summarize, and explain complicated financial and business concerns in a way that is both understandable and adequately substantiated.

The 21st century's financial statements are drawn with motives of window dressing where the preparer tends to hide atrocities committed during the financial year, which has been on headline for years now, a good example of which is the case of Enron and WorldCom. This has caused people wonder if there are really auditors or whether auditors play a genuinely important part in the transparency and avoidance and detection of fraudulent act. These new problems have popularized the term forensic reporting (Adeshina, Elenin, Ajetunmobi, Ilogho & Asinwa, 2020); Bassey, 2018). An organization needs to show its scorecard at the end of a business cycle to its owners and other stakeholders.

In addition to evaluating companies' ability, productivity and effectiveness in achieving their assigned goals, the company needs to show its scorecard at the accounting year-end to its owners and other stakeholders. The increasing fraud and financial corruption in developing and developed world countries, has their negative impact on economic, social and political development. In addition to depletion of many human and economic resources and capabilities, pressure has increased on the government to develop areas that work to reduce fraud and financial corruption. To this plight, forensic accounting works to detect and prevent fraud and financial crimes of all kinds and providing range of other important services such as business evaluation, assistance in settling disputes and carry out internal investigations.

The misuse of institution's funds and the prevention of increasing misappropriation of funds through failing to carry out regulatory inspection has placed pressure on competent accountants and legal practitioners to look for an appropriate way to mitigate fraud and other criminal act in the public sector. However, forensic accounting has the job of bridging the tertiary education system gap in order to control financial crimes. The question therefore is, has forensic accounting techniques helped in the preventions of fraud in the public polytechnics. This question becomes pertinent as many tertiary institutions have been in debt as a result of high rate of fraudulent practice. This research work is an effect of combined forensic accounting techniques in fraud detection in public polytechnics in Oyo state, Nigeria.

The objectives of the study are to

- i. examine the effect of forensic anonymous communication on Fraud detection in Public Polytechnics in Oyo State, Nigeria.
- ii. evaluate the influence of Beneish model in Fraud detection in Public Polytechnics in Oyo State, Nigeria.

LITERATURE REVIEW

Fraud in Tertiary Institution

In the view of Appah and Inini (2021) many establishments fail to report cases of fraud to the suitable authorities for concern of negative public image of their establishments. Once cases of revenue leakages in tertiary institutions discovered however do not seem rumored and wear down professionally, a repeat of such act is certain to happen once more. However, the extent to which the alleged dishonorable act is perpetrated has proven on the far side cheap degree of doubts depends on the flexibility of the schools to involve the services of consultants like rhetorical accountants as a part of their control system. Others causes of revenue leakages and alternative dishonorable acts area unit poor security arrangement such as employee's negligence no thanks to poor supervising, lack of technical information, apathy². Appah & W. Inini2021. Pressure with no incentives, dangerous management practices, poor remuneration significantly in things wherever remuneration don't adapt with the economic realities of the time, poor accounting and accounting, and finally faulty personnel policies and employee's unfaithfulness.

Legal Background

Forensic Litigation consist of forensic investigation which has to do with evidence collected from investigation carried out on behalf of the client, inspection of the entity's equity and use of the failure analysis test for evidence in a court case (Oyedokun, 2013). Litigation provides assistance of an accounting nature in issues involving existing or pending litigation. It primarily addresses challenges of estimating economic damages (Orsaa & Ezekiel, 2017). A typical litigation support task would be assessing the economic loss caused by a breach of contract. One of the main categories that have witnessed the use of forensic investigation is litigation (Oyedokun, 2013).

Forensic accounting is a field of accounting that investigates a company's financial records to find evidence of misbehavior or fraud. It also includes a detailed study of the firm's books, which can be used as evidence in court if necessary. Forensic accountants are regarded as financial detectives that look through every documented transaction to try to find any unlawful or fraudulent activities. The procedure has a wide range of uses, ranging from matrimonial disputes to commercial disputes and shareholder disputes (Oyedokun, 2016).

There are typically three stages of the forensic accounting investigation process, which are:

Investigation

According to Haruna (2020) the forensic accounting investigation process begins when a client approaches an accountant to express concerns about suspected fraud in their business. The accountant will also note why the customer is concerned so that they can address the major issue in the case and follow the conditions of their guidance. There is typically some uncertainty about what forensic accounting investigation steps occur during an investigation. Sometimes, the accountant will simply evaluate known facts, but other circumstances require researching the unknown and digging deep to gather evidence (Haruna, 2020).

In a typical instance, the accountants will use a combination of the forensic accounting investigative tactics outlined above to gather vital information from the company, its director, workers, and third parties. The most thorough investigations will aim to use a wide range of sources and search out a consistent pattern of evidence that identifies the culprit and reveals exactly what happened.

Reporting

Reporting is the second forensic accounting investigation stage that occurs during a case. The accountants will primarily report to their client on the status of the case and any evidence discovered. Any conclusions drawn should be strong enough to survive cross-examination and rigorous analysis (Ashibogwu & Olawoyin, 2021). The reporting must also be proactive, including recommendations (supported by facts) to prevent future instances of fraud. If any evidence of money laundering is uncovered within the company, it must also be reported. The law mandates this. Investigators must also take care not to tell anyone about their suspicions.

Litigation

If the parties involved in the case are unable to reach an agreement, the forensic accounting investigation process concludes with litigation (Oyedokun, 2013). A forensic accountant can serve as an expert witness. This can be incredibly essential to the client and signify the difference between winning and losing. Any information obtained by the accountant is referred to be opinion evidence rather than factual proof. The accountant will also expect some type of cross-examination from the opposing party, therefore meticulous preparation is required. In the words of Ashibogwu and Olawoyin (2021) Forensic accountants has a wide range of activities, but they broadly fall into two categories that are litigation and investigation. Here work revolves between the two aspects. They are either investigating an issue where they apply their accounting knowledge or testifying before a judge the case at stake. Therefore, the works of a forensic accountant can be summarized into those two broad categories of litigation and investigation. However, they perform several activities ranging from tax fraud, bankruptcy and money laundering, among others.

Litigation Support means solving a case through the use of legal means such as a court. The parties present the economic issue involved in the plan to try and win the case (Oyedokun, 2013). When such a case involves a forensic accountant expert, they calculate both parties' damages to resolve the stalemate. Litigation support aims to bring agitating parties into an agreement before the issue escalates to a court case. The case may escalate to a court case, where the forensic accountant is called to the courts as an expert witness to testify. Forensic accountants are expected to understand the court's rules and make concise and clear testimony that courts easily understand before making rulings (Ashibogwu & Olawoyin, 2021). To ensure court proceedings are carried well, the forensic accountant must be skilled in legal matters and understand legal standards. Besides, they should be able to understand the standards of the courtroom. They should also communicate the findings in a more precise and straightforward way to understand the laypeople. Gain should have the ability to calculate damages.

Investigation involves going back to the book of accounts to examine whether a criminal activity occurred or not (Haruna, Awogbade & Ibrahim, 2021). Either employees or employers of various organizations always perpetrate such criminal practices. They include; employee or employer theft cases, money laundering and falsifying records. For civil matters, the forensic investigation involves bringing to light hidden assets, mainly if the case encompasses secession or divorce. It also includes investigating financial crimes committed in business or by individuals. Such case usually forces forensic accountants to trace, and discover malpractices in the line of financial accounting (Haruna, Awogbade & Ibrahim, 2021). The problem identified is then analyzed to give a clear picture of the situation, then a report is written, in explanation of the same. Where discovery simply means identifying and tracking down the sources of any suspicious accounts. At the same time, analysis is the backbone; it requires determination of the crime committed by fraudsters through crunching of numbers.

Finally, the report requires that the forensic accountants make clear and specific evidence of the study's findings before presenting them before an authority.

According to Haruna (2020) fraud appears to get the greatest amount of attention, there are several other common applications for forensic accounting. After acknowledging the need for a forensic accounting credential other than the currently widely recognized Certified Fraud Examiner (CFE) designation, the American Institute of Certified Public Accountants (AICPA) announced a new credential in 2008 for CPAs who focused on forensic accounting and litigation support. The Certified in Financial Forensics (CFF) credential officially took effect in September 2010, and the AICPA defined forensic accounting as an essential foundation of knowledge encompassing all specific practice areas or applications.

Bankruptcy, Insolvency, and Reorganization

Forensic accountants represent the debtor by retaining the individual or company anticipating or already in bankruptcy, or the creditors by retaining those individuals or entities that must be paid. The responsibilities may include assisting the trustee in managing financial affairs, hunting for hidden assets, detecting pre-bankruptcy transfers, recovering resources and assets to satisfy creditors, or performing business appraisals in order to help in the bankruptcy case. Creditors that want to know if there are any extra assets or if any payments were made just before filing may engage forensic accountants. Each creditor expects to collect less than the whole amount due, as a result, the more monies and assets that can be identified and delivered to the trustee, the greater the

possibility of creditors receiving payment. Unfortunately, bankruptcy fraud is rampant, and the forensic accountant's function frequently involves verifying and confirming both the disclosures and the claims.

Computer Forensic Analysis

Computer forensics has two main applications: the preservation and retrieval of electronic information for evidence reasons, and electronic discovery for litigation support. Today, more transactions are conducted through the internet in both corporate and social situations. Files containing valuable information and evidence are stored somewhere other than typical computer and server hard disks. Technology advances toward computers, in which information is stored and accessed via the Internet; the actual location of the data will exist outside of the business, and most likely outside of the country. The latest technologies, such as Blackberries, iPhones, iPads, computers, notebooks, and cell phones, can all connect to the Internet and send electronic data. Understanding the various sorts of electronic information that could exist, what form and format it takes, where it can be found and accessible, and, most importantly, how to get access to it may be the most critical component in winning a lawsuit or establishing your case (Oyedokun, 2024).

Context of Damage Calculation

Damage calculations are commonly used in two contexts: litigation (lawsuits) and insurance claims. Beginning with litigation, a party believes it has suffered a loss of some sort. This loss may be caused by a physical incident, such as a fire or theft, or by the actions or inactions of another person or organization. In every case, the aggrieved party (known as the plaintiff) commences litigation (hires an attorney to file a lawsuit) against another party (known as the defendant), attempting to obtain damages (money) from the defendant for loss. The plaintiff's claim may be basic and clear, or it may need complex computations. It is prevalent for one or both parties to engage the service of a forensic accountant to determine the amount of possible or actual damages. The client may utilize the calculations and counsel to assess whether losses were actually suffered, whether action is initiated based on the damages, and, throughout the course of litigation, to negotiate a settlement in lieu of a trial. Insurance claims work similarly: a party perceives it has incurred some form of loss and, depending on the insurance coverage it has, files an insurance claim to recover the loss. The loss could also be caused by a physical event, such as a fire, flood, or theft, or by another party's acts or inactions. In both contexts of damage calculations, there is a risk of fraud and inaccuracies. It is usual for parties to include objects, expenses, and calculations in their damages claim that are either irrelevant to the loss at issue or unsupported. In reality, baseless and purposely exaggerated insurance claims are prevalent; hence, the necessity for insurance fraud investigators. Forensic accountants are frequently hired to generate, examine, and disprove submitted damage figures in both litigation and insurance claims. To support and corroborate the information included in the damage assessment, the forensic accountant would seek all supporting and confirming material, potentially performing on-site inspections and conducting witness interviews. These are measures that are common to individuals who specialize in fraud investigations.

Revenue Generation in Nigerian Tertiary Institutions

Revenue assortment is usually outlined as financial gain, that an organization receives from its traditional business activities, typically from the sale of products and services to customers. Revenue is known as turnover. Some corporations receive revenue from interest, dividends or royalties paid to them by alternative corporations. Revenue refers to business financial gain generally, or it should consult with the quantity, during a unit of measurement, received throughout a period. For the age once there have been fewer universities within the country and the oil revenue was massively accessible, the federal provided all the funding for operations and capital development wants of the schools. Again, given the large economic misfortunes facing the government, created worse by the recent world monetary crises, the challenge of inadequate funding of the schools has become critically revealing.

Every university, whether federal, state, or private, is urged to participate in the creation of critical access to IGR due to the valuable support it provides. In Federal Universities, a minimum of 10% of total annual sources comes from IGR. However, the funding Gap in higher education and the place of IGR available literatures, agreed that there is a funding gap that requires new creative means to fill, if the students would not have to bear the full burden of the cost of education. This has given rise to the present high emphasis on IGR. Long list of IGR sources for the federal and state universities include consulting services, seminars and workshops, commercial activities for profit, patents and partnerships with industry. Private universities have leveraged on tuition fees, private fund-raising initiatives and consulting to generate revenues to keep the universities running.

Forensic accountants are indeed an effective tool for strengthening the independence of auditors in the university system considering the analytic approach and sophisticated approaches to investigation of fraudulent acts. Another significant role of forensic accounting in the University system is that it is important tools that can be employ to detect frauds such as leakages in revenue accruable to the institutions scientifically and accurately. With the use of technological devices, a forensic accountant can easily detect financial fraud perpetrated by either, account staff, management and their associate thereby preventing corporate failure. Their interview technique to evidence gathering is a sure way to achieve this aim. Although, corruption and embezzlement have been major problems across the globe, Nigeria is not an exception where different corporate businesses in the country and the public sector are rife with such practices. Interestingly, the Nigerian governmental agencies still make efforts to fight corruption, but the problem has been steadily growing over the years primarily because of the socioeconomic, political, and administrative factors.

Furthermore, the country's rank on corruption index is still high and is becoming worse every year. Therefore, this research is to examine the perception of the accounting students on forensic accounting education in the university. This study attempts to address this issue aiming to contribute to knowledge through highlighting the awareness and acceptance, as previous literature did not pay much attention to assess the level of awareness and acceptance of a multidisciplinary field among the academics. Additionally, the majority of the previous literature was conducted in the developed countries while less research was found in the developing countries. We further believe that assessing the awareness and acceptance of forensic accounting among the academics in the developing countries is significant for developing an international model for forensic accounting education and extend forensic accounting literature as well.

Forensic Investigation

The Association of Certified Fraud Examiners (2024) defines forensic accounting as the use of skills in potential or existing civil or criminal disputes, utilizing commonly accepted accounting and auditing concepts, to determine losses of profit, income, property, or harm. Estimates of internal controls, fraud, and other issues requiring the incorporation of accounting skills into the legal system. Forensic accounting is a broad category of professional practice that provides fraud investigation services. A forensic accountant plays an important role in finding, preventing, and prosecuting persons involved in criminal activities like financial misrepresentation, money laundering, and identity fraud (Honigsberg, 2020). Abdulrahman (2019) also defined forensic accounting as accounting principles and procedures used in legal challenges. Forensic accounting refers to the use of analytical and investigative abilities to address financial concerns in accordance with judicial requirements. Accounting, auditing, and investigation skills are used in forensic accounting to give expert support in legal cases (Kolawole, Salman, Durodola, Babatunde & Igbekoyi, (2018). According to Oyedokun (2020) Forensic investigation is a branch of forensic accounting that involves the use of specialist investigative abilities in carrying out an investigation in such a way that the results can be used in court. A forensic investigation may be inadmissible in court in accounting, medicine, engineering, or some other discipline (Oyedokun, 2024).

In court, a fraud investigator may serve as an expert witness, consultant, trier of fact, special master, court-appointed expert, referee, arbitrator, or mediator. The fraud investigator's report is an essential piece of evidence. The fraud report should not be accusatory or conclusive regarding guilt. It is vital that the report's tone is neither provocative nor discriminatory. Fraud trials can be either civil or criminal. In either situation, the fraud investigator's responsibility is to review pertinent materials, records, and authoritative literature related to the matter at hand. Direct and cross-examination questions will be posed, and the fraud investigator is responsible for answering these questions clearly and concisely (Yakubu & Oyedokun, 2021).

Forensic Accounting Techniques

Forensic Anonymous Communication

Anonymous Communication denotes the sending of information, tips, and ideas that could aid the prosecution of fraudsters without the revelation of identity. Anonymous tips come in a wide range of variety and several channels. They are addressed to various individuals and groups within or outside the entity. Anonymous communication tip includes comments from suggestion box, emails, anonymous phone calls and letters, bulletin posts, written confirmation from debtors or/and creditors and fax messages (Ezenwafor & Udukeke, 2019; Oyedokun, 2024).

Forensic anonymous communication, therefore, refers to the investigation of communication activities conducted under conditions of anonymity or pseudonymity. It involves techniques and methodologies to identify, trace, and analyse digital evidence associated with anonymous online activities. This field is particularly relevant in criminal investigations, intelligence gathering, and cybersecurity (Oyedokun, 2022).

Beneish Model

This model is an amazing instrument in rhetorical accounting research. Messod Daniel Beneish, an accounting professor at Indiana University, developed the Beneish model. The variables used in this model were obtained from the business entity's record and profit or loss statement. The Beneish Model enables rhetorical accountants to evaluate corporate financial accounts from several perspectives. According to the model, the following variables have a high potential for detecting financial data manipulation by business entities, Daily sales in assets index, quality index, total accruals to total assets index, leverage index, sales, general and administrative expenses index, sales growth index, depreciation index, and profit margin index. The Beneish Model demonstrates that higher daily sales of assets, higher accruals, higher reductions in gross margins, and higher quality are signs of economic data manipulation (Mbasiti, Jugu & Okwoli, 2017; Oyedokun, 2024).

Continuous Control

Continuous Control is a tool forensic accounting technique used to gather evidence of fraud. Processes for continuous control are centered on audit departments, branches, customers, and agency owners (Oyedokun, 2024).

THEORETICAL FRAMEWORK**Fraud Diamond Theory (FDT)**

According to Oyedokun (2013) Wolfe and Hermanson has an expanded version of the Fraud Triangle Theory first presented the Fraud Diamond Theory (FDT). In this theory, Wolfe and Hermanson added the capability to the three initial fraud elements of the Fraud Triangle Theory (FTT) (Oyedokun, 2013). They opined that capability is essential to translate perceived pressure or incentive, opportunity and rationalization to commit fraud. Therefore, Fraud is unlikely to occur in the absence of the fourth criterion (capacity). In other words, a fraudster must possess the knowledge and competence to conduct fraud. According to Oyedokun (2013) the aspects of FDT are interconnected, and it is doubtful that a person could conduct fraud without all of them. However, the added aspect, capability, distinguishes the FDT of Wolfe and Hermanson from the FTT of Cressey. A person's capability refers to having the required characteristics, skills, and abilities to conduct fraud. It is where the fraudster perceives a specific fraud opportunity and can make it a reality (Oyedokun, 2013; Oyedokun, 2024). Position, intelligence, ego, compulsion, deception, and stress are all supporting components of capability.

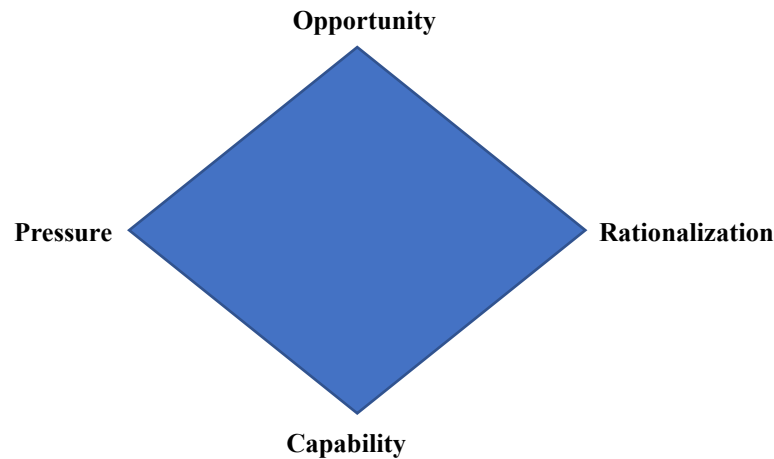


Figure 2.2: Fraud Diamond

Jacob (2021) investigated the effect of forensic accounting on financial fraud management in Nigeria's public sector. Primary data and was collection method was employed, using a well-structured questionnaire administered to two hundred and fifty respondents from EFFC, ICPC, Office of the Accountant General, Office of the Auditor General and other practicing accountants in the country. The data were examined using descriptive statistics and regression analysis. The data demonstrated that forensic accounting procedures improve fraud management. Furthermore, the study discovered that forensic accounting has a significant influence on fraud detection and prevention, while forensic litigation has a significant positive effect on the recovery of funds lost to fraud.

Mbasiti, Gyang and Ojaide (2021) assessed the extent to which forensic accounting techniques serve as a panacea for preventing revenue leakages in federal universities in Nigeria was examined. The study revealed that using data analysis tools has a positive impact on income leakages in Nigerian federal institutions. The study advised that forensic accounting data analysis techniques be used in Nigerian federal universities to help reduce income leakages in the system and that relevant authorities assist in ensuring that this is done. Also, forensic accounting technologies should be deployed and applied to prevent revenue leakages.

Sagir, Junaidu, Kabir and Umar (2021) explored impact of educational, legal, and behavioral factors on the applicability of forensic accounting in Nigeria's public sector. It was discovered that behavioral, educational, and legal aspects are all favorably associated to the use of forensic accounting in the states. The study made note of the success that can arise in applying forensic accounting services, the educational, legal, and behavioral factors must be given special consideration. It was then recommended that all state and federal educational institutions (universities, colleges of education, and polytechnics) offering accounting and related courses should be compelled by their respective regulatory bodies to introduce courses related to forensic accounting into their curricula.

Edward (2021) assessed the impact of forensic accounting on financial fraud detection in deposit money banks in Nigeria. The study sampled 100 staff from 10 banks out of the 15 listed deposit money banks on the Nigerian Stock Exchange for the period 2016-2020. A survey research design was adopted focusing on a definite person(s), grup(s), organization or issue(s). Data were generated through primary sources by the administration of a questionnaire to 1,305 respondents. The questionnaires were dully structured using five points Likert scale methods. Multiple regression techniques were employed to analyze the data with the aid of a statistical package for social sciences (SPSS) version 20. The outcome indicates that forensic accounting techniques have a positive and significant impact on financial fraud detection in deposit money banks in Nigeria.

Arumona, Lambe and Bama (2021) investigated the effects of forensic accounting investigation on public sector financial crimes in Nigeria. The population of the study cut across all public institutions in Nigeria. Forensic accounting investigation was the independent variable proxies by prosecution and convictions. The dependent variable was financial crimes measured by bribery and corruption cases in the public sector during the study period. Data were sourced from the secondary sources from the compendium

of cases compiled by the Independent Corrupt Practices Commission (ICPC) for the period of 21 years (2000-2020) with 15 firm-year observations. The study adopted an ex-post factor research design, while ordinary least squares (OLS) regression techniques were utilized for data analysis with the support of the statistical package for social sciences (SPSS) version 10. The findings showed a positive and significant effect of forensic accounting investigation on financial crimes in Nigeria.

Okoye, Nwoye, Akuchi and Onyema (2020) examined the impact of litigation support services on fraud reduction in firms registered on the Nairobi Securities Exchange (NSE). The analysis included all firms listed on the NSE. The study selected the sample frame using a non-probability sampling (purposive sampling) technique. Primary data were acquired from purposefully selected employees of the aforementioned organizations. The data was analyzed using descriptive and inferential statistics with the help of the Statistical Package for Social Sciences (SPSS) version 25 and Statistics Data (STATA) version 13 analytical tools. The results of the study revealed that litigation support services have significant correlations with fraud mitigation.

Olayinka and Oyedokun (2024) evaluated the influence of data mining and computer-assisted auditing software (CAAS), as well as the usage of anonymous communication, on financial fraud detection in the Oyo State Local Government Council. To collect comments from Local Government officials, the researchers used a descriptive research methodology. The study's populations included all of Oyo State's local governments. The study used a structured questionnaire and key informant interviews in all of Oyo State's local governments. The responses were evaluated using both descriptive and inferential techniques. The findings demonstrated a positive assessment of the impact of data mining techniques on financial fraud detection in the local government council, as well as a generally positive perception of the usefulness of CAAS in detecting and uncovering financial fraud in the local government. Furthermore, it found a mixed view among local government employees about the efficiency of anonymous communication as a whistleblower tool for discovering financial fraud. Based on the findings, this study concluded that the use of data mining and CAAS significantly contributes to the detection of financial fraud within the local government council. Additionally, promoting an anonymous reporting culture and communication channels can empower individuals to report suspicious activities without fear of retaliation, facilitating the identification and prevention of financial fraud. The report proposed that the local government council explore and prioritize the adoption and exploitation of data mining techniques, computer-assisted auditing software (CAAS), and encourage the use of anonymous communication channels, which can develop a culture of reporting and whistleblowing.

METHODOLOGY

The study was anchored on Survey research design, which was in the form of a well-structured closed ended questionnaire. The population of the study comprised 50 staff of the bursary unit of each of the four (4) public polytechnics in Oyo state, Nigeria. These tertiary institutions comprise of The Polytechnic Ibadan, Ibadan, The Oke-Ogun Polytechnic, Saki, Adeseun Ogundoyin Polytechnic, Eruwa, and The Oyo state College of Agriculture and Technology, Oyo. These bursary staff totaled 200 in all. Purposive sampling techniques employed in qualitative investigations The source of data adopted in this study is primary source. Data was gathered from both Primary and secondary sources. The study adopts simple percentage as method of data analysis and also use T – test statistics to test the hypothesis.

PRESENTATION OF DATA

Demographic Data Analysis

Table 1: Gender Distribution of the Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	10	76.9	76.9	23.1
	Female	3	23.1	23.1	100.0
	Total	13	100.0	100.0	

Source: Researchers, 2024

Table 2: Age Distribution of the Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below 30	0	0	0	30.7
	30-39	4	30.7	30.7	84.5
	40-49	7	53.8	53.8	100.0
	Above 50	2	15.4	15.4	100.0
	Total	13	100.0	100.0	

Source: Researchers, 2024

Table 3: Year of Experience

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0-10	2	15.3	15.4	69.3
	11-20	9	69.2	69.2	84.6
	21 and avove	2	15.3	15.4	100.0
	Total	13	100.0	100.0	

Source: Researchers, 2024

Table 4: Academic Qualification

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	O'level	0	0	0	0
	OND/NCE	0	0	0	92.3
	B.Sc /HND	12	92.3	92.3	100.0
	MBA	1	7.7	7.7	100.0
	Total	13	100.0	100.0	

Source: Researchers, 2024

Presentation of Research Questions

Research Question One: How can Beneish model assist in Fraud Detection in Public Polytechnics in Oyo State, Nigeria? The table below will explain the above research question

Table 5: Forensic Accounting Technique is a tool used to curb most misappropriation of assets in the institution.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	0	0	0	0
	Disagree	0	0	0	38.4
	Agreed	5	38.4	38.4	100.0
	Strongly agree	8	61.5	61.5	100.0
	Total	13	100.0	100.0	

Source: Researchers, 2024.

Research Question Two: Can forensic anonymous communication help in investigating Fraud Detection in Public Polytechnics in Oyo State, Nigeria? This is answered in the table below.

E. Forensic Audit

Table 6: Forensic audit enhances effective intervention of the legal services in the institution.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	1	7.7	7.7	7.7
	Disagree	1	7.7	7.7	15.4
	Agreed	6	46.1	46.1	61.5
	Strongly agree	5	38.5	38.5	100.0
	Total	13	100.0	100.0	

Source: Researchers, 2024

Table 7: Forensic audit involves using auditing techniques to qualify economic damaged pursuant to existing or pending litigations in the institution.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	0	0	0	0
	Disagree	0	0	0	38.4
	Agreed	5	38.4	38.4	100.0
	Strongly agree	8	61.5	61.5	100.0
	Total	13	100.0	100.0	

Source: Researchers, 2024

Table 8: Forensic audit is activities that is designed to prepare a forensic accountant, including document review, interviewing witnesses in the institution.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	1	7.7	7.7	7.7
	Disagree	0	0	0	61.5
	Agreed	7	53.8	53.8	100.0
	Strongly agree	5	38.5	38.5	100.0
	Total	13	100.0	100.0	

Source: Researchers, 2024

Presentation of Hypothesis

Hypothesis 1:

There is no significant relationship between Beneish model techniques and fraud detection in Public Polytechnics in Oyo state Nigeria.

One-Sample Test

	Test Value = 0					
	T	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
There is no significant relationship Beneish model techniques and fraud detection in Public Polytechnics in Oyo state Nigeria.	11.547	13	.000	2.06667	1.7006	2.4327

Source: Researchers, 2024

Hypothesis 2:

There is no significant relationship between forensic anonymous communication and Fraud Detection in Public Polytechnics in Oyo State, Nigeria.

One-Sample Test

	Test Value = 0					
	T	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
There is no significant relationship between forensic anonymous communication and Fraud Detection in Public Polytechnics in Oyo State, Nigeria.	16.443	13	.000	1.62000	1.4220	1.8180

Source: Researchers, 2024

DISCUSSION OF FINDINGS

This study discussed various scholarly definitions of forensic accounting techniques, and fraud investigation. Forensic accounting is a scientific accounting method for the detection, resolution, analysis, and presentation of fraud cases that can be used in court (Oyedokun, 2018; Kolawole, Salman, Durodola, Babatunde, & Igbekoyi, 2018). Analysis from this study shows that 69% of the respondents have between 11 and 20 years of work experience in their various fields. This shows that the respondents have enough experience, which makes them suitable for this research, and their responses can be assumed to be valid. The analysis also shows that 11.6% of the respondent have attended training or/and hold a certificate in Forensic and Fraud Examination while 68.4% of the respondent does not. It can then be concluded that the majority of the respondents have not been trained in forensic accounting and fraud investigation. The majority of the respondents are master’s degree holders and are a member of relevant professional institutes/associations such as ICAN, ANAN, ACCA, CITN, CIS, CIBN, NIM, CIA, NBA, and so on.

CONCLUSION AND RECOMMENDATIONS

According to the first research question the use of the Beneish Model analysis in forensic accounting techniques and fraud detection gives broad knowledge of what happened in the previous year before the investigation by providing comparative figures. Ratio Analysis, and Continuous and Forensic Anonymous Communication come after the aforementioned. Also, it was observed that

forensic anonymous communications are suitable forensic investigation techniques because they are efficient and transparent; and facts and figures can be gotten within a reasonable period.

According to the second research question which seeks to ascertain the theories or models with which forensic examiners are conversant and to find out which of the theories or models best explain forensic accounting techniques using forensic anonymous communication. Analysis of the data gathered revealed White-Collar Crime Theory, Theory of the Fraud Diamond, and Fraud Triangle Theory are the most applicable theories that buttress forensic investigation. The results show that the Theory of Fraud Diamond is most appropriate in forensic accounting because it guides forensic accountants on factors to watch out for while investigating fraud. The theory, assesses the four elements that influence a person to commit fraud, namely pressure, opportunity, rationalization, and capability. That is, it encompasses all the factors that make people involved in fraudulent practices. The Fraud Diamond Theory takes into consideration both accounting and non-accounting events that could lead to the conclusion that fraud has been committed and by who. The Fraud Triangle Theory was found to encompass the core areas of fraud. The theory further reveals that for fraud to occur, there is pressure in form of one need or the other that cannot be met and there is a window to exploit in form of opportunity and a rationale which is otherwise known as justification to engage in the act. The study's findings demonstrated that computer-assisted auditing and the interview approach had a considerable impact on fraud prevention in Nigerian tertiary institutions.

From the findings of this study, therefore, the following are recommended:

- i. The government should demonstrate more interest in forensic accounting for monitoring and pursuing suspected perpetrators in fraud cases which is critical in higher institutions, particularly among bursary staff and management.
- ii. that forensic accounting techniques should be deployed to help prevent and reduce fraudulent activity;
- iii. the use of forensic anonymous communication methods should be encouraged as well as extensive awareness should be put in place for the use by the public as well as quick responses to queries should be encouraged;
- iv. The need for organizations to use the services of forensic accountants, as forensic accounting now appears as one of the strategic and dynamic tools for the management of all sorts of corruption;
- v. Professional bodies should continue to encourage specialization in forensic accounting among the professional practices.

REFERENCES

1. Abdulrahman, S. (2019). Forensic accounting and fraud prevention in Nigerian public sector: A conceptual paper. *International Journal of Accounting & Finance Review*, 4(2), 13-22.
2. Adeshina, K., Elenin, O., Ajetunmobi, O., Ilogho, S. & Asinwa, O. (2020). Does forensics adult influence fraud control? Evidence from Nigerian deposit money banks. *Banks and Bank Systems*, 15(2), 214-229.
3. Appah, E. & Inini, W. (2021). Forensic investigation and mitigation of occupational fraud in the Nigerian public sector. *Journal of Accounting and Financial Management*, 7(1), 26-44.
4. Arumona, J., Lambe, I. & Bama, J. O. (2021). Effects of forensic accounting investigation on public sector financial crimes in Nigeria. *Bingham International Journal of Accounting and Finance*, 2(1), 01-17.
5. Ashibogwu, N. K. & Olawoyin, R. O. (2021). Forensic accounting techniques: Tools for fraud mitigation. *Journal of Forensic Accounting & Fraud Investigation*, 6(1), 40-60.
6. Association of Certified Fraud Examiners (ACFE), (2024). *Fraud examiners manual (Intentional)* Association of Certified Fraud Examiners (ACFE). London: McGraw Publishers.
7. Azih, N. & Okoli, B. E. (2015). Forensic accounting as a veritable tool for efficient management of state owned public sectors in Ebonyi state: The accountants perspective. *British Journal of Education*, 3(8), 55-62.
8. Basse, E. B. (2018). Effect of forensic accounting on the management of fraud in microfinance institutions in Cross Rivers state. *Journal of Economics and Finance*, 9(4), 79-89.
9. Dada, S. O. & Jimoh, F. B. (2020). Forensic accounting and financial crimes in Nigeria public sector. *Journal of Accounting and Taxation*, 12(4), 118-125.
10. Edward, I. A. (2021). Impact of forensic accounting on financial fraud detection in deposit money banks in Nigeria. *African Journal of Accounting and Financial Research*, 4(3), 74-119.
11. Esu, B. B. & Inyang, B. J. (2009). A case for performance management in the public sector in Nigeria. *International Journal of Business and Management*, 4(4), 98-105.
12. Eze, E. & Okoye, (2019). Forensic accounting and fraud detection and prevention in imo state public sector. *Accounting and Taxation Reviews*, 3(1), 12-26.
13. Ezenwafor, J. I. & Udukeke, O. F. (2019). Utilization of data mining and anonymous communication techniques for fraud detection in large scale business organisations in Delta state. *British Journal of Education*, 7(11), 74- 86.
14. Haruna, R. A. (2020). Relevance of forensic accounting techniques, accounting numbers and fraud prevention in listed insurance companies in Nigeria. PhD Thesis, Charisma University.

15. Haruna, R. A., Awogbade, A. & Ibrahim, K. M. (2021). Forensic accounting techniques and fraud prevention in listed insurance companies in Nigeria. *Journal of Forensic Accounting & Fraud Investigation*, 6(1), 98-140.
16. Honigsberg, C. (2020). Forensic accounting. *Annual Review of Law and Social Science*, 16, 147-164.
17. Jacob, F. O. (2021). The effect of forensic accounting on financial fraud management in Nigeria's public sector. *International Journal of Innovative Research and Advanced Studies*, 8(7), 27-34.
18. Kolawole, K. D., Salman, R. T., Durodola, S. E., Babatunde, D. & Igbekoyi, E. O. (2018). Determinants of forensic accounting and its effects on alleviation of fraud practices in Nigerian deposit money banks. *Journal of Sustainable Development in Africa*, 20 (1), 331-342.
19. Mbasiti, T. H., Gyang, J. Y. & Ojaide, F. (2021). Forensic accounting techniques: Tools for preventing revenue leakages in Nigerian federal universities. *International Journal of Innovative Science and Research Technology*, 6(5), 1384-1393.
20. Mbasiti, T. H., Jugu, Y. G. & Okwoli, A. A. (2017). Forensic accounting skills and techniques: A panacea for preventing revenue leakages in Nigerian universities. *International Journal of Management Science Research*, 2(1), 2-3.
21. Okoye, E. I., Nwoye, U. J. Akuchi, B. N. & Onyema, A. C. (2020). Effect of forensic investigation techniques in detecting occupational fraud in the public sector: A study of ministry of finance, Anambra state. *International Journal of Innovative Finance and Economics Research*, 8(1), 117-124.
22. Olayinka, M. E. & Oyedokun, G. E. (2024). Effect of data mining, computer-assisted auditing software (CAAS) and the use of anonymous communication on financial fraud detection in local government council of Oyo State, Nigeria. *ISRG Journal of Economics, Business & Management*, 2(1), 71-85, DOI: [10.5281/zenodo.10674720](https://doi.org/10.5281/zenodo.10674720).
<https://isrgpublishers.com/isrgjebm-volume-ii-issue-i-january-february-2024/>
23. Orsaa, D. G. & Ezekiel, H. (2017). Effect of forensic accounting evidence on litigation services in the Nigerian judicial system. *Nigerian Journal of Management Sciences*, 6(1), 104- 113.
24. Oyedokun, G. E. (2013). *An assessment of the role of forensic accountants in litigation support services (An explanatory approach)*. SSRN Electronic Journal.
25. Oyedokun, G. E. (2016). Forensic accounting investigation techniques: Any rationalization? *SSRN Electronic Journal*.
26. Oyedokun, G. E. (2020). *Fundamentals of forensic accounting & fraud examination*. (2nd Edn) OGE Business School Publisher, Ikeja, Lagos.
27. Oyedokun, G. E. (2020). Imperative of Nigerian external reserve: Matters arising. *The Nigerian Accountants*, 51(7), 58-63.
28. Oyedokun, G.E. (2022). Determinants of Forensic Accounting Techniques and Theories: An Empirical Investigation. *Annals of Spiru Haret University. Economic Series*, 22(3), 61-70, doi: <https://doi.org/10.26458/22319Sagir>, L., Junaidu, M. K. Kabir, T. H. & Umar, H. U. (2021). Do behavioral, educational, and legal factors determine the applicability of forensic accounting in the public sector? *Journal of Research in Emerging Markets*, 3(2), 27-43.
29. Yakubu, B. Z. & Oyedokun, G. E. (2021). Enhancing public confidence in audit report of listed companies in Nigeria through forensic audit. *Journal of Forensic Accounting & Fraud Investigation*, 6(1), 83-103.