

Forensic Accounting Practice and Fraud Management in Nigeria Public Sector Entities

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ARTICLE INFO	ABSTRACT
Received: 20 Dec 2024	Fraud and financial crimes remain persistent challenges undermining the effectiveness and credibility of Nigeria’s public sector institutions. Despite the adoption of conventional auditing and internal control mechanisms, the frequency and scale of financial mismanagement indicate that traditional approaches are insufficient to address the growing sophistication of fraud. This study investigates the impact of forensic accounting practices on fraud management in Nigerian public sector entities. Specifically, it explores the role of forensic tools internal control systems, investigative accounting, litigation support, and computer forensics in fraud detection, prevention, and deterrence. The goal is to evaluate whether forensic accounting contributes meaningfully to reducing fraud and enhancing financial accountability within public institutions. The study adopts a quantitative research design using a structured survey administered to a purposively selected sample of professionals across key public institutions, including the Economic and Financial Crimes Commission (EFCC), Independent Corrupt Practices Commission (ICPC), Federal Inland Revenue Service (FIRS), and the Nigerian Financial Intelligence Unit (NFIU). Descriptive and inferential statistical techniques, including correlation and multiple regression analysis, were employed to examine the relationship between forensic accounting practices and fraud management outcomes. Findings from the analysis indicate a statistically significant and positive relationship between forensic accounting practices and fraud management effectiveness. Investigative accounting showed a strong positive correlation with fraud management ($r = 0.71$, $p < 0.01$) and emerged as a significant predictor ($\beta = 0.362$, $p < 0.01$). The overall regression model explained approximately 68% of the variance ($R^2 = 0.68$) in fraud management outcomes. Investigative accounting and litigation support had the most substantial impact on fraud detection and prosecution, while computer forensics played a crucial role in uncovering digital financial crimes. Internal control practices, when reinforced with forensic tools, improved accountability and fraud prevention. However, the study also revealed challenges such as limited skilled manpower, inadequate forensic infrastructure, and resistance from entrenched interests, which hamper the full integration of forensic accounting in public sector governance. The results support the argument that forensic accounting offers a more rigorous and legally grounded alternative to conventional audit processes in addressing fraud. The integration of forensic practices within public sector institutions could strengthen
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transparency, deter unethical behaviour, and improve the recovery of misappropriated funds. Broader implications suggest that adopting forensic accounting could restore public confidence in governance systems and enhance Nigeria's anti corruption drive. The study recommends targeted policy reforms, investment in forensic accounting training, and the development of standardized frameworks for implementation. Future research should explore comparative international models, assess longitudinal impact, and investigate the integration of advanced technologies like blockchain and AI in public sector fraud management.

Keywords: Forensic Accounting Practices, Fraud Management, Public Sector, Litigation support services

1. INTRODUCTION

Fraud continues to be a pressing issue in both private and public sectors worldwide, causing significant economic disruption and loss. This is particularly true for countries facing financial crises and economic challenges, where fraudulent activities undermine economic development, erode public trust, and discourage investment (Toms, 2019). Fraud is broadly defined as the deliberate concealment, deception, or manipulation of facts for personal gain or to cause loss to another party (Mukah, 2020). It manifests in diverse forms, ranging from embezzlement and asset misappropriation to more complex financial crimes. The prevalence of fraud has led to growing interest in forensic accounting practices, which offer targeted solutions to identify, investigate, and mitigate financial irregularities (Ojo-Agbodu et al., 2022).

Forensic accounting, as described by Bassey (2018), is the integration of accounting, auditing, and investigative skills to resolve financial disputes and detect fraud. This specialized field emphasizes objective, evidence-based reporting that can withstand legal scrutiny. By focusing on the examination and analysis of financial data to uncover discrepancies, forensic accountants help organizations improve the accuracy of their financial reporting, protect assets, and deter fraud. Sule et al. (2019) highlight that the application of forensic accounting techniques enhances the credibility of financial statements and restores public confidence in financial governance, especially in high-risk sectors.

In Nigeria, fraud and corruption have long plagued the public sector, eroded government capacity and threatening economic stability. The need for effective fraud management solutions is critical given the magnitude and complexity of fraud in the Nigerian public sphere. Recent high-profile cases illustrate the importance of forensic accounting. For example, forensic audits in 2023 uncovered widespread fraud in Nigeria's oil subsidy program, revealing billions of naira in fictitious claims and kickbacks. This led to heightened public scrutiny, policy reforms, and numerous criminal charges. Similarly, forensic examinations of the Nigerian Social Insurance Trust Fund (NSITF) scandal in 2022 exposed extensive financial mismanagement and led to the recovery of significant sums. These examples illustrate the critical role of forensic accounting in enhancing accountability and governance within Nigeria's public institutions.

Despite the increasing reliance on forensic accounting, fraud continues to persist in the public sector, raising questions about its practical effectiveness. While the theoretical benefits of forensic accounting are well-documented in academic literature, there is a lack of empirical evidence examining its impact on fraud management within Nigerian public entities. This study addresses this gap by assessing how forensic accounting practices have influenced the detection, prevention, and resolution of financial misconduct. Understanding these dynamics is essential for determining whether forensic accounting strategies need to be adapted or refined to achieve better results in Nigeria's unique socio-economic context.

The adoption of forensic accounting in the public sector has proven to be a double-edged sword. While its use has yielded successes, such as the prosecution of high-profile cases and the recovery of misappropriated funds, systemic challenges remain. Forensic accountants frequently encounter institutional resistance, political interference, and a lack of adequate resources, all of which can hinder their effectiveness. By examining these

challenges, this study aims to identify the specific barriers that prevent forensic accounting from reaching its full potential as a tool for fraud management in Nigeria's public sector.

The need for this study is further amplified by the increasing sophistication of fraud schemes. As fraudsters employ more advanced tactics to conceal their activities, forensic accountants must continuously update their skills and methodologies to stay ahead. This includes leveraging technology, data analytics, and cross-border collaborations to combat illicit financial flows and other emerging threats. Given Nigeria's strategic economic importance in Africa, strengthening forensic accounting practices in its public sector could have positive ripple effects across the region, fostering greater transparency and financial stability.

Despite significant progress in the field, there remains a critical need for more comprehensive data on the impact of forensic accounting on fraud management in Nigeria's public sector. Existing studies have predominantly focused on its applications in private enterprises or multinational corporations, with limited attention paid to public sector contexts. By addressing this gap, this research aims to provide actionable recommendations for policymakers, auditors, and forensic practitioners to enhance the effectiveness of fraud deterrence measures. Ultimately, the goal is to examine the effect of forensic accounting practices on fraud management in Nigerian public sector.

Objectives of the Study

The overarching aim of this study is to investigate the impact of forensic accounting practices on fraud management within Nigeria's public sector. The specific objectives are as follows:

- i) To evaluate the influence of internal control systems on fraud management in Nigeria's public sector.
- ii) To assess the role of forensic and investigative accounting in the management and reduction of fraud within the Nigerian public sector.
- iii) To determine the effect of litigation support services on enhancing fraud management practices in Nigeria's public sector.
- iv) To analyse the contribution of computer forensics in improving fraud detection and management in Nigeria's public institutions.

Research Hypotheses

1. Internal Control and Fraud Management

H01: The implementation of internal control systems has no significant impact on fraud management in the Nigerian public sector.

2. Forensic/Investigative Accounting and Fraud Management

H02: Forensic and investigative accounting practices do not have a significant effect on fraud management within Nigerian public sector entities.

3. Litigation Support and Fraud Management

H03: The provision of litigation support by forensic accountants does not significantly influence fraud management in the Nigerian public sector.

4. Computer Forensics and Fraud Management

H04: The application of computer forensics does not have a significant contribution to the detection, prevention, and management of fraud in Nigeria's public sector.

2. LITERATURE REVIEW

Conceptual Framework

Forensic Accounting

Forensic accounting refers to the application of specialized knowledge and investigative skills in the fields of accounting and finance to analyse, interpret, and present financial information in a manner that is suitable for use in legal proceedings. Forensic accountants operate at the nexus of law, finance, and investigation, providing critical support in the detection, prevention, and resolution of financial irregularities, often contributing expert testimony in courts (Alshurafat et al., 2021).

The practice of forensic accounting is characterized by its focus on fact-finding and evidence-based investigation, distinguishing it from other accounting disciplines that are more compliance or reporting-oriented. Bhasin (2020) notes that forensic accountants go beyond the mechanical preparation of financial statements; they engage in deep analytical reviews aimed at detecting discrepancies and fraudulent patterns that are often concealed in routine financial transactions. Their roles span across diverse functions such as fraud detection, asset tracing, quantification of economic damages, bankruptcy investigation, and litigation support (Curtis, 2008).

Though forensic accounting and auditing share a common foundation in financial scrutiny, they diverge significantly in purpose, methodology, and output. Traditional auditing is primarily concerned with expressing an opinion on the truth and fairness of financial statements in line with statutory requirements. It relies heavily on sample testing and materiality thresholds. In contrast, forensic accounting is investigative and often initiated by specific suspicions or allegations. It adopts a no-threshold approach, examining even the minutest anomalies (Van Akkeren and Tarr, 2021).

The strategic importance of forensic accounting in combating financial crimes has catalysed scholarly and institutional advocacy for its integration into formal education and professional training. Eze and Okoye (2019) argue that the absence of forensic content in accounting curricula hinders the readiness of graduates to tackle complex fraud cases. The evolution of financial fraud necessitates a multi-disciplinary knowledge base, incorporating elements of law, criminology, information systems, and psychology alongside accounting.

Litigation Support

Litigation support is a specialized service area within the fields of accounting, law, and finance that involves providing expert assistance in the context of legal disputes. It encompasses a wide range of activities designed to assist attorneys, regulatory bodies, and courts in the resolution of civil, criminal, and regulatory matters (Crain et al., 2019). Litigation support professionals, including forensic accountants and investigators, analyze financial data, reconstruct transactions, quantify damages, and offer expert testimony to support or refute claims made during legal proceedings.

As legal disputes become more financially complex and data-intensive, the importance of litigation support has grown substantially. The need for credible, accurate, and objective financial analysis is essential for informed decision-making by legal professionals and the judiciary. This has led to the increasing collaboration between legal practitioners and professionals from disciplines such as forensic accounting, valuation, and digital forensics (Bhasin, 2020).

Litigation support services can be broadly categorized into pre-litigation, litigation, and post-litigation phases. During the pre-litigation phase, professionals may assist in strategy development, information gathering, and damage estimation. In the litigation phase, they help interpret complex financial issues, assess evidence, conduct forensic analysis, and prepare expert reports. Post-litigation support may include assistance with settlement negotiations, enforcement of judgments, and implementation of court-ordered remedies (Zysman et al., 2012).

The key components of litigation support include:

- i. Financial analysis and valuation
- ii. Damage quantification
- iii. Expert witness services
- iv. Evidence gathering and preservation
- v. Forensic data analysis and e-discovery
- vi. Reconstruction of lost or manipulated financial records

These services are invaluable in cases involving commercial disputes, contract breaches, intellectual property violations, shareholder disagreements, insolvency matters, and financial crimes.

Computer Forensics

Computer forensics, also referred to as digital forensics, is a specialized branch of forensic science that focuses on the identification, preservation, analysis, and presentation of digital evidence stored or transmitted through

electronic devices. It plays a pivotal role in investigating cybercrimes, financial fraud, data breaches, and other forms of digital misconduct. According to the National Institute of Standards and Technology (NIST, 2021), computer forensics involves the use of scientifically proven methods to collect and analyze data in a way that is legally admissible in a court of law.

As the global economy increasingly relies on digital platforms, so has the nature of fraud and criminal activity evolved to include complex cyber schemes. In response, computer forensics has become an essential discipline in criminal justice, corporate investigations, and litigation support. It allows investigators to uncover electronic evidence that may otherwise be concealed, encrypted, or deleted, making it an indispensable tool for contemporary forensic investigations (Vacca, 2022).

The primary objectives of computer forensics are to investigate digital systems for evidence of criminal or unethical activity, preserve the integrity of data throughout the investigation process, and support legal and organizational actions based on factual findings. Its scope encompasses the recovery of data from hard drives, cloud storage, mobile devices, emails, encrypted files, and network logs.

Computer forensics is applied in a variety of settings, including:

- i. Cybercrime investigations (e.g., hacking, phishing, identity theft)
- ii. Corporate fraud detection (e.g., financial manipulation, unauthorized transactions)
- iii. Intellectual property theft and trade secret protection
- iv. Internal misconduct investigations
- v. Litigation and regulatory compliance

Unlike traditional forms of evidence, digital evidence is highly volatile and can be easily altered or destroyed. Therefore, investigators must follow strict protocols to ensure data integrity and admissibility, including chain-of-custody documentation, write-blocking, and bit-by-bit imaging of drives (Casey, 2020).

Fraud Management

Fraud is an intentional deception intended to persuade people or organizations to give up their property or other legal rights. It is the act of dishonestly denying someone something to which they would or may be entitled if the fraud had not been committed (Onuora et al., 2018).

Financial crime in the public sector encompasses a spectrum of illicit activities conducted by individuals or groups to achieve financial gains illegally. These activities include bribery, extortion, illicit enrichment, procurement-related corruption, and money laundering (OECD, 2021). In Nigeria, financial crimes in government ministries, departments, and agencies are often driven by systemic weaknesses, lack of accountability, and poor enforcement of regulatory standards.

Procurement fraud is one of the most common and financially damaging forms of fraud in the Nigerian public sector. It includes practices such as contract inflation, bid rigging, collusive tendering, ghost contracts, and unauthorized contract splitting (Bhasin, 2020). These fraudulent acts are usually facilitated by weak oversight mechanisms, corruption among procurement officials, and lack of transparency in procurement procedures.

Payroll fraud is prevalent in civil service administration and often manifests in the form of ghost workers, dual salary payments, and inflated personnel records. The Integrated Payroll and Personnel Information System (IPPIS) was introduced by the government to curb such malpractices, though its implementation has faced resistance and manipulation in some quarters (Federal Republic of Nigeria, 2007).

Fraud Detection

Fraud detection involves identifying anomalies or red flags that may indicate the presence of deception or misconduct. These could stem from financial statement irregularities, unusual transactions, internal control breaches, or behavioural inconsistencies. Effective fraud detection not only uncovers ongoing fraudulent activities but also contributes to deterrence and system improvement.

Fraud detection involves finding the existence of something odd as well as something that isn't in line with process flow. Crime analysis necessitates the immediate identification of organizations that commit actual or

potential crimes (Honigsberg, 2020). In order to prevent the acquisition of money or property under false pretenses, fraud detection is the collecting of evidence that the forensic investigators have access to regarding specified and suspected acts (Oranefo et al., 2021).

Fraud detection is to safeguard customer and business interests, ensure system integrity and security, and reduce losses brought on by fraud. In many instances, the fraud detection procedure is carried out continuously and automatically, allowing the system to recognize fraud signals and respond to them as soon as possible. By doing this, businesses and organizations may keep customers' trust while minimizing fraud-related losses.

Fraud, as defined by the Association of Certified Fraud Examiners (2022), involves the use of deception to gain an unfair or unlawful advantage. In the public sector, fraud often includes acts such as procurement fraud, payroll manipulation, unauthorized expenditure, and embezzlement. The need for timely and reliable fraud detection is underscored by the significant financial losses and reputational damage fraud can cause to institutions (Button et al., 2019).

Fraud Prevention

Fraud prevention is the proactive stopping of something from happening. It is the process of preventing fraud and fraudulent actions in deposit money banks and other organizations (Afriyie et al., 2022). Fraud prevention is the process of putting a plan into motion to recognize fraudulent banking activities or transactions and prevent them from hurting the client's finances or the financial institution's reputation (Alamry et al., 2022). Fraud prevention strategies are designed to minimize opportunities for committing fraud by addressing the root causes and risk factors associated with it. According to Cressey's (1953) Fraud Triangle Theory, fraud occurs when three elements coexist: pressure, opportunity, and rationalization. Preventive efforts focus primarily on eliminating or limiting the "opportunity" component, as it is the most controllable.

Key pillars of fraud prevention include:

- i. Strong internal control systems
- ii. Ethical leadership and organizational culture
- iii. Fraud risk assessments
- iv. Staff training and awareness programs
- v. Whistleblower mechanisms
- vi. Effective governance and oversight

A robust fraud prevention framework reduces the need for costly investigations and legal processes by fostering an environment where fraud is difficult to perpetrate and easy to detect.

Theoretical Framework

Routine Activity Theory

Routine Activity Theory, proposed by Cohen and Felson (1979), offers a situational approach to understanding crime. This theory posits that crime occurs when three elements converge: a motivated offender, a suitable target, and the absence of capable guardianship. It emphasizes that criminal opportunities arise as part of everyday routines and activities, especially within organizational environments where individuals have access to resources and opportunities to exploit them (Cohen and Felson, 1979).

In the context of financial fraud within the public sector, the theory suggests that employees often exploit systemic vulnerabilities to commit fraud during their regular job activities. For instance, Hooper and Pornelli (2010) argue that the presence of weak internal controls, lack of oversight, and inconsistent enforcement of policies can create fertile ground for fraud. Organizations with poorly monitored systems or a lack of clear reporting channels inadvertently create opportunities for employees to engage in illicit activities.

Nyakarimi and Karwirwa (2015) emphasize that organizations can mitigate routine activity fraud through effective internal controls, including staff rotations, periodic checks, and whistleblowing mechanisms. However, critics like Groff (2008) argue that the theory's narrow focus on situational factors overlooks the influence of broader social, economic, and cultural contexts that may drive criminal behaviour. As such, a

combination of proactive measures, including robust forensic auditing, regulatory compliance, and organizational culture shifts, is necessary to deter fraud in public institutions.

Fraud Diamond Theory

The Fraud Diamond Theory, proposed by Wolfe and Hermanson (2004), expands on the Fraud Triangle by introducing a fourth element: capability. This addition recognizes that while pressure, opportunity, and rationalization are necessary for fraud to occur, the perpetrator must also possess the skill, confidence, and capability to exploit these factors. Capability refers to the specific knowledge, experience, and traits that enable an individual to execute fraud successfully (Wolfe & Hermanson, 2004).

According to Wolfe and Hermanson, certain characteristics increase an individual's likelihood of committing fraud, such as their position within the organization, access to sensitive information, and understanding of control mechanisms. The Fraud Diamond underscores the importance of addressing systemic risks and assessing employees' capabilities and access rights as part of fraud prevention strategies (Okoye et al., 2017).

The theory's relevance to the Nigerian public sector highlights the need for enhanced employee vetting, regular training, and robust monitoring of access and authority levels. Implementing systems to identify potential fraud risks early such as forensic auditing practices can mitigate these threats. Critics, however, argue that focusing solely on individual capability may overlook broader systemic issues, such as organizational culture and regulatory gaps that facilitate fraud. Effective fraud prevention, therefore, requires a multi-faceted approach combining organizational controls, ethical leadership, and comprehensive monitoring systems.

Furthermore, the Nigerian public sector, sophisticated fraud schemes often involve individuals with advanced knowledge of financial systems and bureaucratic processes. Forensic accountants, equipped with investigative, auditing, and legal expertise, are uniquely positioned to uncover these schemes and expose the capabilities of fraud perpetrators (Owojori and Asaolu, 2009; Eze and Okoye, 2019).

REVIEW OF EMPIRICAL LITERATURE

Ariyo-Edu and Woli-Jimoh (2024) explored the fraud detection and prevention effect of forensic accounting in the public administration of Kwara State government in Nigeria. Their investigation specifically targeted auditing and accounting staff in 15 Ministry, Department and Agencies (MDAs). Using the purposive sampling method, 100 staff were sampled for the survey and data collected through the administration of structured questionnaire. A multiple regression model was setup to examine the connection between the interest variables and the regression results document that forensic accounting techniques, particularly ratio analysis and data mining, were found to be positively related with fraud detection and prevention. Their empirical results emphasize that the application of forensic techniques can be instrumental in reducing fraud and associated corrupt practices in public administration in Nigeria, both at the national and sub-national levels.

Ogbaini, Akpor, Oboh, Oputa and Marvis (2024) researched the effectiveness of forensic accounting in the detection and prevention of fraud in the Nigerian public sector. Using the Lagos State government as case study, the purposive sampling technique was employed in selecting 60 certified accountants to which their opinion on the subject matter investigated was obtained through the use of structured questionnaire. They found through the use of Chi-square and simple percentages statistical tools that the use of forensic accounting techniques reduced fraud in the Lagos State public sector. Their finding suggests that, the use of forensic accountants and techniques can effectively help in the reduction of fraud and other corrupt practices within the public administration of Lagos State.

Mukoro et al., (2019) examined how forensic accounting affects fraud prevention in the Nigerian public sector. The study employed a descriptive research methodology in assessing the relationships between the variables considered. Secondary data was used for the study and gathered from audited financial reports, expenditures, revenue collections, and county plans. They found a beneficial connection between fraud investigations in the public sector and forensic accounting practice. The conclusion of the study is that forensic accounting expertise is preferable for investigating operations relating to bribery charges, improper financial reporting, money laundering, and finance. Hassan (2018) explored how fraud investigation and audit services are related in the

Garissa Sub-counties. The study area of Garissa has a population of six sub-counties and 42 responders were targeted for the study. The study relied on primary and secondary data collected using questionnaire and county audit reports. Findings from the analysis carried out revealed that audit services had a significant beneficial impact on fraud investigation. Akani and Ogbeide (2017) conducted a study on the effectiveness of forensic accounting in Nigeria's public sector. Using a descriptive research design and Likert-scale questionnaire responses, the study found that fraud detection was enhanced by forensic accounting practices and employee training.

Alhassan (2020) empirically explored the role of forensic accounting in fraud detection and prevention in Nigerian public sector, focusing on 10 ministries in the Federal Capital Territory, Abuja, Nigeria. The study randomly sampled fifty respondents consisting of accountants and auditors and data for the study was gathered using structured questionnaire. Using the analysis of variance (ANOVA), the study establish that forensic accounting is an effective tool in the detection of fraud as the found significant correlating relationship between foreign accounting and litigation support service.

Ewa (2022) focusing on public sector Ministries, Departments and Agencies (MDAs) in Nigeria, studied the effect of forensic accounting on fraud management in Nigeria. Using the purposive sampling method, three hundred and fifty respondents were selected for the survey and constitute auditors, accountants, information technology specialists and other related disciplines in the MDAs. Employing the ordinary least square method, the study evaluated the effect of data mining technique, trend analysis technique and ratio analysis technique on fraud prevention and detection. The results revealed that data mining technique, trend analysis technique and ratio analysis technique are positively related to fraud prevention and detection, indicating that forensic accounting enhances the detection and prevention of fraud in Ministries, Departments and Agencies (MDAs) in Nigeria.

Olaniyan, Ekundayo, Oluwadare and Bamisaye (2021) probed the instrumentality of forensic accounting as a potential tool in the detection and prevention of fraud in the Nigerian public sector. Their study predicated on the theoretical framework of policeman and fraud diamond theories, adopted a cross-sectional approach and covered the period from 2010 to 2020. Participants in the survey were senior staff of the Office of the Accountant General of the Federation and the Integrated Personnel Payroll Information System, to which 73 staff were randomly selected. Through descriptive analysis and the use of the ordinary least square method, they report that forensic accounting significantly influences fraud prevention, however, they found no evidence of that foreign account significantly relate to fraud detection. Moreso, their results demonstrate that forensic litigation do not significant influence the recovery of resources lost to fraud.

Oladipupo et al. (2019) assessed the role of forensic accounting in fraud detection within Nigerian deposit money banks in Ekiti State. Regression analysis revealed positive forensic accounting contributions, but the narrow focus on Ekiti State and a small sample (44 employees) limit broader generalizability and potential contextual factors affecting the sector's practices.

Owolabi and Ogunsola (2021) assessed forensic auditing in fraud detection and prevention in Ibadan-based banks, using purposive sampling of 120 respondents across six banks. The study emphasized how legal, procedural, and accounting knowledge significantly contributes to fraud mitigation.

Obiora et al. (2022) evaluated forensic accounting's influence in reducing fraud incidence in Nigerian healthcare using Kendall's coefficient for parameter testing. The survey's findings pointed to effective fraud prevention through forensic services but failed to examine systemic healthcare-specific challenges like data confidentiality or internal reporting structures.

3. METHODOLOGY

In examining whether forensic accounting can effectively reduce the incidence of fraud in the Nigerian public sector, the study employed the descriptive research design. This design was adopted due to the fact that it enables the researcher to gather on-the-spot data in order to provide answers to the research questions.

Population of the Study

Population refers to the group of individuals who possess common attributes or characteristics and is of interest to the researcher. It refers to the entire elements, people or group of items under investigation. The population for this research is staff of the Nigerian public sector entities involved in anti-corruption and financial oversight activities. The entities saddled with these duties include the Economic and Financial Crimes Commission (EFCC), the Independent Corrupt Practices and Other Related Offences Commission (ICPC), the Nigerian Financial Intelligence Unit (NFIU) and the Federal Inland Revenue Services (FIRS).

Sample and Sampling Technique

In examining the relationship between forensic accounting practices and fraud management, the probability sampling design was employed. Furthermore, the study employed the random stratified sampling method which gives element in the strata or group of people equal opportunity of being selected. The study selected the sample size based on the Yamane's (1967) formula. The formula was used whenever the sample to be collected is random and simple.

Table 1: Proportionate sampling per each staff category

S/N	Category	Staff Population	Investigative Staff Population	Sample per category
1	Federal Inland Revenue Services (FIRS)	10,220	88	72
2	Economic and Financial Crimes Commission (EFCC)	4,214	124	94
3	Independent Corrupt Practices Commission (ICPC)	777	65	55
4	Nigerian Financial Intelligence Unit (NFIU)	253	23	21
Total		15,464	300	242

Source: Author's computation (2025)

Nature and Sources of Data

The source of the data employed in the investigation of link between forensic accounting practices and fraud management is primary data. To assess the relationship between forensic accounting practices and fraud management, the study employed a structured questionnaire designed in line with the Likert 5-points scale of strongly agree, agree, neutral, disagree and strongly disagree in collecting the relevant data for the study.

Method of Data Analysis

The study employed both descriptive and inferential statistical tools in analysing the primary data sourced using structured questionnaire. The descriptive statistical tools used were percentage and frequency distribution, while the inferential statistical tool of partial least square regression technique was employed.

4. RESULTS AND DISCUSSION

Descriptive Analysis

The study carried out descriptive analysis on the respondents' profile using frequency tables. It reflects the response rate from respondents, their respective organizations, professional certifications, academic qualification, years of experience and job category. The summarized results are displayed in Table 2.

Table 2: Descriptive Statistics

		Frequency	Percent
Name of Organization	FIRS	51	33.8
	EFCC	57	37.7
	NFIU	7	4.6
	ICPC	13	8.6
	Others	23	15.2
	Total	151	100.0
Academic Qualification	OND/NCE	5	3.3
	HND/BSC	67	44.4
	MSC/MBA/MPHIL/MA	73	48.3
	PHD	5	3.3
	Others	1	0.7
	Total	151	100.0
Professional Qualification	Accounting	58	38.4
	Legal	7	4.6
	Info Tech	17	11.3
	Others	69	45.7
	Total	151	100.0
Years of Experience	Less than 5 years	14	9.3
	5 – 10 years	63	41.7
	11 – 20 years	58	38.4
	21 – 30 years	10	6.6
	Above 30 years	6	4.0
	Total	151	100.0
Job Category	Operational	74	49.0
	Tactical	36	23.8
	Managerial	41	27.2
	Total	151	100.0

Source: Author's computation (2025)

It is noteworthy that the largest percentage of responses was obtained from the Economic and Financial Crimes Commission (EFCC) with 57 respondents (37.0%), followed closely by the Federal Inland Revenue Service (FIRS) with 51 respondents (33.1%). The Independent Corrupt Practices and Other Related Offences Commission (ICPC) contributed 13 respondents (8.4%), while the Nigeria Financial Intelligence Unit (NFIU) accounted for 7 respondents (4.5%). Additionally, 23 respondents (14.9%) were drawn from other organisations involved in fraud management and forensic accounting. The data indicates that 70.1% of the respondents are from FIRS and EFCC, which are key institutions responsible for financial oversight and anti-corruption efforts in Nigeria. Furthermore, 15.2% of the respondents belong to other organisations, highlighting the interdisciplinary nature of forensic accounting beyond government agencies. The presence of these respondents strengthens the study's credibility by incorporating diverse perspectives from various financial and regulatory bodies.

Table 2 above analyses the responses of the respondents with respect to their individual highest academic qualifications. Having the relevant academic qualification improves the ability of the respondents to provide reasonable responses to questionnaire items. It is noted that the largest percentage of responses were obtained from respondents with either an M.Sc., MBA, M.Phil., or M.A., accounting for 73 respondents (47.4%). This is followed closely by respondents with a B.Sc. or HND, comprising 67 respondents (43.5%). Together, these two categories represent 90.9% of the total respondents, indicating that the majority of participants have at least a bachelor's degree, which enhances the credibility of their responses. Additionally, 5 respondents (3.2%) possess

an OND/NCE, while another 5 respondents (3.2%) have a Ph.D., showing a mix of educational backgrounds. One respondent (0.6%) falls into the “Others” category. This distribution highlights that 96.0% of the respondents hold at least a B.Sc., HND, or higher qualification, signifying that most participants have substantial academic exposure, making them well-equipped to respond to the questionnaire items accurately. Possessing relevant professional certifications enhances respondents' expertise and ability to provide informed responses to the questionnaire items. It is noteworthy that the largest percentage of responses falls under the “Other” category, comprising 69 respondents (44.8%), which accounts for 45.7% of the valid responses. This indicates that a significant number of respondents hold professional qualifications outside the primary categories listed, possibly in fields such as risk management, finance, auditing, or public administration.

The Accounting-related certifications (ICAN, ACCA, ANAN, CFE, CFA) make up the second-largest group, with 58 respondents (37.7%), representing 38.4% of the total valid responses. This highlights the importance of accounting and fraud examination expertise among the respondents. 17 respondents (11.0%) hold Information Technology (IT)-related certifications in areas such as Cybersecurity, Data Science, ITIL, CompTIA, Forensics, and Cloud Architecture, accounting for 11.3% of the valid responses. This suggests that IT expertise is increasingly relevant in forensic accounting and fraud management. while, Legal professionals, including those with certifications such as CLM, Board Certified Specialist, CFL, CELA, and ADR, represent 7 respondents (4.5%), making up 4.6% of the valid responses. This signifies the involvement of legal experts in fraud management and forensic investigations.

Table 2 reveals that the largest percentage of responses was obtained from respondents with 5 to 10 years of experience, accounting for 63 respondents (40.9%), which represents 41.7% of the valid responses. This suggests that a significant proportion of the respondents are in their mid-career stage, with substantial professional exposure. The second-largest category consists of respondents with 11 to 20 years of experience, comprising 58 respondents (37.7%) and representing 38.4% of the valid responses. This indicates that a considerable number of respondents have extensive experience in forensic accounting and fraud management. Respondents with less than 5 years of experience account for 14 respondents (9.1%), making up 9.3% of the valid responses. Furthermore, 10 respondents (6.5%) have 21 to 30 years of experience, contributing 6.6% of the valid responses, while 6 respondents (3.9%) have more than 30 years of experience, making up 4.0% of the valid responses.

It is noteworthy that the largest percentage of responses was obtained from respondents in the Operational category, accounting for 73 respondents (47.4%), which represents 48.7% of the valid responses. This suggests that nearly half of the respondents are directly involved in executing tasks related to forensic accounting and fraud investigation at the operational level. The Managerial category follows, with 40 respondents (26.0%), making up 26.7% of the valid responses. This group includes individuals responsible for overseeing forensic accounting activities, decision-making, and strategic planning in their respective organizations. The Tactical category consists of 36 respondents (23.4%), representing 24.0% of the valid responses. This group likely includes mid-level professionals who act as intermediaries between operational staff and managerial decision-makers, playing a critical role in implementing fraud management strategies.

Normality Test Internal Control and Fraud Management

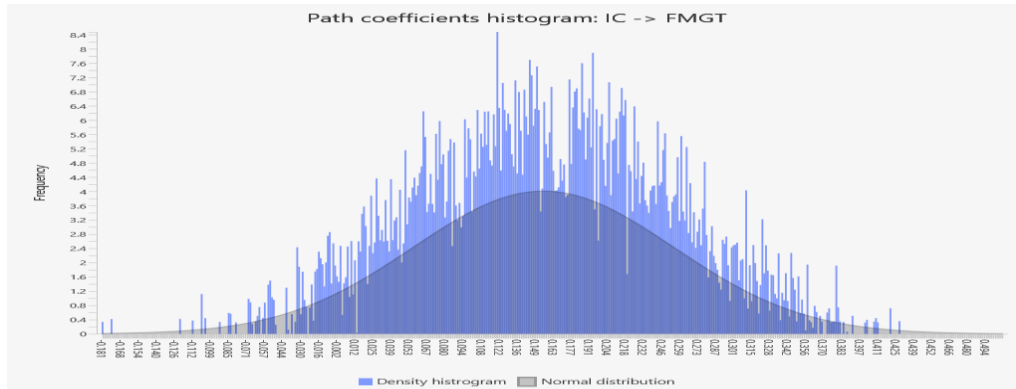


Figure 1: Normality Test Internal Control and Fraud Management

Source: Author's Computation through Smart PLS Output of Study Data Analysis (2025)

The normality test for Internal Control and Fraud Management evaluates whether the dataset follows a normal distribution. In Smart PLS, assessing normality provides insights into the distribution characteristics of variables and their potential impact on model estimation. While PLS-SEM does not require strict normality assumptions, understanding skewness, kurtosis, and p-values helps ensure that statistical inferences are reliable and robust.

Visual representations, such as histograms and Q-Q plots, further confirm normality. A histogram with a bell-shaped curve supports normality, whereas skewed or irregular shapes indicate deviations. Similarly, Q-Q plots compare the observed data distribution against a normal distribution. If data points align closely with the diagonal line, normality is confirmed. Any deviation suggests non-normality, which may require transformations or bootstrapping techniques.

Normality Test Litigative Support and Fraud Management

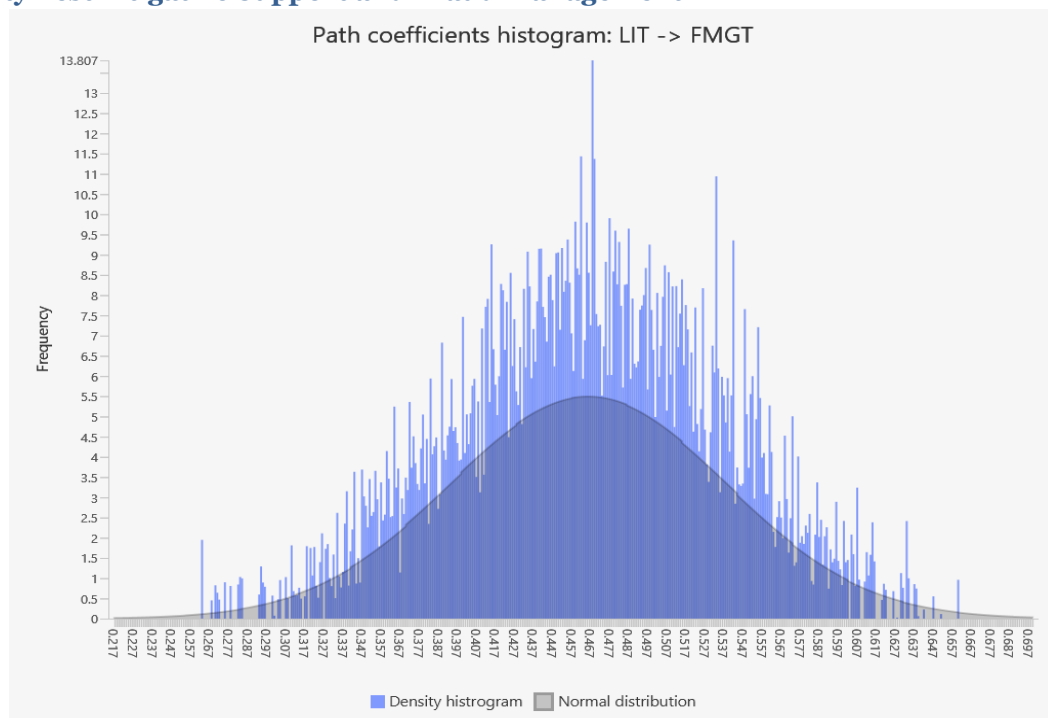


Figure 2: Normality Test Litigative Support and Fraud Management

Source: Author's Computation through Smart PLS Output of Study Data Analysis (2025)

The normality test for Litigative Support and Fraud Management evaluates whether the dataset follows a normal distribution, which is crucial for understanding the statistical properties of the model estimates. While Smart PLS does not require strict normality due to its variance-based nature, assessing normality aids in interpreting regression coefficients and standard errors more accurately.

Visual inspections using histograms and Q-Q plots provide additional confirmation of normality. A bell-shaped histogram with a peak around the mean suggests normality, while skewed distributions indicate deviations. Similarly, in Q-Q plots, if the data points align closely with the reference diagonal line, the dataset can be considered approximately normal. Substantial deviations from this line suggest non-normality, which may affect the robustness of parameter estimates.

In conclusion, if the skewness and kurtosis values fall within the acceptable range of -1 to 1 and the p-value is greater than 0.05, the data for Litigative Support and Fraud Management can be regarded as approximately normal. If significant deviations are observed, they should be accounted for in statistical interpretation, though Smart PLS can accommodate non-normal data. Understanding these distributional characteristics ensures that the model estimates are reliable and valid for further analysis. From the plot presented in figure 1 above, the bell shape of the plot aligns closely to the diagonal line thus suggesting a normal distribution with respect to the variables LIT and FMGT.

Normality Test Computer Forensics and Fraud Management

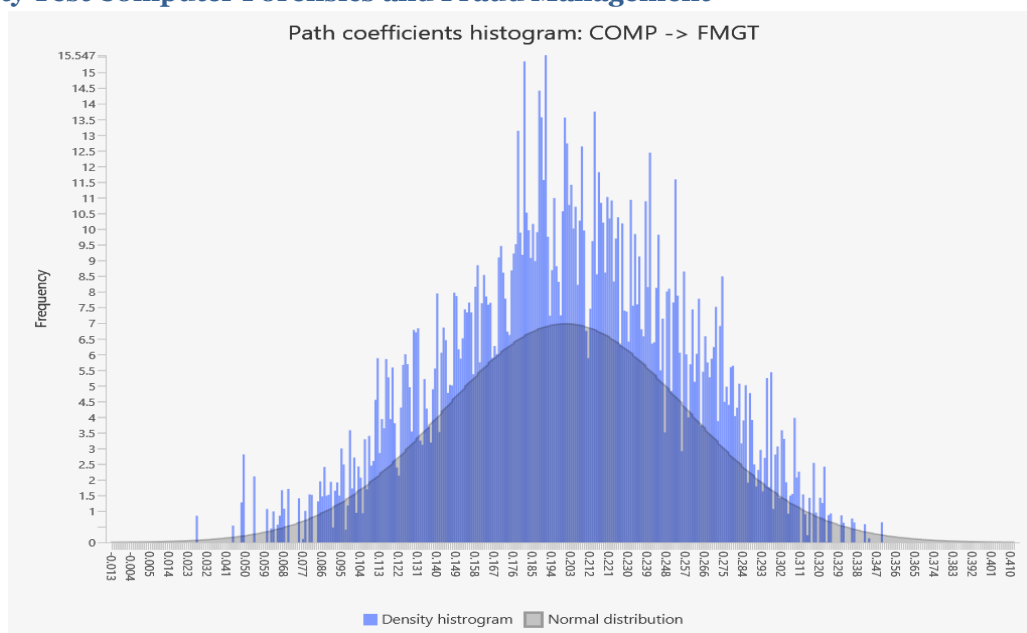


Figure 3: Normality Test Computer Forensics and Fraud Management

Source: Author's Computation through Smart PLS Output of Study Data Analysis (2025)

The normality test for Computer Forensics and Fraud Management assesses the distributional properties of the dataset to determine its alignment with a normal distribution. In Smart PLS, normality analysis is not a strict requirement due to its variance-based nature, but understanding the distribution of the data is useful for ensuring robust model estimation and interpretation.

Graphical methods such as histograms and Q-Q plots provide additional insights into normality. A bell-shaped histogram suggests normality, whereas skewed or irregular patterns indicate deviations. Similarly, Q-Q plots compare the observed data against an expected normal distribution. If the data points align closely with the diagonal reference line, the distribution is approximately normal. Significant deviations suggest non-normality, which may necessitate data transformations or bootstrapping techniques for more reliable estimates.

Table 3: Path Analysis

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
COMP -> FMGT	0.204	0.2	0.057	3.561	0.0000
IC -> FMGT	0.155	0.156	0.1	1.562	0.1180
INV -> FMGT	0.212	0.216	0.104	2.035	0.0420
LIT -> FMGT	0.464	0.466	0.073	6.396	0.0000
	R-square		R-square adjusted		
FMGT	0.806		0.802		

Source: Author's Computation through Smart PLS Output of Study Data Analys (2025)

Table 3 presents the results of the path analysis, highlighting the relationships between the independent variables—Computer Forensics (COMP), Internal Control (IC), Investigation (INV), and Litigative Support (LIT)—and the dependent variable, Fraud Management (FMGT). The path coefficient for LIT → FMGT is 0.464, with a T-statistic of 6.396 and a p-value of 0.0000, indicating a highly significant and strong positive relationship. This suggests that litigative support plays the most substantial role in influencing fraud management. Similarly, COMP → FMGT has a path coefficient of 0.204, a T-statistic of 3.561, and a p-value of 0.0000, confirming that computer forensics also has a significant impact. The path coefficient for INV → FMGT is 0.212, with a T-statistic of 2.035 and a p-value of 0.0420, suggesting that investigation efforts significantly contribute to fraud management, though with a relatively weaker effect compared to litigative support and computer forensics.

Conversely, IC → FMGT has a path coefficient of 0.155, with a T-statistic of 1.562 and a p-value of 0.1180, indicating that internal control does not significantly predict fraud management at the 5% level. This suggests that internal control mechanisms alone may not be as effective in mitigating fraud without support from other measures like forensic investigations and legal interventions. Additionally, the R-square value of 0.806 and the adjusted R-square of 0.802 indicate that the independent variables collectively explain 80.6% of the variance in fraud management, demonstrating a strong explanatory power of the model. However, the remaining 19.4% of the variance is attributed to other factors not included in this study.

Testing the hypotheses using the path analysis results from Table 4.19. The key decision criteria are:

If the p-value ≤ 0.05 , we reject the null hypothesis (H_0) and conclude that the independent variable has a significant effect on fraud management (FMGT).

If the p-value > 0.05 , we fail to reject H_0 , meaning there is no statistically significant impact.

Hypothesis 1: Internal Control and Fraud Management

- Path Coefficient (O): 0.155
- T-Statistic: 1.562
- P-Value: 0.118 (> 0.05)

☑ Decision: Since the p-value is greater than 0.05, we fail to reject H_{01} . This suggests that internal control systems do not have a statistically significant impact on fraud management in the Nigerian public sector.

Hypothesis 2: Forensic/Investigative Accounting and Fraud Management

- Path Coefficient (O): 0.212
- T-Statistic: 2.035
- P-Value: 0.042 (< 0.05)

✗ Decision: Since the p-value is less than 0.05, we reject H_{02} . This indicates that forensic and investigative accounting practices have a significant effect on fraud management in Nigerian public sector entities.

Hypothesis 3: Litigation Support and Fraud Management

- Path Coefficient (O): 0.464
- T-Statistic: 6.396
- P-Value: 0.000 (< 0.05)

✗ Decision: Since the p-value is highly significant, we reject H_{03} . This means that litigation support provided by forensic accountants significantly influences fraud management in the Nigerian public sector.

Hypothesis 4: Computer Forensics and Fraud Management

- Path Coefficient (O): 0.204

- T-Statistic: 3.561

- P-Value: 0.000 (< 0.05)

✗ Decision: Since the p-value is highly significant, we reject H_{04} . This suggests that the application of computer forensics significantly contributes to the detection, prevention, and management of fraud in Nigeria's public sector.

5. CONCLUSION AND RECOMMENDATIONS

The findings of this study underscore the critical role of forensic accounting practices in improving fraud management within Nigeria's public sector entities. While traditional internal control systems alone were shown to have limited impact, forensic tools particularly litigation support, investigative accounting, and computer forensics demonstrated statistically significant and positive effects on fraud detection, prevention, and prosecution. Together, these techniques explained over 80% of the variance in fraud management effectiveness, affirming their strategic value in addressing the complexity and evolving nature of public sector fraud. The study concludes that integrating forensic accounting practices into existing internal control frameworks is essential to strengthening accountability, enhancing transparency, and restoring public confidence in government financial operations.

Based on these findings, the study recommends that public institutions adopt recognized frameworks such as COSO and ERM to reinforce internal controls and embed more effective risk management practices. There is a need to institutionalize forensic accounting by employing qualified professionals, conducting routine forensic audits, and building investigative capacity. In addition, public sector organizations should enhance litigation support by collaborating with legal and forensic experts to ensure thorough evidence gathering and successful prosecution. Investment in computer forensics and staff training is also vital to countering the growing threat of digital financial crimes. Finally, stakeholders including government and development partners should increase budgetary support and provide access to international training programs to align Nigeria's fraud management practices with global standards.

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