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**Effect of Forensic Accounting Techniques on Electronic Evidence for
Fraud Prosecution in Deposit Money Banks**

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ABSTRACT

This study examined the effect of electronic evidence on forensic accounting techniques for fraud prosecution in Deposit Money Banks in Plateau State, Nigeria. This study adopted the descriptive survey research. Population consists of six Deposit Money Banks within Jos metropolis, Plateau State comprising of First Bank, UBA, Guaranty Trust Bank, Access Bank, Keystone Bank and Zenith Bank to represent the population for this study. Oral interview was used to ascertain the total number of staff of the selected banks within Jos Metropolis totaling 200 staff. The sample size consists of One Hundred and Thirty-Three (133) was ascertained using Taro Yamane (1967). Multiple linear Regression analysis was employed to measure the dependent and independent variable using Statistical Package for Social Scientists (SPSS 26). The findings revealed that electronic evidence has a significant effect on data mining technique in Deposit Money banks of Plateau State and electronic evidence has a significant effect on Computer-Assisted Auditing Tools of Deposit Money Banks in Plateau State, Nigeria. It was recommended Deposit Money Banks in Plateau State, Nigeria should strengthen the collection, storage, and management of electronic records such as transaction logs, customer activities, and system audit trails and Deposit Money Banks in Plateau State, Nigeria management should invest in robust electronic evidence management systems and staff training. This will ensure that CAATs have access to complete, reliable, and timely digital records, thereby enhancing audit efficiency, fraud detection capabilities, and regulatory compliance.

KEYWORDS: Electronic Evidence, Forensic Accounting Investigation, Data Mining Technique and Computer-Assisted Auditing Tools (CAATs)

1.0 INTRODUCTION

Estimating the global amount of fraud is difficult since losses could have startling effects on the global economy, undermining prospects for future prosperity and economic efficiency (Tekavcic & Damijan, 2021). The global impact of fraudulent activity is challenging to estimate because fraudulent acts often receive little attention and are not reported. However, according to information revealed in the 2021 ACFE (Association of Certified Fraud Examiners) report, every year, a company loses 5% of its revenue due to fraudulent acts, and it is estimated that this loss reaches almost \$4 trillion globally (Mittal, Kaur, & Gupta, 2021). This situation demonstrates that fraud is a problem in the contemporary economy and can even happen rapidly and extensively since it can happen anywhere and at any moment and is difficult to prevent and detect (Firmanza, Abidin & Ruswanda, 2022).

Forensic accounting has emerged as a crucial tool in detecting, investigating, and preventing fraud in Nigeria's banking sector, which has historically been plagued by fraud and unethical financial practices. With the rapid growth of digital technologies and the increased digitization of banking operations, the nature and complexity of financial crimes have evolved. Consequently, electronic evidence - data stored or transmitted in digital form - has become a fundamental component in modern forensic accounting investigations. Electronic evidence includes emails, digital transaction records, CCTV footage, metadata, logs, and mobile phone data, which can significantly support the identification and prosecution of fraudulent activities. In Nigeria, as more banks adopt electronic platforms for service delivery and record-keeping, electronic evidence plays an increasing role in forensic audits and litigation support (Okoye & Gbegi, 2013).

Evidence is anything that proves that a crime has been committed. Forensic evidence is evidence which is scientifically derived for use in the court of law. Ballistics, blood test, DNA test and other relevant scientific methods are used to obtain forensic evidence (USlegal.com, 2020). The importance of forensic evidence cannot be overemphasized. In all witness testimonies, it is the forensic evidence that is important and not the person giving the evidence (Mayor & Bangerter, 2016).

Forensic evidence helps in solving both violent and non-violent cases. For example, DNA tests are useful for solving cases relating to murder and sexual assault. Furthermore, ballistics are useful for testing weapons used at crime scenes while close circuit cameras, phones and computer circuits are useful for solving cases relating to white collar crimes and cybercrimes. However, forensic science in developing countries including Nigeria is not yet

as developed and sophisticated as the ones we have in developed nations of the world. Forensic evidence can be categorised into the following: direct (eye witness confessions or statements), circumstantial (suspect's fingerprints or hair found at crime scenes), physical (non-living or organic items like fingerprints, shoe and tyre impression etc., biological (blood, saliva, urine, semen etc., reconstructive (broken glass, open doors or windows etc.) and associative (objects, and substances that ties a suspect to a crime scene like gun, paint or soil).

Electronic evidence has significantly bolstered the effectiveness of forensic accounting investigations in the banking sector by enabling deeper, more precise, and faster detection of financial crimes. However, maximizing its potential requires the integration of robust forensic technologies, skilled personnel, and strict adherence to legal and ethical standards. The advent of digital technologies has transformed the landscape of forensic accounting, particularly within the banking sector, where vast volumes of financial transactions and sensitive information are managed electronically. Electronic evidence provides forensic accountants with detailed, time-stamped records of financial transactions, emails, system logs, and other digital communications. These digital footprints help to, identify suspicious patterns (round-dollar transactions, unusual transfers), trace the flow of illicit funds through complex networks and correlate user activity with fraudulent acts. Electronic evidence has significantly bolstered the effectiveness of forensic accounting investigations in the banking sector by enabling deeper, more precise, and faster detection of financial crimes. However, maximizing its potential requires the integration of robust forensic technologies, skilled personnel, and strict adherence to legal and ethical standards.

Electronic evidence has effect on forensic accounting investigative techniques as possible in the detection of fraud regardless of whether they are eventually used in a trial. These investigative techniques include interviewing, invigilation, observation, vulnerability and internal control charts, net worth method, expenditure method, bank deposit method, cash transaction method, document examination, tracing, data mining technique, ratio analysis among others according to Oyedokun (2019). He further stated that forensic accounting techniques such as interviewing, computer assisted reviews such as data mining, and document review techniques are useful. Forensic accounting is the investigation of a fraud or presumptive fraud with a view to gathering evidence that could be presented in the court in form of litigation support. Forensic accounting investigation is the application of accounting knowledge, methods, and standards for the follow up and collection of forensic audit trail to track and trap criminals at their own game. It utilizes as its baseline, an understanding of the

business information, financial reporting system, accounting and auditing standards and procedures (Oyedokun, 2019). Forensic accounting investigation is a scientific accounting method of uncovering, resolving, analyzing and presenting fraud and related matters in a manner that is acceptable in the court of law (Oyedokun, 2019).

In recent years, the prevalence of financial crimes in Nigeria has posed significant challenges to accountability, transparency, and governance. Traditional methods of financial investigation have proven increasingly inadequate in the face of technologically sophisticated crimes such as cyber fraud, money laundering, and electronic fund misappropriation. As a result, the use of electronic evidence such as digital records, emails, computer logs, and other electronically stored information has become indispensable in forensic accounting investigations. However, despite its growing relevance, the effective integration of electronic evidence into forensic accounting practices in Nigeria remains limited due to inadequate technological infrastructure, lack of skilled personnel, legal admissibility concerns, and poor institutional support (Ogundana, Okere & Asaolu, 2021). This study seeks to see if electronic evidence has an effect on the components of data mining technique and computer-Assisted Auditing Tools techniques.

Nigerian banks reported 20,768 incidents in the first half of 2018, costing them N19.77 billion, despite regulatory bodies' attempts to prevent financial fraud and purify the banking system. The Central Bank of Nigeria (CBN) made this known in its economic report for the first half of 2018, released on Friday, November 2, 2018. According to the apex bank, the reported fraud and forgery incidences were perpetrated by both bank staff and non-bank culprits. In the period under review, the actual loss by banks to fraud and forgery, however, amounted to N12.06 billion, compared with the N0.78 billion and \$0.03 million, suffered in the first half of 2017. Similarly, a lot of Nigerian financial companies have implemented certain internal oversight structures to boost productivity and lower fraud, nonetheless, Nigeria continues to rank highly in the prevalence of economic crimes brought on by fraud according to (Nyakarimi et al., 2020; Otuogha, 2021 and Adekunle, 2024).

The Nigerian banking sector continues to face significant challenges related to financial fraud and corruption, despite increased investments in technological infrastructure and compliance mechanisms. While electronic evidence presents a modern means to detect and investigate these crimes, its practical application in forensic accounting within Nigeria remains problematic. There is a growing concern that forensic accountants, auditors, and legal practitioners in Nigeria may lack the technological expertise and institutional support needed to collect, preserve, and analyze electronic evidence effectively. Additionally, issues

such as tampering, data authenticity, poor chain of custody, and legal admissibility in court raise doubts about the reliability of such evidence in prosecuting financial crimes (Akinbowale et al., 2020).

Moreover, empirical studies on how electronic evidence actually affects the outcomes of forensic investigations in Nigeria's banking industry are limited. This gap makes it difficult to assess whether the presence of electronic evidence leads to more successful fraud detection, conviction of offenders, or recovery of misappropriated funds. Without a doubt, a great deal of research has been conducted in this area. The importance of electronic evidence on forensic accounting investigation has been demonstrated by studies such as Gbegi & Ezekiel (2017), William & Gabriel (2020), Ewa, Adesola, & Eseneyen (2020), Safiyanu, Safiyanu and Armaya'u (2019), Sani & Austin (2021), Ojo-Agbodu et al. (2022), Afriyie et al. (2023), Ismail & Nagi (2024), Gideon and Omolara (2024), Uche, Farouk & Uyagu (2025) and Ogah (2025). However, none of these studies were able use the electronic evidence on the data mining technique and Computer-Assisted Auditing Tools techniques to detect fraud in the listed banks in Nigeria, especially selected banks in Jos North LGA, Plateau State. This study attempts to bridge the conceptual gap by looking into electronic evidence and its effect on forensic accounting investigation on in Deposit Money banks of Plateau State

The main objective of the study is to examine the effect of Forensic Accounting Techniques on Electronic Evidence for fraud prosecution in Deposit Money banks of Plateau State. The specific objectives include to:

1. To assess the effect of electronic evidence on Data Mining Techniques on in Deposit Money banks of Plateau State.
2. To determine the effect of on electronic evidence on Computer-Assisted Auditing Techniques in Deposit Money banks of Plateau State

The following research hypotheses shall be tested. They include;

H₀₁: Electronic evidence has no significant effect on Data Mining Techniques on in Deposit Money banks of Plateau State.

H₀₂: Electronic evidence has no significant effect on Computer-Assisted Auditing Techniques in Deposit Money banks of Plateau State.

2.0 LITERATURE REVIEW

2.1 Conceptual Review

2.1.1 Concept of Electronic Evidence

Electronic evidence also called digital evidence refers to any probative information stored or transmitted in digital form that can be used in a court of law. Electronic evidence refers to any information or data stored or transmitted in digital form that may be relied upon in court. In forensic accounting investigations, such evidence is critical because many financial transactions and records are now processed and stored electronically. This includes emails, spreadsheets, accounting software data, bank transaction logs, and metadata from digital files. Electronic evidence plays a pivotal role in identifying fraudulent activities, tracing the flow of illicit funds, and corroborating or refuting testimonies. It is collected using digital forensics techniques, ensuring the integrity and admissibility of the data in legal proceedings (Casey, 2011).

According to Haruna et al. (2021), digital forensic involves using scientifically derived and proven methods to present, collate, validate, identify, analyze, interpret, document, and present digital evidence derived from digital sources. This process aims to facilitate or further the reconstruction of events found to be criminal or help anticipate unauthorized actions that disrupt planned operations. Digital forensic accounting, which involves collecting and analyzing data from electronic sources, is crucial for detecting crimes such as phishing and money laundering. However, evolving encryption techniques and incompatible data formats make digital crime harder to detect, highlighting the need for updated forensic tools, (Moses, et. al, 2022).

2.1.2 Concept of Forensic Accounting Investigation

Forensic accounting investigation are used by investigative accountants to look at financial records, dig into their background and present a clear and concise account of what they mean and how they impact a particular matter that they have been asked to consider (Jaxa, 2023). Forensic accounting techniques are not the same as normal accounting methods, such as auditing techniques or methods for considering tax issues, but they may include the use of these skills along with investigation techniques, legal understanding and a natural tenacious desire to uncover a hidden issue (Tally, 2022).

Forensic accounting investigative techniques are the application and practices of knowledge and skills to help resolve criminal issues in financial misappropriation which requires legal and accounting representations. Eke (2019) stated that the proper understanding of the forensic accounting techniques will assist in identifying the crime cases, the investigative and resolution processes so as be a good witness in report presentation in the court. The forensic accountant should have deep knowledge of law and accounting in displaying the skills and have a good representation in the court.

2.1.3 Concept of the Data Mining Technique

Data mining is the process of identifying deviations, patterns, and correlations within large data sets to predict results. It can help in detecting fraud faster (Bassey, 2018) through data extraction, classification, compilation, regression analysis, and data retrieval. By using data mining techniques, patterns can be identified based on available historical data, providing a basis for future predictions (Jain and Lamba, 2020).

Data mining is the process of analyzing dense volumes of data to find patterns, discover trends, and gain insight into how that data can be used. Data miners can then use those findings to make decisions or predict an outcome (Stedman, 2023). Data mining is the process of sorting through large data sets to identify patterns and relationships that can help solve business problems through data analysis. Data mining techniques and tools enable enterprises to predict future trends and make more-informed business decisions (Hughes, 2023).

2.1.4 Concept of Forensic Accounting Computer-Assisted Auditing Technique (CAATs)

Though, a key auditing technique, it is also used by forensic accountant to test both general controls and application controls. It seeks to scrutinize every transaction and inconsistency therein. These are computer tools that forensic accountants could employ during the audit process to handle data with audit importance in the client's information system and not rely on that client at the same time (Yadav & Yadav, 2013). This method aids professionals working on investigative and forensic accounting assignments to carry out auditing procedures like testing transactions and balances in detail, identifying any discrepancies or notable fluctuations, performing general testing in addition to computer system application, using sampling programs to extract data for audit testing, and documenting the calculations made by accounting systems (Yadav & Yadav, 2013).

When performing some auditing tasks, technology is used and employed, this helps the forensic accountant complete his assignment more effectively, swiftly, and affordably. The availability of all the information required for the process of auditing computer systems is crucial for the usage of this technology (Al-Khalidi, 2012).

2.2 Theoretical review

1. Fraud Management Lifecycle Theory

This theory was propounded by Wilhelm in the year 2004. The fraud management lifecycle is a network lifecycle where each stage in the life cycle is an aggregated entity that is made up of interrelated, interdependent and independent actions, functions and operations

(Albrecht et al., 2009). The fraud management lifecycle is made up of eight stages which include prevention, detection, investigation, deterrence, analysis, mitigation, policy and prosecution stage (Wilhelm, 2004). Deterrence is achieved through creating fear of consequences or difficulty of perpetration, to turn aside, discourage or prevent fraudulent activity from being attempted (Kimani, 2011). Policy must seek to balance deterrent value, loss reduction, sales volume, operational scalability and cost effectiveness (Wright, 2007). Policy development involves constantly reassembling the situations disassembled in the analysis stage, by taking advantage of the knowledge gained by analysis, combining it with internal, external and interactive environmental factors in order to craft policies that address the whole, while leveraging the knowledge of the parts (Wilhelm, 2004). Policy development staff is most frequently the leaders within the fraud management organization as they must consider all disciplines within the fraud management department as well as the needs of the rest of the business enterprise (Hassink et al., 2010). The investigation stage involves obtaining enough evidence and information to stop fraudulent activity, to obtain recovery of assets or restitution and to provide information and support for the successful prosecution and conviction of the fraudsters (Albrecht, et al., 2009). The elements and variables that constitute this theory are linked to this study. Through this theory, data mining and CAAT helps to support prevention, detection, investigation, and monitoring which forms part of the stages of this theory.

Electronic evidence supports every stage of the fraud lifecycle by providing digital records such as emails, transaction logs, system access records, and electronic documents that help detect suspicious activities, investigate incidents, establish facts, and support legal or disciplinary actions. Computer-Assisted Audit Techniques (CAATs) and data mining operationalize fraud management by analyzing large volumes of data to identify anomalies, patterns, and risk indicators, enabling organizations to prevent, detect, investigate, and monitor fraud more efficiently and continuously throughout the fraud management process.

The study is anchored on fraud management lifecycle theory. This is because the theory explains the rudiments and expectancies of electronic evidence and Forensic Accounting Investigation. It is also because the fundamental initiative in fraud management lifecycle theory is that network lifecycle where each stage in the life cycle is an aggregated entity that is made up of interrelated, interdependent and independent actions, functions and operations. This will further help in fraud prevention and detection.

2.3 Empirical Review

Ogah (2025) examined the effect of forensic accounting services such as fraud investigation and litigation support services on fraud management using listed banks in Nigeria. The study adopted the descriptive survey research design with a population of 125 staff of forensic accounting and internal control departments of 25 listed banks. A sample of 95 respondents drawn from 12 listed banks in Nigeria was used for the study. The researcher developed an instrument titled “Forensic Accounting and Fraud Management questionnaire (FAFMQ)” and used it for data collection. The instrument was tested and validated by experts. The data were analyzed through analysis of variance using Statistical Package for Social Sciences version 21 (SPSS 21). The hypotheses were tested at a 5% level of significance. The study revealed that the application of forensic accounting by banks has a significant effect on fraud management by listed banks in Nigeria. The study also showed that fraud investigation and litigation support significantly managed fraud among the listed banks in Nigeria. It was recommended that banks should take advantage of forensic accounting services to ensure operational efficiency and effectiveness in fraud management.

Uche, Farouk & Uyagu (2025) investigated the effect of forensic accounting techniques on fraud detection by professional accounting firms in Plateau State. A survey design was adopted for the study. The population of the study consisted of 6 accounting and auditing professional firms in Plateau State. Oral interview was used to ascertain the total number of staff from these firms totaling 203, whereby a sample size of 135 was determined using Taro Yamane formula. A total of 135 copies of questionnaire were administered on the selected respondents. However, 129 copies were retrieved. The study employed the use of structured questionnaire as method of data collection and the hypotheses were tested using multiple regression as method of data analysis. Findings shows that data mining technique had a positive and significant effect on fraud detection by Professional Accounting Firms in Plateau State; reviewing financial statement technique had a negative and significant effect on fraud detection by Professional Accounting Firms in Plateau State; analyzing accounting records techniques have positive and not significant effect on fraud detection by Professional Accounting Firms in Plateau State and Internal control charts have positive and significant effect on fraud detection by Professional Accounting Firms in Plateau State. The study recommended Professional Accounting Firms and other private organizations should select data mining software that integrates with existing accounting systems.

Adetunji & Chinonso (2025) explored current trends and challenges in forensic accounting, highlighting its increasing significance in financial crime prevention.

Additionally, forensic accountants are collaborating more closely with regulatory bodies, law enforcement, and corporate compliance teams to strengthen fraud detection efforts. Despite technological progress, forensic accounting faces numerous challenges. One major issue is the complexity of financial fraud, which often involves cross-border transactions and sophisticated concealment tactics. Legal and regulatory inconsistencies across jurisdictions further complicate fraud investigations, making enforcement difficult. Moreover, fraudsters are increasingly using emerging technologies, such as cryptocurrency and cyber-enabled financial crimes, to bypass traditional detection mechanisms. To address these challenges, forensic accountants must enhance their analytical capabilities, integrate AI and machine learning tools, and collaborate with cybersecurity experts. Regulatory bodies should also implement stricter compliance frameworks to curb financial fraud effectively.

Anipiriworima, et al (2025) examined the effect of forensic accounting skills on fraud management of selected federal Ministries, Departments and Agencies (MDAs) in Nigeria. The study used primary sources of data, a cross-sectional research design, a quantitative research approach, and a structured closed-ended questionnaire with five-point Likert scale options. A stratified sampling technique was used for the selection of the four federal ministries, departments, and agencies in Nigeria. The study was underpinned by both profession theory and fraud pentagon theory. The SPSS version 23 software statistical package was used for the coding of the questionnaire and data analysis for running both descriptive statistics, correlation, and multiple regression analysis. The regression results indicated that accounting and auditing skills and forensic investigation skills have a positive and significant effect on the fraud management. This implies that any unit increase in both accounting and auditing skills and forensic investigation skills will also result in a unit increase in the fraud management of federal ministries, departments, and agencies in Nigeria. The study recommended that the government should provide avenues for training forensic accounting experts. Through the effective performance of forensic accountants in the country, the Nigerian government can restore its integrity both locally and internationally.

Onamusi et. al. (2024) examines the effect of digital forensic accounting technological tools on fraud detection among quoted deposit money banks in Nigeria. The study population comprised 318 quality control officers of 8 quoted deposit money banks in Nigeria and a sample of 216 was used. Questionnaires were used to collect the data. The data were analyzed using SPSS 23. The reliability of the data gathered from the field was measured using Cronbach's Alpha to give an unbiased estimate of the data's generalizability. Descriptive statistics mainly percentages and frequency distribution were used for data

presentation. Inferential statistics used were correlation and multiple regression analysis to test the relationship between the variables, and t-test and F-test for that purpose. The findings show that Advanced Analytics and AI has a significant effect on financial fraud detection among quoted deposit money banks in Nigeria, Communication Monitoring Software has a significant effect on financial fraud detection among quoted deposit money banks in Nigeria, Geospatial Analysis Tools have a significant effect on financial fraud detection among quoted deposit money banks in Nigeria and Encryption and Data Security Tools has a significant effect on financial fraud detection among quoted deposit money banks in Nigeria. Based on the findings the study recommends among others that Cybercrime is a really bad thing that bank need to stop or make it happen a lot less in Nigeria.

Sabo, et al. (2024) examined Forensic Accounting in Fraud Detection and Prevention: A Literature Review. The paper reviewed the concepts of forensic accounting and fraud as well as empirical studies on the roles played by forensic accounting in fraud detection and prevention. Previous studies showed that both forensic accounting and fraud have no generally acceptable definitions. However, there is a common view with regards to the meaning of the concepts. It is also discovered that forensic accounting covers litigation support, investigative accounting, and dispute resolution. Literature further revealed that some authors classified fraud as internal, external, and mixed, while others classified it as financial statement fraud, asset misappropriation, and corruption. This paper also found out that forensic accounting plays an important role in fraud detection and prevention in both public and private organisations. This study therefore recommended that forensic accounting should continue to be used in order to detect and prevent fraud in organisations.

Ismail & Nagi (2024) examines Digital Forensic Accounting: An Overview. Forensic analysis has become crucial for detecting financial crimes such as fraud, extortion, money laundering, and tax evasion in a rapidly evolving world. This type of analysis is also essential for promoting economic development and enhancing public trust in governments. As fraud strategies advance alongside rapid digital innovations, traditional forensic accounting relies on manual data examination and is increasingly inadequate for addressing sophisticated criminal fraud. The rise in cybercrime underscores digital forensics' need to conduct effective investigations. This study provides an overview of digital forensic accounting, emphasizing the need for forensic accountants to acquire digital forensic skills to conduct thorough investigations. It reviews previous research highlighting the importance of integrating digital technologies into forensic accounting, stressing that this convergence is crucial for enhancing the detection of financial crimes and cyber fraud. Furthermore, the study outlines the basic

concepts of both traditional forensic accounting and digital forensics and presents some digital forensic accounting tools that can be utilized in forensic accounting and computer forensics.

Otaru and David (2023) researched on Forensic Accounting Investigation Techniques and Fraud Detection and Mitigation of Listed Deposit Money Banks in Nigeria. The study assesses the effect of forensic accounting investigation techniques on fraud detection and mitigation of listed banks in Nigeria using three independent variables of forensic accounting interview technique, forensic accounting data mining analysis technique and forensic accounting technology technique. Survey research design was adopted by the study and it had a population of 140 respondents drawn from only operational staff of listed banks in Nigeria while the sample size of 104 was arrived at scientifically using Yaro Yamani's sample size determination technique. Data was gathered using questionnaires administered to the respondents and it was analysed using multiple regression technique. The study found that application of interview technique had positive and insignificant effect while application of data mining analysis technique and technology technique had positive and significant effect on fraud detection and mitigation of listed banks in Nigeria. Based on the findings, it was recommended that shareholders of listed banks in Nigeria should be engaging the use of forensic accounting investigation techniques in addition to conventional annual audit because the usage of interview technique, data mining analysis technique and accounting technology technique all had positive proved to be useful tools for fraud detection and mitigation.

3.0 Methodology

3.1 Sampling and Data Collection

A survey design was adopted for the study. The population consists of all the staff of the selected banks within Jos Metropolis totaling 200 in number (Field survey, 2026). The six (6) selected Deposit Money Banks within Jos metropolis, Plateau State include First Bank, UBA, Guaranty Trust Bank, Access Bank, Keystone Bank and Zenith Bank to represent the population for this study. Using Taro Yamane, the sample size was determined to be 133. A total of 133 questionnaires were distributed out of which 122 questionnaires were retrieved for the study. The study used a structured, closed-ended research questionnaire to understand Forensic Accounting techniques and electronic evidence for fraud prosecution in Deposit Money banks of Plateau State. Data was analyzed using the multiple linear regression analysis with the help of Statistical Packages for Social Sciences (SPSS 26).

Model Specification

The model for this study thus is stated in its functional form below:

$$EE = f(DMT, CAAT)$$

However, in order to take into account, the deterministic and stochastic aspects of the model it is therefore stated in an econometric form:

$$EE = \beta_0 + \beta_1 DMT + \beta_2 CAAT + \mu$$

Where:

EE = Electronic Evidence as independent variable

DMT = Data Mining Techniques

CAAT = Computer-Assisted Auditing Techniques

β_1, β_2 , are the coefficients

β_0 = Constant

μ = error term for the model that is, the difference between the observed value and the predicted value.

4.0 Data Analysis and Discussions

4.1 Descriptive statistics

Table 1: Descriptive statistics for the study variables

	N	Minimum	Maximum	Mean	Std. Deviation
Electronic Evidence	122	1.20	3.40	2.1962	.62921
Data Mining Technique	122	1.00	4.00	2.4288	1.02490
Computer-Assisted Auditing Tools technique	122	1.00	3.80	2.4615	.91124

Source: SPSS Output v.26

The descriptive statistics for the study variables are presented in table 1. The results indicate that the mean score of the latent variables range between 2.1962 and 2.4615 on a 5-point Likert scale, while the standard deviation ranges between 0.62921 and 1.02490. The standard deviations are small relative to their respective means, implying that the statistical mean provides a good fit of the observed data.

4.2 Test of Hypotheses

Table 2: Test of Hypotheses

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.876	.156		11.996	.000
	Electronic Evidence	.132	.059	.215	2.219	.029

a. Dependent Variable: Data Mining Technique

Table 3: Test of Hypotheses

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.779	.174		10.231	.000
	Electronic Evidence	.170	.066	.246	2.559	.012

a. Dependent Variable: Computer-Assisted Auditing Tools technique

This study aimed to determine the Effect of Electronic Evidence on Forensic Accounting Techniques for Fraud Prosecution in Deposit Money Banks in Plateau State, Nigeria. The test of the two (2) hypotheses generated positively significant findings.

Hypothesis 1 states that electronic evidence has no significant effect on data mining technique of listed banks in Nigeria. From the regression analysis run, given the coefficients in table 2 above, it shows that there is significant effect on data mining technique of listed banks in Nigeria, given ($\beta = 0.215$, $t = 2.219$; sig. 0.029). Thus, there is significant effect of electronic evidence on data mining technique of listed banks in Nigeria.

Hypothesis 1 states that electronic evidence has no significant effect on Computer-Assisted Auditing Tools technique of listed banks in Nigeria. From the regression analysis run, given the coefficients in table 3 above, it shows that there is significant effect of electronic evidence on Computer-Assisted Auditing Tools technique of listed banks in Nigeria, given ($\beta = 0.246$, $t = 2.559$; sig. 0.012). Thus, there is significant effect of electronic evidence on Computer-Assisted Auditing Tools technique of listed banks in Nigeria.

4.4 Discussion of findings

The first objective examined the effect of electronic evidence on data mining techniques in Deposit Money banks of Plateau State. From the regression analysis run, given

the coefficients in table 2 above, it shows that there is significant effect of electronic evidence on data mining techniques in Deposit Money banks of Plateau State, given ($\beta = 0.215$, $t = 2.219$; sig. 0.029). Therefore, there is significant effect of electronic evidence on data mining technique in Deposit Money banks of Plateau State. This agrees with the study of Ugwu (2020) who opined that implementation of data mining algorithm techniques of classification, clustering and neural networks detects fraud in Nigeria banks. This finding also aligns with the study of Otaru and David (2023) who discovered that data mining analysis technique and technology technique had positive and significant effect on fraud detection and mitigation of listed banks in Nigeria. This finding opposes that of Oluyide (2025) who concluded that digital forensics and data analytics did not achieve conventional statistical significance in the study.

The second objective examined the effect of electronic evidence on Computer-Assisted Auditing techniques in Deposit Money banks of Plateau State, Nigeria. From the regression analysis run, given the coefficients in table 2 above, it shows that there is significant effect of Computer-Assisted Auditing technique on electronic evidence for fraud prosecution in Deposit Money banks of Plateau State, given ($\beta = 0.246$, $t = 2.559$; sig. 0.012). Therefore, there is significant effect of electronic evidence on Computer-Assisted Auditing Tools technique of Deposit Money banks of Plateau State, Nigeria. This is because the bank has a computer assisted machines that reports transactions with apparent business purpose and transactions involving usually large amount, the bank has the possibility of identifying instances of journal vouchers containing only one signatory and reflecting transfers between different client's record, the bank has facility to electronically compare employees telephone numbers with client's telephone numbers. The study aligns with the studies of Adeyanju & Adenikinju (2023) and Omonuk & Oni (2015) who carried out an empirical study across Nigerian auditors and report users found that use of CAATs is positively associated with audit quality. The study opposed with the study of Wakili et al., (2025) who found out that the Nigeria's forensic/e-evidence infrastructure and procedural practice remain imperfect (limited forensic infrastructure, procedural inconsistency), which reduces the reliability and acceptance of electronic/forensic evidence in formal proceeding.

5.0 Conclusion and Recommendation

Based on findings, the study concludes that electronic evidence has a significant effect on data mining technique in Deposit Money banks of Plateau State. This therefore provides evidence that data mining technique has a significant effect on fraud detection of

listed banks in Nigeria. Also, the study also concludes that electronic evidence has a significant effect on Computer-Assisted Auditing Tools in Deposit Money banks of Plateau State. This therefore provides evidence that the greater the electronic evidence, the higher the chance on data mining technique to detection fraud of listed banks in Nigeria. Furthermore, the study concludes that electronic evidence has a significant effect on analyzing accounting records technique of listed banks in Nigeria.

From the findings and conclusions of this study, the following are the recommendation;

1. Deposit Money Banks in Plateau State, Nigeria should strengthen the collection, storage, and management of electronic records such as transaction logs, customer activities, and system audit trails. High-quality electronic evidence will improve the accuracy of data mining models, enabling earlier detection of fraudulent patterns, suspicious transactions, and operational irregularities.
2. Deposit Money Banks in Plateau State, Nigeria management should invest in robust electronic evidence management systems and staff training. This will ensure that CAATs have access to complete, reliable, and timely digital records, thereby enhancing audit efficiency, fraud detection capabilities, and regulatory compliance.

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