

International Journal of Multidisciplinary Research and Growth Evaluation.



Automated forensic auditing and fraud control in Nigeria

Onah Vitalis Chukwuma 1*, Paschal IP Okolie 2, Dr. Nnenne Aqueen Eneh 3

- ¹ Ph.D., Professor of Forensic Accounting and Fraud Examination, Department of Management, Forensic Accounting and security studies, The University of America Curacao
- ² Ph.D., Professor of Public Finance and Accounting, Department of Management, Finance and Accounting The University of America, Curação
- ³ Faculty of Management Sciences, Department of Accountancy, The University of America Curacao
- * Corresponding Author: Onah Vitalis Chukwuma

Article Info

ISSN (online): 2582-7138

Volume: 03 Issue: 06

November-December 2022 Received: 12-11-2022 Accepted: 04-12-2022 Page No: 596-601

Abstract

"Automated forensic auditing and fraud control in Nigeria" is a critical concept in modern accounting, and our country, Nigeria, is not left out in its practice. This research aims at pointing out the rationale behind fraudulent practises as well as examining the role of automated forensic auditing in fraud control. A survey research design was adopted for this research study, and the sample size was selected using the Taro Yamane sampling technique as the data used were obtained from both primary and secondary sources. Three of the four study hypotheses that were developed were examined using the ANOVA statistical method. The analysis's key conclusions were the following: Given that it aids in fraud identification and prevention, automated forensic auditing has a substantial impact on fraud control. There are measures employed to solve the problem of insufficiently documented materials necessary for investigating suspects, as this helps foster the investigative process; there are standards set for improving on the techniques used for obtaining evidence. Conclusively, it can be said that fraud control in Nigeria cannot be done without forensic accounting; fraud detection may not be possible in Nigeria if management at different levels is not committed to doing an indebtedness study of a financial statement, i.e., having a physical check of assets and liabilities. It was recommended that the internal control system of every organisation should be strengthened through regular audits; the training of forensic auditors should be done regularly; and also, seminars should be organised to encourage the use of automated tools.

Keywords: Automated forensic auditing, fraud and ANOVA

Introduction

Mobile Wise Geeks (2011) defined fraud as a deliberate misrepresentation that causes monetary losses. All of these are usually required for an act to be considered fraud if someone lied about his name. According to the United States legal system (2011), fraud is defined as an international misrepresentation of material existing facts made by one person to another with knowledge of its falsity and for the purpose of inducing the other person to act, on which the other person relies, resulting in injuries or damages. Fraud has been in existence since the beginning of time, and the increase of fraud on a daily basis brought about forensic auditing. Forensic auditing is defined as the activity that consists of gathering, verifying, processing, analysing, and reporting of data in order to obtain facts and/or evidence in the area of legal or financial disputes or irregularities, including fraud, and to give preventative advice. IFA (2011). (2011). The fundamental occurrence that gives rise to forensic auditing, particularly in situations involving economic crime, is fraud, which is a distinct criminal offence. The control of these economic crimes is a concern for any organisation that employs employees, accountants, or other hired professionals who have access to the organization's income, receipts, or funds.

These economic crimes are known to be an unpleasant fact and a disheartening issue in the hearts of many organisations. We must thus come to the inevitable conclusion that forensic auditors are responsible for monitoring and stopping these fraudulent acts.

The Economic and Financial Crime Commission (EFCC) has grown into a robust and reputable national institution that now commands respect. They have gained the admiration of Nigerians and the international community as a whole as the most vibrant anti-corruption organisation that has fought corruption to a standstill within the short time of its existence. Over the years, Nigeria suffered tremendously in her economy at the hands of corrupt leaders who, for selfish reasons, reduced a country like Nigeria, which is rich in oil, to one of the poorest countries in the world. All these brought about the establishment of the EFCC. i. Formation of the Economic and Financial Crime Commission (EFCC) The Economic and Financial Crimes Commission (EFCC) was established in 2003 by the Economic and Financial Crimes Commission Act 2002 and reenacted in 2004 by the Act as a body corporate with perpetual succession and a common seal. It has its headquarters at No. 5 Fomella Street, Off Crescent, Wuse Zone 11, Abuja. With Nuhu Ribadu as the first executive chairman until 2008, he was replaced by Faarida Waziri, and Mr. Ibrahim Lamorde was appointed the chairman of the commission on February 15, 2012, and he is still the substantive chairman to date. Its establishment was partially in response to pressure from the Financial Action Task Force (FATF), which named Nigeria as one of the 23 non-corporative countries in the international community's effort to fight money laundering. ii. Vision statement: To make Nigeria a safe and corrupt-free business environment for sound health and a positive image of the country. iii. Mission statement:

The mission statement of the commission includes the following

A. to combat the menace of corruption, which is a cog in the wheel of Nigerian progress.

- B. To protect national and foreign investments in the country. C. To imbue the spirit of hard work in the citizenry and discourage ill-gotten wealth.
- D. To identify illegally acquired wealth and confiscate it.
- E. To build an upright workforce in both the public and private sectors of the economy.
- F. To contribute to the global war against financial crimes and terrorism financing in Nigeria.

Objectives of the study

- To ascertain why there is a scarcity of skilled labour required to operate automated tools
- To investigate the reasons for insufficiently documented materials.
- 3. To examine the cause of not obtaining enough techniques used as evidence.
- 4. To evaluate the reasons for the high cost of analysis.

Research Hypotheses

The research hypotheses are.

Ho1: There is no significant relationship between automated forensic auditing and fraud control.

HA1: There is a significant relationship between automated forensic auditing and fraud control.

Ho2: There are no methods adopted to adequately train

forensic auditors with investigative skills.

HA2: There are methods adopted to adequately train forensic auditors with investigative skills.

Review of Related Literature Fraud Deterrence and Detection

The fact that fraud cannot be completely eliminated does not guarantee that it should be ignored, for it can be controlled to reduce losses. Then, this control for fraud brings about fraud deterrence and detection. Fraud deterrence involves the proactive identification and removal of the causal and enabling factors of fraud. It is based on the premise that fraud is not a random occurrence but occurs when the conditions are right for it to occur. Its purpose being that it proactively deters financial misrepresentation so as to ensure more accurate financial reporting and, in turn, increase investor confidence. Wikipedia (2011). However, Wiley (2006) [20] stated that fraud deterrence is a preferred preventive measure and that improving organisational procedures to reduce the causal factors of fraud is the best defence against it as they are designed to reduce the risk of fraud and misconduct occurring. On the other hand, fraud detection, which is more of an act, requires innovative and creative thinking, which may involve reviewing historical transactions in order to identify indicators of a non-conforming transaction that may lead to fraud. They are usually designed to uncover fraud and misconduct when they occur. Cendrowski, Martin, and Petro (2006) [11].

Elements of Fraud

All kinds of fraud, including financial statement fraud, are outcomes of at least three (3) elements, which include pressure, opportunity, and rationalization. These three elements make up what we call the "fraud triangle." 1. Pressure or motive: it is the need to commit fraud. 2. Rationalization: A fraudster's mindset that justifies their decision to commit fraud. 3. Opportunity: A situation that allows fraud to occur, which frequently occurs when internal control is weak or non-existent.

Types of Fraud

The different types of fraud, which include: employee embezzlement, management fraud, investment scams, vendor fraud, customer fraud, and miscellaneous fraud, were categorised into three (3) broad headings by: internal fraud, external fraud, and corruption or collusion. Internal Fraud: This is the most common form of fraud found in organizations. The perpetrators of this kind of fraud are managers (i.e., top or middle management) and employees. External Fraud: This is another form of fraud that is being perpetrated by those outside the organization, which may include customers or organised criminals. Corruption or collusion: This is one of the most difficult kinds of fraud to recognize. It is internal corporate fraud committed by an inside employee and an outsider.

Fraud Theories

- Anomie Theory: This theory is seen as a condition of malaise in individuals, characterised by an absence or diminution of standards of values. When it applies to a government or institutions, anomie implies social unrest, chaos, or disorder. Chandola (2009) [9].
- **Differential Association Theory:** This theory is based on the premise that through interaction with others,

individuals learn the values, attitudes, techniques, and motives for criminal behavior, and that if employees are shielded from bad influences and exposed to good role models, the incidence of fraud will be low. Ekeigwe (2011)^[15].

- Social Control Theory: This theory proposes that people's relationships, commitments, values, norms, and beliefs encourage them not to break the law, and that if moral codes are internalized, individuals will voluntarily limit their propensity to commit deviant acts. These acts are undertaken in the pursuit of self-interest and selfcontrol.
- **Strain Theory:** This theory states that social structures in society may encourage citizens to commit fraud. When the goals of a society become significant to an individual, achieving them becomes more important than the means adopted, as there is usually an encouragement to strive for monetary success with little or no emphasis placed on the legitimate means of achieving them. Ekeigwe (2011) [15].

Antidotes to Fraud

- Internal Control: This is best regarded as the whole system of controls, financial and otherwise, established by management in the conduct of a business, including internal checks, internal audit, and other forms of control. Okezie (2004) [22]. An internal control system is defined as the whole system of controls, financial and otherwise, established by management in order to carry on the business of an enterprise in an orderly and efficient manner to ensure adherence to management policies, safeguard assets, and secure as far as possible the completeness and accuracy of the records.
- Auditing and Monitoring: Auditing and monitoring system that are reasonable designed to detect fraud and misconduct are important tools that management can use to determine whether the organization's control are working as internal. Since it is impossible to audit every fraud and misconduct, management should develop a comprehensive auditing and monitoring plan that is based on risk identification through the organization's fraud risk assessment process. Ekeigwe (2011) [15] also opines that the auditing and monitoring plan should encompass activities that are tailored in depth to the nature and degree of the risk involved, with higher-risk issues receiving priority treatment. Auditing activities, which are evaluations of past events, and monitoring activities, which are evaluations conducted in real time, should be performed in areas where:
- 1. There are specific concerns about a key procedure, account, or position.
- 2. The company has a history of fraud and misconduct.
- 3. There is high employee turnover or organizational change.
- 4. Laws and regulations have changed significantly.
- 5. Audits are legally required in situations where governmental agencies are targeting enforcement actions like money laundering. Budget and Fiscal Transparency: Budget transparency (BT) is defined as the full disclosure of all relevant fiscal information in a timely and systematic manner. The 2011 Code of Good Practice on Fiscal Transparency of the International Monetary Fund provides a set of guidelines to establish a good and viable transparency framework for fiscal policy, which

- has the following objectives:
- 6. Clarity of roles and responsibilities ii. Open budget process iii. Public availability of information; iv. Assurance of integrity the combination of budget transparency and public participation in budget processes has the potential to combat corruption, foster public accountability of government agencies, and contribute to the judicious use of public funds. OECD, (2002).

Application of Forensic Audit

Due to the increase in fraudulent practices, there has been an increasing need for auditing skills to prevent fraud by identifying and rectifying situations that could lead to fraud being perpetrated. It has been observed that the cost of implementing procedures to monitor and restrict fraudulent acts is far less than the fraud risk that companies face each day. Chatterji (2007) [10]. It will be useful, therefore, to discuss forensics as being either "proactive" or "reactive." Proactive Forensic: This audit helps businessmen ensure that their processes stay robust, and it can be viewed from different aspects depending on its application.

Investigative Audits

According to Ezeilo (2010) [16], investigative audits are "audits performed to investigate incidents of possible fraud or misappropriation of institution funds." It is usually seen as an audit that takes place as a result of a report of unusual or suspicious activity on the part of an individual or a department. It usually focuses on specific aspects of the work of a department or individual in relation to fraud and corruption, so as to examine how the systems can be reinforced for fraud prevention and detection. Ezeilo (2010) [16] further explains that investigative audit is a valuable part of the audit toolkit because it focuses on the risks that threaten achievement, such as the risk of fraudulent claims for expenditure, fraudulent provision of services to an organization, or fraud and evasion of revenue payments. It also focuses on the standards of financial management, the implementation of internal control regimes, and electronic services. It is also worth noting that this audit differs from others because they are normally conducted without first notifying personnel who may be affected by the findings. In carrying out this investigation, the forensic auditors, who are usually referred to as investigative auditors, have certain principal tools used in investigating, and they include:

- Information (informants);
- Interviews (witnesses);
- Interrogation (suspects);
- Instrumentation (crime laboratories, comparison microscopes, polygraphs, etc.).

Out of all these tools, information contributes more to the solution of crime than the other tools, although there is some evidence that instrumentation could be used more frequently and more effectively to solve a greater number of crimes.

Research Methodology

To determine the sample size in this study, the researcher used the most convenient sampling method. Out of the entire population of EFCC in Port Harcourt, the researcher conveniently selected 80 participants out of the overall population as the sample size for this study. According to, "sample of convenience" is the terminology used to describe

a sample in which elements have been selected from the target population on the basis of their accessibility or convenience to the researcher. The research instrument used in this study is a questionnaire. A survey containing a series of questions was administered to the enrolled participants. The questionnaire was divided into two sections: the first section inquired about the responses' demographic or personal data, while the second section was in line with the study objectives and aimed at providing answers to the research questions. Participants were required to respond by placing a tick in the appropriate column. The questionnaire was personally administered by the researcher. The hypothesis test was conducted using the Chi-Square statistical tool, SPSS v.23.

Data Presentation and Analysis Introduction

This section presents the analysis of data derived through the questionnaire and key informant interview administered on the respondents in the study area. The analysis and interpretation were derived from the findings of the study. The data analysis depicts the simple frequency and percentage of the respondents as well as interpretation of the information gathered. A total of eighty (80) questionnaires were administered to respondents of which only seventy-seven (77) were returned and validated. This was due to irregular, incomplete and inappropriate responses to some questionnaire. For this study a total of 77 was validated for the analysis.

Data Presentation

Table 1: Demographic profile of the respondents

Demographic information	Frequency	Percent						
Gender								
Male	42	54.5%						
Female	35	45.5%						
Age	;							
20-25	15	19.5%						
25-30	19	24.7%						
31-35	23	29.9%						
36+	20	25.9%						
Marital S	Status							
Single	10	12.9%						
Married	64	83.1%						
Separated	0	0%						
Widowed	3	3.9%						
Education	Level							
WAEC	00	0%						
BS.c	35	45.5%						
MS.c	42	55.5%						
MBA	00	0%						

Source: Field Survey, 2021

Test of Hypothesis

Ho 1: There is no significant relationship between automated forensic auditing and fraud control.

HA 1: There is a significant relationship between automated forensic auditing and fraud control.

Ho 2: There are no methods adopted to adequately train forensic auditors with investigative skills.

HA 2: There are methods adopted to adequately train forensic auditors with investigative skills.

Hypothesis One

Table 2: There is no significant relationship between automated forensic auditing and fraud control.

Options	Fo	Fe	Fo – Fe	(Fo - Fe)2	(FoFe)2/Fe
Yes	38	25.6	12.4	153.8	6.0
No	10	25.6	-15.6	243.4	9.5
Undecided	29	25.6	3.4	11.7	0.5
Total	77	77			16.0

Source: Extract from Contingency Table

At 0.05 significant level and at a calculated degree of freedom, the critical table value is 5.991.

Findings

The calculated $X^2 = 16.0$ and is greater than the table value

of X^2 at 0.05 significant level which is 5.991.

Decision

Since the X^2 calculated value is greater than the critical table value that is 16.0 is greater than 5.991, the Null hypothesis is rejected and the alternative hypothesis which states there is significant relationship between automated forensic auditing and fraud control is accepted.

Hypothesis Two

Table 3: There are no methods adopted to adequately train forensic auditors with investigative skills.

Options	Fo	Fe	Fo – Fe	(Fo - Fe)2	(FoFe)2/Fe
SA	26	19.25	6.8	46.24	2.4
A	25	19.25	6.8	33.64	1.7
SD	11	19.25	-8.3	68.9	3.6
D	15	19.25	-4.3	18.5	0.9
Total	77	77			8.6

Source: Extract from Contingency Table

Degree of freedom =
$$(r-1)$$
 $(c-1)$ $(4-1)$ $(3-1)$ (3) (1) = 3

At 0.05 significant level and at a calculated degree of freedom, the critical table value is 7.815.

Findings

The calculated $X^2 = 8.6$ and is greater than the table value of X^2 at 0.05 significant level which is 7.815.

Decision

Since the X^2 calculated value is greater than the critical table value that is 8.6 is greater than 7.815, the Null hypothesis is rejected and the alternative hypothesis which states that there are methods adopted to adequately train forensic auditors with investigative skills is accepted

Summary, Conclusion and Recommendation

It is important to ascertain that the objective of this study was to establish automated forensic auditing and fraud control in Nigeria. In the preceding chapter, the relevant data collected for this study were presented, critically analyzed, and an appropriate interpretation given. In this chapter, certain recommendations are made that, in the opinion of the researcher, will be beneficial in addressing the challenges of automated forensic auditing and fraud control in Nigeria.

Summary

This study was on automated forensic auditing and fraud control in Nigeria. Three objectives were raised, which included determining why there is insufficient skilled manpower needed for operating automated tools, investigating the reasons for insufficiently documented materials, examining the cause of not obtaining enough techniques used as evidence, and evaluating the reasons for the high cost of analysis. A total of 77 responses were received and validated from the enrolled participants; all respondents were drawn from the EFCC in Port Harcourt. The hypothesis was tested using the Chi-Square statistical tool (SPSS).

Conclusion

Nigeria seems to have acquired a name that is synonymous with corruption. As a nation, it has carved out for itself the reputation of being the most corrupt in the world. If corruption in Nigeria is not addressed, our treatment as a parish state will either be reversed or become meaningless (as will our call for foreign investors). Chukwumaeze (2010) ^[7]. However, the quest to combat this economic monster called fraud brought about the concept of forensic auditing as well as the Economic and Financial Crime Commission (EFCC),

which are out to reduce the incessant occurance of fraud in our financial system, which has hampered the progress of organizations' objectives and led to a loss of confidence by investors who prefer to invest abroad rather than risk their resources in a country like Nigeria where fraud is perpetrated by many. Owing to this, is of the opinion that fraud has become a pandemic disease, surpassing geopolitical boundaries, race, ideology, or the level of economic development. However, with determination and minimal effort, fraud can be managed to limit financial losses while also defrauding and exposing the criminals who victimise us all. Ezeilo (2010) [16]. However, the automated forensic tools that were discussed earlier in this research work have been helpful in identifying the root cause of fraudulent practises and facilitating the implementation of security measures in organizations. It also ensures the validity and reliability of information used in curbing fraudulent acts.

Recommendation

- 1. The internal control system of every organisation should be strengthened through regular audit exercises so as to reduce the occurrence of fraudulent practices.
- 2. Training forensic auditors should be done regularly so as to enable them to carry out investigations successfully.
- 3. Seminars should be organised to encourage the use of automated tools by organizations, so as to make them aware of the fact that they can save more by preventing fraud than when fraud has already occurred.

References

- 1. Anyaogu CN. Management Accounting: A Functional Approach. Owerri: Tonyben Publications; c2011. Available from: http://www.accessdata.com
- 2. Association of Certified Fraud Examiners (ACFE). Report on Fraud Occurrence; c2002. Available from: http://www.wikipedia.com. Retrieved on 11 May.
- 3. Adeniji AA. Auditing and Assurance Services. Lagos: Value Analysis Consult Publications; c2010.
- 4. Arens AA, Elder RJ, Beasley M. Auditing and Assurance Services. France: Aida Postoyan Publications; c2009.
- 5. Apostolou B. Internal Fraud Investigation. Louisiana: Institute of Internal Auditors Publications; c2000.
- 6. Bytes S. Forensic Tools; c2011. Available from: http://www.securebytes.com. Retrieved on 27 June.
- 7. Chukwu LC. Auditing and Investigation. Owerri: Benson Publications; c2010.
- 8. Casey E. Handbook of Digital Forensic and Investigation. USA: Academic Press Publications; c2009.
- Chandola V. Anomaly Detection. India: University of Minnesota Publications; c2009.
- 10. Chatterji AN. Definition of Forensic Auditing. India:

- Mumbia Publications; c2007.
- 11. Cendrowski H, Martin JP, Petro LW. The Handbook of Fraud Deterrence. USA: John Wiley and Sons Publications; c2006.
- 12. Dnven W, Samer A, Taylor DJ. Incident Response and Report Writing; c2003. Available from: http://www.knowledgeleader.com. Retrieved on 11 May.
- 13. Ovute F. Fraud Teams. Unpublished B.Sc Thesis. Department of Accountancy, Caritas University, Amorji-Nike Enugu State; c2013.
- Ovute F. Differences, Advantages, and Disadvantages of Forensic Accounting. Unpublished B.Sc Thesis. Department of Accountancy, Caritas University, Amorji-Nike Enugu State; c2013.
- 15. Ekeigwe C. Forensic Accounting. Lagos: Institute Chartered Accountants Publications; c2011.
- 16. Ezeilo G. Forensic Accounting. Lagos: Institute Chartered Accountants Publications; c2010.
- Forensic Focus. Digital Investigation Manager. Available from: http://www.dimflabs.com. Retrieved on 11 May. Investopedia. Forensic Auditing; c2011. Available from: http://www.investopedia.com. Retrieved on 9 May.
- 18. Justanswer. CAAT Tools to Management; c2011. Available from: http://www.justanswer.com. Retrieved on 11 May.
- 19. Kessler MG. Forensic Accounting Services: Financial Fraud Detection. New York: Kessler International Publication; c2011.
- Nigrini N. Forensic Analytics: Methods and Techniques for Forensic Accounting Investigation. USA: John Wiley and Sons Publications: c2011.
- 21. Oliver MS, Shenoi S. Advances in Digital Forensics. New York: Springer Publications; c2006.
- 22. Okezi BN. Auditing and Investigation, with Emphasis on Special Classes of Audit. Owerri: Bon Publications; c2004.
- 23. Organisation for Economic Co-operation and Development (OECD). Budget Transparency. Finland: Kumanan Publications; c2002.
- 24. Wikipedia. Computer Forensic; c2010. Available from: http://www.wikipedia.org. Retrieved on 11 May.
- 25. Wikipedia. Computer Aided Audit Tools; c2009. Available from: http://www.wikipedia.org. Retrieved on 11 May.
- 26. Zabihollah R, Crumbley L. Financial Scandal; c2011. Available from: http://www.findarticles.com. Retrieved on 11 May.