

INTEGRATED FINANCIAL MANAGEMENT INFORMATION SYSTEM AND FRAUD INVESTIGATION IN NIGERIAN PUBLIC SECTOR

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Abstract

Integrated financial management information systems (IFMIS) are systems that assist budgetary, financial, and accounting processes in the public sector and encourage improved public financial management (PFM) by providing a centralized registry of revenues and expenditures and in the process of fraud investigation it provides accurate information to work with however, according to previous literature, ineffective public financial management has resulted in the implementation of various reforms. The study examined the effect of integrated management information system on fraud investigation in Nigerian public sector. One hundred and thirty-seven (137) copies of questionnaires were distributed to government personnel in the designated agencies as part of the study's survey design and one hundred and thirty-three (133) were returned. The data was analysed using descriptive and inferential (Multiple regression) methods. The result of the finding integrated financial management information has significant effect on fraud investigation in Nigerian public sector. Adj. $R^2 = 0.58$, F- statistics 30.880, P- value > 0.000 . The study concluded that integrated financial management information system has significant effect on fraud investigation. The study recommended that the government should guarantee that fiscal transparency is encouraged across the system in order to ensure active public and government engagement. The efficient implementation of an IFMIS will result in timely, relevant, and reliable financial data, encouraging fiscal discipline, assisting resource allocation, and increasing operational efficiency and fiscal transparency.

Keywords: IFMIS, Fraud investigation, Public financial management, Fiscal Transparency, Public Sector, Financial management.

1.0 Introduction

Fraud is a significant issue that people all over the world are concerned about. In underdeveloped countries, it is a major cause of concern. Fraud is so ubiquitous that it is gradually becoming the norm in both the public and private sectors, from the president to parliamentary officers to members of district councils, from business directors to middle-level cadres and lower managers. Individuals commit crimes in proportion to the capabilities of their companies. However, in regions of the world where forensic accounting is used, such as the United Kingdom, Canada, Germany, and the United States, it has contributed to unravel and prevent fraudulent activities. Accounting methods and techniques have become increasingly important in order to carry out detailed fraud investigation (Gbegi and Adebisi, 2014).

According to Mukoro (2013) the fastest and most proficient technique in which firms carries out dishonest operations are via accounting and financial information. It is well known that the top management of Enron, the well-known energy production company in the United States that was swindled by her top executives, employed innovative accounting to boost the company's profits to appear more productive and lucrative on paper than it was by setting different purpose branch offices with a singular goal that did not need to be included in Enron's financial statements to hide risky investment transactions and financial losses. However, investigative accounting later revealed that several of Enron's reported profitability and return were overstated, and in other cases, wholly false

and fictitious. Suleiman and Ahmi (2018); Lawal, Kurawa, Hamid and Umar (2021) further stated that Nigerian anti-corruption authorities have no choice but to use forensic accounting to combat financial crime.

Olatunji and Adekola (2017) opined that with the rapid spread of fraud occurrences in today's world, the responsibilities of independent auditor in principles and application on fraud control, which is the embedded range of operations to avert, identify, react appropriately, and screen malpractice in the finance sector, cannot be overstated. Risk analysis, system audits, and accounting reports confirmations are investigated on the basis and influence of investigators on fraud control in Financial institutions, revealing that auditing' functions in the financial sector ought to be optimized.

In today's society, where fraudulent activity by employees and management has recently dominated company culture, a lack of understanding of an auditor's obligations in relation to fraud detection has frequently resulted in unfair criticisms of his role. Auditors are skilled, trustworthy, and objective professionals who provide an unbiased assessment on the accuracy and fairness of financial data provided by management to business members. Over time, the accounting profession has created a reputation that encourages others to trust auditors' judgment. Severe consequences may result if these opinions are ambiguous or even untrustworthy (Josiah, Samson & Elizabeth, 2012).

Criminal activities like bribery, embezzlement, misappropriation, and money laundering are all examples have been recorded in Nigeria and it is depicted in negative light in global publications and scholarly conclusions, adversely affecting the country's reputation. Nigerian governments have attempted to combat this threat by setting standards and creating the Economic and Financial Crimes Commission (EFCC) (Umar, Samsudin & Mohamed, 2016; Yahaya, 2022). Given the emergence of the EFCC, the news headlines were saturated by incidents of economic and financial crimes. This indicates the commission's incapacity to combat illegal activities in Nigeria to a certain level. Internal and external sources comprise the majority of the Commission's major obstacles. Fundamentally, the Commission lacks the skills and expertise to combat widespread fraudulent activities. Furthermore, amidst the EFCC's exhaustive investigation, the findings show that less attention has been paid to understanding these problems and their impact on the EFCC's implementation of investigative accounting (Umar, Samsudin & Mohamed, 2016).

The problem of corruption in Nigeria's public sector persists despite increased efforts to combat it. According to prior studies, one of the flaws is an insufficient investigative technique (Suleiman & Othman, 2021). Auditors, on the other hand, are critical in the prevention and detection of fraud. For a long time, one of the most challenging and unsolvable problems for global businesses has been fraud; but, since the Enron, WorldCom, and other financial catastrophes, the topic has gotten a lot more attention and examination (Olatunji & Adekola, 2017).

The goal of a fraud investigation is to acquire information pertaining to fraud claims in order to discover the facts of the situation and make decision to take the required, regardless of how much the investigation assessment leads in the situation being reported for a judicial proceeding. Government agencies are expected to examine recurring or small incidents of crime involving organization and report the rationale behind it. Furthermore, fraud investigation

and response system should be able to explain the fraud investigation and response operations as well as proffer solutions (Duarte, 2016).

Ismaili, Ismajli and Vokshi (2021) opined that as the world grows more integrated, stakeholders from all over the world will need to communicate in a basic economic terminology. Various countries and cultures employ accounting as a basic economic language to analyze the information received from financial statements, and it is adjusted to their needs. Authorities must prepare and publish high-quality, transparent financial statements that are credible and globally recognized. This is a crucial aspect of democratic responsibility, accountability, and trustworthiness in the eyes of the people. Such financial statements, on the other hand, might be viewed as an opportunity to create and publish high-quality management information for better decision-making, so resulting in improved government service performance and long-term public finances as a strategic goal.

The accounting information within the institution is among the most credible news sources, and it can be a final authority depending on the access this information specific situation faced. However, accounting systems are seeing the growth and advancement of the use and adoption of digital devices, as well as the expansion of the combination of quantitative and qualitative methods and the accessibility of information on the Web from numerous other fiduciaries. The impact of computerized accounting systems was not restricted to assessing financial activities; rather, it extended to many other events that caught the attention of the government and prompted them to plan for monitoring regulations (Mohammed, 2021).

The accounting system used to record revenues and expenditures that were only available in the spending plan and excluded the government's payables, receivables, and assets because the government previously operated in a limited zone. As the government's operations developed, the accounting system established a system that tracked budgeted revenues and expenses, as well as the government's payables, receivables, and assets. However, there is currently no globally acknowledged governmental accounting method. Depending on the age, government accounting systems have evolved. When the demand for information about government financial actions and policies was substantially lower, a rudimentary, budget-oriented accounting system was established (Arslan, 2017).

IFMIS has launched and used throughout most jurisdictions' financial operations; the few confronting financial waste did not adopt proper organizational change management. The primary financial benefits of IFMIS to government personnel were improved openness and transparency, reduced wasteful expenditure, budget control, automatic reconciliation of banking information, and fully balanced financial information. The adoption of IFMIS was positively impacted by the technical quality of the IFMIS service as well as effectiveness in terms of promoting openness, integrity, and accessibility, therefore IFMIS met the expectations of the users. The IFMIS system in Kenya was safe and protected, however it was running on a bad network architecture, which affected its efficiency and cost money (Micheni, 2017). This study determined the effect of integrated financial management information on fraud management in Nigerian public sector.

2.0 Literature Review

2.1 Conceptual Review

A. Fraud Investigation

Fraud is defined as any type of illegal activity that involves deceit, concealing, or a betrayal of trust. It comprises the use of deception from beginning to end in order to obtain unjust or illegal benefits, such as misappropriation of funds or products, fraudulent financial reporting, and money laundering. Fraud investigation also refers to the time-consuming fact-gathering procedure involved in settling fraud claims from start to finish. To begin, data is acquired from many sources such as eyewitness accounts, documentary and physical proof, and personal observation. Knowledge categories include organizational behavior, managerial decision-making, commercial procedures, market systems, accounting concepts, harmful acts, personal motives, legal infractions, and previous judgments (Jannopat, & Phornlaphatrachakorn, 2022).

Fraud and corruption cost companies and industries hundreds of billions of dollars each year, and it can damage a company's brand. Both commercial and public enterprises are susceptible to major forms of fraud and corruption; nevertheless, these activities are more harmful in the public sector. In Pakistan's public sector, the situation is extremely grave. Corruption and fraud are the leading reasons of poor public service delivery (Abbas, 2020; Yasin, Tahir, Aslam, Bakhsh, Ullah, Imran, & Khaliq, 2019).

Despite institutional presence, anti-fraud agencies have been unable to stem the flood of economic crime, owing in part to investigators' lack of judicial competence. It's possible that a lack of or insufficient forensic accounting practice, which requires expert evidence, is compounding this poor performance. Because it aims to bridge the gap between traditional auditing and advanced accounting with all of today's concerns and challenges, forensic accounting as a strategy is one of the most effective ways of decreasing and avoiding fraudulent acts (Dada & Audu, 2021).

B. Integrated Financial Management Information Systems (IFMIS)

Financial management in the government sector is determined by economic behavior and attitude of government when it comes of techniques, guidelines, laws, and policies that structure planning, budgetary control, making predictions, organizing, channeling, impacting, and governing the input and output of finances in order to optimize the institution's goal. Improved public finance management is critical to upgrade the effectiveness of government service outputs. It has an impact on how funds are allocated to national and local goals, the ease with which new technology may be invested, and the cost-effectiveness of government services. The majority of existing research in this field has focused on the magnitude of government spending and its causes, with little attention paid to the impact of these public financial management operations on the quantity of output generation. (Odior and Alenoghena, 2014)

An FMIS's usefulness as a budget management tool is determined not just by its technological soundness, but also by the institutional and regulatory framework in which it is used. FMIS technologies, however, require physical complements, according to the conclusions of the 2016 World Development Report, in order to be effective and defend against potential losses. These elements, which are sometimes identified to as prerequisites for FMIS efficacy, should be examined in a diagnostic. Without these analog counterparts, even modern systems may not be able to achieve anticipated budgetary control benefits. A reassessment of existing control protocols is also necessary. Instead of managing the hemorrhage of resources, establishing up an automated FMIS alone without requisite control functions could hasten it (World Bank Group, 2018).

The IFMIS is a strong financial management system that has proven to be useful in a variety of settings around the world. Due to the obvious de-incentivized human resource in Uganda, the intended outcomes have still not been adequately addressed. Many institutions were utilizing platforms that didn't communicate with the IFMIS, and when it came to uploading data to the IFMIS, the human factor dictated the speed and consistency of procedures. Financial management has increased in terms of timeliness and accuracy, and accounting information has improved as well. Furthermore, during the testing period, the proportion of institutions (Ministries, Departments, Agencies, and Local Governments) with unqualified audit opinions grew significantly from 47 percent to 50 percent. The quality of financial statements, however, continues to be substandard, as seen by the large pool of qualified audit reports among institutions affiliated with the IFMIS (IFMS Study Report Uganda, 2015).

The computerized accounting information system, according to Al-Hashimy and Yusof (2021), is a platform that helps policymakers to assemble, store, and evaluate accounting records a computer-driven technique for monitoring operations is integrated with information technology applications in general accounting systems. The computerized accounting information system has developed as a critical component of strategy execution. As a result of an increase level of sophistication, real economy openness, and competition rapid expansion, modern businesses must pay close attention to multiple data that emerge from the external and internal environments, as well as enjoy the benefits provided by modern innovations in accumulating various types of data, ability to identify expertise, take advantage of the opportunities, improve weaknesses, and mitigate risks (Meraghni, Bekkouche & Demdoun, 2021)

Poljasvic, Vasicek and Kostic (2021) stated that Croatia's and the Republic of Srpska's public sector accounting systems are similar in that both have begun to modernize their accounting systems in order to embrace the accrual basis for financial reporting. At the same time, the modified cash basis is still employed for budget reporting because it is deemed to be superior to accrual in terms of budget liquidity management. Budget and financial reporting systems are linked, and budget producers deliver both budget and financial reports, depending on the degree of reporting. Some business decisions require data that includes both financial and non-financial information, which is often provided by distinct accounting information systems (AIS) and management information systems (MIS). The two pieces of information will then be integrated and provided to the management. The work of providing integrated information management will be inefficient and costly if the information support system is not integrated. Furthermore, poor management decisions might result from a lack of cooperation among financial and non-financial operations (Astuty & Pasaribu, 2021).

Government IFMIS differs significantly from private-sector IFMIS in terms of features and performance. Government financial management information systems must be designed to adhere to all expenditure rules, as well as other government finance regulations and restrictions, and a wholly new established of accounting policies and disclosure requirements, because authorities are influenced by indicators of accountability rather than profit. They must also be developed to accommodate a broad array of functions and organizational structures specific to the government sector. Governments' local and global conduct a large volume of transactions on a regular basis, necessitating the use of robust, adaptable, and trustworthy technologies to manage the data flows. These platforms must be capable of handling and communicating all financial transactions for the complicated structure of different ministries, expenditure agencies, regional and local governments, and other public users (Ibrahim & Dauda, 2014).

The integrated financial management information system has aided government planning, execution, and monitoring of budgets, as well as tracking, documenting, and reporting income and expenditures in government offices and parastatals in other developing economies. IFMIS enables faster and easier access to quality financial records, which contributes in public budgetary controls, service delivery, budget transparency and accountability, and accelerate federal programs (Willy & Paul, 2021; Odooyo, Adero & Chumba, 2014; GOK, 2011; Peterson et al, 2008).

Wanyonyi and Theuri (2021) opined that IFMIS has been adopted and tested as a financial management system in a number of nations throughout the world, with a variety of challenges and successes. The problems varied per country, owing to the uniqueness of each circumstance to some extent. Kosovo, Iraq, Vietnam, and other countries on the continent where IFMIS has been deployed include; Malawi, Uganda, Tanzania, Somalia, the Rwanda, Kenya, and Zimbabwe Ghana, South Africa, and others are among the countries on the continent. Higher degrees of performance with regards to sound financial management in terms of cost structure, allocation, cost management, and reporting have been established (Majer, Mathew & Kur, 2021). To this end, this study focused the effect of integrated financial management information system on fraud management in Nigerian public sector.

2.2 Theoretical Review

A. Theory of Fraud Management Life Cycle

Wesley Kenneth first proposed this theory in 2004. The availability and effective monitoring of a full fraud management lifecycle, according to this hypothesis, is what permits for drastically fewer fraudulent transactions. The eight stages of this process are sanctions, avoidance, management problems, minimization, damage appraisal, efforts to study, distribute, and implement ways to reduce the risks of fraud, investigation, and conviction. The foundation for a successful implementation of the Fraud Management Lifecycle is a shared knowledge or interpretation of the stages. Fraud management experts are unable to effectively communicate with one another, their counterparts in other industries, or within their own firms due to a lack of exposure and understanding. As a result, the Fraud Management Lifecycle is a networked cycle in which each system component, each lifecycle phase, is a comprehensive entity made up of interconnected, interdependent, and self-sustaining behavior, goals, and activities (Lawal, Yinusa, Oyetunji & Adekoya, 2020).

According to Nenyiaba, Osisioma, and Okoye, the strategy covered actions, activities, processes, procedures, organizational designs, economic evaluations, and intra-entity interactions (2015). The term "life cycle" is used in the theory's caption, but the research disagrees since it suggests a continuous cycle of birth, maturity, and death, which the theory does not describe.

The theory of fraud management life cycle is relevant to the study because of the principles. Fraud in the public sector could go in stages and could be managed if their employees have the exposure. The theory implies that fraud could be managed to a barest minimum through scrutiny and sanctions of public servants involved in fraudulent activities.

B. White-Collar Crime Theory

Edwin H. Sutherland proposed the white-collar crime idea in 1940. Sutherland's crime is a well-executed professional robbery, with the victims being members of the general public who are fully unaware of their predicament. Prior criminologists and sociologists focused on the broad subject of crime, focusing largely on street and violent crime. He was the first to relate white-collar crime to economic and commercial activities. Sutherland portrayed the white-collar criminal as a sophisticated specialist who mostly violates "delegated or implied trust" in the backdrop of blatant criminal behavior by various nineteenth-century rich elites. Although poverty is rarely the basis of white-collar crime, previous theories of criminality have emphasized poverty as a major component to crime.

White-collar criminals, according to Sutherland, can be distinguished from street or violent criminals on three tiers. For starters, the majority of white-collar offenders are professionals. According to him, a professional's social status creates an atmosphere of both respect and intimidation. Professionals are respected by society, but they are also afraid of repercussions if they offend them. As a result of adulation and dread, white-collar criminals are punished less harshly. Second, because of the expert's status, the conventional judicial system is used less frequently, resulting in reduced penalties. Third, because the majority of people are unaware of the crime, identifying perpetrators and victims is more difficult. (Ardi, Sulistyono & Roziq, 2019).

Until recently, fraudulent acts, criminal trials, punishments, sanctions, or probation were common, with any sign of a "criminal" act being removed from the adjudication process. For a variety of reasons, white-collar crimes are less visible than violent crimes: the impact on the general public may be spread out over a longer time period; the act may be spread out over a larger number of persons, and so on. Financial markets and white-collar schemes have only grown in complexity and creativity since Sutherland's observations in 1940 (Dorminey, Fleming, Kranacher and Riley, 2012).

White collar crime differs from corporate crime in that it is a type of employment crime, according to Gottschalk (2020). The offender had just a slight benefit in committing crime, but there were easier methods to hide it, such as as a buddy in a shady supply relationship. As a result of their friendship, the criminal established a character in which he considered illegal financial transaction as personalized rather than professional.

White-collar criminals conduct and conceal their crimes in a professional setting with authorized access, resources, and procedures (Logan, Morgan, Benson, & Cullen, 2017). White-collar crime might give monetary gain, personal adventure, or any other desired result (Craig & Piquero, 2017). White-collar crime is often thought to be the product of criminogenic workplaces in which individual distinctions are largely overlooked. This norm is investigated in the study by looking at whether white-collar criminals disobey rules in various situations. Fraud is primarily considered a type of crimes committed by elite parties in white-collar crime theory. As a result, because the white collar crime concept is still overly broad, it is less specific when it comes to describing fraud offenses. As a result, the fraud triangle theory appears to focus the discussion on fraudulent activities (Van-Onna, van-der-Geest & Denkers, 2020).

The fraud triangle theory, according to Ardi, Sulisty, and Roziq (2019), is more fixated on fraud than the white collar crime hypothesis. This is due to the fact that the fraud triangle theory describes how fraud happens. Pressure, justification, and opportunity are the three variables that drive fraud, according to the fraud triangle theory. This concept is known as the fraud triangle because it explains the prevalence of fraud in three ways. This idea is well-known among those who investigate related fraud.

The white-collar crime theory is relevant to this study because most of the fraudulent activity carried out is driven by financial gain. White collar crimes are mostly carried out by professionals and top executives. This gives a clearer picture of the reasons employees commit fraud. Public officers tend to enrich themselves financially through diverting funds meant for projects from the government's income to his own personal account, and they can turn all kinds of creative accounting to prevent this from being understood.

2.3 Empirical Review

The efficacy of forensic accounting inquiry in detecting financial fraud was established by Lawal, Kurawa, Hamid, and Umar (2021); Adesina, Erin, Ajetunmobi, Ilogho, and Asiriwa (2020); Sule, Ibrahim, and Sani (2019); Ehioghien and Oyakhire (2017); Gbegi and Adebisi (2014). Suleiman and Othman (2021) created a paradigm for employing forensic accounting techniques to improve the detection of public sector corruption in Nigeria. The factors of cyber fraud investigation in Nigeria were investigated by Abu, Lateef, and Echobu (2018). Josiah, Samson, and Elizabeth (2012) examined the responsibilities of auditors in the detection and investigation of fraud in Nigerian industries.

The influence of the Integrated Personnel and Payroll Information System (IPPIS) on government expenditure and transparency in the public sector was investigated by Agbaje and Aladetanye (2021); Abdulsalam, Nkiru, Kibir, Sani, Jafaru, and Lawal (2020). They both employed descriptive statistics to suggest that the government strengthen the system in order to improve government performance. Examine how GIFMIS has influenced government policy and altered government financial transactions as well as the country's economic progress. Ali (2020); Felix and Rufus (2018); Ogbonna and Ojeaburu (2015) Cheruiyot and Miroga (2021); Otieno, Migiro and Mutambara (2017) further explored the influence of Integrated Financial Management Information System (IFMIS) on public spending. The difference between IFMIS and GIFMIS is the fact that GIFMIS is peculiar to Nigeria. The various studies

carried out focused on the effect on IFMIS on government expenditure however this study focused on the effect of integrated financial management information system and fraud management in Nigerian public sector.

3.0 Methodology

The goal of this research was to see how the Nigerian public sector will be affected by an integrated financial management information system and fraud investigation. This study will be conducted using a survey research approach. The sample size for this study was 137 people from four agencies under the federal financial ministries. The survey questionnaire was used as the research instrument, and it was used to collect primary data.

Hypothesis and Model

H₀: integrated financial management information system does not have significant effect on fraud investigation in Nigerian public sector.

$$FI_i = \beta_0 + \beta_1 BPM_i + \beta_2 BEM_i + \beta_3 AM_i + \beta_4 HRM_i + \beta_5 MDM_i + \beta_6 RM_i + \varepsilon_i$$

4.0 Data Analysis and Findings

Multiple Regression Analysis for Model

Variable	Co-efficient	Standard Error	t-Stat	Probability
C	0.195	0.328	0.595	0.553
BPM	0.195	0.116	1.686	0.094
BEM	0.040	0.082	0.483	0.630
AM	0.025	0.055	0.459	0.647
HRM	0.343	0.109	3.144	0.002
MDM	0.009	0.092	0.101	0.920
RM	0.327	0.119	2.743	0.007
R ²	0.601			
Adjusted R ²	0.582			
S.E of Reg	0.361			
f-Statistic	30.880			
Prob.(f-Stat)	0.000			
Observations	133			

Dependent Variable: FI

Significant at 5%

Source: Researcher's Computation, 2022

Model

$$FI_i = \beta_0 + \beta_1 BPM_i + \beta_2 BEM_i + \beta_3 AM_i + \beta_4 HRM_i + \beta_5 MDM_i + \beta_6 RM_i + \varepsilon_i$$

$$FI_i = 0.195 + 0.195PM_i + 0.040BEM_i + 0.025AM_i + 0.343HRM_i + 0.009MDM_i + 0.327RM_i$$

4.1 Interpretation

The result of the multiple regression analysis on Table 4.18, shows that Budget Preparation Module (BPM), Budget execution module (BEM), Accounting module (AM), Human resource module (HRM), Master Data module (MDM)

and Reporting module (RM) have positive effect on fraud investigation (FI). This is indicated by the sign of the coefficients, that is $\beta_1 = 0.195 < 0$; $\beta_2 = 0.040 < 0$; $\beta_3 = 0.025 < 0$; $\beta_4 = 0.343 < 0$; $\beta_5 = 0.009 < 0$; $\beta_6 = 0.327 < 0$. The result is consistent with *a priori* expectation integrated financial management information system will have positive effect on fraud investigation. This means 1% increase in BPM, BEM, AM, HRM, MDM and RM will lead to 0.195, 0.040, 0.025, 0.343, 0.009 and 0.327 increase in fraud investigation.

Except for HRM and RM, which are significant at the 5% level of significance acceptable in this investigation, the likelihood of individual t-statistics demonstrates that most of the variables are not significant at the 5% level of significance acceptable in this study. Furthermore, the Adjusted R-squared revealed that the integrated financial management information system is responsible for 58 percent of variations in fraud investigation. Other factors not included in this model account for the remaining 42% of variations in fraud investigation. As a result, the main model's coefficient of determination indicates that it has a strong explanatory power. This is reinforced by the F-statistic probability of 0.00, which indicates that the regression result is statistically significant because the study's level of significance is less than 5%.

We reject the null hypothesis that states' integrated financial management information system has no significant influence on fraud detection in the Nigerian public sector, with a level of significance of 5% and F-statistics of 30.880, a P-value of 0.000. As a result, in the Nigerian public sector, an integrated financial management information system has a substantial impact on fraud investigation. This result is accepted because it backs up all of the conceptual evidence acquired during the investigation.

The challenges in fraud investigation in Nigeria, according to Abu, Lateef, and Echobu (2018), are due to a lack of computer/digital forensic expertise. The EFCC, the ICPC, and the Nigerian police force are responsible with investigating and prosecuting computer crime, but they have a limited understanding of how these crimes are carried out. It becomes more difficult to investigate and prosecute culprits as a result of this. Businesses can use forensic accounting investigation services to detect and battle fraud and corruption in the corporate and governmental sectors of society. Furthermore, investigative financial reporting should be widely promoted because it will significantly assist in the discovery and investigation and prosecution and criminal activities in Nigerian businesses (Ehioghiren & Oyakhire, 2017). This supports the conclusion that an integrated financial management information system has a major impact on fraud investigation in the Nigerian public sector since it allows for proper fraud investigation.

4.2 Implication of Findings

Since the proportion of changes in fraud investigation described by integrated financial management information system is so large, it implies that other factors influencing fraud investigation are minor, but integrated financial management information system is the most important factor. The model's findings suggest that an integrated financial management information system has a considerable impact on the identification of fraud in the Nigerian public sector. This could be because the technology improves record keeping and reporting while also allowing for an audit trail during fraud investigations. All information on the system is saved in cloud spaces and may be

accessed by key role players with the access code from anywhere in the world. The ability of the system to determine who committed fraud, as well as how and when it was committed, improves fraud investigation in the public sector.

5.0 Conclusion and Recommendation

In the course of a fraud investigation, an integrated financial management information system can assist in providing access to high-quality data. An audit trail is maintained by the system in order to fully investigate the level of fraud. The government's integrated financial management information system houses all of the government's data. Finally, because information is kept in the cloud, access to crucial information for investigation purposes is made simple.

The federal government according to the study should ensure that fraud investigations are free of political interference. They should establish a rule of law system in which all public and private individuals, institutions, and entities, including the state, are held accountable to laws that are publicly promulgated, equally enforced, and independently adjudicated, as well as laws that are consistent with global principles.

6.0 Contribution to future research

The effect of an integrated management information system on fraud investigation is still a gray area undergoing research. The dependent and independent variables' varied conceptions will expand the concepts in linked domains for further investigation. It has increased the amount of literature available in terms of connected fields, as well as the quality and validity of the material.

References

- Abbas, G. (2020). Role of Forensic Auditing in Enhancing the Efficiency of Public Sector Organization: Role of Forensic Auditing. *Reviews of Management Sciences*, 2(2), 40-59.
- Abdulsalam Nasiru, K., Kabir, N., Sani, I., Jafaru A. G. & Lawal I. U. (2020) Integrated Personnel and Payroll Information System (IPPIS) and Transparency in Government Payroll Administration in Nigerian Civil Service: A Unique Approach. *Asian Journal of Economics, Business and Accounting* 19(3): 1-8, 2020; Article no. AJEBA.61704 ISSN: 2456-639X.
- Abu S.O, Lateef O. M & Echobu J., (2018) Determinants of Cyber Fraud Investigation in Nigeria. *International Accounting and Taxation Research Group, Faculty of Management Sciences, University of Benin*, 43(7), 67-79, ISSN: 2635-2966 (Print), ISSN: 2635-2958 (Online). Available online at <http://www.atreview.org>
- Adesina, K., Erin, O., Ajetunmobi, O., Ilogho, S., & Asiriwa, O. (2020). Does forensic audit influence fraud control? Evidence from Nigerian deposit money banks. *Banks and Bank Systems*, 15(2), 214.
- Agbaje, W., & Aladetanye, T. S. (2021). Integrated Personnel and Payroll Information System (IPPIS) and Government Recurrent Expenditure in Nigeria. *Acta Universitatis Danubius. Œconomica*, 17(6), 78-87.

- Al-Hashimy, H. N. H., & Yusof, N. A. (2021). The relationship between the computerized accounting information system and the performance of contracting companies. *Materials Today: Proceedings*. 2214-7853, <https://doi.org/10.1016/j.matpr.2021.03.426>.
- Ardi, R. D., Sulistiyo, A. B., & Roziq, A. (2019) Development of the Theory of Fraud towards the New Fraud Triangle. *International Journal of Business and Management Invention (IJBMI)*, 8(3), 21-34, ISSN (Online): 2319 – 8028, ISSN (Print): 2319 – 801X.
- Arslan, M. C. (2017). Historical Development of Government Accounting. *Accounting and Corporate Reporting Today and Tomorrow*. <http://dx.doi.org/10.5772/intechopen.6912>.
- Astuty, W., & Pasaribu, F. (2021). The Impact of Business Environment and Organizational Culture on the Implementation of Management Accounting Information System in Some Hotels. *Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences*, 4(3), 6251-6262.
- Cheruiyot, S.K., & Miroga, J. (2021). Influence of Integrated Financial Management Information System Reengineering Reforms on Public Expenditures in Nakuru County Government. *IOSR Journal of Economics and Finance (IOSR-JEF)*, 12(4), 49-57.
- Dada, S. O., & Audu, M. A. (2021) Expert Witness and Tax Fraud Prevention in Federally Collected Taxes in Nigeria: An Empirical Analysis. *International Journal of Research Science & Management*, 8(2), ISSN: 349-5197, DOI: <https://doi.org/10.29121/ijrsm.v8.i2.2021.1>.
- Dorminey, J., Fleming, A. S., Kranacher, M. J., & Riley Jr, R. A. (2012). The evolution of fraud theory. *Issues in accounting education*, 27(2), 555-579.
- Duarte Trigueiros (2016) Fraud Prevention and Detection: Methods, Technologies and Vendors: An introductory manual, *Master in European Studies Association, Macau*
- Ehioghiren, E. E., & Oyakhire, V. A. (2017) Forensic accounting investigation: a panacea for fraud and corruption detection in Nigeria. *SAU Journal for Management and Social Sciences*, 2(1,2) 124-139
- Felix, O., & Rufus, O. S. (2018). Pedagogy and Impact of Gifmis Adoption as a Tool for Public Finance Management. *Canadian Social Science*, 14(1), 1-8.
- Gbegi, D. O., & Adebisi, J. F. (2014). Forensic accounting skills and techniques in fraud investigation in the Nigerian public sector. *Mediterranean Journal of Social Sciences*, 5(3), 243-243.
- GOK (2011). Integrated Financial Management Information System (IFMIS) IFMIS ReEngineering, From Modular, to Full Cycle End-To-End Processes, Strategic Plan 2011 2013.
- Gottschalk, P. (2020). Convenience in white-collar crime: a case study of corruption among friends in Norway. *Criminal Justice Studies*, 33(4), 413-424.
- Ismaili, A., Ismajli, H., & Vokshi, N. (2021). The importance and challenges of the implementation of IPSAS accrual basis to the public sector: The case of Kosovo. *Accounting*, 7(5), 1109-1118.
- Jannopat, S., & Phornlaphatrachakorn, K. (2022). Fraud Investigation, Internal Audit Quality and Organizational Performance: Empirical Evidence from Thai Listed Companies. *The Journal of Asian Finance, Economics and Business*, 9(1), 311-324.

- Josiah, M., Samson, A. A., & Elizabeth, A. O. (2012). Evaluation of roles of auditors in the fraud detection and investigation in Nigerian industries. *American Journal of Social and Management Sciences*, 3(2), 49-59.
- Lawal, B. O., Yinusa, S. O., Lawal, B. A., Oyetunji, O. T., & Adekoya, A. A. (2020). Forensic accounting and fraud detection: evidence from manufacturing industry in Nigeria. *KIU Interdisciplinary Journal of Humanities and Social Sciences*, 1(2), 242-264.
- Lawal, S., Kurawa, J. M., Hamid, K. T., & Umar, U. H. (2021). Do behavioral, educational, and legal factors determine the applicability of forensic accounting in the public sector. *Journal of Research in Emerging Markets*, 3(2), 27-43.
- Logan, M.W., Morgan, M.A., Benson, M.L., & Cullen, F.T. (2017). Coping with imprisonment: Testing the special sensitivity hypothesis for white-collar offenders. *Justice Quarterly*, 36(2), 225–254
- Majer, C. G., Mathew, A. B., & Kur, L. D. (2021). The roles and Adaptation of Integrated Financial Management Information System (IFMIS) Free Balance on public finance management and service delivery in South Sudan. *International Journal of Science and Business*, 5(8), 89-106.
- Micheni, E. "Analysis of the Critical Success Factors of Integrated Financial Management Information Systems in Selected Kenyan Counties." *Journal of Finance and Accounting*, 5(5), 185-193.
- Mohammed, A.H, (2021). The Impact of Computerized Accounting Information Systems Risks on the Quality of Accounting Information. *International Journal of Business and Management*, 16(7), 91-103.
- Mukoro, D. (2013). The role of forensic accountants in fraud detection and national security in Nigeria. *Manager*, (17), 90-106.
- Neniyaba, I. C., Osisioma, B., & Okoye, E. (2015). Combating fraud and White Collar crime in Nigeria through application of International Accounting reporting Standards. *International Journal of Economic Development Research and Investment*, 6(1), 72-83.
- Odior, E. S. O., & Alenoghena, R. O. (2014). Public sector financial management and output growth in Nigeria: A predictive causality test and two-stage least square approach. *International Journal of financial management*, 14(9), 84-93.
- Odoyo, F. S., Adero, P., & Chumba, S. (2014). Integrated financial management information system and its effect on cash management in Eldoret West District Treasury, Kenya. *International Journal of Business and Social Science*, 5(8), 67-86.
- Ogbonna, G. N., & Ojeaburu, D. (2015). The impact of government integrated financial management information system (GIFMIS) on economic development of Nigeria. *West African Journal of Business and Management Sciences Faculty of Business Administration Imo State University, Owerri Nigerian Edition*, 4(1), 13-19.
- Olatunji, O. C., & Adekola, D. R. (2017). The roles of Auditors in fraud detection and prevention in Nigeria deposit money banks: Evidence from South West. *European Scientific Journal*, 13(31), 290-306.

- Otieno, J. & Migiro, S. & Mutambara, E.I. (2017). Integrated Financial Management Information System: a conceptual framework for Migori County, Kenya. *Public and Municipal Finance*, 6(1), 37-45.
- Paterson, A. S., Changwony, F., & Miller, P. B. (2019). Accounting control, governance and anti-corruption initiatives in public sector organizations. *British Accounting Review*, 51(5), 10-18.
- Poljašević, J., Vašiček, V., & Kostić, M. D. (2021). Public managers' perception of the usefulness of accounting information in decision-making processes. *Public Money & Management*, 41(6), 456-465.
- Sule, S., Ibrahim, S. S., & Sani, A. A. (2019). The effect of forensic accounting investigation in detecting financial fraud: A study in Nigeria. *International Journal of Academic Research in Business and Social Sciences*, 9(2), 545-553.
- Suleiman, N., & Ahmi, A. (2018). Mitigating corruption using forensic accounting investigation techniques: the watchdog perspectives. *Indian-Pacific Journal of Accounting and Finance (IPJAF)*, 2(1), 4-25.
- Suleiman, N., & Othman, Z. (2021). Forensic Accounting Investigation of Public Sector Corruption in Nigeria: The Gioia Methodology. *The Qualitative Report*, 26(3), 1021-1032.
- Umar, I., Samsudin, R. S. B., & Mohamed, M. B. (2016). Challenges of the Economic and Financial Crimes Commission and Their Influence on Adoption of Forensic Accounting: A Conceptual Framework. *Qualitative Research Conference (QRC) 2016* 24-26 May 2016, Penang, Malaysia. 105-109.
- Van Onna, J. H., van der Geest, V. R., & Denkers, A. J. (2020). Rule-violating behaviour in white-collar offenders: A control group comparison. *European Journal of Criminology*, 17(3), 332-351.
- Wanyonyi, K. W., & Theuri, J. (2021). Integrated Financial Management Information System and Financial Performance in Trans Nzoia County, Kenya. *International Journal of Current Aspects in Finance, Banking and Accounting*, 3(2), 51-64.
- Willy, T. K., & Paul, M. (2021). Integrated financial management information system implementation on procurement performance of state-owned enterprises in Kenya. *International Research Journal of Business and Strategic Management*, 2(2).
- Yahaya, O. (2022). The impacts of financial crimes on the Nigerian economy. *Journal of Accounting*, 3(8), 266-274.
- Yasin, M., Tahir, N., Aslam, M., Bakhsh, A., Ullah, S., Imran, M. A., & Khaliq, M. T. (2019). The Impact of Nepotism on Employment Status in Public Sector Institutions: An Evidence from Fresh Graduates of Pakistan. *Journal of Economic Impact*, 1(1), 07-11.

